RFQ 15/2021 - Equipment

Temperature		RFQ 15/2021 - Equipment	
Description of Punction  Desp Freezess are required to preserve blood and blood products, vaccinations et at specified temperature.  Operational Requirements  Microprocessor Vertical Freezer, at least double door with adjustable 4 to 6 shelves (frost free)  Separate Chamber racks to be publed out for easy handling  Non CUC entirgeration  Technical Specifications  Capacity within 250 to 300 1.  Deptal display of set and actual temperature, with audiovisual alarm  No condensation on storing material with automatic electric defroit  Construction:  Sold rost free cabacte to prevent corrosion and lockable eastor wheels.  Refrigeration System  Heavy Duty refrigeration system, maintenance free, below -20 deg (+ 10 C) cascaded connection with hemerically sealed refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooked with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum anhiest emperature of 33 deg (.  The equipment should be of continuous duty and frost free.  Alarm  It should also have and/or visual Electronic Alarm System independent of power supply.  Insulation High density polytemane or equivalent Galactes - Double seal allicon.  System Configuration Accessories, sparses and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humality, etc. for Sudan.  Sundards, Safety and Trialing  Most automatic Scholars of Survival Production of the equipment on size.  Decemberative water and accessories with their part numbers and consumable and consumable of the equipment on size.  Decemberation  User Operating Environment  Find Automated Foreign of the equipment on size.  Decemberation  User Operating Insuratory for 2 years after acceptance.  Microprocedular of the production of the production of the equipment on size.  Decemberation and Commissional Accessories with their part numbers and costaing.  C	No.	•	Fill Your Specifications
Deep Freezers are required to preserve blood and blood products, vaccinations etc at specified temperature.  Operational Requirements Microprosers Vertical Princer, at least double door with adjustable 4 to 6 shelves ( frost free) Separate Chamber racks to be pulled out for easy handling Non-CFC refrigerant Technical Specifications Capacity within 250 to 300 L Digital display of set and actual temperature, with auditovisual alarm No condensation on storing material with automatic electric defrost Construction: Solid rust fire exhibite to prevent corrosion and lockable eastor wheels. Refrigeration System Heavy Duy efrigeration system, maintenance free, below 20 deg C (+ 10 C) cascaded connection with bermetically seader driftigeration compresses and reliable refrigeration to minimize noise and vibration, air cooled with seartily lock to power unintentional work off shall be supplied. It should have cooling time within bours at maximum ambient temperature of 33-deg C.  The equipment should be of continuous duty and frost free.  Automatical also have audio visual Electronic Adams System independent of power supply.  Institution High develop physicrelinus or equivalent Clackers. Double sead ulicons.  System Configuration Accessories, sparse und consumables.  As specified.  Operating Environment The product offered shall be designed to be stered and to operate normally under Power Supply, Climate, Temperature, Humildy, etc., for Solution.  Stundards, Safety and Training Must submit 103 1483 2036 ACC 2007 for Medical Devices AND  (3) 639-342 EEC Directives) or USFDA approved product certificate.  User Training Must sporting the production of the story of the s	1	Ultra Plasma freezer (-20 °C)	
Operational Requirements  Microprocessor Vertical Freezer, at least double door with adjustable 4 to 6 shelves (frost free) Separate Chumber rocks to be pulled out for easy handling  Non-CPC retrigerant  Technical Specifications  Capacity within 2510 to 3001.  Digital display of set and actual temperature, with audiovisual alarm  No condensation on storing material with automatic electric defrest  Construction:  Solid rast fine enhiest to prevent controlous and lockable eastor wholes.  Retrigeration System  Heavy Duty retrigeration system, maintenance free, below 20 deg C (1 10 C) cacacade connection with hemetically sealed refigeration compressors and reliable retrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within boars at maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and firest free.  Alarma  In should a maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and firest free.  Alarma  Alarma		Description of Function	
Operational Requirements  Microprocessor Vertical Freezer, at least double door with adjustable 4 to 6 shelves (frost free) Separate Chumber rocks to be pulled out for easy handling  Non-CPC retrigerant  Technical Specifications  Capacity within 2510 to 3001.  Digital display of set and actual temperature, with audiovisual alarm  No condensation on storing material with automatic electric defrest  Construction:  Solid rast fine enhiest to prevent controlous and lockable eastor wholes.  Retrigeration System  Heavy Duty retrigeration system, maintenance free, below 20 deg C (1 10 C) cacacade connection with hemetically sealed refigeration compressors and reliable retrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within boars at maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and firest free.  Alarma  In should a maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and firest free.  Alarma  Alarma		Doop Franzers are required to preserve blood and blood ready at a received at a realified to	
Microprocessor Vertical Freezer, at least double door with adjustable 4 to 6 shelves (frost free) Separate Camber meks to be pulsed out for easy handling Non-CFC erligerant Technical Specifications Capacity within 250 to 300 L Digital display of set and actual emperature, with audiovisual alarm No condensation on storing material with automatic electric defrost Construction: Solid russ free cabinet to prevent corrosion and lockable castor wheels. Refrigeration System Heavy Duty refrigeration system maintenance free, below 20 dags C (= 10 C) cascaded connection with hermetically seaded criticigenation compressors and reliable refrigeration to minimize roise and vibration, nir owners at maximum ambient temperature of 33 deg C. The copagnets should be of continuous duty and frost free.  Alarm B should also have audio visual Electronic Alarm System independent of power supply. Insulation High density polyperchane or equivalent Gaskes - Double seal silicon. System Configuration Accessories, squares and consumables As specified Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature Humility, etc. for Sudan. Sondards, Safety and Training Must selement Humility etc. for Sudan. Must submit Stol 3485-2003AA-2007 for Medical Devices AND (F. 6/342 EFC Directives) or USFDA approved product certificate.  Unperturbed Humility etc. for Sudan. Sondards, Safety and Training Must submit Sol 3485-2003AA-2007 for Medical Devices and Competensive Association and Commissioning Supplements Service Daring Warranty Period During warranty period supplier must ensure conceive breakdoon maintenance whenever required.  Unperturbed the Safety of the Safety of Safety		Deep Freezers are required to preserve blood and blood products, vaccinations etc at specified temperature.	
Separate Chamber neks to be pulled out for easy handling		Operational Requirements	
Separate Chamber neks to be pulled out for easy handling		Microprocessor Vertical Freezer, at least double door with adjustable 4 to 6 shelves (frost free)	
Non-CFC refrigerant			
Technical Specifications		1 , 5	
Capacity within 250 to 300 L Digital display of set and actual temperature, with audiovisual alarm No condensation on storing material with automatic electric defrost Construction: Solid rust free cabinet to prevent corrosion and lockable castor wheels.  Refrigeration System Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with hermetically sealed refrigeration compressors and reliable entire for the property of			
Digital display of est and actual temperature, with audiovisual alarm No condensation on storing material with autoriate electric defrost  Construction: Stalid rust free cabinet to prevent corrosion and lockable castor wheels.  Refrigeration System  Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with thermetically seader defigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum ambient emperature of 3 deg C.  The equipment should be of continuous duty and frost free.  Alarm  Is should also have audio visual Electronic Alarm System independent of power supply. Insulation High density polytureliane or equivalent Gaskers - Double seal silicon. System Configuration Accessories, spares and consumables As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Stundards, Safety and Training Must submit ISO 13485 2003AC2:007 for Medical Devices AND  CF. (3342 FEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Ford During warranty period supplier must ensure corrective-freakdown maintenance wheneve required.  Loc of Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Ford During warranty period supplier must ensure corrective-freakdown maintenance whenever required.  Loc of Training  Must provide user training (including how to use and maintain the equipment) of the equipment on site.  Documentation  User (Operating) manual in English  Last of important spare p			
No condensation on storing material with automatic electric defrost  Construction:  Solid rise free cabinet to prevent corrosion and lockable castor wheels.  Refrigeration System  Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with hermetically sealed refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum ambient temperature of 33deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarn System independent of power supply.  Insulation High density polywrethane or equivalent Gaskers - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature-Humidity, etc. for Sudan.  Standards, Safety and Training  Must submit 1801/3485.2003/AC/2007 for Medical Devices AND  CE 0342 EEE Directions or USEDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance wheneve required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Chenical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and impection from factory.  Configuration and commissioning solution of the equipment on site.  Documentation  User (Chenical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibra			
Construction:  Sold rust free cabinet to prevent corrosion and lockable castor wheels.  Refrigeration System  Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with hermetically seader drefrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyuvethane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Eavisonment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Intuitiolly, etc. for Sodian.  Standards, Safety and Training  Must submit BOJ 3485-2003/AC-2007 for Medical Devices AND  CE 05942 EEEE Directives or USEPDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Competensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective heads on maintenance whenever required.  Installation and Commissioning  User (Chentical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Configuration of Rust provide account of the part of the part of the part of the part of the should consist of Digital dispay uplo 4 digits. Decount may get from to 5-9000 Dis should consist of Supplier mass are for the contractions.  Full Stainless seel fairbraced body with delty bene curved epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of Digital dispay uplo 4 digits. Decoun			
Solid rust free cabinet to prevent corresion and lockable castor wheels.  Refrigeration System  Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with hermetically sealed refrigeration compressors and reliable refrigeration to maintaize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum ambient temperature of 33 deg C.  The sequipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyurethane or equivalent Caskets - Double seal silicon.  System Configuration Accessories, spares and consumables As specified  Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidisty, etc. for Sudan.  Standards, Safety and Training Must submit 1801/3485/2003/AC/2007 for Medical Devices AND  CE 0342 EEC Directives or USFDA approved product certificate.  User Training Must submit 1801/3485/2003/AC/2007 for Medical Devices AND  CE 0342 EEC Directives or USFDA approved product certificate.  User Training Must submit Soli/3485/2003/AC/2007 for Medical Devices AND  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Chemical / Maintenance) manual in English List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and imagection from factory.  Certificate of calibration of the Sequence of the Se			
Refrigeration System  Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with hermetically sealed refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum ambient temperature of 33deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyuvethane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature-Hunidity, etc. for Sudan.  Standards, Safety and Training  Must submit BO1348552003/AC.2007 for Medical Devices AND  CE-0542 EPEC Directives or USEPDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective-breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Decumentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colonge Comprehensive warranty of the part of the proper installation of the "Operating manual in English and "Certificate of calibration and inspection from Factory of the supplied marking per (1) In Accessy specified upon size 120mm dimeter with a centering and inspection from Factory of the part of the proper processed with priority  Full Stainbess			
Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with hermetically seaded refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent uniminational switch off shall be supplied. It should have cooling time within bours at maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and frost free.  Alarm It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards, Safety and Training Must submit ISO/13485-2007/36/2007/67 Medical Devices AND  CE (9342 EEC Directives) or USFDA approved product certificate.  User Training Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance whenever required.  Installation and Commissioning Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) musual in English Service (Technical / Maintenance) manual in English Decommendation  User (Operating) musual or English proper installation with digital marking pen (1) English pot size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Tluorescent LED lamp		1	
bermetically sealed refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unimitational switch off shall be supplied. It should have cooling time within bours at maximum ambient temperature of 33deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density objuverthene or equivalent Gaskets - Doubbe seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature-Huntifity, e.e. for Sudan.  Standards, Safety and Training  Must submit ISO(134852003/AC:2007 for Medical Devices AND  CE (9342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  Full Suinless steel fabricated body with duly beat cured epoxy coating with dimensions 41 x32x30 cm 2. Unit It should consist of Digital dispay upto 4 digits. 3 count range from 0 to >9000 ml 8 should consist of Magnifying less (nore than 2X magnification, with digital marking pen(1) Diagocept peritish but posts ze Domm diameter with a centering ada	-	Retrigeration System	
bermetically sealed refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unimitational switch off shall be supplied. It should have cooling time within bours at maximum ambient temperature of 33deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density objuverthene or equivalent Gaskets - Doubbe seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature-Huntifity, e.e. for Sudan.  Standards, Safety and Training  Must submit ISO(134852003/AC:2007 for Medical Devices AND  CE (9342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  Full Suinless steel fabricated body with duly beat cured epoxy coating with dimensions 41 x32x30 cm 2. Unit It should consist of Digital dispay upto 4 digits. 3 count range from 0 to >9000 ml 8 should consist of Magnifying less (nore than 2X magnification, with digital marking pen(1) Diagocept peritish but posts ze Domm diameter with a centering ada		Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10 C) cascaded connection with	
cooled with security lock to prevent unintentional switch off shall be supplied. It should have cooling time within hours at maximum ambient temperature of 33 deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyurchane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards. Safety and Training  Must submit ISO134852003/AC:2007 for Medical Devices AND  CE 0342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical) Maintenance) manual in English December of the English of the Maintenance of the Serv			
hours at maximum ambient temperature of 33deg C.  The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc., for Sudan.  Standards, Safety and Training  Must submit ISO13485:2003/AC.2007 for Medical Devices AND  CE (9342 EEC Directives) or USFDA approved product certificate.  User Training  Must sprovide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and accessories with their part numbers and costing.  Certificate of calibration and an inspection from factory.  Cointy Counter  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ coont range from 0 to −9000 □ It should consist of □ Digital dispay upto 4 digits. □ coont range from 0 to −9000 □ It should consist of □ Digital dispay upto 4 digits. □ coont range from 0 to −9000 □ It should consist of □ Digital dispay upto 4 digits. □ coont range from 0 to −9000 □ It should consist of □ Digital dispay upto 4 digits. □ coont range from 0 to −9000 □ It should consist of □ Digital dispay to the temperature of the pro			
The equipment should be of continuous duty and frost free.  Alarm  It should also have audio visual Electronic Alarm System independent of power supply.  Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards, Safety and Training  Must submit ISO13485:2003/AC.2007 for Medical Devices AND  CE (9342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2. Comprehenses seel fabricated body with duly heat cured epoxy coating with dimensions 41×32×30 cm 2, Unit It should consist of Digital dispay upot 4 digits. □ Count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts peridish upto size 120mm diameter with a centering adaptor for standard 90mm perid dish □ Phorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 resultsh firs Groun, Plasma  Specify Loaduniload capacity  Primary ubes: 5 to 10m; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2-5ml Cup on tube:			
Alarm   It should also have audio visual Electronic Alarm System independent of power supply:   Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.   System Configuration Accessories, spares and consumables   As specified   Operating Eurobusoment   Operating Eurob		1	
It should also have audio visual Electronic Alarm System independent of power supply.		* 1	
Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.  System Configuration Accessories, spares and consumables  As specified  Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards, Safety and Training Must submit ISO13485-2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA approved product certificate.  User Training Must provide user training (including how to use and maintain the equipment).  Warranty Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation User (Operating) manual in English Service (Technical / Maintenance) manual in English List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2 Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of ☐ Digital dispay upto 4 digits. ☐ count range from 0 to >9000 ☐ It should consist of Magnifying lens (more than 2x magnification, with digital marking peri() ☐ Accepts pertidish upto size 120mm diameter with a centreling adaptor for standard 90mm pertid ish ☐ Plurovescent LED lamp ☐ Zero reset button  Full Automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results hr Serum, Plasma Specify Number of Rack positions, RD standard Specify Number of Rack positions, RD standard Specify Number of Rack positions, RD standard Specify Number of Tray (racks' samples) processed with priority Primary ubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm Sample cupe 2:5imi Cup on tube:			
System Configuration Accessories, spares and consumables  As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidic, see, for Sudan,  Standards, Safety and Training  Must submit ISOT3485:20037Ac:2007 for Medical Devices AND  CE (93/42 FEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  Service (Technical / Maintenance) manual in English  Certificate of calibration and inspection from factory.  Colory Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to ⇒9000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm peri dish □ Diruorescent LED lamp □ Zero reset button  Full sutomated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/umload capacity  Specify Number of Rack, Samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube: Cup on		It should also have audio visual Electronic Alarm System independent of power supply.	
As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards, Safety and Training  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective-breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x,32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >0000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts pertidish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Pluorescent LED lamp □ Zero reset button  Full Nationated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Rack positions, RD standard  Specify Number of Rack positions, RD standard  Specify Number of Tay (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube: C		Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.	
As specified  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards, Safety and Training  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective-breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x,32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >0000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts pertidish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Pluorescent LED lamp □ Zero reset button  Full Nationated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Rack positions, RD standard  Specify Number of Rack positions, RD standard  Specify Number of Tay (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube: C		System Configuration Accessories, spares and consumables	
Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc., for Sudan.  Standards, Safety and Training  Must submit ISO 13485:2003/AC:2007 for Medical Devices AND  CE (9342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to −9000 □ It should consist of Magnifying less (more than 2X magnification, with digital marking periol □ □ Accepts peridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 resultshr Serum, Plasma Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube: Cup on tobe: Cup on tube: Cup on tobe: Cup on tube: Cup on tobe: Cup on tube: Cup		•	
The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Standards, Safety and Training  Must submit ISO13485;2003/AC:2007 for Medical Devices AND  CE 69342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Estrice (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of Digital dispay upto 4 digits. D count range from 0 to >9000 D It should consist of Magnifying lens (more than 2 y June 1 y June 2 y June 2 y June 2 y June 3 y June 4			
Temperature, Humidity, etc. for Sudan.			
Standards, Safety and Training			
Must submit ISO 13485:2003/AC:2007 for Medical Devices AND  CE 0342 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  Service (Technical / Maintenance) manual in English  Certificate of calibration and inspection from factory.  2 Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of ☐ Digital dispay upto 4 digits ☐ count range from 0 to >9000 ☐ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) ☐ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish ☐ Fluorescent LED lamp ☐ Zero reset button  ### Technical Specifications  Full yautomated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma Specify Load/unload capacity  Specify Number of Tray (racks/ samples)  processed with priority  Primary unbes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup; 2.5ml Cup on to be a 16x75/100mm 5 to 50µl		*	
CE (93/42 EEC Directives) or USFDA approved product certificate.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to ~9000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Full yautomated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma Specify Number of Rack positions, RD standard Specify Number of Rack positions, RD standard Specify Number of Tray (racks/ samples) processed with priority Primary tubes: 5 to 10mi; 16x100, 16x75, 13x100, 13x75mm Sample cup: 2.5ml Cup on tobe: Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl		, <b>,</b> ,	
User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10mi; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Must provide user training (including how to use and maintain the equipment).  Warranty Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation User (Operating) manual in English Service (Technical / Maintenance) manual in English List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma Specify Load/unload capacity Specify Number of Rack positions, RD standard Specify Number of Tray (racks/ samples) processed with priority Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm Sample cup: 2.5ml Cup on tube: Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Warranty		8	
Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of Digital dispay upto 4 digits. Dount range from 0 to >9000 lt should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1)   Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish   Fluorescent LED lamp   Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Rack positions, RD standard  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Maintenance Service During Warranty Period During warranty period supplier must ensure corrective/breakdown maintenance whenever required.  Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2 Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on top o a 16x75/100mm 5 to 50µl		ų.	
corrective/breakdown maintenance whenever required.  Installation and Commissioning Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation User (Operating) manual in English Service (Technical / Maintenance) manual in English List of important spare parts and accessories with their part numbers and costing. Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr) Technical Specifications Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma Specify Load/unload capacity Specify Number of Rack positions, RD standard Specify Number of Tray (racks/ samples) processed with priority Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm Sample cup: 2.5ml Cup on top o a 16x75/100mm 5 to 50µl		Comprehensive warranty for 2 years after acceptance.	
Installation and Commissioning  Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of □ Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma Specify Load/unload capacity  Specify Number of Rack positions, RD standard Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube: Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl		Maintenance Service During Warranty Period During warranty period supplier must ensure	
Supplier must accomplish proper installation & commissioning of the equipment on site.  Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl		corrective/breakdown maintenance whenever required.	
Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2		Installation and Commissioning	
Documentation  User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2			
User (Operating) manual in English  Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2			
Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  2			
List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.  Pull Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Certificate of calibration and inspection from factory.  Colony Couner  Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification, with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Full Stainless steel fabricated body with duly heat cured epoxy coating with dimensions 41x32x30 cm 2. Unit It should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3 Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl	-		
should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3	2	Colony Couner	
should consist of □ Digital dispay upto 4 digits. □ count range from 0 to >9000 □ It should consist of Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3		Full Stainless steel fabricated body with duly heat cured enovy coating with dimensions 41x32x30 cm 2. Unit It	
Magnifying lens (more than 2X magnification. with digital marking pen(1) □ Accepts petridish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish □ Fluorescent LED lamp □ Zero reset button  3			
diameter with a centering adaptor for standard 90mm petri dish   Fluorescent LED lamp   Zero reset button  Full Automated Hormone analyzer (min. 200 test/hr)  Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Technical Specifications  Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl		Same of the second for same of the second point of the second poin	
Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl	3	Full Automated Hormone analyzer (min. 200 test/hr)	
Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl		Technical Specifications	
Min. throughput 200 results/hr Serum, Plasma  Specify Load/unload capacity  Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Specify Load/unload capacity Specify Number of Rack positions, RD standard Specify Number of Tray (racks/ samples) processed with priority Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm Sample cup: 2.5ml Cup on tube: Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Specify Number of Rack positions, RD standard  Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
Specify Number of Tray (racks/ samples)  processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl			
processed with priority  Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50μl		A 7	
Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm  Sample cup: 2.5ml Cup on tube:  Cup on tube: Cup on top o a 16x75/100mm 5 to 50μl	-		
Sample cup: 2.5ml Cup on tube: Cup on tube: Cup on top o a 16x75/100mm 5 to 50μl	<u> </u>		
Cup on tube: Cup on top o a 16x75/100mm 5 to 50μl		i '	
Ready to use Rack Packs with 2-D barcode temperature controlled reagent compartment			
		Ready to use Rack Packs with 2-D barcode temperature controlled reagent compartment	

No.	Item Specifications	Fill Your Specifications
	(20°C) onboard capacity max. 15 tests 180 disposable cups	•
	360 disposable tips (Assay Tip), liquid level and clot detection, sample and test specific dilution	
	Colored touch-screen monitor, customized keyboard and computer	
	RS 232 serial interface, bi-directional, query and batch mode	
	Running cost details important and all start up kits neede for operation and calibration	
	Running cost details important and all start up kits neede for operation and calibration	
	Operating Environment	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%	
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%	
	<b>Power supply</b> : 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
	Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	Should be FDA/CE/BIS approved product.	
	Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.	
	Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years from acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure planned preventive maintenance (PPM) and	
	corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel;	
	any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
	Documentation	
	User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	List of important spare parts and accessories with their part number and costing.	
	Certificate of calibration and inspection from factory.	
4	Full Automated Hormone analyzer (min. 30 test/hr)	
	Technical Specifications	
	Fully automated, sample selective analyzer for heterogeneous immunoassays, continuous loading, self contained Min. throughput 30 results/hr Serum, Plasma	
	Specify Load/unload capacity	
	Specify Number of Rack positions, RD standard	
	Specify Number of Tray (racks/ samples)	
	processed with priority	
	Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm	
	Sample cup: 2.5ml Cup on tube:	
	Cup on tube: Cup on top o a 16x75/100mm 5 to 50µl	
	Ready to use Rack Packs with 2-D barcode temperature controlled reagent compartment	
	(20°C) onboard capacity max. 15 tests 180 disposable cups	
	360 disposable tips (Assay Tip), liquid level and clot detection, sample and test specific dilution	
	Colored touch-screen monitor, customized keyboard and computer	
	RS 232 serial interface, bi-directional, query and batch mode	
	Running cost details important and all start up kits neede for operation and calibration	
	Running cost details important and all start up kits neede for operation and calibration	
	Operating Environment	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity	
	of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative	
	humidity of 15-90%	
	<b>Power supply</b> : 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	

No.	Item Specifications	Fill Your Specifications
	Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	Should be FDA/CE/BIS approved product.	
	Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.	
	Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty Comprehensive warranty for 2 years from acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure planned preventive maintenance (PPM) and	
	corrective/breakdown maintenance whenever required.  Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
	Documentation	
	User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.	
5	Real Time PCR Machine	
_	Operational Requirements :	
	Real Time PCR System for measuring Real-time amplification of DNA/RNA from purified samples, application include Quantification assays, Qualitative assays, SNP,HRM, Gene Expression, Any published protocol or chemistry should be reproduced.	
	Instrument should be with standalone operation independent of Computer work station.	
	System should have a prot for USB Drive for uploading and downloading data and programs.	
	Dedicated Peltier-based Real time Thermal cycling system, Electro formed silver mount 96-well block can accomadates both 96 well PCR plates as well as 8-Tube Strips with clear caps.	
	System should have a temperature accuracy of $\pm 0.2$ °C and well to well Temperature Uniformity of $\pm 0.1$ °C	
	System should have Gradient function for the temperature programmable of 20 $^{ m o}$ C gradient range.	
	System should allow Optimum reaction volumes of 5µl to 50µl or more	
	System should have sample ramp rate more than 4 °C while heating and less than 2°C while cooling.	
	System to provide on line Cycle by Cycle monitoring with continuous display of readings for Fluorescence, Temperature changes and progression of amplification and detection simultaneously on all 96 wells on the plate without any moving parts.	
	RT PCR system should have fiber optics for high accuracy and easy multiplexing on probed assys.	
	System should have individual well to well excitation and emission for better sensitivity for capturing the signals without any edge effects.	
	System should have broad range high-intensity white LED as a excitation source	
	Working Programmable range 37 to 99 °C, Sensitivity from 1 copy detection and dynamic range of 10 orders of magnitude.	
	System should be compatible with all kind of chemistry Syber green and Hydrolysis probe and compatabile with all kind of kits in market. Should be open system for both reagents & disposable plastic consumables.	
	System should use cooled CCD camera for detection without any moving detectors or scanning detectors	
	Instrument filters should be divided based on the wavelength starting from 400 to 700 nm	
	System should have a minimum of Eight filters, Four Excitation filters (470/533/577and 645 nm) and Four Emission filters (514/572/620 and 697 nm) to cover majority of the commercially available dyes	
	Multiplexing capacity: true 4 color multiplex analysis without any passive reference dye.	

No.	Item Specifications	Fill Your Specifications
	System should be Calibrated for Detection Dyes: SYBR, FAM, ResoLight dye, VIC, Hex, Yellow555, Red610, Texas Red, and Cy5. Any new dyes should be used with in the filter settings.	
	System should be free of passive reference dye.	
	System should be capable of Simultaneous data acquisition for all positions in 10–1000 ms (dynamic mode)	
	Fast run time, Runtime < 40 min for 3-step 40 cycles PCR	
	Should have preferably 10 inch colored LCD touch Screen display for smooth operation while standalone usage and online fluorescence display.	
	The real time PCR software should allow the user to do the analysis of all type of application like:	
	a. Absolute quantitation	
	b. Advanced Relative quantitation c. Multiplex-PCR allelic discrimination (SNP)	
	d. Tm Calling (Meltcurve Anlysis – Sybr)	
	e. Endpoint Genotyping	
	f. Qualitative Gene detection	
	g. High Resolution Melting curve analysis (HRM) for mutation studies	
	h. Pathogen detection and plus/minus assay.	
	Nessessary control / QC kits for installation should be supplied along with instruments	
	Software should be compatible with Win 7 to Win 10 with future upgradation	
	RT PCR software should be of multi user installation facility and allow the user to design the experiment or plate layout conveniently.	
	Software should allow to import / export formats like Txt export, Charts: Data and image.	
	System software should support remote access for trouble shooting.  Software should have the provision to use barcode scanner and import / export option for plating layout	
	to reduce the time in plating layout.	
	A laptop/ desktop PC with good configuration should be supplied	
	Should provide AMC terms and conditions	
	Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter	
	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Covered by a two-year replacement warranty in the event of any component failure arising from defective design, materials or workmanship.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
6	Full automated Electrophoresis Machine	
	Capillary	
	full automated	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter	
	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).  Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever	
	required.	

No.	Item Specifications	Fill Your Specifications
110.	Installation and Commissioning	Thi Tour Specifications
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
7	Full Automated Tissue processor Machine	
	Easy loading and full process by rotating table principle	
	Up to 240 cassette	
	Up to 25 holders	
	System status monitor	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be	
	minimum 3 Meter	
	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the	
	system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Covered by a two-year replacement warranty in the event of any component failure arising from defective	
	design, materials or workmanship.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever	
	required.  Installation and Commissioning	
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English  List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
8	Tissue Autostainer	
0	Operational Requirements:	
	Operational Requirements.	
	High throughput robotic stainer for Multiple staining applications and should run up to 12 racks in parallel.	
	Simultaneous staining of protocols of haematoxylin-eosin and pap stain should be available .	
	Equipment should have solvent resistant color touch screen to monitor the staining process using the graphical	
ļ	process representation.	
	Racks should be assigned to the correct Staining Protocol based on transponder & Color -code system.	
	The equipment should have 34 reagent stations and 6 wash stations of 450ml capacity.	
	The equipment should be programmable for 50 programs of upto 40 steps each with incubation time setting from	
	0 sec to 59 minutes 59 seconds.	
	Optional Integrated oven with temperature setting from 40 □ to 70 □C for optimal slide drying is preferred.	
	Continuous loading and unloading of slides via rack entry and exit door should be available.	
	Specimen slide throughput of at least 200 slides per hour upto 600 slides per hour is required.	
	Agitation programmable from 0 to 20 times or continuous should be available.	
	Reagent management System, Station information on touch screen & Data Logging should be available.	
	Programmable up and down movement of robotic arm should be available.	
	Fume extraction fan with charcoal filter to remove hazardous fumes should be available.	
	Gentle vibration to slide rack during lifting to reduce carry over contamination should be available.	
	Audible warning buzzer in case of any error during operation should be a feature of the equipment.	
	Operating Environment	

No.	Item Specifications	Fill Your Specifications
1100	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	Im I our Specimentons
	Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
•	Certificate of calibration and inspection from factory.	
9	Embeding Center manual lever and foot switch for paraffin dispenser	
	adjustable magnifier	
	spacious and heated paraffin collection tray	
	from 3-8 liter paraffin container	
	cooling spot	
	working area with Led light	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature,Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the	
	system.	
	Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Covered by a two-year replacement warranty in the event of any component failure arising from defective design, materials or workmanship.	
<u> </u>	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
<u> </u>	Installation and Commissioning  Supplier must accomplish proper installation and commissioning of the equipment on site.	
<u> </u>	Supplier must accomplish proper installation and commissioning of the equipment on site.  Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
10	Floating Water Bath	
	capacity min. 2 liter	
	capacity slide min. 30	
	over heating protection	
	microprocessor thermostatic controller	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter	

NT	To Co. 10° d.	D11 87 C
No.	Item Specifications Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the	Fill Your Specifications
	system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Covered by a two-year replacement warranty in the event of any component failure arising from defective	
	design, materials or workmanship.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever	
	required.	
-	Installation and Commissioning	
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Downwardship.	
	Documentation User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
<u> </u>	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
11	Semi Automated Microtome	
	Operational Requirements :	
	The instrument should have Motorised feeding system with optional motorized and manual sectioning with rocking mode facility and ability for voltage selection,2nd handwheel brake, separate control panel for display,	
	blade holder, disposables blades, with following specifications:	
	Section thickness setting: 0.5 to 100 microns	
	Setting values:	
	0.5 to 5 micron in 0.5 micron increments	
	5 to 20 micron in 1 micron increment	
	20 to 60 micron in 5 micron increment	
	60 to 100 in 10 micron increment	
	Horizontal specimen feed: 28 mm +/- 1 mm, feed motion via step motor	
	Coarse feed: Motorised coarse feed in two steps i.e 300 micron/sec and 900 micron/sec.	
	Vertical specimen stroke length: 70 mm.	
	Specimen orientation: Horizontal 8 deg, Vertical 8 deg.	
	Trimming Section thickness: 1 to 600 micron	
	8.Specimen retraction: 5 to 100 micron in 5 micron increment, can be turned off.	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50/60 Hz AC Single phase with appropriate plug .The power cable must be minimum	
	3 Meter	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.	
	User Training  Ment and the control of the line based and the line	
-	Must provide user training (including how to use and maintain the equipment).	
<u> </u>	Warranty Comprehensive wearenty for 2 years often acceptance	
<u> </u>	Comprehensive warranty for 2 years after acceptance.  Maintenance Service Duning Waynerty Period	
-	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
-	Installation and Commissioning	
-	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.  Certificate of calibration and inspection from factory.	
12	Full Automated Chemistry Analyzer (not less than 300 Test/hr)	
12	The Fully-automated Biochemistry Analyzer measures biochemical indexes by analyzing blood and other body	
	fluid, then combines with other clinical information, to help diagnose disease, evaluate organs function, identify	
	disease gene and determine the norm for future therapy.	
	and according the norm for future therapy.	

NT-	T4 C	F:11 X/ C:@4:
No.	Item Specifications Automatic Analyzer	Fill Your Specifications
	random continuous access	
	Specify: Sample Tray, continuous loading, positive sample identification	
	Not less than 300 test / hr	
	Automatic calibration	
	Specify Sample Tray capacity	
	sample Separate access to refrigerated area for on-board calibrators and controls.	
	Reagent Storage Area:	
	Specify Refrigerated storage for one- or two-reagent chemistries plus open system capability –	
	Calibration stability more than 10 days	
	documentation on CD	
	Host interface : bidirectional	
	Auto-dilution : Automatic dilution from the original sample	
	Auto-repeat: Automatic repeat testing from the original sample  Automatic Clot Detection	
	Sample Volume: from 1-5 µL  Running cost details important and all start up kits neede for operation and calibration	
	Operating Environment	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity	
	of 15-90%	
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative	
	humidity of 15-90%	
	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
	The part of the pa	
	Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	Should be FDA/CE/BIS approved product.	
	Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.	
	Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years from acceptance.	
	Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and	
	corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.	
	Documentation	
	User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)	
-	Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)	
-	List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.	
13	Full Automated Chemistry Analyzer (not less than 180 Test/hr)	
	The Fully-automated Biochemistry Analyzer measures biochemical indexes by analyzing blood and other body	
	fluid, then combines with other clinical information, to help diagnose disease, evaluate organs function, identify disease gene and determine the norm for future therapy.	
	Automatic Analyzer	
	random continuous access	
	Specify: Sample Tray, continuous loading, positive sample identification	
	Not less than 180 test / hr	
	Automatic calibration	
	Specify Sample Tray capacity	
	sample Separate access to refrigerated area for on-board calibrators and controls.	
	Reagent Storage Area:	
	Specify Refrigerated storage for one- or two-reagent chemistries plus open system capability –	
	Calibration stability more than 10 days	
	documentation on CD	
	Host interface : bidirectional	

No.	Item Specifications	Fill Your Specifications
140.	Auto-dilution : Automatic dilution from the original sample	rm rour specifications
	Auto-repeat: Automatic repeat testing from the original sample	
	Automatic Clot Detection	
	Sample Volume : from 1-5 µL	
	Running cost details important and all start up kits neede for operation and calibration	
	Operating Environment	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%	
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%	
	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
	Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	Should be FDA/CE/BIS approved product.	
	Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.	
	Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.	
-	User Training	
-	Must provide user training (including how to use and maintain the equipment).  Warranty	
	Comprehensive warranty for 2 years from acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure planned preventive maintenance (PPM) and	
	corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.	
	Documentation	
	User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	List of important spare parts and accessories with their part number and costing.	
	Certificate of calibration and inspection from factory.	
14	Fully Automated Haematology Analyser (3 Parts Differential)	
	Description of Function	
	Automated haematology analyser or complete blood cell counter is used to count various types of blood cells in the blood.	
	Operational Requirements	
	Fully automated 3 parts differential haematology analyser.	
	System Configuration	
	Fully Automated Haematology Analyser, complete unit with all standard reagents, consumables and accessories.	
<u> </u>	Technical Specifications	
	Determination of 18 to 19 parameters, with 3-part differential, for routine haematology.	
	Shall have fully automatic, open system.  Sample volume: < 30ul.	
<b> </b>	Throughput: approx. 50 samples per hour, 24h power on, with dormancy and wake function.	
	Determination of: Red blood cell (RBC), White blood cell(WBC), Haemoglobin(HGB), Haematocrit(HCT),	
	Mean cell volume(MCV), Mean cell haemoglobin(MCH), Red cell distribution(RDW-SD and RDW-CV), Platelets(PLT), Platelet distribution(PDW-SD and PDW-CV), Mean platelet volume(MPV), differential	
	leucocytes (LYM, LYM%, MID, MID%, GRA, GRA%).	
	Method: Photometry and impedance technology, cyanide-free colorimetry for haemoglobin counting.	
	Calibration: independent automated calibration and manual calibration for minimum two test modes.	
	Typical counting time: approximately 60 seconds for differential.	
	Shall have with self-test capability.	
	Display: LCD screen.	
	Indication of self-test failures and assistance messages, sample ID, date and time are reported with test results.	
	Supplied complete with dedicated data analysis and data management software.  Results are reported on external laser printer.	
	теошть не теропон он олюнии имет ринен.	

No.	Item Specifications	Fill Your Specifications
	Shall have built-in RS232, USB2.0 or equivalent, for allowing data transfer and network capability via LIS.	
	On board memory for about 100-150 tests records.	
	Shall quote rates for reagents & consumables, calibrators & controls, printer paper, separately and it must be valid for at least 3 years.	
	Accessories, spares and consumables	
	Reagents & consumables, calibrators & controls, printer paper to be supplied for 1000 samples.	
	Shall provide compatible laser printer, 1 no.	
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under the conditions of	
	the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.	
	Power supply: 220-240VAC, 50Hz fitted with appropriate plug type D (3 pins). The power cable must be	
	minimum 3 meters long.	
	Suitable UPS with maintenance free batteries, voltage regulation and spike protection for minimum 30 min. back- up for the entire system including computer and printer shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA approved product certificate.	
	Shall meet IEC 61010-2-081 safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).  Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure preventive maintenance and corrective/breakdown	
	maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
	Documentation	
	User (Operating) manual in English.	
	Service (Technical / Maintenance) manual in English.	
	List of important spare parts and accessories with their part numbers and costing.	
15	Certificate of calibration and inspection from factory.  Fully Automated Haematology Analyser (5 Parts Differential)	
- 13	Description of Function	
	Automated haematology analyser or complete blood cell counter is used to count various types of blood cells in the blood.	
	Operational Requirements	
	Fully automated 5 parts differential haematology analyser.	
	System Configuration	
	Fully Automated Haematology Analyser, complete unit with all standard reagents, consumables and accessories.	
	Technical Specifications  Description of 20 to 22 properties with 5 and differential formation because in the second of the seco	
	Determination of 20 to 22 parameters, with 5-part differential, for routine haematology.  Shall have fully automatic, open system.	
	Sample volume: < 30ul.	
	Throughput: approx. 50 samples per hour, 24h power on, with dormancy and wake function.	
	Determination of: Red blood cell(RBC), White blood cell(WBC), Haemoglobin(HGB), Haematocrit(HCT), Mean cell volume(MCV), Mean cell haemoglobin(MCH), Red cell distribution(RDW-SD and RDW-CV), Platelets (PLT), Platelet distribution(PDW-SD and PDW-CV), Mean platelet volume(MPV), differential leucocytes (LYM, LYM%, MID, MID%, GRA, GRA%).	
	Method: Photometry and impedance technology, cyanide-free colorimetry for haemoglobin counting.	
	Calibration: independent automated calibration and manual calibration for minimum two test modes.	
	Typical counting time: approximately 60 seconds for differential.	

No.	Item Specifications	Fill Your Specifications
	Shall have with self-test capability.	-
	Display: LCD screen.	
	Indication of self-test failures and assistance messages, sample ID, date and time are reported with test results.	
	Supplied complete with dedicated data analysis and data management software.  Results are reported on external laser printer.	
	Shall have built-in RS232, USB2.0 or equivalent, for allowing data transfer and network capability via LIS.	
	On board memory for about 100-150 tests records.	
	Bar code scanner included	
	LAN Connection	
	storage capacity about 200000 result minimum.	
	ability to view 5 parts differential in histogram	
	Shall quote rates for reagents & consumables, calibrators & controls, printer paper, separately and it must be valid for at least 3 years.	
	Accessories, spares and consumables	
	Reagents & consumables, calibrators & controls, printer paper to be supplied for 1000 samples.  Shall provide compatible laser printer, 1 no.	
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item	
	included in their offer (including items not specified above).	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under the conditions of Sudan. The conditions include Power Supply, Climate, Temperature, Humidity, etc.	
	Power supply: 220-240VAC, 50Hz fitted with appropriate plug type D (3 pins). The power cable must be minimum 3 meters long.	
	Suitable UPS with maintenance free batteries, voltage regulation and spike protection for minimum 30 min. back- up for the entire system including computer and printer shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA approved product certificate.	
	Shall meet IEC 61010-2-081 safety requirements for electrical equipment for measurement, control, and	
	laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure preventive maintenance and corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
	Documentation	
	User (Operating) manual in English.	
	Service (Technical / Maintenance) manual in English.	
	List of important spare parts and accessories with their part numbers and costing.	
16	Certificate of calibration and inspection from factory.	
16	Electric Centrifuge bench top  Description of Function	
	Centrifuges are required in the laboratory to separate various components of Blood for analysis.	
	Operational Requirements	
	Aerodynamic compact construction for vibration free performance.	
	System Configuration	
	Centrifuge with complete accessories, adaptors.	
	Technical Specifications	
	Volume of tube: 15 ml.	
-	Rotor Type: Fixed OR swing-out to take 8x15ml - 12x15ml tubes  Speed Pange: 4000 6000 rpm (or higher)	
	Speed Range: 4000 - 6000 rpm (or higher)  Drive Motor: Brushless motor.	
	Digital display and control for speed and time.	
	Q a . 1	

No.	Item Specifications	Fill Your Specifications
110.	Stainless Steel Chamber.	rm rour specifications
	LID Lock.	
	Line voltage: 220 ± 20 % 50 Hz.	
	Accessories, spares and consumables	
	Aerosol-resistant caps for buckets / lid for rotor	
	Adapters for 15 ml tubes	
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA approved product certificate.	
	Must comply with IEC/TR 61010-3-020 :Safety requirements for electrical equipment for measurement, control,	
	and laboratory use - Part 3-020: Conformity verification report for IEC 61010-2-020:1992 Particular requirements for laboratory centrifuges"	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
	1	
	Installation and Commissioning Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
	Manufacturing Date must be less than 6 months before delivery	
17	ESR Analyzer	
	The equipment should be able to give results after reading of Red Cells aggregation.	
	The equipment should be able to provide automated ESR readings.  No specific reagent required for running the test.	
	No specific reagent required for running the test.	
	The equipment should have a facility for calibration as well as it should be able to store Quality Control Data.	
	The equipment should be able report the result in mm/hr.	
	The equipment should have good co - relation with Westergen method.	
	The result should have any effect due to low hematocrit levels.	
	The equipment should be able to use the same sample tube with EDTA from cell counter available with the lab.	
	The equipment should have capacity of minimum 15 samples at a time.	
-	The throughput should be 50-60 samples / hour.  The equipment should be compatible with Latex Controls and Calibrators.	
	Instrument should have two level of controls.	
	The equipment should work at 37 deg C with thermostat control.	
	The equipment should mix sample thoroughly as per CLSI requirements.	
	The equipment should be able to connect with external bar code reader if required.	
	It should be possible to perform test up to 24 hours from sample collection.	
	The equipment should have a touch screen LCD display.	
	The equipment should have internal thermal printer.	
	The equipment should have facility to interface with host computer with bi-directional data transfer. Instrument	
18	should have USB and serial port.  Fully Automated Coagulation Analyzer	
10	Fully Automated Coagulation Analysis	
	A microprocessor controlled desk top, coagulation analyzer to include PT, PTT, TT and thrombin.	
	4 measuring channels	
	Cap piercing	
	Sample throughput up to 160 tests/h (without cap piercing)	
	Sample throughput up to 120 tests/h (with cap piercing)	
	Chromogenic, immunological and coagulometric tests	
	Open system, suitable for almost all reagents	

No.	Item Specifications	Fill Your Specifications
110.	Derived fibrinogen	Im Tour Specifications
	Positive patient identification, all commercial barcodes	
	Automatic pre-dilution	
	Automatic test repetition	
	Automatic calibration curve creation	
	Automatic level detection	
	Follow up test (reflex test)	
	Digitalised measuring results recording	
	QC programme	
	Up to 30,000 patients' data, incl. reaction curves  Collection tubes	
	Operating Environment	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%	
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative	
	humidity of 15-90%  Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
	Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND Should be FDA/CE/BIS approved product.	
	Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.	
	Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years from acceptance.	
	Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and	
	corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.	
	Documentation	
	User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	List of important spare parts and accessories with their part number and costing.	
	Certificate of calibration and inspection from factory.	
19	Coagulometer	
	Semi-automatic 4 channels	
	Twin channel coagulometer for routine tests: PT, a PTT, TT, Fibrinogen and clotting factors.	
	To have 30 sample capacities 37 deg C dry incubation block.	
	To have automatic counter, to grig off when starter reagent is added to sample and to stop when clot is formed.	
	Results to be displayed and printed.	
	To have recorder output for platelet aggregation	
	Measuring system Photometric	
	Beam source Infra-red LED Incubation 37 deg C + 0.2 deg C	
	Capacity 30 cuvette and 3 reagent bottles	
	Display twin 3 digit 00.0 to 99.9 seconds.	
	Keyboard 6 keys	
	Printer 20 column, 64 characters.	
	Operating Environment	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity	
	of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative	
	humidity of 15-90%	
	<b>Power supply</b> : 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	

Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.  Standards and Safety Requirements  Must submit ISO13485:20037AC:2007 for Medical Devices AND  Should be FDA/CEBIS approved product.  Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.  Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years from acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective-breakdown maintenance wherever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any perceptisties for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 s rolls.  Speedpran approx: 33.  Amplitudeapprox: 16 mm.  Roller Approx Size: 340x30 mm.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Hundilly, etc., for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plag: The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (9342 EEC Directives) or USPDA or TUV approved product certificate.  User Training  Must provide user train	
Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  Should be FIDACE-BIS approved product.  Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.  Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years from acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective-breakdown maintenance whenever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any perequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Stitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedpran approx: 33  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/5 OHz AC Single phase with appropriate plug: The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CEGET Tailning	
Must submit ISO13485:2003/AC:2007 for Medical Devices AND Should be FDA/CE/BIS approved product. Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1. Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety. User Training Must provide user training (including how to use and maintain the equipment). Warranty Comprehensive warranty for 2 years from acceptance. Maintenance Service During Warranty Period During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective-breakdown maintenance whenever required. Installation and Commissioning The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy) Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing. Certificate of calibration and inspection from factory.  Blood Samble Rolling Mixer Technical Specifications Rocking and rolling action for complete mixing Removable rollers to accommodate large bottles Stialable for continuous operation Nomber of Rollersapprox: 6 - 8 rolls. Speedrpm approx: 33 . Amplitudeapprox: 16 mm . Roller Approx Size: 340x30 mm Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan. Power supply: 220-240V/V 50 Hz AC Single phase with appropriate plug :The power cable must be minimum 3 Meter Standards and Safety Requirements Must submit ISO13485:2003/AC:2007 for Medical Devices AND (Et (9742 EEC Directives) or USFDA or TUV approved product certificate.	
Should be FDA/CE/BIS approved product. Shall met internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.  Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.  User Training Must provide user training (including how to use and maintain the equipment).  Warranty Comprehensive warranty for 2 years from acceptance. Maintenance Service During Warranty Period During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisities for installation to be communicated to the user in advance, in detail.  Documentation User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications Rocking and rolling action for complete mixing Removable rollers to accommodate large bottles Suitable for continuous operation Nomber of Rollersapprox: 6 8 rolls.  Speedrym approx: 33  Amplitudeapprox: 16 mm. Roller Approx Size: 340x30 mm Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/30 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Shall meet internationally recognised for Electromagnetic Compatibility(EMC) for electromedical equipment: 61326-1.  Certified to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years from acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 # rolls.  Speedpm approx: 33 .  Amplitude-approx if 6 mm.  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,  Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3  Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Gardied to be compliant with IEC 61010-1, IEC 61010-2-281, 61010-2-101 for safety.   User Training   Must provide user training (including how to use and maintain the equipment).	
User Training   Must provide user training (including how to use and maintain the equipment).   Warranty	
Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years from acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm.  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Warranty Comprehensive warranty for 2 years from acceptance. Maintenance Service During Warranty Period During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required. Installation and Commissioning The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel: any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy) Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing. Certificate of calibration and inspection from factory.  Blood Samble Rolling Mixer  Technical Specifications Rocking and rolling action for complete mixing Removable rollers to accommodate large bottles Suitable for continuous operation Nomber of Rollersapprox: 6 - 8 rolls. Speedrpm approx: 33 . Amplitudeapprox: 16 mm. Roller Approx Size: 340x30 mm Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan. Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter Standards and Safety Requirements Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (9342 EEC Directives) or USFDA or TUV approved product certificate. User Training	
Comprehensive warranty for 2 years from acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel: any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications  Rosking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO 13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6-8 rolls.  Speedrym approx: 33.  Amplitudeapprox: 16 mm.  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
corrective/breakdown maintenance whenever required.  Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Installation and Commissioning  The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20 Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 - 8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 nm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug . The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
any prerequisites for installation to be communicated to the user in advance, in detail.  Documentation  User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20 Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 - 8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 nm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug . The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)  Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  20  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 - 8 rolls.  Speedrpm approx: 33.  Amplitudeapprox: 16 mm.  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)  List of important spare parts and accessories with their part number and costing. Certificate of calibration and inspection from factory.  20 Blood Samble Rolling Mixer  Technical Specifications Rocking and rolling action for complete mixing Removable rollers to accommodate large bottles Suitable for continuous operation Nomber of Rollersapprox: 6 - 8 rolls. Speedrpm approx: 33 . Amplitudeapprox: 16 mm . Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan. Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA or TUV approved product certificate. User Training	
List of important spare parts and accessories with their part number and costing.  Certificate of calibration and inspection from factory.  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Certificate of calibration and inspection from factory.  Blood Samble Rolling Mixer  Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33.  Amplitudeapprox: 16 mm.  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Technical Specifications  Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33.  Amplitudeapprox: 16 mm.  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Rocking and rolling action for complete mixing  Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Removable rollers to accommodate large bottles  Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Suitable for continuous operation  Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Nomber of Rollersapprox: 6 -8 rolls.  Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Speedrpm approx: 33 .  Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Amplitudeapprox: 16 mm .  Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Roller Approx Size: 340x30 mm  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA or TUV approved product certificate. User Training	
Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug . The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND  CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3 Meter  Standards and Safety Requirements  Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.  User Training	
Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA or TUV approved product certificate. User Training	
Must submit ISO13485:2003/AC:2007 for Medical Devices AND CE (93/42 EEC Directives) or USFDA or TUV approved product certificate. User Training	
User Training	
Must provide user training (including how to use and maintain the equipment)	
2.2400 pro 1.200 aper training (merataing now to tabe and manatain the equipment).	
Warranty	
Comprehensive warranty for 2 years after acceptance.	
Maintenance Service During Warranty Period	
During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
Installation and Commissioning	
Supplier must accomplish proper installation and commissioning of the equipment on site.  Decumentation	
User (Operating) manual in English	
Service (Technical / Maintenance) manual in English	
List of important spare parts and accessories with their part numbers and costing.	
Certificate of calibration and inspection from factory.	
21 Blood Gas Analyzer	
Description of Function	
Blood gas analysers are used to measure blood gases, electrolytes, pH values and biochemical parameters of the	
blood  Technical specifications	
Technical specifications  Automated analyzer	
Compact system for measuring pH, pCO2, pO2, -HCO3 in blood	
Fast and accurate result of test made available in about 60 seconds.	

No.	Item Specifications	Fill Your Specifications
	May have provision of modular platform for further up gradation to include glucose, lactate & hemoglobin.	•
	Built in printer	
	Barcode reader for reagents and other consumables, patient ID and quality control data  Automatic aspiration from syringe or capillary Sample size: approximate 250ul – 50ul	
	Easy-to follow computer assisted guidance for operator	+
	Sample type: whole blood, serum, plasma	_
	All parameters must be measured from a single sample	
	Approximate time for analysis: around 2 minutes	
	Automatic calibration, programmable 1 and 2 point calibration; in case of non-automatic calibration,	
	Please provide the calibration kit.	
	Data storage: approximate 500 patients	
	Ambient temperature:18 - 30 °C	
	Reagents and waste level detection by software	
	Save mode	
	Measurable parameters (approximate measurable ranges): ph 6.5 - 7.8	
	pCO2 10 - I50 mmHg	-
	pO2 10 - 700 mm Hg	+
	Gluc 20 - 500 mg/dl or better	<u> </u>
	tHb 5 - 25 g/dL and/or Hct 15-60%	
	ctHb mmol/1 0.5 – 16.5	1
	sO2 0 – 100%	
	fO2Hb 0 – 100%	
	fCOHb 0 – 100%	
	fMetHb $0-100\%$	
	fhHb 0 – 100% optionally	
	Calculated parameters (approximate calculated ranges):	
	HCO3 0 - 100mmol/L	
	BE-30 - 30 mmol/L	
	tCO2 0 - 100mmol/L	
	pH(T) 6.5 - 7.8	
	RI 0-10 O2SAT 15-100%	
	Connection to PC at least RS 232	
	Self diagnosis system	+
	No maintenance required for the electrodes	
	Consumables:	
	Specify all Consumables for 2 year (with a usage rate of min 10 tests/day)	
	sensor cards (box)	
	Power Supply	
	Input power supply: 220/240 V AC , 50Hz single phase schuko plug	
	Suitable UPS with maintenance free batteries for minimum 30 min. shall be supplied with the system.	
	Environmental factors	
	The unit shall be capable of being stored continuously in ambient temperature of 0 -55deg C and relative humidity of 15-90%	
	The unit shall be capable of operating in ambient temperature of 20-50 deg C and relative humidity of 80%	
	Standards and safety	
	Should be FDA or CE approved product certificate.	
	User Training	
	Must provide operating and service trainings	
	Warranty	
<u> </u>	Comprehensive warranty for 2 years.	
	Documentation   User (Operating) manual in English Should provide 2 sets(hardcopy and soft-copy)	+
	Service (Technical / Maintenance) manual in English Should provide 2 sets(hardcopy and soft-copy)	
	List of important spare parts, accessories and consumables with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
22	Blood Bank Refrigerator	
	Description of Function	

Blood Bank Refrigerator is used to saver bloom and controlled temperature.  Operational Requirements  System required with weekly chart recorder, digital display,  System required with weekly chart recorder, digital display,  System required with weekly chart recorder, digital display and with complete accessories.  Technical Specifications  Temperature range:  Mass have adjustable temperature control range from +2 °C to +6 °C. It shall maintain internal temp at 4 of °C the ben unformery of this temperature must be maintained throughout the churber with the avanisma average temperature variation of +6 ·1 of. browned different churbers with the approximately 250 times.  Capacity mast accommodate 15 blood hage and six with the approximately 250 times.  Blood Bank Refrigerator shall have a large LCD which displays:    Temperature.	No.	Item Specifications	Fill Your Specifications
Operational Requirements System Configuration Blood Bank Refrigerators with weekly chart recorder and digital display and with corruptee accessories.  Technical Specifications Temperature range:  Mars have adjustable temperature coated range from +2 °C to +6 °C. It shall maintain internal temp at 4 of & the uniformity of this temperature must be maintained throughout the chumber with the maximum average lemperature variation of +1 °C to between different damabers.  Capacity must accommendate 150 Blood tags and size will be approximately 250 listes.  Capacity must accommendate 150 Blood tags and size will be approximately 250 listes.  Capacity must accommendate 150 Blood tags and size will be approximately 250 listes.  Capacity must accommendate 150 Blood tags and size will be approximately 250 listes.  Capacity must accommendate 150 Blood tags and size will be approximately 250 listes.  Capacity must accommendate 150 Blood tags and size will be approximately 250 listes.  The blood bank refrigerator shall have a large LCD which displays:  1 Tomperature.  C It shall be address a size of the size	INU.		rm rour specifications
System required with weekly chart recorder and digital display.  System Configuration  Blood Bank Refrigerator with weekly chart recorder, digital display and with complete accessories.  Technical Specifications  Temperature range:  Must have adjustable temperature control range from 42°C to 46°C. It shall maintain internal temp at 40°C & the uniformity of his temperature must be maintained throughout the chamber with the maximum average temperature variation of 1-1. Oc between different chambers.  Capacity must accommodated 150 Mood Tagas and six will be apparentimedly 250 litres.  Blood Bank Refrigerator shall have integrated temperature monitoring system with microprocessor controls.  The blood bank Refrigerator shall have a larget 1.07 which displaye:  J Temperature.  J High & Low alarme points with date & time.  J Provious Alboor temperature in graphical form.  J Data of power failure vascorption in lat 21 hours with date & time.  The internal alboor temperature in graphical form.  J Data of power failure vascorption in lat 21 hours with date & time.  The internal anionatic temperature alarm system shall work if a temperature falls below 2 of & exceeds beyond of &C.  The internal anionatic temperature alarm system shall work if a temperature falls below 2 of & exceeds beyond of &C.  The internal anionatic temperature alarm system shall also have a nisting temperature falls below 2 of & exceeds beyond of &C.  The internal construction must be made up of high grade statiless set 201 (mmi 22°C). External construction  Corrision tensul temperature alarm system shall also have a battery backup of minimum 3-4 hours.  Internal construction must be made up of high grade statiless set 204 (mmi 22°C). External construction  Corrision tensul			
Blood Bank Refrigerator with weekly chart recorder, digital display and with complete accessories.  Technical Specifications  Temperature range:  Must have adjustable temperature control range from ±2°C to ±6°C. It shall maintain internal temp at 4°C & the min fromity of this temperature most he maintained throughout the chamber with the maximum average temperature variation of ±1°L 0°C between different chambers.  Capacity must accommodate 150 blood bega and see will be approximately 250 litres.  Blood Bank Refrigerator shall have integrated temperature monitoring system with microprocessor controls.  The blood bank refrigerator shall have a large LCD which displays:  □ Temperature.  □ Tigith & Low alarm points with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of power faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24 hours with data & time.  □ Data of cover faiture/resumption in lat 24			
Technical Specifications Temperature range:  Must have adjustable temperature control range from +2 °C to +6 °C. It shall maintain internal temp at 4 °C & the uniformity of this temperature must be maintained throughout the chamber with the maximum avverage temperature variation of +-1 °C to Detween different chambers.  Capacity must accommodate 150 blood bags and size will be upproximately 250 litres.  Brond Bank Refrigerator shall have a large LCD which displays:  1. Imperature.  2. Imperature.  2. Imperature.  3. Imperature.  3. Imperature.  3. Imperature.  4. Imperature.  5. Imperature.  5. Imperature.  6. Imperature.  6. Imperature.  6. Imperature.  6. Imperature.  6. Imperature.  6. Imperature.  7. Imperature.  6. Imperature.  7. Imperature.  6. Imperature.  7. Imperature.  8. Imperature all the state of th		System Configuration	
Must have adjustable temperature control range from ±2 °C to ±6 °C. It shall maintain internal temp at 4 oC & the uniformity of this temperature must be maintained throughout the chamber with the maximum average temperature variation of ±7 ±10 °C between different chambers.  Capacity must accommodate 150 blood bugs and size will be approximately 250 litrus.  Blood Bank Refrigerator shall have a larger LCD which displays:  ☐ Temperature.  ☐ The blood bank refrigerator shall have a larger LCD which displays:  ☐ The blood bank refrigerator shall have a large LCD which displays:  ☐ The blood bank refrigerator shall have a large LCD which displays:  ☐ The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  ☐ The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  The internal automatic temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall of the shall have the state of the shall also have a hastery backup of minimum 3-4 hours.  In shall have beckable door. Oncer door shall be made of glass to see through and inner door shall be made of explic sheet to ensure uses of poperations, better minitenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IFC 61010.  Internal calabority lighting the population of the shall be a shall be a shall be a lease of explicit sheet to ensure uses of populations, better minitenance of internal temperature and or shall be readed of the		Blood Bank Refrigerator with weekly chart recorder, digital display and with complete accessories.	
Must have adjustable temperature control range from ±2 °C to ±6 °C. It shall maintain internal temp at 4 oC & the uniformity of this temperature must be maintained throughout the chamber with the maximum average temperature variation of ±7 ±10 °C between different chambers.  Capacity must accommodate 150 blood bugs and size will be approximately 250 litrus.  Blood Bank Refrigerator shall have a larger LCD which displays:  ☐ Temperature.  ☐ The blood bank refrigerator shall have a larger LCD which displays:  ☐ The blood bank refrigerator shall have a large LCD which displays:  ☐ The blood bank refrigerator shall have a large LCD which displays:  ☐ The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  ☐ The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  The internal automatic temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall below 2 of & exceeds beyond 6 of C.  The internal temperature alarm system shall work if a temperature fall of the shall have the state of the shall also have a hastery backup of minimum 3-4 hours.  In shall have beckable door. Oncer door shall be made of glass to see through and inner door shall be made of explic sheet to ensure uses of poperations, better minitenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IFC 61010.  Internal calabority lighting the population of the shall be a shall be a shall be a lease of explicit sheet to ensure uses of populations, better minitenance of internal temperature and or shall be readed of the		Technical Specifications	
the uniformity of this temperature must be maintained throughout the chamber with the maximum average temperature variation of x-1 of between different chambers.  Capacity must accommodate 150 blood bags and size will be approximately 250 litres.  Blood Bank Refrigerator shall have integrated temperature monitoring system with microprocessor controls.  The blood bank refrigerator shall have a large LCD which displays:  O Temperature.  O Previous 24 hour temperature in graphical form.  O Previous 24 hour temperature in graphical form.  O To bas of power fulner-compution in lard 24 hours with dats & time.  The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  The internal automatic temperature alarm system shall work if a temperature falls below 2 of & exceeds beyond of which is the state of t			
Capacity must accommodate 150 blood bags and size will be approximately 250 litres.  Blood Bank Refrigerator shall have integrated temperature monitoring system with microprocessor controls.  The blood bank refrigerators shall have a large LCD which displays:    Temperature		the uniformity of this temperature must be maintained throughout the chamber with the maximum average	
The blood bank refrigerator shall have a large LCD which displays:    Temperature.   Previous 24 hour temperature in graphical form.		Capacity must accommodate 150 blood bags and size will be approximately 250 litres.	
1 Temperature.		Blood Bank Refrigerator shall have integrated temperature monitoring system with microprocessor controls.	
C Previous 24 hour temperature in graphical form. C Data of power failure/resumption in last 24 hours with date & time. The blood bank refrigerator shall also have an inbuit circular chart recorder for 7 days recording of temperature on circular chart paper. The internal automatic temperature alarm system shall work if a temperature falls below 2 oC & exceeds beyond 6 oC. The internal automatic temperature alarm system shall also have a battery backup of minimum 3-4 hours. Internal construction must be made up of high grade stainless steel 304 (min 22 G). External construction Corrosion resistant sheet at leas 1 mm thickness.  I shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of carylic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010. Internal cabinet lighting to be provided with lamp illumination whenever door opens. Shall come with roll out seel trays for proper storage of blood bags. Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating. Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and labrication materials, to be included in the offer.  Operating Environment The product offered shall be designed to be stored and to operate the equipment, including all standard tools and cleaning and labrication materials, to be included in the offer.  Operating Environment The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Jumidity, etc. of Sudan. Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Stituble Automatic Voltage regulator/stabilizer m		The blood bank refrigerator shall have a large LCD which displays:	
Il Previous 24 hour temperature in graphical form.		☐ Temperature.	
Data of power failure/resumption in last 24 hours with date & time.  The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  The internal automatic temperature alarm system shall also have a battery backup of minimum 3-4 hours.  Internal construction must be made up of high grade stainless steel 304 (min 22 G). External construction Corrosion resistant sheet at least 1 mm thickness.  It shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of acrylic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.  Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out selt trays for proper storage of blood bags.  Blood bank refrigerator shall have in built serve controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V 50 Hz AC Single phase with appropriate plug: The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V + 7 %, 50 Hz. Single phase, AC with automatic 24-sec Cut Official for the product ofference BTS/FD.  Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two		☐ High & Low alarm points with date & time.	
The blood bank refrigerator shall also have an inbuilt circular chart recorder for 7 days recording of temperature on circular chart paper.  The internal automatic temperature alarm system shall work if a temperature falls below 2 of & exceeds beyond 6 of C.  The internal construction must be made up of high grade stainless steel 304 (min 22 G). External construction Corrosion resistant shear a least 1 mm thickness.  It shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of acrylic sheet to ensure case of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.  Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out steel trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +7 79, 50 Hz. Single phase, AC with automatic 24 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type			
on circular chart paper.  The internal automatic temperature alarm system shall work if a temperature falls below 2 oC & exceeds beyond 6 oC.  The internal temperature alarm system shall also have a battery backup of minimum 3-4 hours.  Internal construction must be made up of high grade stainless steed 304 (min 22 G). External construction Corrosion resistant sheet at least 1 mm thickness.  It shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of acrylic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.  Internal cabinet lighting to be provided with lamp tillumination whenever door opens.  Shall come with roll out sele trays for projer storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Hundity, etc., for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V 4-7 9s, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay, Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for 10 modes. Proved the provide w		☐ Data of power failure/resumption in last 24 hours with date & time.	
6 oC. The internal temperature alarm system shall also have a battery backup of minimum 3-4 hours. Internal construction must be made up of high grade stainless steel 504 (min 22 G). External construction Corrosion resistant sheet at least 1 mm thickness.  It shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of acrylic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010. Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roil out selt rarys for proper storage of blood bags. Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc., for Sudan.  Power supply: 220-240V/50 Hz. AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V + 7 9s, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay, Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outless  Standards and Safety Requirements  Must submit ISO 9001 or ISO 13485:2003/AC:2007 AND  Must comply with WHOUNICEF Specification Reference: BTS/RF-1 and DIN			
Internal construction must be made up of high grade stainless steel 304 (min 22 G). External construction Corrosion resistant sheet at least 1 mm thickness.  It shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of acryfic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.  Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out sele trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall now adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply. Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 8, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input volumeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO 13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Broad and procedure: Standard Test P			
Internal construction must be made up of high grade stainless steel 304 (min 22 G). External construction Corrosion resistant sheet at least 1 mm thickness.  It shall have lockable door. Outer door shall be made of glass to see through and inner door shall be made of acryfic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.  Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out sele trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall now adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply. Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 8, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input volumeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO 13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Broad and procedure: Standard Test P		The internal temperature alarm system shall also have a battery backup of minimum 3-4 hours.	
acrylic sheet to ensure ease of operations, better maintenance of internal temperature.  Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.  Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out steel trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V. Output 220 +y-7 9s, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit 180 9001 or ISO 13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF-1 and DIN 58371.  Test and inspections as per WHO Procedure reference: BTS/RF-1 and DIN 58371.  Test and inspections as pre WHO Procedure reference: BTS/RF-1 and DIN 58371.  Test and inspections as per WHO Procedure reference: BTS/RF-1 and DIN 58371.  Test and inspections as per WHO Procedure reference: BTS/RF-1 and DIN 58371.  Test and inspections as per WHO Procedure refe			
Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out steet trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz. AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 24 sec Cut Off and 6-9 minutes restart delay, Quick start arrangements for bypassing the start delay, Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever requir		· · · · · · · · · · · · · · · · · · ·	
Internal cabinet lighting to be provided with lamp illumination whenever door opens.  Shall come with roll out steet trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz. AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 24 sec Cut Off and 6-9 minutes restart delay, Quick start arrangements for bypassing the start delay, Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever requir		Blood Bank Refrigerator shall confirm to noise level of less than 85 dBA as per IEC 61010.	
Shall come with roll out steel trays for proper storage of blood bags.  Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 78, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9010 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective-breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of			
Blood bank refrigerator shall have in built servo controlled voltage stabilizer of suitable rating.  Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay, Quick start arrangements for bypassing the start delay, Suitable McB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Shall have adjustments for uneven bases. The adjustments must be easy to use like rotating a screw at the legs in the base.  Accessories, spares and consumables  All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-79 minutes restart delay, Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO 13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.		, , , , , , , , , , , , , , , , , , , ,	
and cleaning and lubrication materials, to be included in the offer.  Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.		Accessories, spares and consumables	
Operating Environment  The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-land -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Temperature, Humidity, etc. for Sudan.  Power supply: 220-240V/50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug. The power cable must be minimum 3 Meter  Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Suitable Automatic Voltage regulator/stabilizer meeting international standards must be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets  Standards and Safety Requirements  Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.		Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3	
Must submit ISO 9001 or ISO13485:2003/AC:2007 AND  Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.		specifications are: Automatic Type Input 150-280V, Output 220 V +/- 7 %, 50 Hz. Single phase, AC with automatic 2-4 sec Cut Off and 6-9 minutes restart delay. Quick start arrangements for bypassing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Pore Cable with 15 A Plug and six way output terminal strip for two outlets	
Must comply with WHO/UNICEF Specification Reference: BTS/RF.1 and DIN 58371.  Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1 and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training Must provide user training (including how to use and maintain the equipment).  Warranty Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning The supplier must accomplish proper commissioning of the item onsite.			
BTS/Proc. / 3.  Shall meet IEC 60335-1and -2-24 General requirements of electrical safety.  User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
User Training  Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.		BTS/Proc. / 3.	
Must provide user training (including how to use and maintain the equipment).  Warranty  Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Warranty Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Maintenance Service During Warranty Period  During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
corrective/breakdown maintenance whenever required.  Installation and Commissioning  The supplier must accomplish proper commissioning of the item onsite.			
Installation and Commissioning The supplier must accomplish proper commissioning of the item onsite.			
		1	
Documentation		The supplier must accomplish proper commissioning of the item onsite.	
		Documentation	

No.	Item Specifications	Fill Your Specifications
110.	User (Operating) manual in English	rm rour specifications
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part number and costing.	
	Certificate of calibration and inspection from factory.	
23	Lab Incubator	
	Description of Function	
	Incubators are required to incubate living culture at a uniform temperature above ambient.  Operational Requirements	
	System with temperatures up to 50 deg C - specifically for incubating living cultures at 37 deg C and at 45 deg C	
	as required.	
	Technical Specifications	
	Capacity: within 50L	
	Interior chamber: Stainless steel for easy cleaning and decontamination	
	Timer: 1 min. to 100 hours and hold position	
	Temp range 5 deg C above ambient to 50 deg C	
	Minimum 4 adjustable shelves should be available.	
	Internal glass door for the observation	
	Temp Accuracy +/-1% of required temp, with inbuilt Temp.Sensor	
	Adjustable safety thermostat for temp setting at 1 deg C increment  Minimum turbulence and no cross contamination	
	In case of total breakdown of sensor, the heating should be switched off at approx. within 3 °C above set value.	
	There should be a Membrane Keypad with LCD/LED to set and display operating parameters, current status, running	
	time and alarm conditions for time and temperature.	
	Interior lighting facility, insulated door fitted with heavy	
	System Configuration Accessories, spares and consumables	
	System as specified-	
	Environmental factors	
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%	
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%	
	Power Supply Power input to be 220-240VAC, 50Hz fitted with Sudanese plug	
	Resettable overcurrent breaker shall be fitted for protection	
	Suaitable voltage corrector/stabilizer	
	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.	
	Standards and Safety	
	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001	
	Should be FDA or CE or ISI approved product	
	Comprehensive training for lab staff and support services till familiarity with the system.	
	Attach original manufacturer's product catalogue	
	8 Documentation	
	Certificate of calibration and inspection from factory.	
	List of Equipments available for providing calibration and routine maintenance support as per manufacturer	
	documentation in service / technical manual.  User/Technical/Maintenance manuals to be supplied	
	List of important spare parts and accessories with their part number and costing.	
	Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.	
	Comprehensive warranty for 2 years after acceptance.	
24	Hot Air Oven	
	Description of Function	
	Hot Air Oven is required for heating a sample under controlled conditions.	
	Operational Requirements  Microprocessor based system with DID temperature controller with integrated outs discreptic system with foult	
	Microprocessor based system with PID-temperature controller with integrated auto diagnostic system with fault indicator.	
	System Configuration	
	Microprocessor based Hot Air Oven.	
	Technical Specifications	

No.	Item Specifications	Fill Your Specifications
110.	External: Stainless Steel Casing: w x h x d: Approx.600 x 600 x 600 mm, insulated stainless steel door with	Im Tour Specifications
	locking and rear zinc-plated steel.	
	Interior: w x h x d: Approx. 400mm x 400mm x 400mm. Easy to clean, interior made of stainless steel, with	
	supports on the three sides for three adjustable perforated stainless steel shelves.	
	Forced air circulation by quiet air turbine/Fan to ensure uniform temperature.	
	Fitted with load indicator and safety thermostat take over indicator lamp. LCD/LED indicator.	
	Temperature Variation +/- 1.	
	Temperature Range- ambient to 250 oC	
	Output available for data acquisition.	
	Hot Air Oven shall be mounted on suitable epoxy powder coated support stand having 4 robust 360 deg. swivel lockable castor wheels for easy movement and repositioning.	
	Accessories, spares and consumables	
	All standard accessories/consumables/parts required for the proper operation of the above item shall be included	
	in the offer.	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/50 Hz AC Single phase fitted with appropriate plugs. The power cable must be at least	
	3 metres long.	
	Standards and Safety Requirements	
	Must submit ISO 9001 or ISO 13485:2003/AC: 2007 AND	
	CE or USFDA or TUV approved product certificate.	
-	User Training User training a most be availed exists	
<u> </u>	User training must be provided onsite  Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English.	
	Service (Technical / Maintenance) manual in English.	
	List of important spare parts and accessories with their part number and costing.	
25	Certificate of calibration and inspection from factory.  Spectrophotometer	
23	Description of Function	
	Description of Function	
	UV/Visual spectroscopy is routinely used in the quantitative determination of solutions of transition metal ions	
	and highly conjugated organic compounds. The instrument used in ultraviolet-visible spectroscopy is called a	
	UV/Vis spectrophotometer. It measures the intensity of light passing through a sample (I), and compares it to the	
	intensity of light before it passes through the sample (Io). In a double-beam instrument, the light is split into two beams before it reaches the sample. One beam is used as the reference; the other beam passes through the sample.	
	Some double-beam instruments have two detectors (photodiodes), and the sample and reference beam are	
	measured at the same time.	
	Operational Requirements	
	System Must provide for analysis of Protein, DNA / RNA & Enzyme kinetics etc.	
	Microprocessor controlled Double beam spectrophotometer with scanning, kinetic and multi wave length facility ,Self-check & self-diagnostic facility and Auto wavelength calibration facility	
	System Configuration	
	UV-visible Spectrophotometer, Dual Beam with complete accessories.	
	Technical Specifications	
	Single beam and double beam mode: Allow both modes	
	Wavelength range: 190nm - 1100nm	
	Photometric range :Minimum 2.0 Absorbance (Abs.) units	
	Lamp switching: Allow both modes manual or automatic	
	Band width: 0.2 nm - 4.0 nm or better, with 0.1 nm of increments	
	Must have automatic baseline corrections	
	Wavelength accuracy: Minimum of ±0.2 nm	
	Wavelength reproducibility:0.05 nm or better	
	Wavelength resolution: 0.2 nm or better  Photometric accuracy 10.003 Abs. units or better for 1.0 Abs. units	
	Photometric accuracy: ±0.003 Abs. units or better for 1.0 Abs. units  Photometric stability: After 2 hour Must not be more than 0.0005 Abs. units/h	
	p notometre staumty. And 2 note that not be more than 0.0003 Aus. tilits/ii	

No.	Item Specifications	Fill Your Specifications
110.	Photometric reproducibility: Must not be more than 0.0005 Abs. units at 0.5 Abs. units	rm rour specifications
	Photometric noise: Must not be more than 0.0003 Abs. units at 1.0 Abs. units	
	Scan speed: Must be between 0.25 nm/sec. and 8 nm/sec. or better	
	Monochromator slew rate: Must be 1500 nm/min. or better	
	Acquisition at more than one wavelength: Minimum of two	
	Must have Data acquisition and processing system	
	Must be Photometric scaling in Abs. units, %T, log Abs. units and concentration	
	Must Abscise scaling in nm, min., deg. and mm	
	Calibration at one or more levels and one or more wavelengths	
	Must Calculate and give factor for linear regression and other	
	Must Build and memorize in file form: data, method and report	
	Accessories, spares and consumables	
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.	
	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
	Suitable UPS with maintenance free batteries for minimum 30 min. back-up shall be supplied with the system.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA approved product certificate.	
	Must be compliant with IEC 61010-1:(or any international equivalent e.g. EN/UL 61010) covering safety	
	requirements for electrical equipment for measurement control and laboratory use.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years from acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part number and costing.	
	Certificate of calibration and inspection from factory.	
26	Benchtop tube sealer	
	Description of Function	
	Blood Bag Tube Sealer is a compact equipment to seal the Blood Bag pilot tube by radio frequency sealing system.	
	Operational Requirements	
	The system should be heavy duty and be able to seal the blood bag etc quickly and effectively.	
	Should be simple to handle	
	System should gently seal the tubing with no hemolysis.	
	Technical Specifications	
	Should be a heavy duty tube-sealer capable of sealing tubes of various manufacturers of blood bag.	
	Should be for bench-top use.	
	The sealing time should be adjustable between 0.5-5 seconds  Sealing triggering should be automatic	
	Sealing triggering should be automatic  Should also have extended portable hand unit. Sealing hand should be with coaxial cable of 1.5 - 2.0 meter.	
	Should have indication lamps (LED or any other) for "Sealing Process" on handle as well as main unit.	
	No warm-up time should be required.	
	Should ensure easy separation of tube segments after the sealing.	
	System should run on both mains and battery (more than 10 hrs. back up and charger).	
•		

No.	Item Specifications	Fill Your Specifications
140.	Should be lightweight not more than 6 Kg.	Fin Tour Specifications
	Detection of wet tube, leakage & sealing defect. Alarm in case of seal not complete.	
	4 System Configuration Accessories, spares and consumables	
	Tube Sealer with Accessories - 01	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Standards, Safety and Training	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA approved product certificate.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years after acceptance.  Maintenance Service During Warranty Period During warranty period supplier must ensure	
	corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	Supplier must accomplish proper installation & commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
27	Water Distiller	
	Technical Specifications	
	Minimum Distilled water output: 4L/h  Maximum water supply required: 1L/min	
	Flow regulator for water supply	
	Conductivity of water produced: 2 µS/cm or less	
	Automatic cut-out for low water level in the boiler	
	Automatic switch off when distillate reservoir is full	
	Heating elements should be silica glass sheathed	
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Power supply: 220-240V/ 50 Hz AC Single phase with appropriate plug .The power cable must be minimum 3	
	Meter	
	User Training  Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	
28	Glucometer Technical Specifications	
	Technical Specifications Hand held type Glucometer	
	Battery operated	
	Memory min. 50 measurements	
	Strips method measurements, Code free reading	
	Indication of high and low measurements	
	With Start up kits	
	Case is included	
	One box of strips and lancet is included	
	Operating instructions is included	
	Specify the Price of strip (by Pcs) in SDG.	

No.	Item Specifications	Fill Your Specifications
	Operating Environment	
	The product offered shall be designed to be stored and to operate normally under Climate,	
	Temperature, Humidity, etc. for Sudan.	
	Standards and Safety Requirements	
	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.	
	User Training	
	Must provide user training (including how to use and maintain the equipment).	
	Warranty	
	Comprehensive warranty for 2 years after acceptance.	
	Maintenance Service During Warranty Period	
	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
	Installation and Commissioning	
	Supplier must accomplish proper installation and commissioning of the equipment on site.	
	Documentation	
	User (Operating) manual in English	
	Service (Technical / Maintenance) manual in English	
	List of important spare parts and accessories with their part numbers and costing.	
	Certificate of calibration and inspection from factory.	