1

Ambo Bag - Adult

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	An Ambu Bag (also known as a Bag Valve Mask or BVM or Ambu bag) is a hand-held device used to provide ventilation to a patient who is not breathing or who is breathing inadequately.	
2	**Operational Requirements**	
2.1	It shall be self-inflatable and must have pop up valve (non-return valve), attachment for oxygen tube & oxygen reservoir.	
3	**System Configuration**	
3.1	Ambu bag, complete unit.	
4	**Technical Specifications**	
4.1	Bag must be made up of medical grade silicon, latex free double layered which retain sensitivity and it must be resistant to rough use.	
4.2	Inlet end of the bag must have separate port for Oxygen supplement.	
4.3	Outer port must be such that re-breathing valve or non-return valve can be attached.	
4.4	Must be supplied with Oxygen reservoir bag and shall deliver tidal volumes of 250/500/750 and 1000 ml.	
4.5	It shall be autoclaveable.	
4.6	It shall be adaptable to all type of face masks.	
5	**Included Accessories**	
5.1	Set to be supplied in a heavy duty, re-sealable plastic pouch or clear top plastic box.	
5.2	with adult face mask	
6	**Operating Environment**	
6.1	The system offered must be designed to store and be operated normally under the condition include Climate, temperature and relative humidity for Sudan.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
8	**Warranty**	
8.1	Comprehensive warranty for 2 years after acceptance.	
9	**Documentation**	
9.1	User's manual shall be supplied in English.	

2

Ambo Bag - Neonate

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	An Ambu Bag (also known as a Bag Valve Mask or BVM or Ambu bag) is a hand-held device used to provide ventilation to a patient who is not breathing or who is breathing inadequately.	
2	**Operational Requirements**	
2.1	It shall be self-inflatable and must have pop up valve (non-return valve), attachment for oxygen tube & oxygen reservoir.	
3	**System Configuration**	
3.1	Ambu bag, complete unit.	
4	**Technical Specifications**	
4.1	Bag must be made up of medical grade silicon, latex free double layered which retain sensitivity and it must be resistant to rough use.	
4.2	Inlet end of the bag must have separate port for Oxygen supplement.	
4.3	Outer port must be such that re-breathing valve or non-return valve can be attached.	
4.4	Must be supplied with Oxygen reservoir bag and shall deliver tidal volumes of 250/500/750 and 1000 ml.	
4.5	It shall be autoclaveable.	
4.6	It shall be adaptable to all type of face masks.	
5	**Included Accessories**	
5.1	Set to be supplied in a heavy duty, re-sealable plastic pouch or clear top plastic box.	
5.2	with infant face mask sizes 00,01 & 02	
6	**Operating Environment**	
6.1	The system offered must be designed to store and be operated normally under the condition include Climate, temperature and relative humidity for Sudan.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
8	**Warranty**	
8.1	Comprehensive warranty for 2 years after acceptance.	
9	**Documentation**	
9.1	User's manual shall be supplied in English.	

3

Ambo Bag - Pediatric

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	An Ambu Bag (also known as a Bag Valve Mask or BVM or Ambu bag) is a hand-held device used to provide ventilation to a patient who is not breathing or who is breathing inadequately.	
2	**Operational Requirements**	
2.1	It shall be self-inflatable and must have pop up valve (non-return valve), attachment for oxygen tube & oxygen reservoir.	
3	**System Configuration**	
3.1	Ambu bag, complete unit.	
4	**Technical Specifications**	
4.1	Bag must be made up of medical grade silicon, latex free double layered which retain sensitivity and it must be resistant to rough use.	
4.2	Inlet end of the bag must have separate port for Oxygen supplement.	
4.3	Outer port must be such that re-breathing valve or non-return valve can be attached.	
4.4	Must be supplied with Oxygen reservoir bag and shall deliver tidal volumes of 250/500/750 and 1000 ml.	
4.5	It shall be autoclaveable.	
4.6	It shall be adaptable to all type of face masks.	
5	**Included Accessories**	
5.1	Set to be supplied in a heavy duty, re-sealable plastic pouch or clear top plastic box.	
5.2	with Pediatric face mask	
6	**Operating Environment**	
6.1	The system offered must be designed to store and be operated normally under the condition include Climate, temperature and relative humidity for Sudan.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
8	**Warranty**	
8.1	Comprehensive warranty for 2 years after acceptance.	
9	**Documentation**	
9.1	User's manual shall be supplied in English.	

4

Apnea Monitor (cardiorespiratory monitor)

No.	Item Specifications	Fill Your Specifications
1	**Description of Functions**	
1.1	Apnea monitors detect the cessation of breathing (apnea) in infants who are at risk of respiratory failure and alert the attendant to the condition.	
2	**Operational Requirements**	
2.1	It shall operate on AC power supply, as well as battery.	
3	**System Configurations**	
3.1	Monitor with 2-Channel Electrode. Heart rate, respiration rate	
3.2	All accessories, consumables and etc. required for monitoring of physiological parameters specified herein.	
4	**Technical Specifications**	
4.1	Display of up to 2 physiological parameter modules without the need for external devices	
4.2	Breath indicator Visual and/or audible or LED/LCD	
4.3	Range, breaths/min 0-120	
4.4	Should have ECG reject circuit or software	
4.5	Come with internal rechargeable Lithium battery complete with built-in charger	
4.6	Monitor shall be operated by the battery for at least 60 minutes	
4.7	Come with Alarms for all monitored parameters.	
4.8	Alarm notification shall be given by Audible and Visual	
4.9	Low-battery notice Preferred Audible and visual	
5	**Accessories, Spare Parts and Consumables**	
5.1	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.	
6	**Operating Environment**	
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature,Humidity, etc. for Sudan.	
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metres in length.	
7	**Standards & Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
8	**User Training**	
8.1	The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users.	
9	**Warranty**	
9.1	Comprehensive warranty for 2 years.	
10	**Maintenance Service During Warranty Period**	
10.1	During the warranty period supplier must ensure planned preventive maintenance (PPM) along with corrective/breakdown maintenance whenever required.	
11	**Documentation**	
11.1	User (Operating) manual in English	
11.2	Service (Technical / Maintenance) manual in English	
11.3	List of important spare parts and accessories with their part numbers and costing.	
11.4	Certificate of calibration and inspection from factory.	

5 **Baby Cot**

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	Basic baby cot on castors for use in wards and delivery rooms of healthcare facilities.	
2	**Operational Requirements**	
2.1	Mobile baby cot with removable bassinet.	
3	**System Configuration**	
3.1	Baby cot with bassinet on castors.	
4	**Technical Specifications**	
4.1	Mounted on 4 swivel anti-static castors, of which two with brakes.	
4.2	With padded mattress, detachable for easy cleaning.	
4.3	Mattress cover removable via side zipper.	
4.4	Basinet sets and removes smoothly from cart frame.	
4.5	**Materials:**	
	□ High resistance to corrosion (tropical environment).	
	□ Frame: Epoxy oven baked powder coated tubular steel.	
	□ Mattress: High-density polyurethane foam with density approx. 20 kg/m3.	
	□ Cover: Plastic, flexible highly tear resistant, anti-static, flame retardant, disinfectant- and liquid proof, washable.	
4.6	**Dimensions, Approx. + 10%:**	
	□ Frame: 800 x 400 x 900mm (l x w x h).	
	□ Bassinet: 800 x 400 x 300mm (l x w x h).	
	□ Frame, diameter: 30mm.	
	□ Mattress: 70mm (h)	
	□ Swivel castors, diameter: 50mm.	
	□ Carrying capacity: 30kg.	
5	**Accessories, spares and consumables**	
5.1	All standard accessories/consumables/parts required for the proper operation of the above item shall be included in the offer.	
6	**Operating Environment**	
6.1	The system offered must be designed to store and be operated normally under the condition include Climate, temperature and relative humidity for Sudan.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
8	**Warranty**	
8.1	Warranty for 2 years.	
9	**Maintenance Service During Warranty Period**	
9.1	Standard warranty conditions are applicable.	
10	**Installation and Commissioning**	
10.1	Must supply preassembled unit, ready to use.	
11	**Documentation**	
11.1	**User's manual shall be supplied in English.**	

6 **Breast Pump**

No.	Item Specifications	Fill Your Specifications
1	**Description of Functions**	

1.1	Is a mechanical device that extracts milk from the breasts of a lactating woman.	
2	**Technical Specifications**	
2.1	Breast pump body with handle	
2.3	Natural bottle	
2.4	Soft flow nipple	
2.5	Milk seal disc	
2.6	Breast pad sample packs	
3	**Documentation**	
3.1	User's manual shall be supplied in English.	
4	**Standards and Safety Requirements**	
4.1	Must be USFDA or CE or TUV or JPAL approved product	
5	**Warranty**	
5.1	Comprehensive warranty for 2 years after acceptance.	

7 **Infant Incubator**

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	An infant incubator provides a closed, controlled environment that warms an infant by circulating heated air over the skin. The heat is then absorbed into the body by tissue conduction and blood convection. Ideally, both the skin and core temperatures must be maintained with only minor variations.	
2	**Operational Requirements**	
2.1	High quality with humidity and servo controlled double walled with cabinet incubator. The quality of the material shall be very high and crystal transparent.	
3	**System Configuration**	
3.1	Infant Incubator Servo Control, complete unit with all standard accessories.	
4	**Technical Specifications**	
4.1	Microprocessor controlled, easy access control panel with feather touch switches. Facility for self-test function.	
4.2	Shall have facility to elevate base to offer adjustable range.	
4.3	Facility with both servo control as well as air temperature control and servo humidifier.	
4.4	Shall have Oxygen port with tubing.	
4.5	Continuous bed tilt up to 8° on either sides	
4.6	Head end raise facility with auto lock.	
	Both visual and audible alarms for:	
4.7	□ High / low temperature.	
	□ Air circulation / probe / system / power failure.	
	□ Humidity control.	
4.8	Head end raise facility with auto lock.	
4.9	Facility to take x-ray and weight without removing baby.	
4.10	Facility to display and trending of temperature information on compatible monitors with other physiological parameters.	
4.11	Height 140 +/- 5 cm, depth at least 60 mm, width at least 90 mm.	
4.12	Mattress to hood distance (approx.) 40 cm.	
4.13	Working level (approx.): 90 to 100 cm.	
4.14	Iris port for tubing, leads, probes.	
4.15	Gel mattress (approx.) 4 cm. thick and easily washable.	
4.16	With at least 4" dia. castors wheel with swivel in all directions and with front lockable wheels. Two shelves cabinets with door.	
4.17	Weight (approx.) 90-100 kg.	
4.18	Patient control (Servo) mode, 35 oC to 37 oC and Air control (manual mode), 20 oC to 37 oC	
4.19	Air velocity less than 10 cm/sec with inner wall.	
4.20	Temperature variability less than +/- 0.2 oC. and temperature resolution +/- 1 oC.	
4.21	Average oxygen input concentration range 5-15 litres/min or 25-70%.	
4.22	**Humidification:**	
	□ Standard: 10-75% dependent on nursery environment and incubator temperature setting.	
	□ Servo: 40-80% regardless of nursery environment.	
4.23	Double wall canopy with six hand ports.	
4.24	Shall accommodate IV pole.	
4.25	C02 flushing, according to lEC 60601-2-19 / 105.1 Maximum C02 concentration inside incubator 0.2%.	
4.26	Servo control for Oxygen with integrated monitoring.	
4.27	Noise level < 49 dB.	
5	**Accessories, spares and consumables**	
5.1	Included Accessories:	
	□ Two sets of extra mattresses.	
	□ Two sets of extra sensors.	
5.2	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.	
6	**Operating Environment**	
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature,Humidity, etc. for Sudan.	
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
7.2	Shall meet IEC 60601-2-50 Medical Electrical Equipment PART 2: Particular Requirements for the Safety of Baby Incubators.	
8	**User Training**	
8.1	Must provide user training (including how to use and maintain the equipment).	
8.2	External training must be provided for every 5 units	
9	**Warranty**	
9.1	Comprehensive warranty for 2 years after acceptance.	
9.2	Maintenance Service during Warranty Period	
9.3	During warranty period supplier must ensure preventive maintenance corrective/breakdown maintenance whenever required.	
10	**Documentation**	
10.1	User (Operating) manual in English.	
10.2	Service (Technical / Maintenance) manual in English.	
10.3	List of important spare parts and accessories with their part numbers and costing.	
10.4	Certificate of calibration and inspection from factory.	

8 **Infant Phototherapy**

1	Description of Function	Fill Your Specifications
1.1	Phototherapy units are used to treat hyperbilirubinemia, a condition characterized by high bilirubin concentrations in the blood. These units are also called: bilirubin lamps, bilirubin lights, fibreoptic phototherapy blankets, neonatal phototherapy units.	
2	**Operational Requirements**	
2.1	It must be LED based single surface phototherapy unit used for clinical management of neonatal hyperbilirubinemia.	
3	**System Configuration**	
3.1	Phototherapy Unit (LED type), complete unit with all standard accessories.	
4	**Technical Specifications**	
4.1	Single surface, LED phototherapy unit with blue power and white power LEDs.	
4.2	Light Source :	
	□ Blue power LEDs for phototherapy	
	□ White power LEDs for Observation	
4.3	Wavelength: Blue Light: Peak between 450 and 470nm.	
4.4	There shall be no UV and no IR radiation.	
4.5	Phototherapy Intensity Adjustment:	
	□ Intensity at 30 cm: Low level > 20 µW/cm2/nm. High level > 30 µW/cm2/nm.	
	□ Effective area: 250mm round (at 30cm).	
4.6	Therapy timer: An accurate LCD timer for recording therapy time with reset facility.	
4.7	Life of LED: Minimum 20,000hours of use.	
4.8	It must have flexible neck for easy use with Radiant Warmer.	
4.9	Flexible Mobile Stand:	
	□ Base of Stand: Sturdy mild steel with epoxy powder coated base with casters.	
	□ Approx. 4 inch dia castors with break/locking mechanism.	
	□ Easily slides below all standard trolleys.	
	□ Height: Adjustable from 1,000 to 1,500mm +/- 50mm (from ground).	
	□ Tilt adjustment: 0º (horizontal) to approx. 40º (both sides).	
4.10	It shall have thick gauge Stainless Steel top of baby tray with foldable transparent acrylic side panels. The baby tray shall have facility for trendelenburg and anti-trendelenburg position.	
4.11	It shall have breakage free Stainless Steel clips and holders for acrylic panels.	
4.12	Shall provide foam / bubble mattress.	
4.13	Shall provide Stainless Steel instrument/medicine tray.	
4.14	It shall have X-ray cassette guide facility.	
4.15	It shall have facility to provide phototherapy from underneath also.	
5	**Accessories, spares and consumables**	
5.1	Included Accessories:	
	□ Phototherapy eye pads for preterm and term babies: 05 each.	
5.2	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).	
6	**Operating Environment**	
6.1	The system offered shall be designed to store and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.	
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
7	Standards and Safety Requirements	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
7.2	Shall meet IEC 60601-2-50 Medical Electrical Equipment PART 2-50: Particular Requirements for the Safety of Infant Phototherapy Equipment.	
8	**User Training**	
8.1	Must provide user training (including how to use and maintain the equipment).	
9	**Warranty**	
9.1	Comprehensive warranty for 2 years after acceptance.	
10	**Maintenance Service During Warranty Period**	
10.1	During warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
11	**Installation and Commissioning**	
11.1	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.	
12	**Documentations**	
12.1	User (Operating) manual in English.	
12.2	Service (Technical / Maintenance) manual in English.	
12.3	List of important spare parts and accessories with their part numbers and costing.	
12.4	Certificate of calibration and inspection from factory.	

9

Infant Warmer

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	A radiant warmer is used to keep the patient's core temperature stable at 37 oC.	
2	**Operational Requirements**	
2.1	It shall be microprocessor controlled radiant warmer with manual and servo options.	
3	**System Configuration**	
3.1	Radiant Warmer with Baby Bassinet, complete unit with all standard accessories.	
4	**Technical Specifications**	
4.1	It must have facility to display both skin and air (ambient) temperature separately.	
4.2	It shall have audio-visual alarm facilities for:	
	□ Overheating beyond set temperature range.	
	□ Patient temperature less than or greater than the required temperature i.e. above or below the set range.	
	□ Power failure.	
	□ Heater failure.	
	□ Probe failure.	
	□ Time out alarm in manual mode.	
4.3	It must have manual setting for high and low alarm setting.	
4.4	It must rotate and swivel in different direction, so as to allow taking X-ray.	
4.5	The light must be dazzle free.	
4.6	It must have preferably inbuilt rechargeable battery to run equipment in case of power failure for at least 30 min.	
4.7	In servo mode, the heater output must be controlled to maintain the baby at the required set temperature.	
4.8	In manual mode, the heater output must be directly controlled by a setting on the front panel.	
4.9	The desired temperature range from 25 to 40 oC.	
4.10	The resolution must be 0.1 oC.	
4.11	The height of the warmer must be adjustable for different types of bed.	
4.12	Halogen based observation light must be provided for observing the baby.	
4.13	It must be mounted on a pole with sturdy base with lockable castors.	

5	**Accessories, spares and consumables**	
5.1	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.	
6	**Operating Environment**	
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature,Humidity, etc. for Sudan.	
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
7.2	Shall meet IEC 60601-2-21 Medical Electrical Equipment PART 2: Particular Requirements for the Safety of Infant Radiant Warmers.	
8	**User Training**	
8.1	Must provide user training (including how to use and maintain the equipment).	
8.2	External training must be provided for every 5 units	
9	**Warranty**	
9.1	Comprehensive warranty for 2 years after acceptance.	
10	Maintenance Service during Warranty Period	
10.1	During warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
11	**Documentation**	
11.1	User (Operating) manual in English.	
11.2	Service (Technical / Maintenance) manual in English.	
11.3	List of important spare parts and accessories with their part numbers and costing.	
11.4	Certificate of calibration and inspection from factory.	

10

Laryngoscope

No.	Item Specifications	Fill Your Specifications
1	**Description of Function**	
1.1	Laryngoscopy to facilitate tracheal intubation during general anaesthesia or cardiopulmonary resuscitation or for procedures on the larynx or other parts of the upper tracheobronchial tree.	
2	**Operational Requirements**	
2.1	Battery powered laryngoscope unit (handle to take C-size batteries).	
3	**System Configuration**	
3.1	Laryngoscope set (McIntosh or equivalent)	
4	**Technical Specifications**	
4.1	Blades to be made of surgical grade stainless steel.	
4.2	Clip-on quick release mechanism for blades, which also provides electrical contact for blade light. Light to be activated when blade is engaged.	
4.3	Shall operate on battery.	
4.4	Handle/battery unit to be made of non-ferrous metal.	
5	**Accessories, spares and consumables**	
5.1	**Included Accessories:**	
	□ Spare bulbs: 03 nos.	
	□ Blades: One each of following sizes:	
	i-Neonate size 00	
	ii-Adult small size 3	
	iii-Adult medium size 4	
	iv-Adult large size 5	
5.2	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).	
6	**Operating Environment**	
6.1	The product offered shall be designed to be stored and to operate normally under Climate, Temperature,Humidity, etc. for Sudan.	
6.2	Battery operated system.	
7	**Standards and Safety Requirements**	
7.1	Must be USFDA or CE or TUV or JPAL approved product	
8	**Warranty**	
8.1	Comprehensive warranty for 2 years after acceptance.	