MARSANA ORTHOPEDIC SERVICES

Our company is currently in the process of furnishing our practice and is seeking quotations from furniture suppliers for the purchase of suitable furniture items for our office and working environment.

2. SPECIFICATIONS

Item Name 2.1	**Vital Signs Monitor with Oximetry & Temperature** 
Functional Specifications	Vital Signs Monitor is the ideal solution for patient monitoring systems in the Community Clinic, Outpatients Department or in General Wards. With SPO2, NIBP, and Temperature, this is a cutting-edge medical device designed to accurately measure and monitor vital signs. With its advanced features and user-friendly design, this monitor is a reliable and indispensable tool for healthcare professionals.

	The device features a crisp and clear 6-inch LED screen, providing a high-quality display of vital sign readings. Equipped with a rechargeable 12-hour lifespan lithium-ion battery, this monitor offers convenience and flexibility. This makes it ideal for both stationary and portable use in various healthcare settings. Versatility is a key aspect of the Vital Signs Monitor. It is designed to cater to patients of different age groups, including adults, pediatrics, and neonates. This broad range of patient types ensures that healthcare professionals can rely on the monitor for accurate readings across various populations. Efficient data management is a crucial feature of the Vital Signs Monitor. It allows seamless data storage, review, and transfer. This enables healthcare providers to maintain comprehensive patient records, track trends over time, and facilitate data sharing for collaborative decision-making. The standard configuration includes SpO2, NIBP and Temp As a standard the device is supplied with: Main Unit with 6-inch segment LED screen 2200mAH Lithium battery for up to 12 hours uninterrupted work Up to 50 groups of easy to review data storage Rapid NIBP measurement technology Adult Reusable Analog SpO2 sensor (10ft, 12pin) Adult/Ped/Neo NIBP latex- free Tube (white) 2M Reusable latex- free Adult Cuff 25-35cm Power Cord/User manual cable must be a minimum of three meters. The battery must operate for at least eight hours with measurements every five minutes. Data storage: last reading, or last average. The unit must be impervious to liquids. The case of the unit must be robust and impact resistant. Must have a mounting point for wall and pole
Applicable Standards	The standard configuration includes SpO2, NIBP and Temp. As standard the device is supplied with: • Main Unit with 6-inch segment LED screen • 2200mAH Lithium battery for up to 12 hours uninterrupted work • Up to 50 groups of easy to review data storage • Rapid NIBP measurement technology • Adult Reusable Analog SpO2 sensor • Finger sensor for paeds Sp02 • Finger wrap-around probe for neonates • Adult/Ped/Neo NIBP Tube (white) 2M • Reusable latex-free Adult/ Pediatric/ Neonate Cuff • Reusable latex-free obese cuff

	• Power Cord/User manual
Full Specifications	**Standard Configuration:** SpO2, NIBP, Temp **Optional Configuration:** 3-Lead ECG, Nellcor/Masimo SpO2, Ear Temp, Thermal Recorder, Suntech NIBP **Safety Standards** ISO 13485:2016 approved, CE marking according to MDD93/42/EEC **Physical Characteristics** Product Size: 164mm*245 mm*162mm Net Weight: ≤2.5kg (battery excluded) **Operation Environment** working Temp: 5-40°C Humidity: ≤93% Power Supply: 100-240V~, 50/60Hz±1Hz Battery Type: Rechargeable Lithium-ion battery Battery Capacity: 2200mAh (Working time: 3hours)/ (Optional 4400mAh (Working time: 8hours)) Battery Recharging Time: Maximum 3.5 hours for charging; Battery backup: 3 hours for continuous working Display: 8” color TFT with touch screen Resolution: 800*600 Trace: 2 waveforms **Indicator** two alarm indicators Power indicator Battery indicator QRS beep and alarm sound Operating key sound **NIBP** Method Automatic oscillometric Work mode: Manual / Automatic/Continuous Auto measure time: Adjustable(1-720min) Measurement Unit: mmHg / Kpa selectable Measurement types: Systolic, Diastolic, Mean Range of systolic pressure: Adult Mode:30-270mmHg Pediatric Mode:30-200mmHg Neonate Mode 30-135mmHg

<table>
<tr><td></td><td>Range of diastolic pressure: Adult Mode:10-230mmHg
Pediatric Mode:10-150mmHg
Neonate Mode 10-100mmHg
Range of mean pressure: Adult Mode:20-235mmHg
Pediatric Mode:20-165mmHg
Neonate Mode 20-110mmHg
Over-pressure protection: both Hardware and software over pressure protection
Accuracy: Less than ±5mmHg
Resolution： 1mmHg
Alarm： Systolic, Diastolic, Mean
PR from NIBP: 40-240bpm
Resolution: 1bpm
Accuracy: ±3% or ±3bpm, whichever is greater
Reusable Adult Finger Clip SpO2 Sensor
Measurement & alarm range: 0-100%</td></tr>
<tr><td>Warranties</td><td>At least 2 years</td></tr>
<tr><td>Instructions to Suppliers</td><td>Specify method, frequency, and cost of re-calibration.</td></tr>
<tr><td>Item Name 2.2</td><td>Manual Resuscitator Infant
</td></tr>
<tr><td>Functional Specifications</td><td>The ventilation bag is highly reactive with fast recoil and excellent stroke volume which help relieving fatigue to the rescuer. The thin-walled compression bag provides an excellent feeling of lung compliance and helps avoid excessive ventilation that could damage the lungs.

Technical specifications

<table>
<tr><th>Type</th><th>Infant</th></tr>
<tr><td>Patient weight</td><td><10kg</td></tr>
<tr><td>Tidal volume</td><td>150ml</td></tr>
<tr><td>Resuscitator bag volume</td><td>215-280ml</td></tr>
<tr><td>Dimensions</td><td>135 x 75mm</td></tr>
</table>
</td></tr>
</table>

Pressure limiting valve	40cmH2O
Inspiratory resistance	<5cmH2O
Expiratory Resistance	<5cmH2O
Reservoir bag volume	300-600ml
Patient Connector	ISO5356- : φ22/15mm Male/Female
Operating temperature	-18°C ~ +50°C
Storage temperature	-40°C ~ +50°C

The resuscitator is a reusable hand-operated double-walled self-inflating device.
It is used to provide or assist pulmonary resuscitation in adults' children and infants/neonates
Materials: Silicone rubber: inner bag, outer bag, valve disc, supporting strap,
mask rim (cuff).
- Polysulphone (PSU): patient valve housing, O-ring, patient connector, mask dome.
- Polyacetal (POM): inlet valve housing, screw cap (two parts), connector.
- POM or Polypropylene (PP): reservoir housing.
- Aluminium: nameplate.

Features: Maximum ventilation frequency depends on the inspiratory volume
used.
- The expansion rate of the bag must be fast enough to comply with all recommended frequencies.
- Maximum delivered volume 1300ml.
- Dead volume: <5ml
- Leaks (both ways): non-measurable
- Inspiratory resistance at 50 litres/min: approximately -0.35 kPa (3.5cmH2O).
- Inspiratory resistance of reservoir bag at 50 litres/min without O2
supply: approximately -0.1kPa (-1.0cmH2O)
- Expiratory resistance at 50 litres/min: approximately 0.26 kPa (2.6cmH2O)
- Maximum attainable delivery pressure at 0.2 litre/kPa: approximately 10kPa (100 cmH2O)
- Application temperature: -18 to 50°C (0 to 122°F)
Pressure-limiting system: the elasticity of the bag's outer cover limits the airway pressure to escape

Applicable Standards	Manual resuscitator: - Comprised of 3 parts (A,B,C,D) - Size: length 275mm, diameter 135mm (including patient valve) - Weight: approximately 415g, resuscitator and patient valve (Without mask) A) Self inflating bag with inlet valve (A) Thin-walled outer cover - Self-expanding inner bag: volume 1500ml - Inlet valve housing (ISO 32mm connector) Extra oxygen can be administered by connecting oxygen to the O2 inlet valve connector. - Flange lock and connection, towards patient valve. - Handle, permits the bag to be held with one hand, for regular inflation. During the normal one-hand operation of the bag, the elasticity of the outer bag prevents the airway pressure from exceeding 7kPa (70cmH2O), approximately (B) Patient valve One-way valve made in 3 parts with a single shutter; facilitates the easy removal of foreign matter. a) Valve housing 21.4 with - Inspiration connector: 32 mm female for connection 11.3 - patient connector: 22/15 ISO 11.4 b) Valve disc. 21.3 The guide pin in the patient valve is a visible indicator of correct functioning of the unit. 21.3 c) Expiration connector: 30 mm male (ISO) 11.1 /21.2 (C) Mask Size: 0-5 (Neonate up to adult) Specifications: transparent molded shell with inflatable rim or cushion. All components can be disassembled for cleaning, chemicals disinfection and/or steam sterilization at 121 to 134°C (D) Oxygen Resevoir Bag SANS/ISO 10651-4
Performance Specifications	Manual resuscitators are reusable resuscitators designed for manual ventilation of infant/ neonate patients. They are available in different sizes: – Infant suitable for patients with a body weight <10 kg.

<table>
<tr><td>Accessories</td><td>
<table>
<tr><td>Patient Port</td><td>15mm I.D, (F)/22 mm O.D. (M)</td></tr>
<tr><td>Silicone Bag Inlet</td><td>32 mm I.D. (F)</td></tr>
<tr><td>Reservoir Valve</td><td>32mm O.D. (F) (to silicone bag inlet), 25mm O.D. (M) (to oxygen reservoir)</td></tr>
<tr><td>Supplemental gas inlet</td><td>6 mm O.D. (M)</td></tr>
</table>
</td></tr>
<tr><td>Warranties</td><td>It is recommended that manual resuscitator is updated after 5+ years from its manufactured date.</td></tr>
<tr><td>Instructions to Suppliers</td><td>All components (bag, mask, tubing, reservoir) must be 100% latex-free</td></tr>
<tr><td>Item no: 2.3</td><td>Manual Resuscitator Paediatric

</td></tr>
<tr><td>Functional specifications</td><td>The ventilation bag is highly reactive with fast recoil and excellent stroke volume which help relieving fatigue to the rescuer. The thin-walled compression bag provides an excellent feeling of lung compliance and helps avoid excessive ventilation that could damage the lungs.

Technical specifications

<table>
<tr><th>Type</th><th>Paediatric</th></tr>
<tr><td>Patient weight</td><td><10-30kg</td></tr>
<tr><td>Tidal volume</td><td>400-450ml</td></tr>
<tr><td>Resuscitator bag volume</td><td>600-675ml</td></tr>
<tr><td>Dimensions</td><td>146 x 100mm</td></tr>
<tr><td>Pressure limiting valve</td><td>40cmH2O</td></tr>
<tr><td>Inspiratory resistance</td><td><5cmH2O</td></tr>
<tr><td>Expiratory Resistance</td><td><5cmH2O</td></tr>
<tr><td>Reservoir bag volume</td><td>300-600ml</td></tr>
<tr><td>Patient Connector</td><td>ISO5356- : φ22/15mm Male/Female</td></tr>
<tr><td>Operating temperature</td><td>-18°C ~ +50°C</td></tr>
</table>
</td></tr>
</table>

	Storage temperature | -40°C ~ +50°C
	The resuscitator is a reusable hand-operated double-walled self-inflating device. It is used to provide or assist pulmonary resuscitation in adults' children and infants/neonates Materials: Silicone rubber: inner bag, outer bag, valve disc, supporting strap, mask rim (cuff). - Polysulphone (PSU): patient valve housing, O-ring, patient connector, mask dome. - Polyacetal (POM): inlet valve housing, screw cap (two parts), connector. - POM or Polypropylene (PP): reservoir housing. - Aluminium: nameplate **Features**: Maximum ventilation frequency depends on the inspiratory volume used. - The expansion rate of the bag must be fast enough to comply with all recommended frequencies. - Maximum delivered volume 1300ml. Dead volume: <5ml - Leaks (both ways): non-measurable - Inspiratory resistance at 50 litres/min: approximately -0.35 kPa (3.5cmH2O). - Inspiratory resistance of reservoir bag at 50 litres/min without O2 supply: approximately -0.1kPa (-1.0cmH2O) - Expiratory resistance at 50 litres/min: approximately 0.26 kPa (2.6cmH2O) - Maximum attainable delivery pressure at 0.2 litre/kPa: approximately 10kPa (100 cmH2O) - Application temperature: -18 to 50°C (0 to 122°F) Pressure-limiting system: the elasticity of the bag's outer cover limits the airway pressure to escape
Performance Specifications	Manual resuscitators are reusable resuscitators designed for manual ventilation of child patients. They are available in different sizes: – Child suitable for patients 10kg to 30kg.

<table>
<tr><td>Accessories</td><td>
<table>
<tr><td>Patient Port</td><td>15mm I.D, (F)/22 mm O.D. (M)</td></tr>
<tr><td>Silicone Bag Inlet</td><td>32 mm I.D. (F)</td></tr>
<tr><td>Reservoir Valve</td><td>32mm O.D. (F) (to silicone bag inlet), 25mm O.D. (M) (to oxygen reservoir)</td></tr>
<tr><td>Supplemental gas inlet</td><td>6 mm O.D. (M)</td></tr>
</table>
</td></tr>
<tr><td>Warranties</td><td>It is recommended that manual resuscitator is updated after 5+ years from its manufactured date.</td></tr>
<tr><td>Instructions to Suppliers</td><td>All components (bag, mask, tubing, reservoir) must be 100% latex-free</td></tr>
<tr><td>Item no 3.4</td><td>Manual Resuscitator Adult

</td></tr>
<tr><td>Functional specifications</td><td>
<table>
<tr><td>Type</td><td>Adult</td></tr>
<tr><td>Patient weight</td><td>>40kg</td></tr>
<tr><td>Tidal volume</td><td>600-700ml</td></tr>
<tr><td>Resuscitator bag volume</td><td>1600-2000ml</td></tr>
<tr><td>Dimensions</td><td>212 x 131mm</td></tr>
<tr><td>Pressure limiting valve</td><td>60cmH2O</td></tr>
<tr><td>Inspiratory resistance</td><td><5cmH2O</td></tr>
<tr><td>Expiratory Resistance</td><td><5cmH2O</td></tr>
<tr><td>Reservoir bag volume</td><td>2600ml</td></tr>
<tr><td>Patient Connector</td><td>ISO5356- : φ22/15mm Male/Female</td></tr>
<tr><td>Operating temperature</td><td>-18°C ~ +50°C</td></tr>
<tr><td>Storage temperature</td><td>-40°C ~ +50°C</td></tr>
</table>

The resuscitator is a reusable hand-operated double-walled self-inflating device.
It is used to provide or assist pulmonary resuscitation in adults' children and infants/neonates</td></tr>
</table>

	Materials: Silicone rubber: inner bag, outer bag, valve disc, supporting strap, mask rim (cuff). - Polysulphone (PSU): patient valve housing, O-ring, patient connector, mask dome. - Polyacetal (POM): inlet valve housing, screw cap (two parts), connector. - POM or Polypropylene (PP): reservoir housing. - Aluminium: nameplate Features: Maximum ventilation frequency depends on the inspiratory volume used. - The expansion rate of the bag must be fast enough to comply with all recommended frequencies. - Maximum delivered volume 1300ml. Dead volume: <5ml - Leaks (both ways): non-measurable - Inspiratory resistance at 50 litres/min: approximately -0.35 kPa (3.5cmH2O). - Inspiratory resistance of reservoir bag at 50 litres/min without O2 supply: approximately -0.1kPa (-1.0cmH2O) - Expiratory resistance at 50 litres/min: approximately 0.26 kPa (2.6cmH2O) - Maximum attainable delivery pressure at 0.2 litre/kPa: approximately 10kPa (100 cmH2O) - Application temperature: -18 to 50°C (0 to 122°F) Pressure-limiting system: the elasticity of the bag's outer cover limits the airway pressure to escape
Applicable Standards	Manual resuscitator: - Comprised of 3 parts (A,B,C,D) - Size: length 275mm, diameter 135mm (including patient valve) - Weight: approximately 415g, resuscitator and patient valve (Without mask) A) Self inflating bag with inlet valve (A) Thin-walled outer cover - Self-expanding inner bag: volume 1500ml - Inlet valve housing (ISO 32mm connector) Extra oxygen can be administered by connecting oxygen to the O2 inlet valve connector. - Flange lock and connection, towards patient valve. - Handle, permits the bag to be held with one hand, for regular inflation. During the normal one-hand operation of the bag, the elasticity of the outer bag prevents the airway pressure from exceeding 7kPa (70cmH2O), approximately (B) Patient valve One-way valve made in 3 parts with a single shutter; facilitates the easy removal of foreign matter.

<table>
<tr><td></td><td>a) Valve housing 21.4 with
- Inspiration connector: 32 mm female for connection 11.3
- patient connector: 22/15 ISO 11.4
b) Valve disc. 21.3
The guide pin in the patient valve is a visible indicator of correct functioning of the unit. 21.3
c) Expiration connector: 30 mm male (ISO) 11.1 /21.2
(C) Mask
Size: 0-5 (Neonate up to adult)
Specifications: transparent molded shell with inflatable rim or cushion.
All components can be disassembled for cleaning, chemicals disinfection and/or steam
sterilization at 121 to 134°C
(D) Oxygen Reservoir Bag
SANS/ISO 10651-4</td></tr>
<tr><td>Performance Specifications</td><td>Manual resuscitators are reusable resuscitators designed for manual ventilation of adult patients. They are available in different sizes –Adult suitable for patients with a body weigh more than 40 kg.</td></tr>
<tr><td>Accessories</td><td><table>
<tr><td>Patient Port</td><td>15mm I.D, (F)/22 mm O.D. (M)</td></tr>
<tr><td>Silicone Bag Inlet</td><td>32 mm I.D. (F)</td></tr>
<tr><td>Reservoir Valve</td><td>32mm O.D. (F) (to silicone bag inlet), 25mm O.D. (M) (to oxygen reservoir)</td></tr>
<tr><td>Supplemental gas inlet</td><td>6 mm O.D. (M)</td></tr>
</table></td></tr>
<tr><td>Warranties</td><td>It is recommended that manual resuscitator is updated after 5+ years from its manufactured date.</td></tr>
<tr><td>Instructions to Suppliers</td><td>All components (bag, mask, tubing, reservoir) must be 100% latex-free</td></tr>
</table>

Item Name 2.5	 **Blood pressure monitor: automated, non-invasive,**
Functional Specifications	The unit will automatically inflate and deflate the cuff once a switch is pressed. Automatic timed repetitive readings are not required, as this machine will not be used for ongoing. monitoring. However, a unit which automatically performs several measurements and displays the

	average, would be desirable. Modes: Manual/stat (optionally average of multiple readings). Continuous monitoring not required. Given the operational environment, the smallest number of controls is preferred. Ideally, unit will automatically go to power-saving mode between measurements. Although not mandatory, external communication port would be an advantage. Could be optional (USB or RJ). Must be suitable for adults, children, and neonates. The unit must use the Oscillo metric method of measurement. Unit should have optional module to measure temperature, or alternative model incorporating temperature measurement should be proposed. Temperature measured and displayed in degrees Centigrade, state range available. Values must be displayed numerically via LED or backlit LCD (colour or monochrome). Must be clearly visible under all lighting conditions. Display should also indicate battery- and charging status. Auto zero when unit is switched on reusable cuffs must be supplied: Large Adult, Adult, pediatric, neonatal. Cuffs and cuff covers must be washable, disinfectable. The air hose must be at least 1,5 meters long. The unit must charge from 220 V, 50 Hz mains supply. Rechargeable battery and charger incorporated in the unit. The battery must be charged while the unit is operating from the mains supply. Battery must be replaceable. Battery charger to be incorporated in the unit. The battery must automatically take over in the event of a mains power failure. The length of the mains cable must be a minimum of three meters. The battery must operate for at least eight hours with measurements every five minutes. Data storage: last reading, or last average. The unit must be impervious to liquids. The case of the unit must be robust and impact resistant. Must have mounting point for wall and pole
Applicable Standards	Measurement accuracy must have been clinically validated (AASI/AAMI SP10-2002, BHS protocol, or ESH protocol). PROOF TO BE SUBMITTED, PREFERABLY PEER-REVIEWED PUBLISHED REPORT. Unpublished independent clinical validation study may be accepted in absence of peer-reviewed published report. Minimum is in-house clinical validation study and report.

	Evidence of measurement repeatability required (SD <1mm Hg from 30 consecutive measurements of 120/80mm Hg). Must comply with latest version of EN 1060-4, EN 1060-3 with Amendment A1:2005. Supplier must supply certificate issued by Directorate of Radiation Control of the Department of Health, in terms of the Hazardous Substances Act (Act 15 of 1973)
Performance Specifications	State whether measurements are performed on inflation or deflation part of cycle. State BP measurement algorithm. Pressure measurements: Adult: Systolic: 30-270mm Hg, Diastolic: 20-240mm Hg, MAP: 20-250mm Hg Pediatric: Systolic: 30-160mm Hg, Diastolic: 20-120, MAP: 20-120mm Hg Neonate: Systolic: 30-130mm Hg, Diastolic: 20-100mm Hg, MAP: 20 – 120mm Hg Heart rate: 30-240 /min. Indication of pulse irregularity desirable Low battery: Alarm at least 10 minutes before battery power is exhausted Over pressure protection: Automatic deflation at 300mm Hg adult, 150mm Hg neonate Average measurement time: approximately 30s. If measurement exceeds two minutes the cuff must deflate, an alarm must sound, and likely faults indicated. Supplier to state Mean Time Before Failure for Unit and any parts which may have different MTBF.
Accessories	Reusable cuffs must be supplied: large adult, adult, pediatric, neonatal. Cuffs and cuff covers must be washable, disinfectable
Warranties	3 years on all parts (including cuffs and cuff covers) except battery. Specify expected battery life under 8 hr. continual operations, daily cycling. Guarantee to include calibration
Instructions to Suppliers	Supplier to stipulate any costs associated with service over the Guarantee period, and whether a service plan is available (specify price). Supplier to stipulate recommended recalibration intervals. Cuffs and covers must be cleanable and disinfectable. Indicate whether sterilisable, preferred method, and number of cycles. Supplier must specify available after-sales support, with relevant pricing. Quote prices inc. l VAT for: Large adult cuff Adult cuff Pediatric cuff Neonatal cuff Air hose Battery Replaceable main board (if user serviceable)

	Temperature sensor (if disposable, quote price per 100) Optional wall-mounting bracket Optional pole-mounting fixture Optional bracket to fix unit to a tabletop Optional mobile stand on 5-star base with non-marking castors SABS 601) Optional cradle for cuff when not in use (wall/pole/stand) Supplier to deliver and commission units and train users
Note to Procurement	The following items should be in series with this instrument: Large adult cuff Adult cuff Pediatric cuff Neonatal cuff Air hose Battery Replaceable main board (if user serviceable). Temperature sensor (if disposable, quote price per 100) Optional wall-mounting bracket Optional pole-mounting fixture. Note: the above specifications are more stringent than RT 2 Item code 42272501-00002 and should be referred to for future procurement. The item in RT 2 has continuous monitoring capabilities, which are not required. The lack of quality measures means that there are a wide range of units on offer. This defeats standardization.
Item Name 2.6	 **BP Cuff different sizes (Paediatric, child, adult, Obese/ Large adult)**
Functional Specifications	SET: Large adult, adult, and pediatric upper-arm cuffs for Blood pressure apparatus The ideal cuff bladder length is ≥ 80 percent of the patient's arm circumference. The ideal cuff bladder width is ≥ 40 percent of the patient's arm circumference. *Many devices are sold with variable size cuffs that will fit a majority of arms from the small adult to large adult range. • Single tube BP bladder in arm cuff • Comfortable and durable cuff with Velcro fastener • Artery positioning label • Tubing connects directly to the machine • Excludes bulb and gauge • Latex Free
Applicable Standards	None

Item Name 2.7	**Peak flow meter** 
Functional Specifications	Simple aerodynamic, non-electrical device. One-way valve in mouthpiece to prevent inhalation cross-infection. Easy-to-read scale. Professional-grade instrument suitable for multi-patient screening
Applicable Standards	ISO 23747:2015.
Performance Specifications	Sterilisable. Measure flow from approximately 50 to 900 l/minute. Repeated readings must show <5% discrepancy. Accuracy must be within 10% of a calibrated spirometer.
Accessories	Disposable mouthpiece PHC-C-341.
Warranties	2 years.
Instructions to Suppliers	Describe sterilisation method.
Item Name 2.8	**Pulse oximeter with adult and paediatric (including neonates) probes** 
Functional Specifications	Portable battery-operated hand-held robust pulse oximeter. Visual display must be brightly illuminated for low-light viewing. Display O2 saturation, pulse rate, plethysmographic wave form
Applicable Standards	SANS 80601-2-61:2014
Performance Specifications	Oxygen saturation range 0-100%. Pulse range 20-300 beats per minute. Accuracy. Operating temperature 0-50°C. Must be cleanable with standard cleaning and disinfectant solutions. Expected service life: 5 years
Accessories	Must include one adult and one paediatric/ neonate re-usable probes.
Warranties	2 years.
Instructions to Suppliers	Indicate whether re-calibration is necessary. If it is, indicate frequency, method, and quote cost.
Note to Procurement	Replacement re-usable adult and paediatric probes must be in series with this item

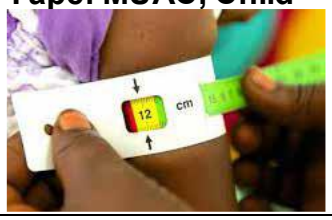
Item Name 2.9	**Scale: adult, with height board** 
Functional Specifications	Scale, with large dial. Comply with the specifications on Appendix H, Type 2, see attached. Capacity: at least 150kg, dial to be at least 150mm in diameter. Must include height measuring rod. Mounted on castors, roller size: 30-50mm. Fixed direction, scale to be able to tilt for moving.
Applicable Standards	SANS 1649:2014.
Performance Specifications	Weighing capacity up to 150kg. Expected service life: 10 years. Accuracy: within 1gm per 1000gm. Repeatability: Standard deviation less than 10gm after 20 measurements at 50kg
Accessories	None
Warranties	2 years.
Instructions to Suppliers	Specify method, frequency, and cost of re-calibration.
Item Name 2.10	**Scale: adult, without height board** 
Functional Specifications	Scale, analog/mechanical, bathroom type, weighing capacity: 0 – 150 kg at least. Large dial display. Spring lever mechanism with vanadium steel spring. Heavy, hardened steel pivots and bearing. Scale must be of robust construction.
Applicable Standards	SANS 1649:2014.
Performance Specifications	Weighing capacity up to 150kg. Accuracy: 0.1% throughout measurement range. Expected service life: 15 years. Accuracy: within 10gm per 1000gm. Repeatability: Standard deviation less than 10gm after 20 measurements at 50kg.
Accessories	None
Warranties	2 years.
Instructions to Suppliers	None
Item Name 2.11	**Scale: baby** 

Functional Specifications	Scale, weighing electronic, baby and child convertible. Battery operated. Automatic switch off. Increments: 10g up to 10kg, 20g > 10kg LCD display: digits at least 20mm high. Electronic damper. Hold feature to retain weight reading. Function to display breast milk intake.
Applicable Standards	No available.
Performance Specifications	Weighing capacity up to 20kg. Must be accurate within 10gm at 20kg. Repeatability: Standard deviation less than 10gm after 20 measurements at 10kg. Expected service life 10 years
Accessories	Set of batteries.
Warranties	2 years.
Instructions to Suppliers	None
Item Name 2.12	**Stadiometer (Height Board)**
Functional Specifications	Medical instrument designed to measure the standing height of adults and children. Range: up to 2500 mm, graduated in m, cm and mm with numbers at metre and cm positions.
Applicable Standards	ISO 13485
Performance Specifications	Measuring surface must be free of all moving parts that may affect the markings. Movable headboard must slide easily on the vertical section and lock in the measurement position. Headboard must lock at 90 degree to the vertical measuring section Locking mechanism must not affect the measuring surface. Must allow the heels, buttocks and back of the head to make contact with the vertical surface during measurement. It must be made of durable, non-flexible, smooth material that is water resistant, easy to clean with no sharp edges or unfinished parts.
Accessories	Sturdy and stable footplate Head Stopper
Warranties	2 years
Instructions to Suppliers	None
Item Name 2.13	**Patella hammer** 
Functional Specifications	Queen's Square Pattern, Babinski pattern also acceptable. Head is disc-shaped, stainless steel or chromeplated brass,

	with doughnut-shaped rubber bumper. Non-hardening rubber bumper. Handle is white nylon, threaded at one end to screw into the head, pointed at the other end to test for the Babinski reflex. Handle length approximately 45cm. Nylon must be flexible, guaranteed non-hardening and shatterproof for 10 years.
Applicable Standards	Expected service life 15 years.
Performance Specifications	Must be cleanable and disinfectable with standard cleaning solutions.
Accessories	None
Warranties	10 years on handle and rubber bumper.
Instructions to Suppliers	None
Item Name 2.14	**Stethoscope** 
Functional Specifications	The single-tube design eliminates rubbing noises. The instrument has been chosen to selectively amplify sounds of clinical interest, while blocking out environmental noises. The bell or the diaphragm can be rotated into position, depending on the clinical use. For optimal use, the auditory pathway between the patient's body and the clinician's ears, should be airtight.
Applicable Standards	Spare diaphragm. Spare earpieces (soft and hard).
Performance Specifications	None
Accessories	None
Warranties	5 years (excluding deliberate or accidental damage0.
Instructions to Suppliers	
Item Name 2.15	**Stethoscope: dual head** 
Functional Specifications	Stethoscope, binaural twin-head. Head to be one-piece stainless steel or medical-grade aluminium, with air-tight seal between head and shaft. Non-removable bell and non-corrugated diaphragm. Bell to be of shallow type, with replaceable non-chill sleeve. Diaphragm to be of good quality reinforced plastic. Rotation mechanism must have positive click-stop in both bell and diaphragm position, such that head does not rotate during auscultation.

	Tubing must be of sufficient thickness to attenuate environmental noise. Latex-free material. Single tube (although may be double lumen). Longer tube length preferred (minimum 70cm from earpiece to head). Ear tubes must be adjustable (i.e., rotatable) or angled forward at 15 degrees. Tubes must be of stainless steel with screw-on earpieces. Junction between tubes and earpieces must be airtight. Headpiece spring may be internal (preferred) or external, stainless steel or chrome-plated spring steel. Earpieces should be soft, formfitting, but standard hard plastic earpieces must also be supplied.
Applicable Standards	Nonavailable.
Performance Specifications	Head must amplify low frequency <100hz by approximately 15db, attenuate higher frequencies >500hz. Performance certificate required. Entire unit must be disinfectable with standard solutions. Expected service life: 15 years.
Accessories	Unit to be supplied complete with spare diaphragm and earpieces. Warranties
Warranties	Minimum 5-year guarantee on all components, including rotation of head and headpiece spring (at least 100 000 rotations and flexions).
Instructions to Suppliers	An optional model with paediatric head to be proposed. Specify any cleaning materials not compatible with the unit.
Item Name 2.16	**Syringe: ear** 
Functional Specifications	Stainless steel cylinder and plunger. Finger rings or half-rings for one-handed control of irrigation.
Applicable Standards	Non available.
Performance Specifications	Must be cleanable and disinfectable with standard solutions. Envisaged service life minimum 15 years.
Accessories	Re-usable silicon rubber tips.
Warranties	Minimum 2 years.
Instructions to Suppliers	None
Item Name 2.17	**Torch: pupillary** 
Functional Specifications	One cell pupil examination penlight torch. Pushbutton latching on-off switch. No sliding or rotary switch, no push-to-hold switch. Single super-bright white LED light source (no multi-LED types).

	Non-slip body, preferably splash-proof. Must be cleanable and disinfectable with standard cleaning solutions.
Applicable Standards	None.
Performance Specifications	Must have a uniform beam of light at up to 50cm – no dark centre spot with bright outer ring. Must withstand a 1m drop onto a concrete surface, without malfunction. Expected service life 10 years.
Accessories	Two sets of non-corrosive batteries.
Warranties	Warranted free of manufacturing defects for a 6-month period. Instructions to Suppliers None. Note to
Instructions to Suppliers	None.
Item Name 2.18	 **Torch: pupillary**
Functional Specifications	Two-cell pupil examination penlight torch. Pushbutton latching on-off switch. No sliding or rotary switch, no push-to-hold switch. Single super-bright white LED light source (no multi-LED types). Non-slip body, preferably splash-proof. Must be cleanable and disinfectable with standard cleaning solutions.
Applicable Standards	None.
Performance Specifications	Must have a uniform beam of light at up to 50cm – no dark centre spot with bright outer ring. Must withstand a 1m drop onto a concrete surface, without malfunction. Expected service life 10 years.
Accessories	Two sets of non-corrosive batteries.
Warranties	Warranted free of manufacturing defects for a 6-month period. Instructions to Suppliers None. Note to
Instructions to Suppliers	None.
Item Name 2.19	**Tuning fork** 

Functional Specifications	Tuning fork to be manufactured from medical grade stainless steel. Attached flat base for vibration and bone conduction tests. Models without weights on tines preferred. Set of one each 128Hz and 256Hz
Applicable Standards	Nonavailable.
Performance Specifications	Each fork to be clearly marked with vibration frequency. Accurate to 0,2 HZ. Expected service life: 20 years.
Accessories	None.
Warranties	None.
Instructions to Suppliers	None
Item Name 2.20	**Tape: MUAC, Child** 
Functional Specifications	Tape/ armband to measure upper arm circumference of children. Threads into itself through a hole at one end Arrow marks to indicate the point of measurement.
Applicable Standards	None
Performance Specifications	Material: Flexible, non-stretchable, washable Thickness: PVC, 0.5 mm to prevent tearing. Marked in cm, accurate to 0,1 mm per 10 cm Graduations: 1mm Multicolored as follows: Red: 0-11,5 cm Yellow/Orange 11,5-12,5 cm Green: 12,5- 25 cm
Accessories	Instruction leaflets: Pictorial guides showing correct placement (midpoint of the arm) Packaging: Pack of 100
Warranties	None
Instructions to Suppliers	None
Item Name 2.21	**Tape: MUAC, Adult** 
Functional Specifications	Tape/ armband to measure upper arm circumference of adults

	Threads into itself through a hole at one end Arrow marks to indicate the point of measurement.
Applicable Standards	None
Performance Specifications	Material: Flexible, non-stretchable, washable Thickness: PVC, 0.5 mm to prevent tearing. Marked in cm. Measurement range typically 15.0 to 56 cm. It must cover the circumference of severely wasted adults up to those with obesity. Graduations: 1mm
Accessories	Instruction leaflets: Pictorial guides showing correct placement (midpoint of the arm) Packaging: Pack of 50
Warranties	None
Instructions to Suppliers	None

RESUSCITATION

Item Name 2.22	**Tape: BROSELOW** 
Functional Specifications	Durable tape with standard length markings and colour zones. Each colour zone is associated with recommended dosages of resuscitation drugs and defibrillation energy for use in infants, where the weight is unknown. Flexible type preferred, for storage purposes. Non-smudge, non-fade. Must be cleanable with detergents and standard disinfectants. Supplier to state which cleaning solutions are unsuitable. Supplier to state whether the basis for the year edition of the tape (the US National Health and Nutrition Examination Survey – NHANES data) has been correlated with similar South African data.
Applicable Standards	None.
Performance Specifications	Supplier to state year edition of tape. Supplier to state whether all required clinical information is printed on tape, or whether a laminated card with resuscitation algorithms is required. In the latter case, supplier to propose such a card, specifying cost.
Accessories	Transparent plastic protective cover.
Warranties	None
Instructions to Suppliers	State expected service life of tape under normal use.
Item Name 2.23	**Laryngoscope straight blades sizes 00, 0 and 1:**

	
Functional Specifications	The Miller laryngoscope is a straight blade designed to obtain a view of the vocal cords by directly lifting the epiglottis. It has useful application in 'floppy' airways making it popular within paediatric anaesthesia. The Miller laryngoscope is the most commonly used blade
Applicable Standards	None.
Performance Specifications	Supplier to state year edition of tape. Supplier to state whether all required clinical information is printed on tape, or whether a laminated card with resuscitation algorithms is required. In the latter case, supplier to propose such a card, specifying cost.
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 2.24	**Introducer (intubation stylet): adult** 
Functional Specifications	Size: Adult -To fit Endotracheal tube size 6.5-11.0mm. Length: 340mm-365mm. Manufactured from low friction atraumatic outer coating around a malleable aluminium core. Soft atraumatic tip, U-bend, or other mechanism at proximal end to limit depth. Latex free. Clinically clean packaging. Individually packed in peel pouch.
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None

Item Name 2.25	**Introducer (intubation stylet): child** 
Functional Specifications	Size: Paediatric -To fit Endotracheal tube size 4.0-4.5mm. Length: 275 mm. Manufactured from low friction atraumatic outer coating around a malleable aluminium core. Soft atraumatic tip, U-bend, or other mechanism at proximal end to limit depth. Latex free. Clinically clean packaging. Individually packed in peel pouch
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 2.26	**Scissors: rescue** 
Functional Specifications	Heavy duty rescue scissors suitable for Emergency Medical Care and Rescue of patients in the pre-hospital environment. The scissors must not be smaller or larger than 15cm long. The handle must be ergonomic to allow for a solid grip. The blades must be constructed from high quality 420 surgical grade stainless steel. Autoclaveable. Blades and handles to have non-stick surface.
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	Nine

RESUSCITATION: SURGICAL

Item Name 2.27	 **Forceps: artery, curved**
Functional Specifications	Forceps, artery, Kocher. Curved, box joint. Stainless steel. Length: 200mm. Autoclavable. Specification number: 6330.
Applicable Standards	ISO 13402:1995, ISO 7151:1988, ISO 7153-1:2016, ISO900101 & ISO13485.
Performance Specifications	15-year service life.
Accessories	None
Warranties	2 years.
Instructions to Suppliers	None
Item Name 2.28	 **Forceps: artery, straight**
Functional Specifications	Forceps, artery, Kocher. Straight, box joint. Stainless steel. Length: 200mm. Autoclavable. Specification number: 4636.
Applicable Standards	ISO 13402:1995, ISO 7151:1988, ISO 7153-1:2016, ISO900101 & ISO13485.
Performance Specifications	15-year service life.
Accessories	None
Warranties	2 years.
Instructions to Suppliers	None
Item Name 2. 29	 **Forceps: non-toothed**
Functional Specifications	Forceps, dissecting/dressing. Standard pattern.

	Block joint. Non-toothed serrated jaws. Grip with transverse grooves. Stainless steel. Length: 180mm. Autoclavable. Specification number: 1520.
Applicable Standards	ISO 13402:1995, ISO 7151:1988, ISO 7153-1:2016, ISO900101 & ISO13485.
Performance Specifications	15-year service life.
Accessories	None
Warranties	2 years.
Instructions to Suppliers	None
Item Name 2.30	**Haemoglobinometer**
Functional Specifications	The meter must be lightweight (approximately 300 grams), robust and simple to operate. Must use dry cell batteries Size AAA Specify the type and number of dry cells batteries and expected operating time per charge. If rechargeable, state expected service life of batteries. If the unit has rechargeable batteries, a battery charger, operating from 220V mains supply must be provided. Cable for the battery charger must be at least two meters long and be fitted with a SABS approved 15A plug. Automatic calibration. The display must provide indication of a low battery condition. The unit must display blood hemoglobin test results in g/dl or mmol/l. State whether the unit on offer makes use of disposable cuvettes, or test strips (specify type). The meter must perform self-test/ self-calibrating on power-on. State method of self-calibration, and whether periodic user calibration is required. If so, detail method and materials required and cost thereof. The meter must automatically compensate for turbid blood samples and thereby still provide accurate measurement results.
Applicable Standards	None.
Performance Specifications	The minimum measuring range of the meter must be as follows: 0 – 25,6g/dl 0 – 15,9mmol/l. The meter must display test results within 60 seconds. The accuracy of the meter must be ± 1,5 %
Accessories	Case for storage. Lancets, multipurpose PHC-C-146. Hb meter test strips PHC-C-182.

	Hb meter microcuvette PHC-C-183 (Depending on the model procured).
Warranties	Minimum 2-year guarantee on meter. Supplier to indicate expected number of examinations in average service life of meter.
Instructions to Suppliers	State frequency of recalibration by supplier if any. Such recalibration will be at no cost. Supplier must state the price of all consumables per 100. Includes delivery and group training. Supplier must specify available after-sales support, with relevant pricing. Supplier to train one person per facility. Note to Procurement Consumables (Cuvettes or test strips) must be in
Item Name 2.31	**Fetal Doppler Handheld** 
Functional Specifications	Compact & light weight, easy to use Large, illuminated display provides clear monitoring at a glance Graphical display showing on-screen FHR and Toco traces continuously updated. Fetal heart rate analysis including Short Term Variation, Signal Loss, Basal Heart Rate, Accelerations, Decelerations, High Episodes, Low Episodes.
Applicable Standards	Size: 32x85x138 mm Weight: 290 g (including battery) Heart rate range: 50-210 bpm Resolution: 1 bpm LCD display: 45x25 mm (only code 29491-93) Auto average and manual mode Recording length: 480 s / 240 s Auto power-off to save power Manual: GB, IT - on request: DE, ES, FR, PT.
Performance Specifications	Automatically record fetal movements with Actogram.
Accessories	
Warranties	2 years
Instructions to Suppliers	Indicate whether re-calibration is necessary. If it is, indicate frequency, method and quote cost.
Item Name 2.32	**Thermometer: digital, ear-type** 
Functional Specifications	Ear type thermometer. Hand-held, battery operated, batteries in handle. Batteries may be conventional alkaline or

	rechargeable (if the latter, price must include charger) Probe tip and sensor. Probe cover detection system. Automatic probe cover eject button. Easy-to-read, LCD displays temperatures in degrees Celsius.
Applicable Standards	Non available.
Performance Specifications	Accuracy within 0.1°C. Must be cleanable with standard cleaning and disinfectant solutions. Expected service life: 10 years.
Accessories	None
Warranties	2-year guarantee.
Instructions to Suppliers	Supplier to provide pricing of probe covers and any other spares/consumables. Supplier to indicate expected length of operation on one set of batteries or one charge. If rechargeable, state expected battery life under normal operation. State expected Mean Time Before Failure of the unit.
Note to Procurement	Disposable probe covers PHC-C-178 to be in series with this item.

SURGICAL

Item Name 2.33	**Mirror** 
Functional Specifications	Mirror, glass, 300x400 mmx3mm thick, in frame (natural anodised aluminium required, pre-drilled for wall mounting. Back to be sealed to keep out dust and moisture.
Applicable Standards	Nonavailable.
Performance Specifications	Must be cleanable and disinfectable with standard solutions.
Accessories	To be supplied with wall mounting hardware (stainless steel screws).
Warranties	Minimum 1 year on frame.
Instructions to Suppliers	None

CLEANING

Item Name 2.34	**Squeegee** 
Functional Specifications	Double-sided aluminium headpiece, approx. 30cm wide. Replaceable live rubber edge on one side, replaceable cellulose sponge in gauze wrapper on the other.

	Handle: two-piece aluminium, telescopic. Locking mechanism must not allow head to rotate, in the extended or retracted positions. Extended length approx. 1,2m.
Applicable Standards	None
Performance Specifications	Spare sponge and rubber edge to fit aluminium headpiece.
Accessories	None
Warranties	1 year.
Instructions to Suppliers	None
Item Name 2.35	**Color coded mops: blue, red** 
Functional Specifications	Standard wooden handle. Painted Red, Blue or Black. Non-chip, water-resistant paint. Head: metal, rust-free. Long hair mop. Handle must attach to head-part securely.
Applicable Standards	None
Performance Specifications	
Accessories	None
Warranties	6 months
Instructions to Suppliers	Procure equal numbers of the different colours.
Item Name 2.36	**DOUBLE MOPPING BUCKET + CADDY** 
Functional Specifications	Capacity: 50L (2 x 25L) Comes complete with 4 x castors, 2 x 25L bucket,1 x caddy and 1 x wringer. Rectangular shape, to suit janitor trolley. Used in combination with colour-coded mops and cloths, for cleaning.
Applicable Standards	None
Performance Specifications	Cleanable with standard cleaning and disinfectant solutions. Chemical resistant

Accessories	 Colour-coded bucket: Heavy duty
Warranties	1 year
Instructions to Suppliers	None
Item Name 2.37	**Trolley: janitor** 
Functional Specifications	The trolley holds a large refuse bad, held in the open position on the frame by a retainer. There is a sealing lid over the mouth of the bag, to prevent spillage and odours escaping. Alongside the receptacle are three shelves. The top shelf is sunken, to accommodate spray bottles and other containers. The middle and lower shelves are enclosed by a rail on all sides, and house cloths and brushes. The free edge of the top shelf has hooks or snap holders, into which mop handles can be secured when the unit is moving. Space for three mops (or mop/broom combinations). The floor of the trolley extends beyond the shelves, to provide a support for two heavy-duty buckets. The trolley is castor-mounted for easy movement into and out of rooms. The trolley shall be fitted with 75mm diameter castors. Castors must comply with the latest issue of SANS 621; proof of compliance must be submitted. Where castors are fitted into steel tubular legs, the tube shall be of wall thickness not less than 2,0mm and castors shall be fixed to the tube by one of the following methods: a. Solid plug (long) complying with SANS 621 subsection 3.5.6 or b. Screwed into 35mm long sleeves welded into the tubular members and locked in an acceptable manner c. Rubber or plastic expanding sleeves for fitting castors are not acceptable.
Applicable Standards	SANS 778 paragraph 5.2, Proof of compliance must be submitted. To comply with SANS 896 specifications. SANS 621, proof of compliance must be submitted.
Performance Specifications	Cleanable with standard cleaning and disinfectant solutions. Expected service life: 15 years for trolley body.
Accessories	Available separately as Cleaning Equipment and Cleaning Consumables.
Warranties	2 years.

Instructions to Suppliers	None
Item Name 2.38	**Soap dispenser** 
Functional Specifications	Simple, heavy-duty stainless steel cage unit, that will accept non-proprietary, standard replaceable, plastic pump-action bottles. To fit 750 ml bottle. Bottles are re-fillable with bulk-purchased liquid soap. Bottles can be replaced when pump mechanism fails. Must be affixed to the wall, in proximity to the washbasin.
Applicable Standards	None
Performance Specifications	Cleanable with standard cleaning and disinfectant solutions. Expected service life: 15 years
Accessories	2 Empty bottles, 750 ml. All wall mounting hardware (stainless steel screws)
Warranties	---
Instructions to Suppliers	None
Item Name 2.39	**Spray bottle: 750ml** 
Functional Specifications	Simple trigger-action mechanism, on a robust plastic bottle. For use with bilk-purchased liquid detergents and window-cleaning solutions. Bottle should not be of the thin, transparent, blow-moulded type. Spray pattern is adjustable at the nozzle.
Applicable Standards	
Performance Specifications	None
Accessories	None
Warranties	
Instructions to Suppliers	
Note to Procurement	

Item Name 2.40	**Paper towel dispenser: folded towels** 
Functional Specifications	Wall-mounted polycarbonate dispenser for folded paper towels.
Applicable Standards	
Performance Specifications	Cleanable with standard cleaning and disinfectant solutions. Chemical resistant. Expected service life: 15 years.
Accessories	All wall-mounting hardware (stainless steel screws).
Warranties	2 years on all components.
Instructions to Suppliers	Supplier to deliver and install.
Note to Procurement	Suitable folded paper towels available on RT 14 as Item 14111703-0003.
Item Name 2.41	**Paper towel dispenser: roll** 
Functional Specifications	Dispenser of paper towels for drying hands. Stainless steel U-shaped metal frame minimum 3mm thickness, with stainless steel tubular crossmember, to take standard width perforated paper roller towels. Unit must accommodate large diameter rolls (not industrial sizes). Cross-member to have positive retaining system, to prevent slippage and displacement of roll. Pre-drilled for wall mounting.
Applicable Standards	
Performance Specifications	Cleanable with standard cleaning and disinfectant solutions. Expected service life: 15 years.
Accessories	All wall-mounting hardware (stainless steel screws).
Warranties	5 years on all components.
Instructions to Suppliers	Supplier to deliver and install.
Note to Procurement	Suitable folded paper towels available on RT 14 as Item 14111703-0003.
Item Name 2.42	**Bin: pedal, 20l** 
Functional Specifications	All stainless-steel construction. No plastic in the lid-lifting mechanism. All levers to be secured in position with circlips or split pins.

	Usable with or without a liner. Noise-deadening bumpers to reduce lid noise. Applicable Standards Performance Specifications At least 10 000 lid openings. Standard cleaning and disinfectant solutions. Accessories Warranties 2 years. Instructions to Suppliers Note to
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 32.43	**Bin: pedal, 10 l** 
Functional Specifications	All stainless-steel construction. No plastic in the lid-lifting mechanism. All levers to be secured in position with circlips or split pins. Usable with or without a liner. Noise-deadening bumpers to reduce lid noise. Applicable Standards Performance Specifications At least 10 000 lid openings. Standard cleaning and disinfectant solutions. Accessories Warranties 2 years. Instructions to Suppliers Note to
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None

Instructions to Suppliers	None
Item Name 2.44	**Heavy Duty Plastic Chairs** 
Functional Specifications	Maximum User weight: 120kg Material: Polypropylene Colour: Black Product Dimensions: 450mm x 420mm x 810mm No arm rest on chair Stackable Height :420mm Heavy Duty
Applicable Standards	None

EMERGENCY ROOM

Item Name 2.45	FOR Automatic External Defibrillator Corres A6S MACHINE USING FOR LIFE SAVING (COR RES AED machines already procured and in emergency rooms in CoT clinics. Accessories must be COR RES to fit current available AED machine already on-site)
Functional Specifications	Spare battery for COR RES A6S Automatic External Defibrillator 12V, not rechargeable
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None

Item Name 2. 46	**SPARE ADULT PADS FOR COR RES A6 AED** (Automatic External Defibrillator) (COR RES AED machines already procured and in emergency rooms in CoT clinics. Accessories must be COR RES to fit current available AED machine already on-site)
Functional Specifications	Disposable multifunction electrodes for external defibrillation, synchronised cardioversion, cardiac stimulation, and ECG monitoring. ADULT
Applicable Standards	None
Performance Specifications	None

Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery

Item Name 2.47	**SPARE INFANT PADS FOR COR RES A6 AED** (Automatic External Defibrillator) (COR RES AED machines already procured and in emergency rooms in CoT clinics. Accessories must be COR RES to fit current available AED machine already on-site)
Functional Specifications	Disposable multifunction electrodes for external defibrillation, synchronised cardioversion, cardiac stimulation, and ECG monitoring PAEDIATRIC
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery

Item Name 2.48	**PHILLIPS replacement M5070A Battery used** in the Phillips HeartStart Automatic External Defibrillator) Accessories must be Phillips to fit current available AED machine already on-site)
Functional Specifications	Disposable long-life lithium manganese-dioxide 200+ shock capacity
Applicable Standards	None
Performance Specifications	Do not attempt to recharge. Do not use beyond the expiration date marked on the label
Accessories	None
Warranties	None
Instructions to Suppliers	None

Item Name 2.49	**SPARE ADULT PADS FOR PHILLIPS** HeartStart (Automatic External Defibrillator) already procured and in emergency rooms in CoT clinics. Accessories must be Phillips to fit current available AED machine already on-site) 
Functional Specifications	Disposable multifunction electrodes for external defibrillation, synchronised cardioversion, cardiac stimulation, and ECG monitoring. ADULT

Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.50	**SPARE INFANT PADS FOR PHILLIPS** HeartStart AED (Automatic External Defibrillator) (Phillips machines already procured and in emergency rooms in CoT clinics. Accessories must be Phillips to fit current available AED machine already on-site) 
Functional Specifications	Disposable multifunction electrodes for external defibrillation, synchronised cardioversion, cardiac stimulation, and ECG monitoring PAEDIATRIC
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.51	**LIFEPAK 1000 Lithium-Ion** rechargeable battery designed for the Physio-Control LIFEPAK 1000 Defibrillators. Accessories must be Lifepak to fit current available AED machine already on-site)
Functional Specifications	Disposable long-life lithium manganese-dioxide 200+ shock capacity
Applicable Standards	None
Performance Specifications	Rechargeable batteries designed for a “high use” environment requires unit and multiple batteries
Accessories	Requires battery charger
Warranties	None
Instructions to Suppliers	None

Item Name 3.52	**SPARE ADULT PADS Physio-Control LIFEPAK 1000** (Automatic External Defibrillator) already procured and in emergency rooms in CoT clinics. Accessories must be

	Physio-Control LIFEPAK 1000 to fit current available AED machine already on-site)
Functional Specifications	Disposable multifunction electrodes for external defibrillation, synchronised cardioversion, cardiac stimulation, and ECG monitoring. ADULT
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery

Item Name 3.53	**SPARE INFANT PADS Physio-Control LIFEPAK 1000** (Automatic External Defibrillator) (Lifepack machines already procured and in emergency rooms in CoT clinics. Accessories must be Physio-Control LIFEPAK 1000 to fit current available AED machine already on-site) 
Functional Specifications	Disposable multifunction electrodes for external defibrillation, synchronised cardioversion, cardiac stimulation, and ECG monitoring PAEDIATRIC
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 3.54	**Masmed MAS203G ECG Digital machine electrodes**
Functional Specifications	Adult: Healthease pregelled sensor Child: INTCO pregelled sensor
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery

Item Name 2.55	**Masmed ECG machine Thermal paper**
Functional Specifications	MAS203G: 320 x 240 LCD (3.5 inch) EG paper 14 blocks
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.56	**GE ECG machine snap electrodes**
Functional Specifications	ECG snap electrodes
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.57	**GE ECG machine Thermal paper**
Functional Specifications	
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery

Item Name 2.58	**Medhold ECG machine electrodes**
Functional Specifications	Pregelled AG/AGCL Sensor
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.59	**Medhold machine Thermal paper**
Functional Specifications	Vital signs, MAC serie, 8 years imaged Archival Life, A4, Red Grid, Z-fold (VYAIRE)

Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.60	**MACTM ECG Analysis System electrodes**
Functional Specifications	Pregelled AG/AGCL Sensor
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.61	**MACTM ECG Analysis System Thermal paper**
Functional Specifications	Standard thermal recording paper in either z-fold pads or roll paper.
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.62	**Contec ECG Machine: Thermal paper**
Functional Specifications	Width: 10cm
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	No short expiry date delivery
Item Name 2.63	**Contec ECG Machine: electrodes**
Functional Specifications	Size: 40mmx32mm
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None

Instructions to Suppliers	No short expiry date delivery

SUNDRIES

Item Name 2.64	**Headset USB-Duo** 
Functional Specifications	VT6200UNC-USB-Duo Headset with excellent noise-cancelling microphone. Volume and Call control on the cord. Big and Soft Leatherette Ensure All Day Wearing Comfort. Receiving Type: Dynamic Moving coil. **Connection Type: USB2.0.** Microphone Type: ECM. Microphone Directivity: Cardioid. Wearing Style: Adjustable headband.
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 2. 65	**Pin Index Oxygen Regulator.** 
Functional Specifications	Oxygen Regulator Pin Index without Extended Heyer Fitting. **DIMENSIONS** *19 × 7.5 × 7.5 cm* • Body manufactured from high quality polished aluminium • Inner mechanism manufactured from brass • Gauge: 1 – 3000psi • Click stop flow dial adjustable from 0 – 25L/Min

	• Pressure dial encased in rubber seal for added protection • Silicone “O” Ring • Female High-Flow Heyer Port • Tried and tested in the EMS environment.
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 2.66	**stapler remover kangaro.** 
Functional Specifications	Removes standard staples as well as heavy-duty staples up to **23/24** (including 23/6 through 23/17). **DIMENSIONS** Approximately **14.5 x 4.5 x 5 cm** (L x W x H) and weighs about **160 grams** **Sheet Capacity:** Capable of easily pulling staples from document stacks of up to 160–210 sheets at once. **Safety Mechanism:** Features an in-built clamping device that holds the removed staple to prevent it from flying or kicking back during extraction. **Material & Build:** Durable all-metal core with a sturdy exterior, featuring protective plastic top and bottom grips for comfortable handling. **Staple Compatibility:** Removes standard staples as well as heavy-duty staples up to 23/24 (including 23/6 through 23/17)
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None

Instructions to Suppliers	None
Item Name 2. 67	**Giant stapler.** 
Functional Specifications	Durable, high-volume heavy-duty stapler. Featuring a robust die-cast metal body, it utilizes a powerful cantilever handle for effortless stapling of thick reports and presentations **DIMENSIONS** **Compatible Staples:** *66/8:* 20 to 40 sheets *66/11:* 30 to 70 sheets *66/14:* 50 to 100 sheets **Throat Depth:** Adjustable up to 70mm for accurate, flexible paper insertion **Loading Mechanism:** Quick and easy bottom-loading **Weight:** 1.68 kg **Design:** All-metal construction with a plastic handle cover and anti-jam mechanism
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 2. 68	**Giant Puncher.** 
Functional Specifications	**Punch Capacity**100 to 300 sheets (standard 80 gsm paper) per actionHole

	Diameter (6 \text{ mm}\) (typically utilizing hollow-pin technology for effortless cuts) **Hole Distance** (80 \text{ mm}\) (standard ISO 838 spacing for 2-ring/4-ring files) **Construction** Die-cast aluminium or robust cast-iron chassisKey FeaturesLock-down handle for compact storage, adjustable paper/margin depth guides, self-centering mechanisms, and a removable confetti/waste tray
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None
Item Name 2. 69	**Electric Kettle.** 
Functional Specifications	**Electric kettle specifications** generally encompass capacity, power consumption, materials, and safety features. Standard models hold 1.5 to 1.8 liters and consume 1500 to 2200 watts, while basic travel kettles might hold 0.5 liters at 1000 watts. Key details vary by design. **Capacity:** Ranges from 0.5L (compact/travel) to 2.2L (family size). The most common household sizes are 1.5L, 1.7L, and 1.8L. **Power Consumption:** Typically between 1200W and 2200W Higher wattage 2000W- 3000W boils water faster but requires a higher power draw. **Voltage & Frequency:** Standard household requirements are AC 220–240V ~ 50/60Hz. **Materials:** • **Interior:** Food-grade Stainless Steel (304), Borosilicate glass, or BPA-free plastic. • **Exterior:** Often double-wall (insulates heat and keeps the outside cool).
Applicable Standards	None
Performance Specifications	None
Accessories	None

Warranties	None
Instructions to Suppliers	None
Item Name 2. 70	**Calculator 13 digits Twin Power, multi-digits** 
Functional Specifications	**Display:** 12 to 14 digits usually on a large, angled, or tilting LCD screen. **Power Source:** Twin-powered (solar cell with a battery backup, such as an LR44 or CR2032 button cell). **Key Operations:** Independent memory (4-keys), double-zero (00) key, and a correction key. **Business Features:** Grand Total (GT) memory, Tax Calculation (+TAX / -TAX), Mark-Up/Mark-Down (MU), and Cost-Sell-Margin functions. **Design:** Ergonomic slanted design, durable plastic keys, and 3-digit comma punctuation. **Auto Power Off:** Yes, typically shuts down after 7-10 minutes of inactivity
Applicable Standards	None
Performance Specifications	None
Accessories	None
Warranties	None
Instructions to Suppliers	None

Item Name 2.71	**Disposable mouthpiece for Peak flow meter** 
Functional Specifications	Single-use, disposable mouthpieces for use with peak flow meters to measure Peak Expiratory Flow Rate. Suitable for both adult and child peak flow meters Non absorbent finish that wont stick to the lips for less irritation and greater comfort.
Applicable Standards	ISO 23747:2015.