

**LOT 10 - INPATIENT SERVICES**

S/No.	LOT NO.	EXPECTED EQUIPMENT	QTY	Estimated Units Price	Estimated Total Price
<b>General WARD bed requirements</b>					
1.	10-1	Oxygen flow meters	100		
2.	10-2	Wall Suction Units	100		
3.	10-3	Ward bed complete with drip stand, Bedside locker and over-bed table	212		
4.	10-4	Drip stand (Portable)	5		
5.	10-5	Thermometers (Electronic Ear Thermimeter)	12		
6.	10-6	Blood pressure Machine (Aneroid)	12		
7.	10-7	Wheelchairs	12		
8.	10-8	Vital signs monitor	12		
9.	10-9	Diagnostic sets	5		
10.	10-10	Portable suction units	5		
11.	10-11	Nebulizers	5		
12.	10-12	Macerators	5		
13.	10-13	Commode chairs	8		
14.	10-14	X-ray viewer	5		
15.	10-15	Emergency Trolley	5		
16.	10-16	Procedure trolley	20		
17.	10-17	Fluid warmer	5		
18.	10-18	Patient Trolleys	10		
19.	10-19	Defibrillator	4		
<b>PAEDIATRICS WARD requirement</b>					
20.	10-20	Baby cots	20		
21.	10-21	Reclining chairs	10		
22.	10-22	Radiant heaters	10		
23.	10-23	Portable Examination lamp	0		

**LOT 10: INPATIENT SERVICES****LOT 10-1 Oxygen flow meters**

Item Code No.	Department	Section	Item Description
LOT 10-1	Inpatient	Wards	Oxygen Flow meters
1. General Description			
Oxygen Flow meter with Humidifier:			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Should be duly USFDA or CE marked by the European notified body 3.2. The Flowmeter should be fitted with BS standard Medical Oxygen Probe. 3.3. Back Pressure Compensated flow meter will be of accurate gas flow measurement with control within a range of 0 to 15 Lpm. 3.4. It should meet strict precision and durability standard. 3.5. The flow meter body should be made of brass chrome plated materials. 3.6. The flow tube and shroud components should be made of clear, impact resistant polycarbonate. 3.7. Flow Tube should have large and expanded 0 – 5 lpm range for improved readability at low flows. 3.8. Inlet filter of stainless-steel wire mesh to prevent entry of foreign particles. 3.9. The humidifier bottle should be made of unbreakable & Reusable of polycarbonate material and autoclavable at 134 degree centigrade.			

**LOT 10-2 Wall Suction Units**

Item Code No.	Department	Section	Item Description
LOT 10-2	Inpatient	Wards	Wall Suction Unit
1. General Description			
Ward Wall Vacuum Units:			
2. Composition			

Item Code No.		Department	Section	Item Description		
LOT 10-2		Inpatient	Wards	Wall Suction Unit		
2.1.	Main unit					
3. Description of the medical supply unit design type						
3.1. Should be duly USFDA or CE marked by the European notified body 3.2. Vacuum Unit should be wall mounted and should consists of Suction Controller/ Regulator & Collection bottle of 1000ml. with mounting arrangement. 3.3. The Vacuum unit should be fitted with BS standard Vacuum probe. 3.4. The vacuum regulator should be step-less adjustable and have large vacuum gauge providing indication of the suction supplied by the regulator. 3.5. Safety trap should be provided inside the jar to safeguard the regulator from overflowing. 3.6. The unit should be consisting of reusable 1000ml. shatter resistant bottle, each made up of poly carbonate material and fully autoclavable at 1340C.						

#### **LOT 10-3 Ward bed complete with drip stand, Bedside locker and over-bed table**

LOT 10-3 Ward bed complete with drip stand, bedside locker and over bed table					
Item Code No.	Department	Section	Item Description		
LOT 10-3	Inpatient Services	General Ward	Electrical Bed with mattresses, bed side locker and Over bed Table		
1. General Description					
Four sections HDU bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, and water proof mattress					
2. Composition					
2.1.	Main unit				
2.2. Physical Specifications					
2.2.1. Operational Requirements					
2.2.2. The system should be electrically and manually operated and adjustable for heights, trendelenburg etc. It should also be having radiotransluscent top for carrying out X-Ray at the bedside					
3. Technical Specifications					
3.1. Should have four section mattress base					
3.2. Should be able to handle weight of up to 200Kg					
3.3. Should have X-Ray translucent back section made up of high-pressure laminate.					
3.4. Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed.					
3.5. Base frame & support frame should be made up of steel for long life & prevention from rusting.					
3.6. Should have stepless electrical adjustment for the following :-					
• Height : 450-840 mm					
• Back section : 0- 50 degrees					

Item Code No.	Department	Section	Item Description
LOT 10-3	Inpatient Services	General Ward	Electrical Bed with mattresses, bed side locker and Over bed Table
<ul style="list-style-type: none"> <li>• Leg Section : 0-30 degrees</li> </ul> <p>4. Should have stepless pneumatic adjustment for Trendelenburg (20-25° approx.), reverse-trendelenburg (10-15° approx.)</p> <p>4.1. Should have a manual quick release mechanism for back section adjustment during emergency situation</p> <p>4.2. Should be equipped with four articulated half-length tuck away side rails</p> <p>4.3. Should be equipped with large castors (diameter 150 mm) with central braking and steering facility.</p> <p>4.4. Mattress of the Bed should be made up of high density foam with Anti-Microbial agent incorporated into all components that assists in Prohibiting growth of bacteria &amp; fungi and easy to clean.</p> <p>4.5. Mattress should be fully Radiolucent for ease in performing portable X-Rays.</p> <p>4.6. Should have bumpers at all four corners and place for fixing accessories</p> <p>4.7. Dimensions of bed :</p> <ul style="list-style-type: none"> <li>• Length : 2100 -2290 mm</li> <li>• Width : 850 -1020mm</li> <li>• Mattress Size : appropriate as per bed size</li> </ul> <p>5. System Configuration Accessories, spares and consumables</p> <p>5.1. Bed Mainframe -01</p> <p>5.2. Bed Ends, detachable : 01 pair</p> <p>5.3. Articulated half-length tuck away side rails: 04 Nos.</p> <p>5.4. IV Rods: 01 No.</p> <p>5.5. Mattress 12 cm Thick: 01 No.</p> <p>6. Environmental factors</p> <p>6.1. Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.</p> <p>6.2. The unit shall be capable of being stored continuously in ambient temperature of 15 - 50 0C and relative humidity of 15-90%</p> <p>6.3. The unit shall be capable of operating continuously in ambient temperature of 10 -40 0C and relative humidity of 15-90%</p> <p>7. Power Supply</p> <p>7.1. Power input to be 220-240VAC, 50Hz as appropriate fitted with BS plug</p> <p>7.2. Resettable overcurrent breaker shall be fitted for protection</p> <p>8. Standards, Safety and Training</p> <p>8.1. Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450</p> <p>8.2. Should be FDA and CE approved product</p> <p>8.3. Manufacturer should have ISO certification for quality standards.</p> <p>8.4. Electric Shock Protection level-Class-B</p> <p>8.5. Electric current Protection- Class -1</p> <p>8.6. Certified to be compliant with IEC 60601-2-38 Medical Electrical Equipment part 2-38 Particular requirements for safety of Electrically Operated Hospital Beds</p> <p>8.7. Service manual in English</p>			

Item Code No.	Department	Section	Item Description
LOT 10-3	Inpatient Services	General Ward	Electrical Bed with mattresses, bed side locker and Over bed Table
User manual in English			

#### **LOT 10-4 Drip stand (Portable)**

Item Code No.	Department	Section	Item Description
LOT 10-4	Inpatient Services	General Ward	Drip stand (Portable)
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<b>TECHNICAL SPECIFICATIONS FOR DRIP STAND</b>  The drip stand must be made of stainless steel with the following features: <ul style="list-style-type: none"> <li>3.1. Stable and strong stainless-steel structure</li> <li>3.2. Four (4) stainless steel hooks each with 1kg load capacity</li> <li>3.3. Adjustable height between approx. 150cm to 250cm</li> <li>3.4. Large, five (5) limb stainless base</li> <li>3.5. Five (5) castors with at least two brakes</li> </ul>			

#### **LOT 10-5 Thermometers (Electronic Ear Thermometer)**

Item Code No.	Department	Section	Item Description
LOT 10-5	Inpatient Services	wards	Thermometer (Electronic Ear Thermometer)
1. General Description			
Digital Thermometer			
2. Composition			
2.1.	Main unit		

Item Code No.	Department	Section	Item Description
LOT 10-5	Inpatient Services	wards	Thermometer (Electronic Ear Thermometer)
3. Description of the medical supply unit design type			
3.1. The system should have minimum 4-digit display with 0.1 increment 3.2. Should have degree Celsius and Fahrenheit display 3.3. Measurement Accuracy: $\pm 0.1^{\circ}\text{C}$ (32.0 to 42.0 $^{\circ}\text{C}$ ), $\pm 0.2^{\circ}\text{F}$ (89.6 to 107.6 $^{\circ}\text{F}$ ) 3.4. Measurement Range: 32.0 to 42.0 $^{\circ}\text{C}$ (89.6 to 107.6 $^{\circ}\text{F}$ ) 3.5. The sensing unit should be thermistor or equivalent 3.6. Should work with a battery and lasts for a minimum measurement of 1000 readings (10 min operation each)			

#### **LOT 10-6 Blood pressure Machine (Aneroid)**

Item Code No.	Department	Section	Item Description
LOT 10-6	Inpatient	Wards	Blood Pressure Machine (Aneroid Type)
1. General Description			
Sphygmomanometer - Aneroid Type			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Should be aneroid type, 3.2. Should have ISI mark. 3.3. Should have a measuring range from 0 to 300 mmHg, 3.4. Should be provided with adult arm cuffs of size medium & large and paediatric cuff. 3.5. The dial manometer markings and graduations should be permanent and clearly visible and filled with pigments, with diameter of minimum diameter of 160 mm. 3.6. Body & Bezel – Aluminum die casted (Powder coated), screw type bezel 3.7. Sensing-corrugated phosphorous bronze twin capsule bellows. 3.8. Movement mechanism – Brass 3.9. Connection: brass, nickel plated for 3-4 mm rubber hose. 3.10. Dial – Aluminum 3.11. Pointer – White coated, thin & sharp made of phosphorous Bronze 3.12. Window lenses – Clear plastic. 3.13. All plastic parts, if any used should not crack, flake, peel or disintegrate in normal use.			

Item Code No.	Department	Section	Item Description
LOT 10-6	Inpatient	Wards	Blood Pressure Machine (Aneroid Type)
3.14. The inflating rubber bag should be capable of withstanding an internal pressure of 450 mmHg without leaking. 3.15. The inflating bulb should be soft and should not have any joints or ridges. 3.16. The fastening arrangements of the cuff should be of hook and loop type (Velcro) 3.17. The threading and fastening arrangement of the cuff should show no sign of slip or failure when subjected to the maximum test conditions. 3.18. The rubber tubes used should have an internal diameter of $3 \pm 0.5\text{mm}$ and the external diameter should not be less than 8mm. 3.19. The tubes should be fitted with male and female leur connectors. 3.20. Should provide a carry bag to keep the whole system safe and sound. All parts should be replaceable in case of breakage.			

#### LOT 10-7 Wheelchairs

Item Code No.	Department	Section	Item Description
LOT 10-7	Outpatient	Consulting Room	Wheelchairs
1. General Description			
Indoor / low-active basic folding chairs			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Detailed specification description of category: Indoor / low-active basic folding chairs. Basic folding frame, standard back height Size range: <ul style="list-style-type: none"> <li>• 51 cm (20") wide</li> <li>• 46 cm (18") wide</li> <li>• 43 cm (17") wide</li> <li>• 41 cm (16") wide</li> <li>• 38 cm (15") wide</li> <li>• 36 cm (14") wide</li> <li>• 30 cm (12") wide with 40 cm seat frame length</li> <li>• 30 cm (12") wide with 30 cm seat frame length</li> </ul>			

Item Code No.	Department	Section	Item Description
LOT 10-7	Outpatient	Consulting Room	Wheelchairs
<ul style="list-style-type: none"> <li>• 25 cm (10") wide with 30 cm seat frame length</li> <li>• 25 cm (10") wide with 25 cm seat frame length</li> </ul>			
<p>3.2. Basic folding frame, tall back height</p> <p>Size range:</p> <ul style="list-style-type: none"> <li>• 51 cm (20") wide</li> <li>• 46 cm (18") wide</li> <li>• 43 cm (17") wide</li> <li>• 41 cm (16") wide</li> <li>• 38 cm (15") wide</li> <li>• 36 cm (14") wide</li> <li>• 30 cm (12") wide with 40 cm seat frame length</li> <li>• 30 cm (12") wide with 30 cm seat frame length</li> </ul>			
<p>3.3. Basic folding frame, short back height</p> <p>Size range:</p> <ul style="list-style-type: none"> <li>• 51 cm (20") wide</li> <li>• 46 cm (18") wide</li> <li>• 43 cm (17") wide</li> <li>• 41 cm (16") wide</li> <li>• 38 cm (15") wide</li> <li>• 36 cm (14") wide</li> <li>• 30 cm (12") wide with 40 cm seat frame length</li> </ul>			
<p>3.4. Basic folding frame, standard back height attendant-propelled, non-institutional use</p> <p>Size range:</p> <ul style="list-style-type: none"> <li>• 51 cm (20") wide</li> <li>• 46 cm (18") wide</li> <li>• 41 cm (16") wide</li> <li>• 38 cm (15") wide</li> <li>• 36 cm (14") wide</li> <li>• 30 cm (12") wide with 40 cm seat frame length</li> </ul>			
<p>3.5. Backrest / Seat configuration:</p> <ul style="list-style-type: none"> <li>• Seat tilt: 5 degree minimum and 8 degree maximum (Approx. minimum of 3.5 cm and maximum of 5.7 cm front and rear seat height differential on 40 cm seat length)</li> <li>• Back to seat angle not to exceed 90 degrees.</li> <li>• 8 - 10 degree bend in back post, except for short back and low slung short back categories</li> </ul>			



Item Code No.	Department	Section	Item Description
LOT 10-7	Outpatient	Consulting Room	Wheelchairs
<p>3.6. Seat length:</p> <ul style="list-style-type: none"> <li>Standard = 40 cm (allow + 1 cm) long on all chairs with 40 cm seat frame. Exception: 30 cm (allow + 1 cm) long on 30 cm (12") wide with 30 cm seat frame length; 25 cm (10") wide with 30 cm seat frame length; 25 cm (10") wide with 25 cm seat frame length Shorter length may be specified by end user.</li> </ul> <p>3.7. Upholstery:</p> <ul style="list-style-type: none"> <li>Back upholstery: Nylon (600 D) or vinyl: Exception: Reinforced on all 20" or reinforced 18" and 16" chairs. Reinforcement by means of a single nylon strip, at least 4 cm wide stitched to outside of back upholstery.</li> <li>Seat upholstery: Nylon (600 D) or vinyl (40 cm long or any shorter length as specified).</li> <li>All back and seat upholstery to be reinforced with an inner PVC minimum spec of 500 g/m<sup>2</sup>. The inner coated PVC to have a minimum tensile strength of 200 kg/50mm WMD and 160kg/50mm AMD and a minimum tear strength of 25kg both WMD and AMD. (Reinforced chairs as specified will therefore have a second, outer layer of PVC for additional reinforcement. Reinforcement by means of strips not acceptable.)</li> </ul> <p>3.8. Armrests:</p> <ul style="list-style-type: none"> <li>Removable sport, full or desk with plastic skirt guard. Exception: Height adjustable full or desk with metal skirt guard only on 30 cm (12") wide with 30 cm seat frame length and 10" wheelchairs</li> <li>Arm rest sockets to be on side of seat rail only.</li> <li>Shape of arm rests may in no way impede the fitting of commercial rigid adjustable back systems onto back posts.</li> </ul> <p>3.9. Castors and forks:</p> <ul style="list-style-type: none"> <li>8x2" (20cm x 5 cm) castors with plastic hub, outer shore hardness of 65 – 70 and inner shore hardness of 33 – 70, with the inner value not exceeding the outer value.</li> <li>Exception: 20" chair: 8x2" (20cm x 5 cm) castors with aluminium hub, and outer shore hardness of 65 – 70 and inner shore hardness of 33 – 70, with the inner value not exceeding the outer value. Alternative, 8x2" (20cm x 5 cm) rubber castors.</li> <li>8x1" (20cm x 2.5 cm) castors with plastic hub to be available as an option on request.</li> <li>Forks to be minimum 0.4cm thick mild steel forks. Stem to be fastened to the fork with a thread and nut system to allow for re-fastening.</li> </ul> <p>3.10. Rear wheels and axles:</p> <ul style="list-style-type: none"> <li>24" x 1 3/8 mag (standard) or spoke (optional) wheel with one part semi-solid tyre as specified by end user. Exception, 12" chair with 30 cm seat rail length to use</li> </ul>			

Item Code No.	Department	Section	Item Description
LOT 10-7	Outpatient	Consulting Room	Wheelchairs
<p>22" x 1 3/8 mag (standard) or spoke (optional) wheel complete with semi-solid one-piece tyre</p> <ul style="list-style-type: none"> <li>• Axle 1.2cm thick</li> </ul> <p>3.11. Footrest hangers:</p> <ul style="list-style-type: none"> <li>• Extra-short (15 cm), short (20 cm), long (25 cm) or fully detachable 90 degree hangers with angle adjustable footplates as specified by end user.</li> </ul> <p>3.12. Footrest:</p> <ul style="list-style-type: none"> <li>• Footplate to be plastic, aluminum or mild steel; Height adjustable</li> </ul> <p>3.13. Leg strap:</p> <ul style="list-style-type: none"> <li>• Nylon strap (4cm to 5 cm wide) with Velcro. The leg strap should have Velcro fitted to its full length to allow maximum adjustability.</li> </ul> <p>3.14. Frame:</p> <ul style="list-style-type: none"> <li>• Basic, non-adjustable folding frame</li> <li>• Finish: Epoxy coated</li> </ul> <p>3.15. Guarantee:</p> <ul style="list-style-type: none"> <li>• Frame and crossbars guaranteed for a minimum of 2 years during appropriate use as stated per category.</li> </ul> <p>3.16. Weight:</p> <ul style="list-style-type: none"> <li>• Not to exceed 23 kg (complete). With rubber castors, allow +1 kg.</li> <li>• Not to exceed 16 kg for 8" &amp; 10" wheelchair. With rubber castors allow +1 kg</li> </ul> <p>3.17. Repair / tool kit:</p> <ul style="list-style-type: none"> <li>• 4 rear wheel: bearings</li> <li>• 4 castor: axle bearings</li> <li>• 4 castor stem bearings</li> <li>• 4 seat guides (where applicable)</li> <li>• Adjustment tool</li> </ul> <p>3.18. General requirement:</p> <ul style="list-style-type: none"> <li>• Supplier must be able to provide chair with all of above-mentioned options for back and seat upholstery, armrests, rear wheels, footrest hangers, and footrests. The end user will specify the desired option at the time of ordering. The different options available within each specification description must be fully interchangeable and available at the same price. Where the end user does not specify options the chair will be issued as in the option given first for the categories with more than one option.</li> </ul>			

Item Code No.	Department	Section	Item Description
LOT 10-7	Outpatient	Consulting Room	Wheelchairs
<ul style="list-style-type: none"> <li>The successful tenderer must be able to supply all of the various models and sizes of items per the tender document.</li> <li>No part or component may be changed / deviate from the specifications set out in this document.</li> </ul>			
<p>3.19. Standards</p> <ul style="list-style-type: none"> <li>Durability of chair must be in accordance with SANS 1060:2003 specifications for the rolled bed and seat sag differential tests. Exception: Weight of test dummy to be 120 kg. This is the minimum required user weight specification.</li> <li>Dimensions of chair for width, seat length and back rest height must adhere to the specifications set out in this tender:</li> <li>Frame to be zinc phosphate rust protected prior to epoxy powder coating.</li> <li>Back rest metal tubing wall thickness to be 0.16cm.</li> <li>X-bars to be constructed of tubing with a minimum of 2.5 cm diameter and 0.2 cm wall thickness.</li> <li>Forks to be a minimum of 0.4.cm thick wall.</li> <li>Forks to be attached to the castor stem by means of a thread and bolt system to allow for re- fastening of the stem.</li> <li>Upholstery used = 600 D Nylon</li> <li>All back and seat upholstery to be reinforced with inner PVC with a minimum specification of 500 g/m2. (Re-enforced chairs as specified will therefore have a second, outer layer of PVC for additional reinforcement)</li> <li>Mag wheels to be glass filled nylon.</li> <li>Bearing spacer to be used in all bearing applications, i.e. rear wheel, front castor and castor stem.</li> </ul>			
<p>Summary Specs</p> <p><b>WHEEL CHAIR FOLDING</b></p> <ol style="list-style-type: none"> <li>1) Dimension should be 650mm W x 1120mm D x 920mm H.(Approx.)</li> <li>2) Two solid rubber tyred bicycle wheels with break and self-propelling stainless steel hoops</li> <li>3) Two swivel castors, 200mm dia in front.</li> <li>4) Seat and back easily removable and replaceable</li> <li>5) Fine and durable upholstery for seat and back</li> <li>6) Nylon Handgrips and Padded arm rest</li> <li>7) Should have polished stainless-steel construct</li> <li>8) Aluminum leg rest – swing away type</li> <li>9) All the Stainless Steel should be 304 grade</li> <li>10) Warranty: 2 years</li> </ol>			

**LOT 10-8 Vital Signs Monitor**

Item Code No.	Department	Section	Item Description
LOT 10-8	Inpatient Services	General Ward	Vital Signs Monitor
1. General Description			
Vital signs Monitor suitable for use in operating theaters. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric.			
<ul style="list-style-type: none"> <li>• SpO<sub>2</sub></li> <li>• Temperature</li> <li>• Blood pressure</li> <li>• Pulse Rate</li> <li>• ECG</li> </ul>			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	The unit should be a model or type on current production capable of measuring/monitoring the following parameters		
3.1.2.	SpO <sub>2</sub> , with reusable sensor	0 - 100% $\pm$ 3%	
3.1.3.	Pulse Rate	30-300 bpm $\pm$ 1%	
3.1.4.	Temperature	0-50 <sup>0</sup> C $\pm$ 0.1%	
3.1.5.	NIBP	Mean 10- 300mmHg $\pm$ 5 mmHg	
3.1.6.	IBP	Mean 50 – 300mm Hg $\pm$ 1 mmHg	
3.2.	Display	At least 12 inches color touch screen type/rotary knob	
3.2.1.		6 to 8 waveforms mode with large font	
3.3.	Printer	Inbuilt, thermal array or equivalent	
3.3.1.		Two speed, selectable	
3.3.2.		Port for external printer	
3.4.	Networking	Port for networking with Ethernet or equivalent Or Serial Port RS 232	
3.5.	Input		
3.6.	Storage	Capable of storing patient data	
4.	Safety requirements		
4.1.	Audio and visual alarm	For all parameter.	

Item Code No.	Department	Section	Item Description
LOT 10-8	Inpatient Services	General Ward	Vital Signs Monitor
4.2.	Alarm setting limits	Adjustable by user	
4.3.	Low battery indicator	Audio and visual alarm	
4.4.	Internal battery	Provided, rechargeable, can operate for at least 3 hours	
5.	Physical characteristics		
5.1.	Main unit		
5.2.	Dimensions	Portable with a recharge dock or equivalent recharging un it	
6.	Operating environment		
6.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug, 3m long cord BS type with PE	
6.2.	Ambient temperature	10° C to 40° C	
6.3.	Relative humidity	20% to 90%	
7.	Accessories	The following accessories will be provided as startup kits.	
7.1.	SpO <sub>2</sub> connection cable and sensor (finger probe), reusable	2 Sets	
7.2.	Adult cuff	2 Sets	
	Peadiatric cuff	2 Sets	
7.3.	Temperature connection cable and probe (reusable)	2 Sets	
7.4.	Recording paper	2 sets of 5 rolls	
7.5.	ECG Cable	1 No.	
7.6.	Grounding lead	1 No.	
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
8.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA approved	
9.	Local back up service		
9.1.	Available	Should be available locally	

Item Code No.	Department	Section	Item Description
LOT 10-8	Inpatient Services	General Ward	Vital Signs Monitor
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, consumables and qualified and skilled technical staff	
10.	Delivery point		
10.1.	See Schedule	For inspection and testing	
10.2.	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		
12.1.	User Training	On site user training on operation and daily up keep	
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance	

#### **LOT 10-9 Diagnostic Sets**

Item Code No.	Department	Section	Item Description
LOT 10-9	Outpatient	Consulting Room	Diagnostic Sets
1. General Description			
Diagnostic set			
2. Composition			
2.1.	ADULT LARYNGOSCOPES		
2.2.	PEDIATRIC LARYNGOSCOPES		
3. Description of the medical supply unit design type			
3.1. ADULT LARYNGOSCOPES			
3.1.1. Fiber optic bright white halogen for true tissue color			
3.1.2. Laryngoscope Handle Type C Battery Handle			
3.1.3. Single-piece type; lightweight			
3.1.4. Blades can be converted from lamp to fiber optic illumination			
3.1.5. Light pathways can be repaired; reduced proximal blade height			
3.1.6. With Macintosh Halogen Fiber Optic Blade 2			
3.1.7. With Macintosh Halogen Fiber Optic Blade 3			
3.1.8. With Macintosh Halogen Fiber Optic Blade 4			

Item Code No.	Department	Section	Item Description
LOT 10-9	Outpatient	Consulting Room	Diagnostic Sets
3.1.9. With Miller Blade 2 3.1.10. With Miller Blade 3 3.1.11. With Miller Blade 4 3.1.12. With laryngoscope case  <b>3.2. PEDIATRIC LARYNGOSCOPES</b> 3.2.1. Fiber optic bright white halogen for true tissue color 3.2.2. Laryngoscope Handle Type C Battery Handle 3.2.3. Single-piece type; lightweight 3.2.4. Blades can be converted from lamp to fiber optic illumination 3.2.5. Light pathways can be repaired; reduced proximal blade height 3.2.6. With six (6) Miller Fiber Optic Blade 00 3.2.7. With six (6) Miller Fiber Optic Blade 0 3.2.8. With six (6) Miller Fiber Optic Blade 1 3.2.9. With laryngoscope case			

#### **LOT 10-10    Portable Suction Units**

Item Code No.	Department	Section	Item Description
LOT 10-10	Inpatient Services	General Ward	Portable Suction Units
1. General Description			
Suction machine suitable for use in theatre, for both adult and pediatric use. Should be constructed from coated non-corrosive, extreme heat resistance material and electrically insulated and mobile on antistatic castors $\phi$ 60 mm, 2 No. lockable, with high level push handle.			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	High flow rate	40 litres per minute.	
3.1.2.	Suction vacuum	Maximum 700mmHg	
3.1.3.	Suction pump	oil free	
3.1.4.	Jars	2 X 2 liter polycarbonate autoclavable and unbreakable complete with overflow devices and valves.	
3.1.5.	Vacuum gauge	Graduated in mmHg and kPa.	
3.1.6.	Vacuum control	Adjustable at the front panel	

Item Code No.	Department	Section	Item Description
LOT 10-10	Inpatient Services	General Ward	Portable Suction Units
3.1.7.	Switch	Main on front panel and foot switch (water proof type)	
3.1.8.	Cable towage	On back with reversible cleats	
3.1.9.	Anti-bacterial filters	Available preferable autoclavable	
3.1.10.	Suction tubing connection	Antistatic neoprene or silicone	
3.1.11.	Safety	Overflow pump protection	
3.1.12.	Handle	High level push handle type	
3.1.13.	Movements	Mobile on four antistatic castors 2 No. lockable.	
4.	Physical characteristics		
4.1.	Main unit	Mobile on castors with push handle	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug BS standard, 3m long cord with PE	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6.	Accessories	The following accessories will be provided as startup kits.	
6.1.	Sterilizable, silicone tubing	5 Set	
6.2.	Bacterial filters	1 Box	
6.3.	Foot switch	1 No.	
6.4.	Cannula with handle for general purpose	4 Sets	
7.	Quality standards		
7.1.	Manufacturing standards	EN 10079-1, IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	CE and FDA marked	
8.	Local back up service		



Item Code No.	Department	Section	Item Description		
LOT 10-10	Inpatient Services	General Ward	Portable Suction Units		
8.1.	Available	Should be available locally			
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff			
9.	Delivery point				
9.1.	See Schedule	For inspection and testing			
9.2.	Nil				
10.	Pre installation requirements				
	Nil				
11.	Installation and testing				
	Complete installation and setup of the machine as per manufacturer’s instructions				
12.	Training				
12.1.	User Training	On site user training on operation and daily up keep			
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
13.	Technical documentations				
13.1.	User manuals	2 Sets			
13.2.	Service Manual	1 Set			
13.3.	Drawings	Nil			
14.	Commissioning				
14.1.	Testing and commissioning of the machine to the satisfaction of the user.				
15.	Warranty				
15.1.	Equipment	Minimum of one year after commissioning on all parts.			
15.2.	Equipment System	Nil			

**LOT 10-11 Nebulizers**

Item Code No.	Department	Section	Item Description		
LOT 10-11	Inpatient Services	General Ward	Nebulizer		
1. General Description					
Nebulizer , mounted on a mobile cart					
2. Composition					
2.1.	Main unit				
3. Performance Specifications					
3.1.	Main Unit				
3.1.1.	Type	Ultrasonic type			
3.1.2.	Nebulizing rate	4 ml/min			
3.1.3.	Mist particle	1 to 5 micron			
3.1.4.	Timer	1 to 30 Minute			
3.1.5.	Mist feed hose, adult	2 pcs			
3.1.6.	Mist feed hose, Pead	2 pcs			
3.1.7.	Inhalation mask, adult	10 pcs			
3.1.8.	Inhalation mask, pead	10 pcs			
3.1.9.	Mouth piece	10 pcs			
3.1.10.	Diaphragm	5 pcs			
3.1.11.	Water supply bottle (1L)	1 pc			
4.	Physical characteristics				
4.1.	Main unit	Mounted on mobile cart			
4.2.	Dimensions				
5.	Operating environment				
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase			
5.2.	Ambient temperature	10° C to 40° C			
5.3.	Relative humidity	20% to 90%			
6.	Accessories				

Item Code No.	Department	Section	Item Description
LOT 10-11	Inpatient Services	General Ward	Nebulizer
6.1.	Automatic Voltage Regulator (AVR)		
6.1.1.	Capacity	Over VA of the main Unit	
6.1.2.	Input	Ac 240V, 50Hz, Single phase $\pm 15\%$	
6.1.3.	Output	Ac 240V, 50Hz, Single Phase $\pm 2.5\%$	
7.	Startup kit		
7.1.	Air filter	10 pcs	
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 9001 or any other internationally recognized standards	
8.2.	Conformity to standards	CE and FDA Approved	
9.	Local back up service		
9.1.	Available	Should be available locally	
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
10.	Delivery point		
10.1.	See Schedule	For inspection, installation and commissioning	
11.	Pre installation requirements		
11.1.	Nil		
12.	Installation and testing		
12.1.	Complete installation and setup of the machine as per manufacturer's instructions		
13.	Training		
13.1.	User Training	On site user training on operation and daily up keep	
13.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
14.	Technical documentations		
14.1.	User manuals	2 Sets	
14.2.	Service Manual	1 Set	

Item Code No.	Department	Section	Item Description		
LOT 10-11	Inpatient Services	General Ward	Nebulizer		
14.3.	Drawings	Nil			
15.	Commissioning				
15.1.	Testing and commissioning of the machine to the satisfaction of the user.				
16.	Warranty				
16.1.	Equipment	Minimum of one year after commissioning on all parts.			
16.2.	Equipment System	Nil			

#### LOT 10-12 Macerators

LOT 10-12 Macerators					
Item Code No.		Department	Section	Item Description	
LOT 10-12		Outpatient	Consulting Room	Macerators	
1. General Description					
2. Composition					
2.1.	Main unit				
3. Description of the medical supply unit design type					
3.1. Capacity – Should dispose a minimum of four disposable.					
3.2. Dimension should be not more than;-length 525mm ,width 650mm and height 1050mm.					
3.3. Water requirement ;-					
3.3.1. Inlet supply with a flow at least 18l/min					
3.3.2. Nominal overall usage at least 30 liters/cycle					
3.4. Drainage must be connected below the machine so that it connects to the hospital drainage.					
3.5. Should have an overflow connection.					
3.6. Should be anchored to the floor due to vibration of the cutting motor system.					
3.7. The noise level during operation should be minimal					
3.8. Should be electronically controlled with ease of operation.					
<b>Accessories, documentation and general</b>					
3.9. The macerator must be supplied with 2 extra diaphragms complete with the spring for the drainage.					
3.10. Power requirement should be 220-240V /50Hz ( thus the cutting motor is single phase)					
3.11. The macerator should have a warranty period of not less than two (2) years from the date of installation.					

Item Code No.	Department	Section	Item Description
LOT 10-12	Outpatient	Consulting Room	Macerators
3.12. The user and technical training shall be conducted before the machine is handed to the hospital. 3.13. It shall be supplied with full set of operating, preventive maintenance and service documentation, both soft and hard copies. 3.14. The macerator must comply with international safety standards and carry FDA/CE mark.			

#### **LOT 10-13 Commode Chairs**

Item Code No.	Department	Section	Item Description
LOT 10-13	Inpatient	Wards	Commode Chairs
1. General Description			
Commode, basic			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Frame:  3.1.1. Rigid frame, Mild steel, Galvanized, Epoxy coated; Constructed in such a way that it can be reversed over a standard toilet bowl 3.1.2. Size: about Width 46 cm, Depth 40 cm 3.1.3. Seat: Molded polyurethane seat; with a vinyl chair seat cover; Removable bucket system 3.1.4. Backrest: Full length back support in vinyl or nylon; Height 40 cm 3.1.5. Armrests: Completely removable, should not form part of the rigid frame 3.1.6. Footrests: Removable 3.1.7. Castors: 4 x Lockable, Minimum 5 cm diameter 3.1.8. Weight limit: Maximum of 130 kg			

**LOT 10-14 X-Ray Viewer**

Item Code No.		Department	Section	Item Description		
LOT 10-14		Inpatient	Wards	X-ray Viewer		
1. General Description						
X-RAY-VIEW BOX (LED Light)						
2. Composition						
2.1.	Main unit					
3. Description of the medical supply unit design type						
<b>A) Product &amp; Manufacturer Quality Standards:</b> 3.1. Should be FDA/ CE approved product. 3.2. Manufacturer and Supplier should have ISO 13485 certification for quality standards.						
<b>B) TECHNICAL CHARACTERISTICS</b> 3.3. Should be ultra-thin X ray film illuminator using LED light 3.4. It should have a thickness of 30 mm 3.5. It should be suitable for viewing 14’’x17’ film. 3.6. Should have position to insert 8 films in 2 rows. 3.7. The LED light must have a life span of more than 50,000 hours. 3.8. It should have easy insertion & removal of the film. 3.9. It should have homogeneous illumination more than 95% and maximum intensity of over 10,000 lux. 3.10. It should have an on-off switch along with digital feather touch dimmer and a button to set the intensity 3.11. It should have fully electronic continuous brightness control, with adjustment range of approximately 90%. 3.12. It should be directly connected to power supply without any external adapters. 3.13. It should have flicker free high frequency light for reduction of eye strain. 3.14. It should have external fuses for protection against power surge. 3.15. 10 step Digital dimmer facility with step up/step down intensity of 500 lux or less. 3.16. Should have automatic film sensor 3.17. Should have facility to switch on only the section where the film needs to be viewed.						
<b>C) Power supply:</b> 3.18. 240V, AC, 50Hz. Single phase						

**LOT 10-15 Emergency Trolley**

Item Code No.	Department	Section	Item Description
LOT 10-15	Inpatient Services	General Ward	Emergency Trolley
1. General Description			
Resuscitation trolley for use in ICU. Epoxy coated mild steel, with drawers, protection perimeter and defibrillator holder. The Unit should be mobile on four castors, 2 lockable			
2. Composition			
2.1.	Main unit,		
3. Performance Specifications			
3.1. Main Unit 3.2. Should be durable with Ergonomic handle and should have easy grip 3.3. Height should be 40-45" 3.4. Should have 6-8 drawers of sizes 3x3",2x6",1x9" 3.5. Should have interchangeable 3",6",9" drawers which run smoothly on good quality channels 3.6. Should have provision of side storage which allows storage of variety accessories like can, storage bins, glove storage, sharp container set 3.7. An over bridge can with baskets, shelves and bins to keep important things 3.8. Should have AMS top surface & advance polymer material which is easy to clean. It should not dent, chip flake or corrode 3.9. Should be easily rolling and has toe brakes 3.10. Should have I.V. pole with clamps ach 3" drawer should have provision for 25-30 compartments 3.11. Should have twin swivel castors & central lock 3.12. Should be CE and ISO 9001/2000 and FDA approved 3.13. Should have CPR board & O2 cylinder holder			

#### LOT 10-16 Procedure Trolley

Item Code No.	Department	Section	Item Description
LOT 10-16	Inpatient	Wards	Procedure Trolley
1. General Description			
Procedure/Dressing Trolley			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Overall approx. Size: 780mmL x 500mmW x 900mmH			

Item Code No.	Department	Section	Item Description
LOT 10-16	Inpatient	Wards	Procedure Trolley
3.2. Approximate shelf dimension 750mmL x 500mmW. 3.3. Tubular CRC frame mounted on four castors of minimum 100mm dia and should be pre-treated and epoxy coated finish. 3.4. Two S.S. of 304 grade shelves with protective railings on three sides. 3.5. Should have provision for holding bowl and bucket. 3.6. Warranty: 2year			

#### LOT 10-17 Fluid Warmer

Item Code No.	Department	Section	Item Description
LOT 10-17	Inpatient	Wards	Fluid Warmer
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Flow Rates should be from kvo to 150ml/min 3.2. Should have temperature range of 36 <sup>0</sup> to 42 <sup>0</sup> C 3.3. Should be easily transportable 3.4. Should be able to attach to IV pole and standard electrical sockets 3.5. Should use dry heat technology 3.6. Should have audible and visual alarms for Temperature 3.7. Should have automatic cutoff for set temperature 3.8. Should be easy to use and to clean 3.9. Calibration certificate should be issued during the installation 3.10. 50 disposable adult and 50 no. of pediatric warming sets should be supplied along with each machine 3.11. Warm up time should be less than 60 seconds 3.12. Consumables should have built in filter 3.13. Should have safety certificate from a competent authority 3.14. Should be CE / FDA certified			



Item Code No.	Department	Section	Item Description
LOT 10-17	Inpatient	Wards	Fluid Warmer
3.15. Should meet electrical and functional safety with relevant certificates attached from recognized authorities.			

#### LOT 10-18 Patient Trolley

Item Code No.	Department	Section	Item Description
LOT 10-18	Inpatient Services	General Ward	Patient Trolley with side rails
1. General Description			
Resuscitation patient trolley with IV pole , Oxygen Cylinders and with adjustable sides, constructed from chrome plated mild steel and mobile on castors			
2. Composition			
2.1.	Main unit		
3. Physical Specifications			
3.1.	Main Unit		
3.1.1.	Material of main unit	Tubular mild steel, chrome plated	
3.1.2.	Movements	Back rest, trendelenburg/reverse tendelenburg, up and down	
3.1.3.	Operation	By hydraulic mechanical system	
3.1.4.	Side guard rails	Foldable or drop down type	
3.1.5.	Mattress	High density, water proof and fire resistance	
3.1.6.	Mobile	On four antistatic castors diameter 150mm with brakes and central locking system	
3.1.7.	IV pole	Provided	
3.1.8.	Oxygen cylinder	Provided, Medium size 11kg (1.36m <sup>2</sup> ) mild steal	
3.1.9.	Resuscitation bags	Provided, adult and paed	
3.1.10.	Dimensions (Overall)	Approx. 2050 mm(L) X 780 mm (W) X 620 -900mm ( H)	
3.1.11.	Weight to handle	approx. 200 kg	

Item Code No.		Department		Section		Item Description	
LOT 10-18		Inpatient Services		General Ward		Patient Trolley with side rails	
4.	Quality Standards						
4.1.	Manufacturing standards	ISO 9001, ISO 13485					
4.2.	Conformity to standards	CE Standard					
5.	Delivery point						
5.1.	KCC	Delivery point					
6.	Warranty						
6.1.	Equipment	Minimum of 2 year after delivery					

#### **LOT 10-19 Defibrillator**

Item Code No.	Department	Section	Item Description			
LOT 10-19	Inpatient Services	General Wards	Defibrillator			
1. General Description						
Defibrillator suitable for cardiac care complete with ECG monitoring, SPO <sub>2</sub> monitoring and NIBP						
2. Composition						
2.1.	Main unit					
3. Performance Specifications						
3.1. The defibrillator should have biphasic technology having energy selection of maximum 200 joules.						
3.2. The machine should have facility for ECG monitoring, defibrillation, external pacing & recorder.						
3.3. Machine should have more than 8” TFT Screen.						
3.4. Machine must be with sweep rate 25mm/sec, 50mm/sec.						
3.5. Machine should have 72-hour trend storage facility.						
3.6. Should have 5 leads and capable of monitoring 12 lead configuration ECG through ECG Cables, electrodes & paddles.						

Item Code No.	Department	Section	Item Description
LOT 10-19	Inpatient Services	General Wards	Defibrillator
3.7. The machine should have defibrillation facility for adult & pediatric patients. 3.8. The machine should have ECG waveform display on bright screen along with other vital numeric information. 3.9. The machine should be compact, portable with built in rechargeable battery & light weight. 3.10. The machine should have inbuilt auto & manual recorder for printing ECG trace & stored information. 3.11. The machine should have user selectable alarm setting. 3.12. The machine should work on mains (without battery) and on battery as well. 3.13. The machine should have AED feature as inbuilt with manual override for manual operations. 3.14. Machine must be with carry bag & Accessory bag. 3.15. The machine must be supplied with all the essential accessories in 2 set & moveable trolley. 3.16. The Defibrillator should have an ECG display and a three lead ECG cable. 3.17. The Defibrillator should have SPO2 and must have Non Invasive Pacing.			
4.	Physical characteristics		
4.1.	Main unit	Portable	
4.2.	Dimensions		
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug (BS), 3m long cord with PE	
5.2.	Back up supply	Internal rechargeable batteries (SLA), to last at least five hours	
5.3.	Ambient temperature	10° C to 40° C	
5.4.	Relative humidity	20% to 90%	
6. .	Consumables		
6.1.	Start-up Kits must be provided including ECG electrode, Gel and Recording paper		
7.	Quality standards		
7.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	CE and FDA marked	

Item Code No.	Department	Section	Item Description		
LOT 10-19	Inpatient Services	General Wards	Defibrillator		
8.	Local back up service				
8.1.	Available	Should be available locally			
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff			
9.	Delivery point				
9.1.	See Schedule	For inspection and testing			
9.2.	Nil				
10.	Pre installation requirements				
	Nil				
11.	Installation and testing				
	Complete installation and setup of the machine as per manufacturer’s instructions				
12.	Training				
12.1.	User Training	On site user training on operation and daily up keep			
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
13.	Technical documentations				
13.1.	User manuals	2 Sets			
13.2.	Service Manual	2 Set			
13.3.	Drawings	Nil			
14.	Commissioning				
14.1.	Testing and commissioning of the machine to the satisfaction of the user.				
15.	Warranty				
15.1.	Equipment	Minimum of one year after commissioning on all parts.			
15.2.	Equipment System	Nil			

**LOT 10-20 Baby cots**

Item Code No.	Department	Section	Item Description
LOT 10-20	Inpatient Services	General Wards	Baby Cot
1. General Description			
Baby Cot for use in ICU. <ul style="list-style-type: none"> <li>• Dimensions L124.5 x W67.5 x H93cm</li> <li>• Mattress Size Required L120 x W60cm</li> <li>• Finish White</li> <li>• one-handed drop side mechanism</li> <li>• Designed with narrow bars on every side so baby can see out, while parents can easily see in.</li> <li>• Distressed nickel handles</li> <li>• Large under cot storage drawer</li> <li>• 3 position mattress base height</li> <li>• Sturdy all-stainless steel SS304 frame</li> </ul>			
2.	Quality standards		
2.1.	Manufacturing standards	ISO 9001 or any other internationally recognized standards	
2.2.	Conformity to standards	CE Approved	
3.	Delivery point		
3.1.	See Schedule	For inspection, installation and testing	
3.2.	Nil		

**LOT 10-21 Reclining Chairs**

Item Code No.	Department	Section	Item Description
LOT 10-21	Inpatient	Paeds Ward	Reclining Chairs
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			

**LOT 10-22 Radiant Heaters**

Item Code No.	Department	Section	Item Description
LOT 10-22	Inpatient	Paeds Ward	<b>Radiant Heaters</b>
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1.	It should be microcontroller based radiant warmer with manual and servo options.		
3.2.	It should have facility to display skin set, skin observed temperature in degree C and heat power separately.		
3.3.	Should have user friendly touch panel control.		
3.4.	It should have ceramic or quartz infrared or calrod heater.		
3.5.	It should have audiovisual alarm facility for overheating beyond set temperature range.		
3.6.	It should have alarm facility for patient temperature less than or greater than the /required temperature i.e. above or below the set range. Machine should sense the skin probe failure and cut off the heater		
3.7.	Warmer head should be rotatable in different direction, so as to allow taking X-ray.		
3.8.	It should have alarm for probe failure, power failure, system failure and heater failure.		
3.9.	Observation light of 90 to 100 foot candles or 1000 Lux (color temperature range 3700K to 5100K) should be provided for inspection		
3.10.	Battery back-up for Power failure indication during power fail.		
3.11.	The desired temperature range from 25 to 40 degree C and settable temperature can be from 32 to 38 degree C.		
3.12.	The resolution should be 0.1 degree C and accuracy should be 0.2 °C.		
3.13.	Should have a facility to lock the keyboard to avoid unwanted user modification of the set parameters		
3.14.	The height of the warmer should be adjustable for different types of bed.		
3.15.	It should have integrated or separate bassinet trolley, bed should be tiltable with locking facility and have provision for x-ray cassette holder, Mattress should be minimum 2" thickness and foam density of 25 kg/cm <sup>3</sup> , transparent (made of polycarbonate) collapsible side walls easily detachable for cleaning. Mattress size should be minimum 20"X30"		
3.16.	Should have a Feather Touch operation with large digital display and comprehensive alarms. Control Panel should be liquid proof and allow easy and hygienic disinfection		
3.17.	Manual Mode can adjust heater Output 10 -100 %, with 10% increment, an auditory and visual alarm shall be given at least every 15 min		
3.18.	In manual mode, heater cut off / switch off, if the maximum irradiance at any point of the mattress area exceeds a total irradiance level of 10 mW/cm <sup>2</sup> (between 10 to 30 minutes)		

Item Code No.	Department	Section	Item Description
LOT 10-22	Inpatient	Paeds Ward	<b>Radiant Heaters</b>
<p>3.19. Bed should be about 80 - 100 cms from the Floor and 80-90cms from the heat source.</p> <p>3.20. Should have lockable castor wheels</p> <p>3.21. Indicator light shall be provided to indicate that warmer is ready for normal use.</p> <p>3.22. Markings on the bassinet and X-Ray cassette holder is mandatory to enable proper positioning of the baby while doing the X-Ray.</p> <p>3.23. The size of the drop down sides should be such that it is 5" above the mattress surface and should be at least 6mm thick; clear and transparent.</p> <p>3.24. If there is more than 60% heater output for 10 minutes it should cutoff with alarm</p> <p>3.25. For the purpose of cable management there should be atleast two number of tubing ports (edges covered by silicon rings) on the side walls.</p> <p>3.26. X-Ray cassette tray should be at least 750X350mm and should adopt up to 20 mm thick X-Ray cassettes.</p> <p>3.27. The baby bed should be crevice free for ease of cleaning, infection control.</p> <p>3.28. The mattress used should be of biocompatible material.</p> <p>3.29. Skin temperature probe should be small in size not more than 10mm diameter and 3-4mm thick to fix the probe firmly on the infant. Baby contact material should be biocompatible as per ISO 10993 standard requirement. It should be insulated on one side and have well conducting non-rusting, non reacting metallic surface on the other side. Probe wire should be pliable, thin and soft. The attachment site of the probe with the wire should also be pliable and non-stiff.</p> <p>3.30. Device shall not overbalance when placed in any transport position of normal use on a 10° inclined plane from the horizontal plane.</p> <p>3.31. Transformers of device shall be protected against overheating in the event of short circuit or overload of any output winding.</p> <p>3.32. Patient leakage current should be less than 100 <math>\mu</math>A in normal condition</p> <p>3.33. Temperature on the baby mattress should not exceed 43 degree C when the warmer is operating under steady temperature condition</p> <p>3.34. Temperature of HEATER GUARDS should not exceed 85 °C in normal use.</p> <p>3.35. The Temperature differences on the mattress shall not exceed 2 °C.</p> <p>3.36. Settings</p> <ol style="list-style-type: none"> <li>Should have Manual mode and Baby (Servo) mode settings.</li> <li>Mode of operation should be clearly displayed</li> <li>In servo mode baby set temperature should be 32 to 38 degree C.</li> </ol> <p>3.37. User's interface: Manual and Servo controlled temperature regulation</p> <p>3.38. <b>Software and/or standard of communication:</b> LED Display and inbuilt software; Interruption and restoration of the power supply does not change the pre-set values.</p> <p><b>PHYSICAL CHARACTERISTICS</b></p> <ol style="list-style-type: none"> <li><b>Configuration:</b> Atleast 60 degree angle adjustment must be possible in the heat source and it should provide shielding to the infant in case of breakage of tubes/bulbs, All surfaces to be made of corrosion resistant material.</li> <li><b>Noise (in dBA):</b> Auditory alarm shall have a sound level of at least 65 dBA at a distance of 3 m from the front of the infant radiant warmer, and the sound level of the alarm shall not exceed 80 dBA on the mattress.</li> </ol>			

Item Code No.	Department	Section	Item Description
LOT 10-22	Inpatient	Paeds Ward	<b>Radiant Heaters</b>
<p>3) <b>Heat dissipation:</b> Should maintain upto 36.5 degree temp and the heat disbursed through a exhaust fan or other provisions, so that effect of UV light is not disturbed.</p> <p>4) <b>Mobility, portability:</b> Yes, on castors (2 of the castors should have breaks; castor size can be at least 4inch).</p> <p><b>ENERGY SOURCE:</b></p> <p>1) Power Requirements: 220 to 240V, 50 Hz</p> <p>2) Battery operated: Power failure indication during power fail</p> <p>3) Tolerance (to variations, shutdowns): <math>\pm 10\%</math> of input</p> <p>4) Protection: OVP, earth leakage protection</p> <p><b>ACCESSORIES, SPARE PARTS, CONSUMABLES:</b></p> <p>1) Accessories (mandatory, standard, optional):</p> <ol style="list-style-type: none"> <li>Should have SS IV pole(sturdy; non rusting; medical grade stainless steel; adjustable to a max height of 6 feet from the ground level)</li> <li>Monitor tray(fixed or swiveling)</li> <li>Storage trays</li> </ol> <p>2) Spare parts (main ones):</p> <ol style="list-style-type: none"> <li>Skin temperature probes-2nos,</li> <li>Examination lamp-2nos</li> </ol> <p>3) Consumables / reagents (open, closed system):</p> <ol style="list-style-type: none"> <li>Thermal reflector to fix the skin probe on baby-10nos</li> </ol>			

#### **LOT 10-23    Portable Examination Lamp**

Item Code No.	Department	Section	Item Description
LOT 10-23	Inpatient	Wards	<b>Examination light</b>
1. General Description			
The LED technology should be of highly engineered optical system which delivers the precisely controlled natural white light that is so important for an accurate examination.			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
Should have mobile Floor Stand SLSE50-CM or Wall/Ceiling Mount			
<b>STANDARD DESIGN FEATURES</b>			
<p>3.1. High-intensity of 39,000 lux (3623 fc) at 24" (61 cm)</p> <p>3.2. 4000 K color temperature</p> <p>3.3. CRI (Color Rendering Index) of 92</p> <p>3.4. Natural white light</p> <p>3.5. LED light module with at least 40,000-hour life</p>			



Item Code No.	Department	Section	Item Description
LOT 10-23	Inpatient	Wards	Examination light
3.6. Universal input voltage 3.7. Drift-free K-arm with 42" (107 cm) arm range 3.8. IEC 60601-1/ 60601-2-41 certified 3.9. Should have European CE or USA certificate 3.10. Should be supplied with European or USA country of origin certificate.			

#### LOT 10-24                      Weighing Scale

Item Code No.	Department	Section	Item Description
LOT 10-24	Inpatient	Wards	Patient Weighing Scale
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Mobile Weighing Scale with height meter 3.2. Capacity approx. 0-160kg 3.3. With circular scale/readout 3.4. With mechanical height rod able to measure between 70cm-2000cm 3.5. With BMI display 3.6. Easy to clean platform with reset to zero function 3.7. With flat tread area platform approximately 360mm (W) X 630mm (D) 3.8. Height approx. 1000mm 3.9. With mechanical column scale 3.10. Displays weight with BMI function 3.11. Graduation approximately 500g. 3.12. Warranty 2 years 3.13. With Calibration Certificate 3.14. FDA/ CE Marked 3.15. With heavy duty transport castors 3.16. Operator and service manuals to be provided			