

# Contents

## Contents-A (List 1 MCH /15-16)

## Annexure-B

Sr.No.	Equipment description for Maternal Health & Child Health	PICU	SNCU	Pediatric Ward	Maternity Wing	Annexure 2*	Annexure 3**	Total	Tentative Cost	Estimated Value (in Rs)	Page
1	Autoclave (Vertical) SS 200 litres	15	15	0	8	53	0	91	20000	1820000	07
2	Bed Side Locker SS with keys	20	20	0	300	1424	0	1764	1940	3422160	08
3	Bed Side Screen (SS-Godrej Model)^ As per requirement	0	0	0	0	250	0	250	1804	451000	09
4	Bell From Labor Room	0	2	0	0	0	0	2	300	600	09
5	Blood Pressure Apparatus(digital)	0	0	0	40	272	2000	2312	1400	3236800	09
6	Defibrillator	0	0	0	1	0	0	1	90000	90000	11
7	Bucket Dustbin(Steel)	0	0	0	20	0	0	20	2000	40000	12
8	Dressing Drum SS	0	0	0	86	1763	3000	4849	1000	4849000	13
9	Dressing Trolley SS	0	0	0	8	73	0	81	3200	259200	14
10	Electric Horizontal Sterilizer with capacity of 10 liters SS	0	0	0	5	424	1500	1929	5000	9645000	14
11	Electric Suction Machine	0	0	0	11	48	0	59	8000	472000	17
12	Electronic Weighing Machine -baby weighting	5	6	0	20	80	0	111	1000	111000	18
13	Emergency Drugs Trolley	10	10	10	0	0	0	30	10000	300000	19
14	Fire Extinguisher	15	15	0	0	0	0	30	4000	120000	20

15	Examination Table SS with mattress	0	0	0	18	452	1500	1970	10000	19700000	21
16	Foetal Doppler	0	0	0	20	576	1500	2096	3000	6288000	22
17	Foot Operated Suction Machine	0	0	0	1	112	0	113	2500	282500	23
18	Fowlers Bed SS with Mattress	0	0	0	50	542	0	592	8000	4736000	24
19	Haemoglobinometer	0	0	0	3	0	3000	3003	1000	3003000	25
20	Horizontal Autoclave 250 litres	0	0	0	2	0	0	2	100000	200000	26
21	Hospital Cot/Mother Ward Bed with mattress	0	40	120	250	865	0	1275	6000	7650000	28
22	Hub cutter Electric	0	0	0	20	250	0	270	1200	324000	29
23	Hydraulic OT Table Major	0	0	0	8	29	0	37	100000	3700000	32
24	Hysterectomy Instruments set	0	0	0	4	24	0	28	30000	840000	34
25	Infusion Pump or Syringe Pump	20	20	0	20	0	0	60	40000	2400000	37
26	Instrument tray with cover - stainless steel 31X19.5X6.5 cm	0	0	0	72	3004	6000	9076	1000	9076000	39
27	IV Stand SS	0	0	0	350	196	4500	5046	1400	7064400	39
28	Jumbo Oxygen Cylinder	25	25	0	0	0	0	50	13000	650000	40
29	Multipara Monitor	0	6	0	20	0	0	26	71000	1846000	41
30	Normal Delivery Instrument Set	0	0	0	30	884	0	914	10000	9140000	43
31	OT lights ceiling	0	0	0	10	31	0	41	161700	6629700	43
32	Oxygen Hood (Neonatal or Infant Size, Unbreakable)	10	20	0	0	0	0	30	1000	30000	45

33	Patient Stool	0	0	100	330	2074	0	2504	1000	2504000	47
34	Sims Vaginal Speculum SS	0	0	0	30	0	0	30	1000	30000	47
35	Servo Control radiant warmer with oxygen provision	0	24	0	5	118	0	147	36000	5292000	47
36	Spot Light with Stand	0	0	0	33	653	1500	2186	1500	3279000	50
37	Stethoscope	0	0	0	40	272	1500	1812	500	906000	51
38	Stretcher with stand on wheel	0	0	0	43	457	1500	2000	3900	7800000	52
39	Surgical Electric Diathermy	0	0	0	2	24	0	26	50000	1300000	53
40	Ventous Extractor	0	0	0	2	16	0	18	25000	450000	55
41	Weighing machine Adult	0	0	0	20	24	1500	1544	1000	1544000	56
42	Wheel Chair with hand, foot and neck rest SS	0	0	0	32	85	0	117	3500	409500	56
43	USG machine	0	0	0	2	13	0	15	500000	7500000	58
44	CTG machine	0	0	0	0	10	0	10	50000	500000	61

## TECHNICAL SPECIFICATIONS FOR MCH EQUIPMENTS

\*Annexure 2-153 DP's+24maternity  
wards+250 New DP's+6 Medical  
Colleges

\*\* Annexure 3 -1500 SHC's

Note: Specifications of all major equipments given below  
Figures given are only illustrative; it does not specify any  
particular company given in picture to be quoted.

For All Surgical instruments ensure-High quality stainless  
steel & corrosive resistant, long durability & reusable, rust  
resistive

# TECHNICAL SPECIFICATIONS FOR MATERNAL & CHILD HEALTH EQUIPMENT

1. Autoclave Vertical SS

**Vertical Electric Autoclave with capacity of 200 litres SS**



- Should have a triple walled construction.
- The working chamber, steam jacket, outer chamber and the lid should be made of stainless steel.
- Should have water inlet and outlet valves.
- Should have a water level gauge.
- Should have gauges for measuring inner and outer steam pressure.
- Should have an inner temperature indicator.
- Should have automatic pressure control switch, safety valve and eject valve.
- Should have joint-less silicone gasket.
- Should have automatic low water protection.
- Should be supplied along with bins.
- Should have an ISI mark.
- Should have 121°C working temperature at 15 to 20 psi pressure.

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- Chamber volume should be approximately 300mm diameter and 500mm depth with minimum 2 bin type.
- Should be operated in mains 220 – 240 V ac 50 Hz input power supply.

Water inlet and outlet pipe should be provided and connections should be done on a turnkey basis.

Warranty: 3 years Warranty and 3 years CMC

## 2. Bed Side Locker SS with keys

### Bed Side Medicine Cabinet/locker



- Metallic, with design features for easy cleaning and disinfection.
- Availability of drawer and a lockable compartment.
- Height: 22.44 in. (57 cm).



- 3- Privacy / Side Screens (Movable)
  - Size: 244cm L X 165 cm H (opened): 60cm L 165 cm (closed)
  - Supplied with Rod & Curtains.
  - Special Knockdown construction.
  - Frame work made of Epoxy Coated Mild Steel with castors.
  - Type: 3 & 4 fold type
  - The curtain fabric should be washable with colour fastness
  - Warranty: 3 years Warranty and 3 years CMC

#### 4. Bell for labour Room

##### Emergency call bell

- Intelligent call rest technology provided at patient end to ensure patient is attended immediately.
- Patient should be able to call nurse simply by pressing a button provided on bed head unit or hand held extension.
- With easy to install system.
- ISI marked

#### 5. Blood Pressure Apparatus

### BP Apparatus (digital)



- Pulse Rate Indicator
- Memory Recall
- One Touch Operation
- Digital Sensor
- Auto Shut off Function
- Clinically Proven
- 4 AA reachable Battery Operated
- Should have data back and transfer facility
- **Device characteristics**
  - Memory Function: Yes
  - Pulse Rate Indicator: Yes
  - Display: LCD
  - USB port
- **Measurement**
  - Measurement Method: Digital Sensor Measurement Accuracy Pressure (mmHg):  $\pm 3$  mmHg Measurement Range Pressure (mmHg) (Min): 40 mmHg
  - Measurement Range Pressure (mmHg) (Max): 260 mmHg
  - Measurement Range Pulse (beats/min) (Max): 160 beats/min
  - Measurement Range Pulse (beats/min) (Min): 40 beats/min

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- Measurement Accuracy Pulse (% of reading):  $\pm 5$  % of reading
- **Power requirements**
  - No. of Battery: 4
  - Power Source: Battery
  - Battery Type: AA
- Should have safety certificate from a competent authority European CE or FDA (US) approved product.
- Manufacturer's quality management system complies with ISO 13485.
- Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
- Should be provide user manual in English/Hindi
- Warranty: 3 years Warranty

## 6. Defibrillator Manual / AED



- Should be USFDA & European CE/IEC Approved
- Should have facility for:
  - ECG Monitoring
  - Defibrillation
  - External Pacing (transcutaneous)

- Recorder
- Should be of Rectilinear Biphasic Technology having energy selection upto 1-200 Joules.
- Must be capable of monitoring ECG through ECG cables, Multi function electrodes and paddles.
- Should have the facility for automatic external defibrillation for both adults and pediatric patients.
- Should have ECG waveform display on bright high resolution display.
- Should be compact and portable with inbuilt rechargeable battery.
- Should not be more than 7 kgs with battery and paddles.
- Should have an inbuilt recorder printing ECG trace and stored information.
- Should have a facility of external non-invasive pacing with 40ms pulse width.
- Should have ability to use ETCO2 both intubated & nonintubated patients with main stream technology.
- Should have user selectable alarm settings.
- Should work on mains as well as on rechargeable battery.
- Should be supplied with Adult and inbuilt Pediatric external paddles.
- Should have facility to increase/decrease energy selection on paddles preferred.
- Charging time should be less than 7 secs at maximum energy.
- Should have an inbuilt upgradation facility for SpO2,
- Should be supplied with following accessories/items.
  - S.L.A. Battery – 1 no's
  - 3-Lead ECG Cable – 1no's
  - External Defibrillator paddles (pediatric inbuilt and adult) – 1 no's
  - Multi-function defibrillator & monitoring pads/gel sheets – 150 no's
- Machine should be covered under 5 year warranty.
- List of consumables if any with price frozen for 3 years should be quoted separately.

European CE or USFDA certificate approval required, Warranty: 3 years Warranty and 3 years CMC

## 7 Bucket Dustbin(Steel)

### Dust Bin

- Stainless steel Dustbin for patient bed side
- Colored plastic bins for nursing station
- Foot operated LID
- Available in various capacity
  - Patient bedside:
  - Nursing station: 40-50 ltr

### 8- Dressing Drum



- Light weight, high storage capacity,
- Sizes 9"x9", 11"x9", 11"x5" and 15"x12" approx.
- Lid Snaps for on the body.

- SS 304 material made up of heavy gauge
- Belt fits snugly and uniformly on the body thanks to precision clip which keeps the belt in fair tension.
- Belt slots and perforations of the body correspond accurately.
- Custom designed chains for comfortable latching
- Configuration, design & material confirms
- IS: 3831 in all sizes

### 9.Dressing trolley



- Made of stainless steel, with two/three shelves.
- Stainless steel rails to cover three sides of top shelf & four of bottom
- Provided with a bowl and a bucket; both made of stainless steel
- Trolley mounted on four 10 cm swivel castor, of which two have breaks

As per IS standard

10. Electric Horizontal Sterilizer with capacity of 10 liters SS

**Electric Horizontal Cylindrical Instrument Sterilizer (10 Litres)**

- Chamber Size 400 mm diameter x 600 length in inches 16" x 24".Accomodate 2 nos of Drums size 15" x 10"
- Chamber Capacity 10Liters(Approximately)
- Cycle Operation mode Manual operated through multiport Valve to set and select.
- Door Single door, Hinge type with radial locking.
- FEED WATER PUMP To draw water automatically, when needed in the inbuilt boiler.
- Material of Construction
  - Chamber: Stainless Steel 316 Quality
  - Door: Stainless Steel 316 Quality
  - Radial locking arm for door: Stainless steel 304 quality
  - Outer cover : Stainless steel 304 quality
  - Inbuilt boiler/Steam Generator: Stainless steel 304 quality.
  - Connecting pipes : Stainless steel 304 quality.
  - Jacket: Boiler quality steel plate.
  - Stand: Mild steel with anticorrosion paint.
  - Door jacket: Silicon rubber gasket, withstand up to 140 deg c
- Working Temperature and 121 degrees and 1.2 kg/square cm

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- pressure
- Electrical Heater      6 KW  
Load
- Power Supply      3 phase ,440 V AC, 50 hz Supply
- Safety features      Door locking facility.Low water protection system,pressure cut off facility and other safety features
- Documentations      User manual in English, Gauge calibration certificate. Warranty certificate and hydraulic test certificate.
- Features :
  - The equipment should have ISI mark on quality
  - Should have safety certificate from a competent authority European CE or FDA (US) approved product.
  - Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
  - Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
  - Should be provide user manual in English/Hindi
  - Upgradable to HMI, PLC ,Vacuum Pump.
  - Sterilisation time: 7 minutes for 134C temperature cycle and 30 Minutes for 121C temperature cycle.

Warranty: 3 years Warranty and 3 years CMC



11. Electric Suction Machine

**Suction Machine Electrical and Foot Operated**



- Portable suction unit: size 38x17x28.5cm, weight 5.1kg
- Technical specifications: SUCTION MACHINE AC/DC/ with pump and Foot operated
- Power supply: 230-240V/50Hz - Vacuum capacity: 18 litres/min –
- The membrane vacuum regulator permits accurate vacuum settings.
- 0 to 30 Lits flow rate
- High Vacuum below - 300 mm of Hg & High Vacuum of - 800 mm of Hg
- Battery backup of 90 minutes minimum
- Overflow protection ensured.
- Double over flow protection system (bottle and pump)
- Working temperature 0 to +45<sup>0</sup> C.
- Should have safety certificate from a competent authority CE or FDA (US) approved product.

- **Collector System :**
  - Bottle or jar: 1 litre, graduated PSU (polysulphone)
  - Lid: Includes 1 overflow device, a 6x10mm diameter conical connector and 2 clips
  - Connection tube: Silicone tubing, diameter 12x7mm, length 25cm, and 2 connectors: 1 straight and 1 curved 90°.
  - Suction tube: Reusable silicone tube: diameter 7x12mm, Length 200 mm. Single-use tubes: diameter 7x12mm, length 180cm.
  - Filters: Bacterial filters, single-use.
  - Unit presentation: Delivered with the following components: - 1 suction machine and pump - 2 one-litre bottles or jars, with lids - 1 safety device - 4 overflow spares - 2 lid clip spares - 2 suction tubes, non-sterile - 2 suction tubes, sterile - 1 spare fuse - 1 user and maintenance manual, multilingual.
  - Packaging: Box: 400x400x470mm the following must appear on the pump packaging: - Manufacturer's name and address. - Item designation, serial number, European CE mark and reference number of notifying body.
  - Outer packaging: Manufacturer's name; product name and serial number.
  - Other: Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.

Warranty: 3 years Warranty and 3 years CMC

## **12- Electronic Weighing Machine -baby weighing**

### **Weighing machine baby digital**

- Table top, light and portable
- Hygienic, easy to clean baby tray.
- Resolution of  $\pm 5$  g (optional  $\pm 1$  gm).
- Freeze reading display
- Zero weight adjustment facility
- Measurement does not change with position of baby on the pan

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- Quick, clear read outs
- Types of scale: Spring balance, Beam balances and Electronic weighing scales

European CE or USFDA certification is required

Three years Warranty and 3 years CMC

### 13. Emergency Drugs Trolley

#### Medicine crash cart



- 12.5cm swivel media castors, two are breaking
- Corner buffers
- Oxygen Cylinder holder provision
- I.V. Rod provision
- Cardiac massage board & 3 laminated shelves

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- Overall approx size : 940mmL x 490mmW x 1535mmH
- Six removable bins
- Two Polystyrene storage unit with three drawers each.

Warranty: 3 years Warranty

**14. Fire Extinguisher (quote for 5 kg size/Type of Cylinder - Class ABC )**

Note: TYPE: ABC or Multi-Purpose extinguishers comprise of a special fluidized and siliconized mono ammonium phosphate dry chemical. It chemically insulates Class A fires by melting at approximately 350°F and coats surface to which it is applied. It smothers and breaks the chain reaction of Class B fires and will not conduct electricity back to the operator.

**Type ABC Powder Base Fire Extinguisher , Sub Type Constant Pressure , Average Discharge Time (s) 8 , Grade IS 15683 , Test Pressure Kgf/Cm<sup>2</sup> 35 , Operating temperature 0°C to +55°C**

External Testing Certification ISI,European CE and ISO 9001. Extinguisher Type: Constant Pressure. Service Pressure: 15 Kgf/cm<sup>2</sup>. Material Type: Mild Steel. Min. Effective Discharge: 85%. Use in Solid Combustible Fires, Flammable Liquid, Flammable Gas, Electrically Started Fires.

### Fire extinguisher

- Must be BIS approved with ISI mark

Capacity (in Kg)	500 gms	1	2	5	10
<b>IS Specification</b>	13849	13849	13849	13849	13849
<b>Jet Range (In Mtrs.)</b>	1.5	2-4	2-4	4-5	<6
<b>Discharge Time (In Sec.)</b>	6-8	8-10	8-10	15-20	23-30
<b>Min. Discharge Quantity</b>	85%	85%	85%	85%	85%

<b>Seal of Approval</b>	ISI	ISI	ISI	ISI	ISI
<b>Hydraulic Test Pressure of Cylinder (Kg./Cm2)</b>	30	30	30	30	30
<b>Discharge Outlet</b>	Direct Nozzle	Direct Nozzle	Direct Nozzle	Direct Nozzle	Direct Nozzle

**15.** Examination Table SS with mattress

**Examination Table SS with mattress (at pre & post Labour Area)**

- Size in mm: 1830 L x 550 W x 800 H mm
- Three section top with Adjustable head section, seat section and leg section.
- Complete with SS bowl 32 cm diameter
- Standard padded Leg holder.
- Top upholstered with waterproof synthetic material and finishing done using epoxy powder.
- Made of MS tubular steel, the beds should b sturdy, wear & tear resistant and long lasting.
- Available with mattress
  - High density foam ILD 48-58(lbs/50sq.)
  - Thickness- 3”(inch)
  - Cover with venlylized nylon cover with Zipper
  - Cover is antibacterial anti static acid resistant waterproof and meets fire regulation cades 16CFR1633&16CFR/1632

16. Foetal Doppler

## Foetal heart Doppler



- Foetal Doppler European CE approved, with blue backlight for dark sight
- Easy operation for everyone, over 10 years quality satisfaction
- Tm-100B Foetal Doppler European CE Approved
- Ultrasound frequency : 2.5+-0.25Mhz
- Ultrasound output power : 10mW/cmDC
- Power supply:9.6V rechargeable battery
- Working environment temperature : 10-40
- Features:
  - Safe: Ultrasound dosage is under 50% of the national standard.
  - Convenience : Small size, convenient for multi bed monitoring and outside diagnosing
  - Sensitivity: Monitor 12 weeks above unborn foetal heart beat.
  - Economic: Adopt with professional recharger battery, for effective cost-saving and also can use 9.6V disposable batteries.
  - Practical: Unique network terminal service can connect central network in hospital through dial-up at home, more timely, reliable and accurate for foetal monitoring. tm-100B Foetal Doppler European CE Approved
  - Manufacturer's quality management system complies with ISO 13485.
  - Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
  - Should provide user manual in English/Hindi.

- Warranty: 3 years Warranty

**17.** Foot Operated Suction Machine

**Suction Machine Foot Operated**

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- The suction machine should be capable of producing minimum vacuum of 500 approximately mm Hg, which should be adjustable and monitored by vacuum gauge of suitable range.
- The suction capacity should be 10l per minute and can be regulated.
- It should have two bottles of 10L with synthetic rubber lids.
- The bottle should be fitted with the arrangement to prevent overflow of fluid.
- The body material: base, top and panel should be made up of rust proof and corrosion resistant moulded ABS/stainless steel. The jar/ bottle material: autoclavable polycarbonate.
- The following spares per machine are also required:-
  - Bottles-2
  - Lids- 2
  - Rubber seal- 2

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- Blades- 2
- Suction tubing- 1 set
- Proposal for full warranty up to 1 year from date of installed properly, covering on-call technical interventions, spare parts and travel.
- Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
- Warranty: 3 years Warranty and 3 years CMC
- 

**18. Fowlers Bed SS**

**Fowler Bed with mattress**



- Bed's frame work of strong and precise steel tubes having 'H' type legs on 10 cms castors-two with brakes.
- Having three sections top of perforated CRCA sheet duly machine press bent with mattress guards.
- Backrest and knee rest sections maneuvered by two separate screws from foot end.
- ABS Panels Board. IV Rod locations.
- Size: 208 L x 90 W x 60 H cms.
- Available with mattress
  - High density foam ILD 48-58(lbs/50sq.)



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- Thickness- 6”(inch)
- Cover with venlyzied nylon cover with Zipper
- Cover is antibacterial anti static acid resistant waterproof and meets fire regulation cades 16CFR1633&16CFR/1632
- Warranty: 3 years Warranty
- 

19 Haemoglobinometer

### Sahalis Hemoglobinometer



- **Composition:**
  - Main unit: 1 set
  - Stand for pano-parallel non-fading: 1pc. each precision standards
  - Graduated square tube 2 pcs
  - Pipette Shali 0.02 ml 6 pcs
  - Filter with rubber cap 2 pcs
  - Spoil with rubber cap 3 pcs
  - Brush 1 pc
  - Instrument case 1 pc
- **Specification:**
  - Pipette error:  $\pm 1\%$  of graduation of 0.02 ml

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- Standard color error:  $\pm 3\%$  by naked eyes or optical comparison
- Measurement tube error:  $\pm 3\%$  volume of the tube  $\dot{\gamma}$  6 mm
- **Accessories:** all as required for standard use
- **Other conditions:**
  - Equipment must meet ISO or equivalent standards
  - Operating manual in English
  - Usable under tropical conditions
  - Warranty: min 3 years & 3 years AMC
  - All surfaces must be cleanable with disinfectional solutions

20. Horizontal Autoclave

### Horizontal High Pressure Double Door Autoclave (electrical)



- Chamber Size            500 mm diameter x 1200 depth in inches 20" x 48"

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- Chamber Capacity 250 Liters(Approximately)
- Cycle Operation mode Manual operated through multiport Valve to set and select.
- Door Double door(One in front and one in rare side, Hinge type with radial locking.
- Material of Construction
  - Chamber: Stainless Steel 316 Quality
  - Door: Stainless Steel 316 Quality
  - Radial locking arm for door: Stainless steel 304 quality
  - Outer cover : Stainless steel 304 quality
  - Inbuilt boiler/Steam Generator: Stainless steel 304 quality.
  - Connecting pipes: Stainless steel 304 quality.
  - Jacket: Boiler quality steel plate.
  - Stand: Mild steel with anticorrosion paint.
  - Door jacket: Silicon rubber gasket, withstand up to 140 deg c
  - Major components:
    - Pressure switch: Branded Make
    - Contractor : Branded make(Siemens/Philips)
    - Steam Tap :Spirax Make
- Working Temperature and pressure 121 To 134 degrees and 1.2 to 2.1 kg/square cm

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- Electrical Heater Load 18 KW
  - Power Supply 3 phase ,440 V AC, 50 hz Supply
  - Safety features Door locking facility.Low water protection system,presure cut off facility and other safety features
  - Standards European CE approved
  - Documentations User manual in English, Gauge calibration certificate. Warranty certificate and hydraulic test certificate.
  - Feature:
    - Should have safety certificate from a competent authority European CE or FDA (US) approved product.
    - Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
    - Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
    - Should be provide user manual in English/Hindi
    - Upgradable to HMI, PLC ,Vacuum Pump.
    - Sterilisation time: 7 minutes for 134C temperature cycle and 30 Minutes for 121C temperature cycle.
- Warranty: 3 years Warranty and 3 years CMC

21. Hospital Cot

### Patient Bed with mattress

- Top of the bed made with CRCA sheet.
- Frame work made with rectangular ms pipe.
- Strong legs mounted on rubber stumps.
- Detachable head and foot bows in ms.
- Pre treated and epoxy powder coated finishing.
- Overall size: - 195(L) x 92(W) x 60(H) cm.
- Available with mattress
  - High density foam ILD 48-58(lbs/50sq.)
  - Thickness- 6"
  - Cover with venlyzied nylon cover with Zipper
  - Cover is antibacterial anti static acid resistant waterproof and meets fire regulation cades 16CFR1633&16CFR/1632

### 22. Hub cutter Electric

#### Hub Cutter



- **General:**

- A manually operated needle cutter comprising a cutting device and a needle container.
- The device should be easily portable.
- The device must be safe, easy and convenient to use, easily cleaned, affordable and reliable.
- Needle container should be with optimal storage space to ensure needles or needle residues are stored until the needle container is filled up to its designed maximum fill line.
- **Performance:**
  - **Needle size:** The device should disable wet or dry needles, 10-76 mm in length and 18-28 gauge in diameter.
  - **Needle/syringe type:** The device should disable all ISO compliant syringe/needle combinations.
  - **Cycle time:** Needle removal or cutting devices should have a maximum cycle time per needle not exceeding 5 seconds.
  - **Needle entry geometry:** The needle aperture must be designed so that the needle can be inserted into the port at any angle lying within a 60 degree cone whose apex is centered on the aperture.
  - **Complete cutting:** The cutting blade configuration should ensure that the needle, needle hub, or syringe nozzle is completely cut or sheared. Incomplete shearing or other modes of disabling the needle, such as crimping or bending, are not allowed.
  - **Self-clearing mechanism:** The cutting mechanism must be self-clearing. Syringe or needle remnants remaining in the device must not impair its operation.
  - **Needle container attachment:** The needle container, if separable, must attach securely to the device so that tipping or dropping it does not separate the container from the cutting assembly. Attachment of the needle container to, and subsequent removal from the cutting assembly should be safe, clean and easy. There must be no risk of needle stick injury during these operations.
  - **Operating life:** Non-disposable devices: must withstand at least 100,000 cycles of operation, and require no major maintenance or user intervention, other than cleaning and lubrication, no more frequently than once every 10,000 cycles of operation.
  - **Splatter:** During or after normal use of the device, there should be no detectable contamination
  - **Drop test (complete device):** The performance and safety of the cutting assembly must not be compromised by dropping from a height of 1,000mm onto a smooth concrete surface in accordance with the test method in IEC 60068-2-32. In devices with a removable needle container, the container must NOT be detached.
  - **Drop test (needle container only):** The container when full of needles and with the closure device engaged should be dropped 100 times onto a smooth concrete surface from a height of 1000mm. No needles must fall out of the container. Not more than one needle must pierce any of the sides. The container must not be seriously damaged by the test.
  - **Tilt angle:** The device must not tip over, whether empty or full, when placed on a 15 degree non-slip plane with its short axis parallel to the line of tilt in general accordance with the test method in AS 4031:1992.

- **Leak-proof:** The device must not leak any liquid contents when placed in the upright position at any angle between 0 and 15 degrees.
- **Needle escapes prevention:** The cutting assembly must be designed to prevent the migration of cut needles from the needle container into the needle aperture.
- **Cutting device closure mechanism:** If the device is intended to be carried with the needle container attached, the needle aperture must have a closure mechanism to prevent needles from falling out of the attached needle container in any orientation of the assembly.
- **Needle container closure mechanism:** If the needle container is intended to be detachable, it must have a secure closure mechanism that prevents spillage of sharps after detachment from the cutting assembly, whatever the orientation of the container.
- **Needle container puncture resistance:** The needle container must pass the penetration resistance test in BS7320:1990
- **Needle container capacity:** The needle container must hold at least 150 nbr. 20mm needles, and/or needle remains, without affecting operation of the device.
- **Tamper proofing:** The needle aperture must be designed to prevent any part of the hand from entering. Needles should not protrude from the needle container when it is filled up the level of the fill line.
- **Weight:** If intended to be portable, the empty device, complete with empty needle container, should weigh a maximum of 750 grams.
- **User position:** The device must be comfortable to operate by 5th to 95th percentile adults in standing and seated positions with the device resting on a firm surface.
- **Handedness:** The device must be equally useable by left and right handed health workers.
- **Activation force:** The maximum force required cutting a standard (21 g) needle, needle hub, or syringe nozzle should not exceed 67 N.
- **Smoothness of operation:** Complete needle removal or destruction must be achieved with a single smooth hand movement.
- **Hand to needle distance:** The distance from the needle to the hand holding or operating the needle cutter must exceed 50 mm while operating the device.
- **Blade edge protection:** The device's cutting blades must not expose the user to cut hazards, either with or without the needle container connected.
- **Cleaning:** External parts and reusable internal parts accessible to the user must be cleanable with standard mild cleaning agents.
- **Warranty:** The device must be warranted to meet all physical and performance requirements defined.

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- **Servicing provision:** on-disposable devices: The only maintenance required during the design life of the device should be consumable part replacement, regular cleaning and lubrication. The minimum life cycle of consumable parts should be 25,000 removals, cuts or destruction cycles. Three additional sets of consumable parts should be provided with the device, together with product-specific service tools, if required.
- **Disposal and recycling:**  
Device must be able to be disposed of in the medical waste stream in accordance with the prevailing Bio-medical Waste Management Rules prevailing in India.

**Instructions:** User and maintenance instructions must be available in English and Hindi.

23 Hydraulic OT Table Major

### Hydraulic OT Table (Trendelenburg)



- The table should have minimum 4 sections.



- The table should have easily detachable split leg and easily detachable head section.
- The table top should have a minimum height of 765mm or lesser.
- The table top should have a minimum vertical stroke of 250mm
- Should have sealed hydraulic mechanism to avoid spillage.
- Should have at least 25° trendelenburg and reverse trendelenburg.
- Should have at least 20° lateral tilt movement.
- Should have at least 80° back up movement with gas spring mechanism.
- The head section should have up and down movement.
- The leg section should have 90° down movement and should move side wards to a minimum of 90 degree.
- The table should have a heavy and sturdy base and compact to provide adequate foot room for the operating team.
- The table should be mounted on heavy duty casters which offer enhanced weight bearing capacity and free mobility.
- The table should have a single lever foot operated brake pedal.
- Should have a minimum patient weight bearing capacity of 100 Kgs.
- Base should be made of cast iron and all other parts and accessories should be completely made of Stainless Steel 304 grade except the cushion, gas spring and hydraulic system which should be made of any non-resting metals like brass etc.
- The table should be supplied with the following accessories.
  - Mattress for the complete table top in sections-1 set
  - A pair of arm boards with pad and fixing clamp - 1
  - A pair of padded shoulder support with clamps - 1
  - A pair of padded lateral support with clamps - 1
  - A pair of leg crutches with clamps - 1
  - Anesthetic screen frame with clamp - 1
  - Patient restraint strap - 1
- The table should have the facility for easily detachable kidney bridge attachment and the price shall be quoted optionally.
- Available with mattress
  - High density foam ILD 48-58(lbs/50sq.)
  - Thickness- 2"
  - Cover with venlyzied nylon cover
  - Cover is antibacterial anti static acid resistant waterproof and meets fire regulation cades 16CFR1633&16CFR/1632

Warranty: 3 years Warranty and 3 years CMC

24. Hysterectomy Instruments set- High quality stainless steel & corrosive resistant, long durability & reusable, rust resistive

### **A. Detailed List of required Instruments and Instrument Sets for Maternity Wing**

Sr. No	Name of Equipments
1.	Cuscos vaginal speculum SS
2.	Sims vaginal speculum SS
3.	Anterior vaginal wall retractor SS
4.	Outlet forcep SS
5.	Dressing Drum SS
6.	Kidney tray SS
7.	Instrument tray with cover - stainless steel 31X19.5X6.5 cm
8.	Suture cutting scissors SS

9. Episiotomy scissors SS
10. Devers retractor SS
11. Tooth forcep SS
12. Plane forcep SS
13. Sponge Holding Forceps (Forester: Straight: Serrated) 25 cm SS
14. Hysterectomy forcep On toothed WERTHEIM 24 Cm. SS
15. Hysterectomy forcep straight toothed WERTHEIM 24 Cm. SS
16. Hysterectomy forcep curved MOYNIHAN 23 Cm. SS
17. Hysterectomy forcep curved HEANEY 23 Cm. SS
18. Halstead Mosquito Forcep 12.5c- Curved SS
19. Halstead Mosquito Forcep 12.5c- Straight SS
20. Artery Forcep Straight- Crile ( Small ) 14cm SS
21. Utering Haemostatic forcep ( Green Armitage) 21 cm SS
22. Allis Forcep 20cm SS
23. Babcock forcep 20cm SS
24. Dressing Forcep( Tissue) 25cm Toothed SS
25. Dressing Forcep( Tissue)18cm On-Toothed SS

26. Dressing Forcep( Tissue)18cm Toothed SS
27. Intestinal Clamps, Straight , Dry Pattern 23cm SS
28. Intestinal Clamps, Curved, Dry Pattern 23cm SS
29. Suction Tube ( Yankauer) 23cm
30. Suction Ozzle large
31. Suction Ozzle medium
32. Suction Ozzle small
33. Scissors, Straight , Mayo Blunt/ pointed 23 cm SS
34. Scissors, Straight , Mayo Blunt 23 cm SS
35. Operating scissors, straight, blunt, pointed, Mayo,17 cm SS
36. Operating scissors, curved, blunt, pointed, Mayo,17 cm SS
37. Retractors-Doyens Small SS
38. Retractors-Doyens Big SS
39. Needle Holder ( Mayo- Hegar) - Straight SS

## 25. Infusion Pump or Syringe Pump

### Syringe Infusion Pump



#### Description of Function

- The Syringe Infusion Pump provides uniform flow of fluid by precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of I.V. medication in critical medical care.

#### Operational Requirements

- The syringe pump must be programmable, user friendly, safe to use and must have battery backup and comprehensive alarm system.

#### System Configuration

- Syringe infusion pump with battery backup alarm and with complete accessories.

**Technical Specifications**

- Flow rate programmable from 0.1 to 1000 ml/hr. or more in steps of 0.1 ml/hr. with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.
- Bolus rate must be programmable to 50 – 1000 ml/hr. or more with 50ml/hr increment with infused volume display. Reminder audio after every 1 ml delivered bolus. SAVE last Bolus rate even when the AC power is switched OFF.
- Display of Drug directory of more than 50 drugs, customized and adjustable.
- Keep Vein Open (KVO) must be available 1.0 ml/hr. or set rate if lower than 1.0 ml. User must have choice to disable KVO whenever desired.
- Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg
- Must Work on commonly available 5, 10, 20, 50/60 ml Syringes with accuracy of minimum of +/-2% or better.
- Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.
- Anti-bolus system to reduce pressure on sudden release of occlusion
- Must have comprehensive alarm package including: Occlusion limit exceed alarm , Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre- alarm and alarm, AC power failure.
- Comprehensive Training for All Staff of user department and support services till familiarity with the system is required
- Rechargeable Battery having at least 5~6 hour backup for about 5ml/hr. flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.

**Accessories, spares and consumables**

- All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).

**Operating Environment**

- The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.
- Power supply: 220 – 240 VAC, 50Hz fitted with appropriate INDIAN 3 PIN plug. The power cable must be at least 3 meter in length.

### **Standards and Safety Requirements**

- Must submit ISO13485:2003/AC:2007 for Medical Devices
- Should have safety certificate from a competent authority European CE or FDA (US) approved product.
- Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
- Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
- Warranty: 3 years Warranty and 3 years CMC

### **26. Instrument tray with cover - stainless steel 31X19.5X6.5 cm**

### **27. IV Stand SS**

#### **IV Stands (equal to total functional beds in ward)**

- Stainless steel
- 4 hook top, 5-legs
- Frame mounted on PVC rubber Stumps
- Height adjustable up to 150/240 cm
- 24" diameter, low-center-of-gravity steel base with epoxy finish
- 3" premium rubber casters with ball bearings (2 yr. warranty)
- Welded steel base pole with epoxy finish
- Slow-descending stainless telescoping top pole

99" fully extended; 68" compressed

### **I.V. STAND**

1. Overall approx. size : height :-136 to 244 cm (with adjustable height)
2. Main Frame : Strong & Sturdy five legged neatly made base mounted on five 2.5cm dia swiveling ball castors of good quality S.S. double hocked I.V. rod & S.S. tube spring loaded.

### 28. Jumbo Oxygen Cylinder

#### **Oxygen cylinder with instrument set (D Type)**



- Chrome Molybdenum Alloy 34 Cr



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- Capacity :: 46.7 Ltr water capacity.
- Working pressure : 150kg/cm<sup>2</sup> at 15 c
- Test Pressure : 250kg/cm<sup>2</sup> at 15o c
- Wall thickness : 5.5 mm min
- Gas ( O<sub>2</sub> ) : 7000 ltr of O<sub>2</sub>
- Standard : IS 7825 part II
- Valve : IS 3224
- Statutory certifications : ISI Standards,BMP Certification WHO & Certified by Dept Explosives –GOI
- Matching Key cum Spanner to release oxygen

29- Multipara Monitor

**Multi para monitor – ECG, SPO<sub>2</sub>, NIBP (Non-invasive BP and temperature) at the head end**



- Should have TFT/LCD display with at least 10.4 inches with 4 wave forms and numeric display simultaneously. The waveforms should be user selectable.
- Should be compact & portable with carrying handle.
- Monitor should have in built Lithium-ion type battery for 4 Hrs continuous operations in case of mains failure.
- Should have keys for quick access to main functions.
- Should be able to monitor ECG, SpO2, NIBP, Respiration Rate, ETCO2 (upgradable) & Temperature for adult, pediatric and neonatal patients.
- 3 or 5 Lead ECG monitoring with lethal arrhythmia recognition capability and ST analysis. Respiration & Apnea alarm.
- Manual, Auto and STAT mode for NIBP monitoring and ranges should be 20 to 230 mmHg.
- Pulse-Oxymeter (SpO2) with Plethysmograph & Pulse strength indicator with variable pitch with change in SpO2
- Upgradable to Side-stream Capnography with display of CO2 wave form & digital values (ETCO2, FiCO2, RR).
- Should have separate volume control for beep sound for QRS and alarm sound.
- The display setting should have at least 4 user defined setups variable as per applications for flexible use of the monitor in various clinical environments.
- Monitor should have networking options
- Should have separate volume control for beep sound for QRS and alarm sound.
- Should provide following accessories
- Reusable adult 3 or 5 lead ECG cable set – 2 nos.
- Reusable adult and paediatric SpO2 finger probes – 1 each
- Disposable SpO2 probes for neonatal use- 10 no's
- NIBP cuffs for standard Adult, Obese Adult, Child and infant – all 1 each

- Facility for last 24 hours trend review facility & facility for patient data entry
- Equipment performance should not be affected by electromagnetic radiated or conducted through power lines from another device.
- Should work on 200-240V AC/50Hz with inbuilt rechargeable battery.
- Should have safety certificate from a competent authority CE or FDA (US) approved product. Copy of the certificate/test report shall be produced along with the technical bid.
- Should be provide user manual in English/Hindi
- Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
- Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
- Warranty: 3 years Warranty and 3 years CMC

### **30. Normal Delivery Instrument Set**

#### **Delivery Pack**

Artery Forceps (Haemostatic, Rankin-Crile or Rochester-Pean) 16cm	<b>2</b>
Cord Cutting Scissors (Umbilical; Blunt end) 16 cm	<b>1</b>
Sponge Holding Forceps (Forester; Straight; serrated) 20cm	<b>1</b>
Bowl S. S. (Small) 600 – 750 ml	<b>1</b>

31. OT lights ceiling

### OT Lights (shadow less ceiling mount twin dome)



- The OT Lights should consist of the following components:
- BASIC EQUIPMENT: Ceiling Mounted Shadow less Operation Theatre LED Lights with Twin Domes on a Single Mount
- STANDARD ACCESSORIES: Detachable sterilisable focusing handles (2 sets) 1.4.
- OPTIONAL ACCESSORIES (Cost to be quoted separately for each item in the price bid)
  - Video camera mount.
  - Online Uninterrupted Power Supply (Online UPS) of a suitable kVA with a backup time of at least 2 hours.
  - Spare sterilisable focusing handles.
- Dual light heads (domes) each with intensity of at least 100,000 lux at 1m.
- Colour temperature in the range 4000 to 4500K.
- Colour Rendition Index at least 93%.
- 360 deg rotations at each pivot axis and should be stable in any position.
- Light field diameter should adjustable over a minimum range of 19 cm to 30 cm at 1m. 2.6. Working distance of light beam 70 cm to 140 cm for each dome. Light field diameter should be constant over this range.
- Light intensity should be adjustable over a range of at least 30% to 100%.
- The bulb should be of LED and must be of a single color.

- Should have adjustable focus system that can be adjusted with a sterilizable and removable handle.
- LED's must have a single color.
- Should be upgradeable to install a video camera mount.
- Power Requirements: Voltage 220 + 20 volts & frequency 50Hz.
- The equipment should be of international standards like European CE, USFDA, BIS, or DCGI etc.
- **Power Supply**
  - Power input to be 220-240VAC, 50Hz fitted with Indian plug
  - Online UPS of appropriate ratings meeting ISI Specifications. (Input 160-260 V and output 220-240 V and 50 Hz).
  - In-built rechargeable battery back-up that is concealed in the above unit and recharges automatically when connected to AC mains.
- **Standards, Safety and Training**
  - Should be US FDA or European CE approved product.
  - Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2 or equivalent particular requirements for the safety of electrocardiographic monitoring equipment.
  - Manufacturer/Supplier should have ISO certification for quality standards.
  - The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
  - Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.
- **Documentation**
  - User Manual in English
  - Service manual in English
  - Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.
  - The job description of the hospital technician and company service engineer should be clearly spelt out.
- **Warranty**
  - The Equipment including all accessories including bought out items should be under WARRANTY for a period of 3 years after successful commissioning.
  - All essential spare parts should be made available with the local service centre during the WARRANTY period and all steps should be taken for immediate servicing to prevent down time.
  - Comprehensive maintenance contract rates for 3 YEARS after warranty must be quoted and these would be taken into consideration while comparing price bids.

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- A copy of service manual should be available with the local service centre.
- Should have safety certificate from a competent authority European CE or FDA (US) approved product.
- Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
- Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
- Warranty: 3 years Warranty and 3 years CMC
- 

**32.** Oxygen Hood (Neonatal or Infant Size, Unbreakable)



**Oxygen Hood Paediatric**

- Transparent Acrylic for easy visibility
- Neck Port adjustment to minimize the wastage of oxygen
- Two side port to access procedures easily
- Oxygen inlet Port
- O2 cell Port/temperature port
- Various size for Paediatric /Infant/Neonatal

- Transparent Polycarbonate unbreakable single molded
- Silicon rubber Neck Port adjustment to minimize the wastage of oxygen
- Silicon rubber Neck port adjustment ensures can be used Neonate/Infant/Pediatric patients
- Oxygen inlet Port
- O2 cell Port/temperature port
- Overall Hood dimensions:
  - Small (0301) : 7.0" L x 7.0" W x 5.4" H
  - Medium (0300) : 7.0" L x 7.0" W x 5.4" H
  - Large (0305) : 8.0" L x 8.3" W x 6.9" H
  - Large/Wide Neck (0305W) : 8.0" L x 8.3" W x 6.9" H
  - Extra Large (0313) : 13.0" L x 10.4" W x 8.5" H
- Neck opening dimensions:
  - Small (0301) : 2.5" W x 1.8" H
  - Medium (0300) : 3.9" W x 2.5" H
  - Large (0305) : 5.0" W x 3.9" H
  - Large/Wide Neck (0305W) : 5.0" W x 2.9" H
  - Extra Large (0313) : 6.3" W x 5.0" H

### 33. Patient Stool

#### Bed-side stool

- Frame Work Constructed With MS Steel.
- Mounted on PVC Rubber Stumps.
- Size: - 300 x 300 x 750 mm

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- Pre-treated and epoxy powder coated finishing.

34. Sims vaginal speculum SS

Vaginal Speculum – Sims (a complete set of 3 sizes) (60x25-30mm; 70x30-35mm and 80x35-40mm)

6

35 Servo Controlled Radiant Warmer With Oxygen Provision

### Radiant Warmer





- It should be microprocessor based servo controlled unit that will allow at least two operation modes – servo (automatic) and manual mode.
- The radiant warmer should have a heating element with power consumption of 80 Watts or less
- It should have cal rod (tubular) / quartz / non-ceramic infrared heating element with parabolic stainless steel reflector for uniform radiation of heat waves to all corners of the basinet. Heater should be protected by a metal grid to prevent shock hazards.
- The heater box/ head should be either of swivel type and it must rotate to  $\pm 90^\circ$  from its axis or fixed type head provided it allows X-Ray exposure from top.
- It should have LED display (at least 1") for showing skin temperature in manual mode and set and skin temperatures in servo mode.
- Temperature display should be bright, numerical. The unit may have a rechargeable battery backup for display of temperatures & alarm during power failure (Optional).6. It should have an adjustable light source (halogen /LED) for observation of the baby.
- The basinet comprises of foldable transparent acrylic side panels of minimum 6 mm in thickness and can be swivelled easily for cleaning and procedures.
- Basinet should not be fixed with the warmer; if it is fixed then it should be detachable easily for cleaning purposes. Both should move on lockable wheels.
- It must have one fixed transparent acrylic sheet below the mattress for under surface phototherapy and an additional acrylic tray with basinet for positioning the X-ray cassette.
- The unit should have facility for inclination in both directions (trendelenburg and reverse trendelenburg) minimum up to  $12^\circ$ .
- Stitch-less mattress should be supplied with a foam density of 21-25 kg/m<sup>3</sup> with at least 1inch in thickness.
- Mattress cover should be made of fire retardant material.
- Mattress should be waterproof and easily washable. It should be resistant to cleaning with chlorine based solution.
- The unit should be supplied with 2 (two) drawers and 1 (one) IV stand.
- The minimum diameter of IV stand (stainless steel) should be 2.5 cm with 4 pegs (stainless steel) for hanging IV fluids.
- Cleaning and maintenance of Radiant Warmer and Basinet should be user friendly.
- The complete unit including the heating element should be European CE 93/42 or FDA – US or UL or BIS certified. Test certificate for the equipment to be submitted with the tender.
- Probe length: Not less than 5.5 ft.
- Length of basinet : Minimum 680 mm
- Width of Basinet : Minimum 50 mm
- Working level from the ground upto upper level of the mattress : Minimum 870 mm

- Distance from mattress top and heat source : Minimum 850 mm
- Diameter of castors for Radiant Warmer and Basinet with brakes /locks on front wheels : Minimum 75 mm
- Length of the IV pole : Length and adjustment of the pole
- Height adjustment system for Radiant Warmer and Basinet should be accommodated (preferable) :  $\pm 2$  inch
- Monitor tray (to be supplied with) : 30 mm X 270 mm
- Operating temperature range : 20°C to 30°C or wider
- Operating humidity range : 30% – 90% RH
- Skin temperature
  - Range : 32°C to 38°C
  - Accuracy :  $\pm 0.2^\circ\text{C}$
  - Resolution : 0.1°C accolade
- Alarm
  - Probe failure
  - Heat failure.
  - High and Low Temperature.
  - Power failure
  - Electrical supply: : Power I/P to be 180-240 VAC,50Hz fitted with Indian 3 pin plug.
  - UPS of suitable rating with voltage regulation and spike protection for 60 Minutes backup.
- Accessories & Consumables to be supplied with the machine:
  - Mattress: 02 (two) nos.
  - Temp. Probe (Reusable): 02 (two) no's
  - Fuse set: 01 (one) no.
  - Monitor tray: 01 (one) no innumerous
- Documents/Certification:
  - Should have safety certificate from a competent authority European CE or FDA (US) approved product.
  - User/Technical/Maintenance Manual to be supplied in English.
  - Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required
- Warranty: 3 years Warranty and 3 years CMC
-

36. Spot Light with stand

**Spot Light with Stand**

- LED light on stand
- Power Consumption 40 Watt
- Stand with tilting facility
- This equipment should be supplied with all necessary fixation accessories/Spares

Standards European CE; EC Marked US FDA; ISO certification

37. Stethescope

## Stethoscope



- Double-sided aluminum, 1 3/8" diameter with a highly sensitive 1 3/4" diaphragm
- Diameter: 9.83mm
- Supply Voltage: (V+) 1.5-10V
- Nominal Supply: 4.5VDC
- Current Drain: 0.5mA (max.)
- Signal/Noise: 40dB (min.)
- Sensitivity: -65dB  $\pm$  4dB
- Output Impedance: 1k $\Omega$
- Frequency Range: 30Hz-15000Hz
- Around 25 gms weight. Turnable diaphragm and a bell.
- High quality buffed stainless steel snap tight ear tubes.
- Poly vinyl chloride double lumen tubing around 76 cms in length.
- Soft sealing ear tips.
- Manufacturer's quality management system complies with ISO 13485.
- Should be provide user manual in English/Hindi

38. Stretcher with stand on wheel

**Stretcher trolley**



- Stretcher made of MS steel supported by tubular frame.
- Pre-treated trolleys, epoxy powder coated with frame work made using quality steel tubes.
- Stretcher trolley mounted on 150mm swiveling castor, two equipped with brakes.
- Available with 50 mm PU form mattress.
- Two side down fall safety side railing.
- Size in mm: 2030 (L) x 560 (W) x 820 (H).
- High density foam mattress ILD 48-58(lbs/50sq.)
  - Thickness- 2”(inch)
  - Cover with venylized nylon cover with Zipper
  - Cover is antibacterial anti static acid resistant waterproof and meets fire regulation cades 16CFR1633&16CFR/1632

Warranty: 3 years Warranty and 3 years CMC

### 39 Surgical Electric Diathermy

#### Surgical Electric Diathermy



- Real digital output & display by microprocessor multi-purpose electrosurgical unit.
- Both monopolar and bipolar function.
- Safety circuit secured for patient and operator safety.
- Outlets for cutting, coagulation and bipolar coagulation actuated by foot or hand switch
- Two tune audible signals represent CUTTING and COAGULATION procedure.
- High crest factors provide the T.U.R.
- Seven different type of current selected by pushing mode select switch and out puts adjusted by steeples control
- Bipolar Coagulation (soft) standard Coagulation Max 99 watts for large tissue coagulation soft coagulation Max, 50 watts for small tissue coagulation Four Modes of monopolar cutting Macro mode.
- Pure cut: 400w a 500 ohms
- Blend I : 230w at 300 ohms
- Blend II : 180w AT 300 ohms
- Blend III : 120w at 300 ohms
- Two Modes of Monopolar Coagulation

- Contact coagulation: 100 w at 300 ohms
- Spray coagulation: 80w at 500 ohms
- Different Audible Signals.
- Different audible signals for cut, coagulation and bipolar coagulation.
- Areas of Use General Surgery, Dermatology, Endoscopy, Vascular Surgery, Gynecology, Heat/Thoracic Surgery, ORL/ENT, Pediatric Surgery, Minimally Invasive Surgery (MIS), Neuro Surgery, Plastic Surgery, Orthopedics, Urology, Oral Surgery, Trans Urethral Resection (T.U.R)
- Main Frequency 400, 490 KHz+ 10% 400, 500KHz 10%
- **Standard Accessories**
  - Color coded double pedal footswitch with cable and connector.
  - Silicone rubber patient cable with detachable connection cable & rubber strap With holes.
  - Reusable Active electrode handles with set of 04 electrodes & silicone rubber insulated cable.
  - Reusable insulated Bipolar Forceps with silicone rubber insulated cable.
  - Reusable Monopolar Handle with cable.
  - Reusable Twin Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent Button Handle with cable.
  - Electrodes (6 pcs)
  - Double Foot switch Single Foot Switch.
  - Reusable Return Plate cable.
  - Reusable Metal Plate with cable.

Calibration: third party (NABL Accredited )      third party calibration is needed ones in year

- Should have safety certificate from a competent authority European CE or FDA (US) approved product.
- **Y** Manufacturer's quality management system complies with ISO 13485.
- Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.

Warranty: 3 years Warranty and 3 years CMC

40. Ventous Extractor

**Ventous Extractor**



- Available in manual and electric modes
- Manual:
  - 3 silicon cups (40mm, 50mm and 60mm without valves)
  - Autoclavable silicone pressure tube
  - Traction handle
  - Suction pump
  - Fitted glass jar
- Electric:
  - Housing: ABS plastic moulded
  - Capacity: -575mm Hg  $\pm$  10, 45 lts/min
  - Pump type: diaphragm pump
  - Jars: 1 x 2 polycarbonate jar
  - Filter: Bacterial filter autoclavable/reusable
  - Tubing: 8mm x2 m (Silicone)
  - Vacuum Gauge: 6.25 cm dia 0-760mmHg calibration.



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- Power: 220 V AC, 50 / 60 Hz, 90Watt
- Noise Level: 55 dB A  $\pm$  3
- Dimension & Weight: 43 x 22 x 37 cm, 8 Kg.
- Overflow Safety: Mechanical / Electronic Acoustic Alarm
- To be supplied with 3 S.S. cups (40, 50, & 60mmdia.)
- Warranty: 3 years Warranty and 3 years CMC

#### **41 Weighing machine adult Digital & Analog**

- With height meter or without height meter
- Analogue and digital
- Capacity: 150 kg
- Readability: 100gm
- Working temperature: 0°-50° C
- Warranty: 3 years Warranty and 3 years CMC

**42.** Wheel Chair with hand, foot and neck rest SS

### Wheel Chair with hand, foot and neck rest SS



- Sturdy, heavy duty, with brakes
- Foldable foot rest
- The foot rest should be capable of swinging about its own axis, so that it does not obstruct while moving in or out from the wheelchair.
- In raised position the foot rest should be at an angle of 120°.
- 8" heavy duty wheel
- With mega wheel unbreakable
- With cushion padded hand rest
- Optional: Breaking provided leg removable & adjustable arms removable
- Dimensions:
  - Overall length : 1050mm
  - Overall width : 680mm
  - Overall height: 910mm
  - Seat height from floor at the front : 500mm
  - Seat height from floor at the back : 450mm
  - Arm height from seat: 225mm
  - Seat length: 430mm

Tender No- 29 / MPPHSCL/15-16/MCH Equip/RC/LIST1

- Seat width between armrest pipes : 430mm
- Back height :380mm
- Back width at seat level: 430 mm
- Back width at the top: 430mm
- Clearance of foot rest to floor : 90- 200 mm
- Back clearance of frame to floor 100mm + 10
- Mean rim diameter 500mm
- Wheel chair should be corrosion resistant
- Materials and finishes should be non –toxic. All surfaces of the wheel chair should be capable of disinfection and cleaning by normal hospital methods.
- The wheelchair should be subjected to a load of min. 75 kg.
- The chair should move smoothly without any wobbling, rocking or rattling.
- It should be ISI certified.
- Warranty: 3 years Warranty and 3 years CMC

### 43. Colour Doppler Ultrasound System



**System should have following Application with extensive Calculation software package.**

- Obstetrics and Gynaecology
- Abdomen
- Vascular
- Endocavitary application-Transvaginal

**System should have following modes**

- 2-D Modes
- M Modes
- Pulse Wave Mode
- Colour Flow Mode
- Continuous Wave Mode
- Colour/Power Doppler Imaging
- Tissue Harmonic Imaging
- Duplex and Triplex mode simultaneity (all three modes 2D, Colour & Doppler Modes simultaneously).
- Anatomical M Mode
- Tissue Doppler Imaging.

**Broad Bandwidth Transducers**

- Convex Array Transducer-Frequency 2-5 MHz
- Intracavitary Transducer – Frequency 4-10 MHz
- Linear Transducer 5-12 MHz
- Scan depth should be 28cm or more for convex transducer
- System should have Dual &/Quad split display
- Duplex for simultaneous B mode & Spectral Doppler
- Facility of Full screen imaging
- The system should support real time acquisition and display of two image planes simultaneously with colour.
- Facility for Zoom(real time and frozen image)
- One touch image optimization and automatic real time Doppler tracing.

- High resolution ,flicker free,antiglare,LCD/LED medical grade flat panel display of 15” or more,with maximum viewing angle.
- Alpha numeric key board with track ball
- Complete package for measurement & calculation for all applications mentioned at Sr no 1, with digital calipers for distance,area,volume,circumference & Doppler wave form parameter measurement etc.
- PW Doppler analysis in Auto & Manual mode
- Pan zoom feature for real time & frozen Images.
- Image Management Facility
- Inbuilt hard disk with memory of minimum 500 GB
- Direct storage of Images & Cine loops in Hard disk
- Patient ID display
- **Environmental factors**
  - The unit shall be capable of operating continuously in ambient temperature of 30 deg C and relative humidity of 80%.
  - Pre Requisites should be clearly spelt out in terms of room requirements.
- **Power Supply**
  - Power input to be 180-240VAC, 50Hz fitted with Indian plug.
  - Resettable over current breaker shall be fitted for protection.
  - Suitable Servo controlled Stabilizer/CVT.
  - Online UPS of suitable rating with voltage regulation and spike protection for 30 minutes back up.
- **Standards, Safety and Training**
  - Should be FDA (US) or European CE approved product.
  - Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450.
  - The product shall comply to IEC 60601-2-37 ed1: Medical Electrical Equipment - Part 2-37: Particular Requirements for the Safety of Ultrasonic Medical Diagnostic and Monitoring Equipment
  - Type of protection against electric shocks -- Class I Degree of protection against electric shocks for ultrasound probes Type "BF" For ECG electrodes Type 'CF'.
  - Manufacturer/Supplier should have ISO certification for quality standards.
- **Documentation**
  - User manual in English.
  - Service manual in English.

- List of important spare parts and accessories with their part number and costing available in stock with the supplier.
- **Maintenance and Serviceability**
  - Remote Service Network Connectivity.
  - Optional Service agreement.
  - Online phone Support.
  - Clinical application support.
- Warranty: 3 years Warranty and 3 years CMC

## 44

### CTG Machine



- 7" wide TFT- color LCD screen for Fetal Heart Rate, Uterine contraction & fetal movement.

- LCD Screen should be tiltable & rotatable.
- It should have display modes of Trend mode, Number mode & Graph mode.
- It should have alarm functions in all movement.
- It should have facility to increase / decrease / mute alarm sounds It should have Automatic track & hold facility.
- It should have high sensitivity less than 1 MHz FHR upper limit should be 130 - 240 BPM & lower limit should be 30 -150 BPM.
- It should have Foetal Heart Rate & Uterine pressure.
- It should have automatic and manual foetal movement detection.
- It should have in built thermal recorder.
- It should have battery backup.
- It should have a built-in memory for 450hrs to save patient graph data.
- It should have Twin Foetal Monitoring system FHR & UC probes should have a slot guided connecting mechanism to the main unit.
- It should have print speed of 1, 2, 3 cm/min.
- It should have automatic paper feeding function.
- Should have safety certificate from a competent authority European CE or FDA (US) approved product.
- Complies with Medical Device Directive 93/42/EEC, class risk IIa or equivalent. Manufacturer's quality management system complies with ISO 13485.
- Demonstration/Comprehensive Training for All Staff of user department and support services till familiarity with the system is required.
- Warranty: 3 years Warranty and 3 years CMC