Amendment No. 1

Date: 21/11/2015

Subject: Amendment to the Tender Enquiry Document

Ref: Tender Enquiry No.: HLL/HITES/PCD/RC-ME/01/2015 dated 06/10/2015

The following changes have been authorized and incorporated in the referred Tender Enquiry Document (TED).

1.

SECTION I
NOTICE INVITING eTENDER (NIT)

The **e-Tender Ref. No.** against all the items under this section were not provided in the existing Tender Enquiry Document, now, shall be read as under:

Sl. No.	e-Tender Ref. No.	Item Name
Group: Special Neonatal Care Unit		
1	3000000414	Radiant Warmer
2	3000000415	Bassinet
3	3000000416	Irradiance Meter
4	3000000417	Suction Pump, Foot Operated
5	3000000418	Suction Pump Portable
6	3000000419	Transport Incubator
Group: Laboratory		
7	3000000420	Automated 3 – part Differential Haematology Analyzer
8	3000000421	Automated 5 – part Differential Haematology Analyzer
9	3000000422	Binocular Microscope
10	3000000423	Capillary Bilirubinometer
11	3000000424	Centrifuge
12	3000000425	Colorimeter
13	3000000426	Fully – Automated Biochemistry Analyzer
14	3000000427	Portable Compact Mobile Lab with Accu Kine
15	3000000428	Semi – Automated Biochemistry Analyzer
16	3000000429	Semi – Automated Elisa Washer and Reader
17	3000000430	Semi – Automated Urine Strip Analyser
18	3000000431	Non Invasive Hemoglobinometer- Conjunctiva based
19	3000000432	Non Invasive hemoglobinometer- Probe based
20	3000000433	SMS based Multi-parameter Patient Monitoring System
21	3000000435	Urine Analyser
Group: Radiology		
22	3000000436	300 mA HF X-Ray Machine
23	3000000437	Color Doppler flow Ultrasound
24	3000000438	Ultrasound Machine
25	3000000439	500 mA X–Ray Machine (HF)
26	3000000440	C-Arm System (HF)
27	3000000441	CR System
28	3000000442	Digital Radiography System (HF)

Sl. No.	e-Tender Ref. No.	Item Name
29	3000000443	Mobile X – Ray Machine (HF)
30	3000000444	Mammography
Group: Emergency Response System		
31	3000000445	Suction Pump Foot Operated
32	3000000446	Flowmeter with Humidifier Bottle
33	3000000447	Oxygen Cylinder“B”Type
34	3000000448	Oxygen Cylinder“D”Type
35	3000000449	Artificial Manual Breathing Unit (Adult)
36	3000000450	Artificial Manual Breathing Unit (Child and Neonatal)
37	3000000451	Trolley Stretcher- With Back Tilt Facility And Collapsible Wheels For Uploading Into The Trolley
38	3000000452	Canvas stretcher(Folding)
39	3000000453	Stretcher Scoop
40	3000000454	BP Instrument Aneroid
41	3000000455	Stethoscope
42	3000000456	Pneumatic Splints
43	3000000457	Gauze Cutter
44	3000000458	Artery Forceps
45	3000000459	Magill’s Forceps
46	3000000460	Cervical Collar
47	3000000461	First Aid Bag
48	3000000462	Spinal Board
49	3000000463	Double Head Immobilizers
50	3000000464	Foetal Doppler
51	3000000465	Portable hand Held Gulcometer
52	3000000466	Nebulizer (Electric)
53	3000000467	Baby Hypothermia Wrap Kit
54	3000000468	Transport Ventilator
55	3000000469	Drug Vending Machine
Group: Neonatal and Pediatric Care ICUs		
56	3000000470	Direct ophthalmoscope
57	3000000471	Mobile X Ray
58	3000000472	Bilirubinometer
59	3000000473	ECG Unit
60	3000000474	Low cost Glucometer
61	3000000635	Blood Gas Analyzer
62	3000000476	Transilluminator Cold Light Source
63	3000000477	CPAP
64	3000000478	Intensive Care Ventilator (Neonatal & Pediatric)
65	3000000479	Transport Ventilator (Neonatal & Pediatric)
66	3000000480	Defibrillator
67	3000000481	Syringe Pump
68	3000000482	Infusion Pump (Volumetric)
69	3000000483	Suction Pump Foot Operated
70	3000000484	Self Inflating Reservoir Bag
71	3000000485	Laryngoscope
72	3000000486	Oxygen Hood
73	3000000487	Oxygen Concentrator

Sl. No.	e-Tender Ref. No.	Item Name
74	3000000488	Phototherapy
75	3000000489	Thermometer Digital
76	3000000490	Pulse Oxymeter, Line Powered
77	3000000491	Monitor
78	3000000492	Baby Weighing Scale
79	3000000493	Breast Pump
80	3000000494	Examination Treatment Light
81	3000000495	EEG Electroencephalography
Group: Skill Laboratories		
82	3000000496	Abdominal palpation mannequin for Leopold maneuvers during pregnancy
83	3000000497	Adult CPR mannequin
84	3000000498	Child birth simulator along with attachment for cervical dilatation
85	3000000499	Adult IV training arm kit
86	3000000500	Episiotomy suturing trainer
87	3000000501	Female lower torso mannequin with normal and postpartum uterus and accessories
88	3000000502	Normal new born baby simulation model
89	3000000503	Pediatric IV Arm Kit
90	3000000504	Uterine model
91	3000000505	Essential new born care and resuscitation mannequin
92	3000000506	Female catheterization mannequin
93	3000000507	Intramuscular Injection training mannequin
94	3000000508	OG Tube insertion simulation model
95	3000000509	Postpartum hemorrhage simulation model
Group: Operational Theatres		
96	3000000510	Suction pump portable electric
97	3000000511	Autoclave HP vertical (single bin)
98	3000000512	Autoclave HP horizontal
99	3000000513	Autoclave HP vertical (2 bin)
100	3000000514	Bowl sterilizer (big)
101	3000000515	Bowl sterilizer (small)
102	3000000516	Operation Table Orthopedic
103	3000000517	Dehumidifier
104	3000000518	Electrosurgical unit
105	3000000519	Ethylene oxide sterilizer
106	3000000520	Flash sterilizer with trolley
107	3000000521	Operation Table Hydraulic major
108	3000000522	Shadow less lamp ceiling type major
109	3000000523	Sterilizer (big instruments)
110	3000000524	Gynae- examination table
111	3000000525	Table for Obstetric Labour
112	3000000526	Focus lamp Ordinary for Examination
113	3000000527	Operation Table Electro-Hydraulic (Electrical With Manual Over Side)
114	3000000528	Operation Table Hydraulic Minor
115	3000000529	Shadow less Lamp Ceiling Type Minor
116	3000000530	Shadow less Lamp Ceiling Type Minor

Sl. No.	e-Tender Ref. No.	Item Name
Group: Preclinical Items		
117	3000000531	Embalming Machine
118	3000000532	Meat cutting Machine (Bakon's slicer)
119	3000000533	Hot plate - Electrical
120	3000000534	Incubator
121	3000000535	Dissection Table - Std
122	3000000536	Dissection table small
123	3000000538	X - Ray viewing Lobby
124	3000000539	Charts (in set)
125	3000000540	Models (in set)
126	3000000541	Refrigerator (Laboratory type)/REAGENT REFRIGERATOR
127	3000000542	Dissecting Microscope
128	3000000543	Paraffin water bath
129	3000000544	Water bath serological
130	3000000545	Hot air oven
131	3000000546	ICE flaking machine
132	3000000547	BOD incubator
133	3000000548	All glass distillation apparatus
134	3000000549	Peristaltic pump
135	3000000550	Biological safety cabinet
136	3000000551	Single channel physiological recorder
137	3000000552	Algometer
138	3000000553	Kymograph with accessories
139	3000000554	Ph Meter
140	3000000555	Drug Cart
141	3000000556	View Box
142	3000000557	Infantometer
143	3000000558	Stadiometer
144	3000000559	Centrifuge machine with hematocrit reader(Capillary)
145	3000000560	Air Oxygen blender
146	3000000561	Exercise table
147	3000000562	Tilt table (Manual)
148	3000000563	Tilt Table (Motorized)
149	3000000564	Parallel bar(12ft with platform with mirror
150	3000000565	HEMOGLOBINOMETER
151	3000000566	Dielectric Tube Sealer, Handheld
152	3000000567	Blood Bag Tubing Stripper
153	3000000568	Refrigerated Blood Bag Centrifuge (12 BAGS)
154	3000000569	Electronic Double Pan Component Balance
155	3000000570	Manual Plasma Extractor
156	3000000571	Vertical Blood Bank Refrigerator
157	3000000572	Platelet Agitator & Incubator (96 Bags)
158	3000000573	VDRL SHAKER
159	3000000574	Micro Pipet 2-1000 ul
160	3000000575	Micro Pipet Fixed Volume (One Set)
161	3000000576	Refrigerated Blood Component Transport Box
162	3000000577	LED Head Light
163	3000000578	Tail Flick Analgesiometer

Sl. No.	e-Tender Ref. No.	Item Name
164	3000000579	Electroconvulsiometer (with ear and corneal electrodes)
165	3000000580	Cook's Pole Climbing Apparatus
166	3000000581	Rotarod (6 compartments)- Computerized
167	3000000582	Digital Photoactometer
168	3000000583	Video assisted Elevated plus maze for rats and mice
169	3000000584	Portable Autoclave (25L)
170	3000000585	Digital Spirometer
171	3000000586	Bicycle ergometer with digital display
172	3000000587	Digital Reaction Time apparatus
173	3000000588	Multiple Choice Apparatus (with digital display)
174	3000000589	Critical flicker fusion apparatus
175	3000000590	Isolated Organ bath
176	3000000591	Multi Channel Pipette (Manual)
177	3000000592	Bioelectric Impedance Analyzer for bodycomposition
178	3000000593	Vortex Mixer
179	3000000594	Pharmaceutical refrigerators
180	3000000595	Automated tissue grinder(Homogenizer)
181	3000000596	Weighing Machine for dead bodies
182	3000000597	Digital Weighing Machine for organs/fetus
183	3000000598	Cadaver/ Autopsy carrier (Non-elevating)

2.

Existing time schedule for Last date of submission of Tender fee, EMD, opening of Tender, etc. have been re-scheduled as under:

Group	Item Sl. No. as in TED	Existing Schedule		Revised Schedule	
		Last date for submission of Tender fee and EMD	Last date for online submission and opening of Tender	Last date for **physical** submission of Tender fee and EMD	Last date for online submission and opening of Tender
Preclinical Items	117 to 183	02.12.2015	03.12.2015	07.12.2015	08.12.2015
Special Neonatal Care Unit	1 to 6	23.11.2015	24.11.2015	08.12.2015	09.12.2015
Emergency Response System	31 to 55	26.11.2015	27.11.2015	09.12.2015	10.12.2015
Laboratory	7 to 21	24.11.2015	25.11.2015	10.12.2015	11.12.2015
Neonatal and Pediatric Care ICUs	56 to 81	27.11.2015	30.11.2015	14.12.2015	15.12.2015
Skill Laboratories	82 to 95	30.11.2015	01.12.2015	15.12.2015	16.12.2015
Operational Theatres	96 to 116	01.12.2015	02.12.2015	16.12.2015	17.12.2015
Radiology	22 to 30	25.11.2015	26.11.2015	17.12.2015	18.12.2015

3.

SECTION-II
GENERAL INSTRUCTIONS TO TENDERERS (GIT)

Ref. GIT Clause No.	Existing	To Read as
14.1 - d)	A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business.	Deleted
17.2 - d)	In case the tenderer is an Indian agent/authorised representative quoting on behalf of a foreign manufacturer for the restricted item, the Indian agent/authorised representative is already enlisted under the Compulsory Enlistment Scheme of Ministry of Finance, Govt. of India, operated through Directorate General of Supply & Disposals (DGS&D), New Delhi.	Deleted

4.

SECTION VI
LIST OF REQUIREMENT

The **e-Tender Ref. No.** against all the items under this section were not provided in the existing Tender Enquiry Document, now, shall be read as mentioned in Section-I, above.

5.

SECTION – XIV
MANUFACTURER'S AUTHORISATION FORM

Existing Sentence in the prescribed format:

"Agency agreement with them giving details of agency commission shall be provided."

Read as:

Deleted

6.

SECTION - XVI
CONTRACT FORM – B

CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Existing Para in the prescribed format:

"d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period."

Read as:

"d) There will be **95%** uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period."

7.

SECTION VII
Technical Specification

Group: Special Neonatal Care Unit

Item No. 01
Radiant Warmer

1. **Existing Para 2.1.14:** The height of the warmer should be adjustable for different types of bed.
   Read as: - The height of the warmer should be **adjustable (electric / manual)** for different types of bed.

2. **Existing Para 2.1. 15:** It should have separate bassinet trolley, bed should be tilt able and have provision for x-ray cassette holder, Mattress foam density should be minimum 25 kg/cm3, transparent collapsible side walls easily detachable for cleaning. Mattress size should be minimum 20"X30".
   Read as: - It **should have separate or integrated bassinet trolley,** bed should be tilt able and have provision for x-ray cassette holder, Mattress foam density should be minimum 25 kg/cm3, transparent collapsible side walls easily detachable for cleaning. Mattress size should be minimum 20"X30".

3. **Existing Para 2.1.17**: Manual Mode can adjust Heater Output 10 -100 %, with 10% increment, an auditory and visual alarm shall be given at least every 15 min.
   Read as: Manual Mode can adjust Heater Output 10 -100 %, **with 5% or 10% increment**, an auditory and visual alarm shall be given at least every 15 min.

4. **Existing Para 2.1. 21:** Green indicator light shall be provided to indicate that warmer is ready for normal use.
   Read as: - Indicator light shall be provided to indicate that warmer is ready for normal use

5. **Existing Para 2.1. 24:** If there is more than 60% heater output for 10 minutes it should cut of with alarm.
   Read as: - Should have an inbuilt logic in the software to ensure there is no overheating of baby skin at any point of time.

6. **Existing Para 2.1.25:** For the purpose of cable management there should be at least two number of tubing ports (edges covered by silicon rings) on the side walls. The height of the side walls should be minimum 110mm over the mattress.
   Read as: - For the purpose of cable management there should be at least two number of tubing ports **(edges should be smooth and does not damage tubing)** on the side walls. The height of the side walls should be **minimum 100mm** over the mattress.

7. **Existing Para 2.1.26:** X-Ray cassette tray should be at least 750X350mm and should adopt up to 20mm thick X-Ray cassette.

Read as: - X-Ray cassette tray should be **of optimum size** and should adopt up to 20mm thick X-Ray cassette.

8. **Existing Para3.5: - heat dissipation:** Should maintain up to 36.5 deg temp and the heat disbursed through a exhaust fan, so that effect of UV light is not disturbed.
   Read as: - heat **dissipation:** Should maintain up to 36.5 deg temp and the heat disbursed through an **exhaust fan/air vents/solid state cooling,** so that effect of UV light is not disturbed.

9. **Existing Para 5.2:** Spare parts (main ones) Skin temperature probes.
   Read as: - Spare parts (main ones): Skin temperature probes **(reusable).**

10. **Existing Para 5.3:** Consumables / reagents (open, closed system) - Thermal reflector to fix the skin probe on baby.
    Read as: - Consumables / reagents (open, closed system): Thermal reflector to fix the skin probe on baby**- 100 nos.**

Item No. 06
Transport Incubator

Existing Para 2.1. 8: Green indicator light should be provided for its ready to be in normal use.
Read as: - **Indicator light** should be provided for its ready to be in normal use.

Group: Laboratory

Item No. 07
Automated 3- part Differential Hematology Analyzer

Existing Para: 2.1.8: Barcode reader and external option
Read as: Barcode reader internal /external

Existing Para: 2.1.2: Maximum sample volume required 50 µl.
Read as: should be maximum 100 ul

Existing Para: 2.1.14: Linearity Range:- Hb, HCT,WBC,RBC &PLT
Read as: Linearity of following parameter as

1. WBC : 01-99.9 x 1000/ ul
2. RBC : 3 - 7 x 1000000/mm3
3. HGB : 0- 25 g/dl
4. HCT : 10- 60 %
5. PLT : 0- 200 x 1000 /mm3

Existing Para: 5.1.3: Closed System rate to be declared for cost/test.
Read as: Cost per test to be declared by the bidder

Existing Para: 7.1: Certificates (pre-market, sanitary, ..); performance and safety standards (specific to the device type);local and/or international
Read as: should be FDA/CE/BIS certified product

Item No. 08
Automated 5- part Differential Hematology Analyzer

Existing Para: 4.5: Operating Analyzer Temperature- 4-50 °C (39-122 °F).
Read as: Working Temperature Should be 15-35 °C.

Existing Para: 2.1.7: Maximum sample required 100 µL sample size permits whole blood analysis from venous collections.
Read as: should have max. aspiration volume 110 µl

Existing Para: 7.1: Certificates (pre-market, sanitary, ..); performance and safety standards (specific to the device type);local and/or international
Read as: should be FDA/CE/BIS certified product

Existing Para: 5.1. 3: closed system rate to be closed for all test
Read as: Cost per test to be declared by the bidder

Existing Para: 1.1: Clinical purpose: Automated differential blood count: Automated hematology instruments using multiple parameters and methods (such as fluorescence, low cytometry and impedance) are used to count and identify the 5 major white blood cell types in blood (so-called 5-part differential count): neutrophils, lymphocytes, monocytes, eosinophils and basophils.
Read as: Method such as Fluorescence / Light Absorbance based Flow Cytomtery and Impedance

Existing Para: 2.1.10: Linearity of all parameters
Read as: Linearity of following parameter as below

i. WBC : 0 -100 x 1000/ ul
ii. RBC : 0 - 8 x 1000000/mm3
iii. HGB : 0- 24 g/dl
iv. HCT : 0- 67 %
v. PLT : 0- 1900 x 1000 /mm3

Existing Para: 2.1.15: Pre-diluted mode and whole blood mode.
Read as: Pre Diluted/Whole Blood Mode

Item No. 09
Binocular Microscope

Existing Para: Para 2.1.2. Eyepieces-Highest quality 10 X/20mm wide angle anti fungus field eyepiece. One with pointer. Diopter adjustment must be present on both eye pieces.
Read as: Eyepieces-Highest quality 10 X/18mm or higher wide angle anti fungus field eyepiece. One with pointer. Diopter adjustment must be present on both eye pieces.

Existing Para: Para 2.1.10. Nose piece: Backward tilted revolving nose piece suitable to acomodate four objectives with click stop and rubber grip.
Read as: Nose piece: Outward / Backward tilted revolving nose piece suitable to accommodate four objectives with click stop and rubber grip.

Item No. 13
Fully Automation Biochemistry Analyzer

Existing Para: 2.1.8: Minimum reaction volume of 150 µl built in/stand alone
Read as: Reaction Volume should be in range 180ml- 550ml.

Existing Para: 2.1.9: Must have built in Cooled reagent Compartment with minimum 350 ml with sample volume 2- 70 ml
Read as: Sample Volume should be 2-70 µl.

Existing Para: 2.1.2: Throughput: 400 tests/hour, up to 200t/hour with ISE.
Read as: Throughput: 400 tests/hour, and additional 200t/hour with ISE.

Existing Para: 2.1.17: Sample type should include Serum, plasma, Urine, CSF, body fluids and Supernatant with at least 70 sample positions for routine and STAT Test.
Read as: Sample type should include Serum, plasma, Urine, CSF, body fluids and supernatant with at least 60 sample positions for routine and STAT Test.

Existing Para: 2.1.9: Must have built in Cooled reagent Compartment with minimum 350 ml with sample volume 2- 70 ml.
Read as: Must have built in Cooled reagent Compartment with minimum 350 µl (with 01 µl stepping) with sample volume 2- 70 µl (with 0.1 µl stepping).

Item No. 15
Semi Automated Biochemistry Analyzer

Existing Para: 2.1.3: Analyzer should have more than 200 programmable channels.
Read as: Analyzer should have 100 programmable channels or more

Item No. 17
Semi Automated Urine Strip Analyzer

Existing Para: 2.1: Technical characteristics -Memory: patient test results: 1000 and QC test results: 50.
Read as: Memory: patient test results: 800-1000 results and also have interface/USB to transfer data from device to data management system/computer

Item No. 18
Non Invasive Hemoglobinometer- Conjunctiva based

Existing Para: 7.1: Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international: European CE or US FDA Certified
Read as: European CE or USFDA Certified or Certificate of Assured Quality along with Certificate of Calibration & Testing by manufacturer

Item No. 21
Urine Strip Analyzer

Existing Para: 2.2: Software Should be available in Hindi and English languages
Read as: Software Should be available in Hindi/English languages

Group: Radiology

Item No.22
300 mA HF X-RAY MACHINE

1. **Existing Para:-** Exposure time (Rad.): 1 ms to 2 sec. with maximum numbers of steps.
   Read as:- Exposure time should be in range of 1 ms to 2 sec.

2. **Existing Para:-** 1mm or less small Focus, 2mm or less large Focus.
   Read as:- 1.2 mm or less for small focus, , 2mm or less large Focus.

3. **Existing Para:-** Point 5.1 Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables/ reagents (open, closed system):
   2 No. BARC Approved whole body lead aprons with all attachments.
   Read as:- All Accessories (mandatory, standard); Spare parts should be supplied with the machine:-
   2 No. lead aprons with thyroid **shield, gonad shield and all protection attachments.**

Item No.23
Color Doppler flow Ultrasound

1. **Existing Para:-** 7.1 - 2. Manufacturer and **Supplier** should have ISO 13485 certification for quality standards.
   Read as:- Manufacturer should have ISO 13485 certification.

2. **Existing Para:-** 2.1-10: System should have disc of at least 500 GB or more.
   Read as:- System should have disc **internal/external** of at least 500 GB or more.

3. **Existing Para:-** 2.1-15: System should have 19" HD display with tilt and swivel Facility along with alphanumeric keyboard with illuminating keys and status function.
   Read as:- System should have **17" or more HD display** with tilt and swivel Facility along with alphanumeric keyboard with illuminating keys and status function.

Item No.24
Ultasound Machine

1. **Existing Para:-** 2.1-2: Integrated high resolution Monitor(17").
   Read as:- Integrated high resolution **Monitor(15") or more.**

Item No.25
500 mA HIGH FREQUENCY X-RAY UNIT

1. **Existing Para:- Point 4.1 Power Requirements:-**
   Power supply: 230V, AC, 50Hz. 15 Amps ,three phase, Line resistance < 0.4 ohms.
   Read as:- Power supply**: 3-phase 440 or 230V, AC- 50Hz.**

2. **Existing Para:-** Point 5.1 Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables/ reagents (open, closed system): Machine should be supplied with following transducers:
   2 No. BARC Approved whole body lead aprons with all attachments.
   Read as:- All Accessories (mandatory, standard); Spare parts should be supplied with the machine:-
   2 No. lead aprons with **thyroid shield, gonad shield and all protection attachments.**

Item No. 26
C-Arm SYSTEM (HF)

1. **Existing Para:- 2.1: Technical characteristics: X-RAY GENERATOR:**
   High Frequency 50 KHz X-Ray Generator with power output 5KW or more should be provided.
   KV Range (Rad./Fluoro): 40 to 120KVP in 1KV/Step.
   Radiographic mA Range: more than 100mA
   Fluoroscopy mA output: Up to 5mA (Normal Fluoroscopy)
   Up to 20mA (Boosted Fluoroscopy)mAs output: 0.1 - 200mAs or more

   Read as:- X-RAY GENERATOR: High **Frequency 40 KHz or more** X-Ray Generator with power output 5KW or more should be provided
   KV Range (Rad./Fluoro): 40 to 110KVP in 1KV/Step.
   • Radiographic mA Range: more 70 mA .
   • Fluoroscopy mA output: Up to 5mA (Normal Fluoroscopy).
   • Up to7.5 mA or more (Boosted Fluoroscopy)

2. **Existing Para:-** Para 2.1. X-RAY TUBE: Anode heat storage capacity should be more than 250KHU.
   Read as:- X-RAY TUBE: - Anode heat storage capacity should be **more than 200KHU.**

3. **Existing Para:-** 2.1: Para 2.1. CONTROL PANEL: A very compact, soft touch control panel(A.P.R) with 20 X 3 (column x rows) L.C.D display on which KV, mAs, Fluoro time, FmA, I.I ZOOM, Error inter lock for KV, Filament, thermal are displayed on wide angle LCD. Console panel has following functions & indications
   Read as:- A very compact, soft touch control panel(A.P.R) with 20 X 3 (column x rows) L.C.D /**LED display.(A very compact, soft touch control panel with L.C.D/LED display on which KV, mAs, Fluoro time, FmA, I.I ZOOM, Error Code are displayed.)**

4. **Existing Para:-** 2.1: STAND: Up/Down movement (Noise free Actuator movement): At least 430mm o Horizontal Movement: At least 210 mm. Arc Orbital: 90º + 30º (120º)
   • Wig wag: ± 12.5º (25º)
   • Rotation: ± 360º (with I.I. Safety lock)
   Read as:- STAND: Up/Down movement (Noise free Actuator movement): At **least 410mm** or Horizontal Movement: **At least 200 mm**. Arc Orbital: 90º + 30º (120º)
   • Wig wag**: ± 10º (20º)**
   • Rotation: **± 180º**(with I.I. Safety lock).

5. **Existing Para:-** Point 2.1 CCD Camera **with a progressive scan sensor of 2/3"** of 1K x1K Medical Grade.
   Read as:- CCD Camera with 1K x1K of Medical Grade.
6. **Existing Para:-** Dual focus stationary Anode X-Ray Tube of focal spot 0.3 mm (small) & 0.6 mm (large) to be provided
   Read as:- Dual focus rotating Anode X-Ray Tube of focal spot **0.6 mm or less (small) & 1.5 mm or less mm** (large) to be provided.

7. **Existing Para:- 2.1. STAND:** Focus Screen Distance: 950mm or more.
   Read as:- Para 2.1. STAND: Focus Screen Distance: **920mm or more**

8. **Existing Para:-** Para 2.1. **MEMORY SYSTEM:** WW/WL adjustments.
   Read as:- MEMORY SYSTEM:- Brightness Contrast Adjustments

9. **Existing Para:-** Anatomical programming for radiography of 4 body parts (up to 8 programmes).
   Read as:- Deleted.

10. **Existing Para:-** "Emergency Flouro".
    Read as:- Deleted.

11. **Existing Para:-** Point 3 Technical characteristics specific to this type of device)
    In built radio timer that enables to select mAS from 0.1 to 300 in **25 steps** for radiography.
    Read as:- In built radio timer that enables to select mAS from **0.1 to 150** for radiography.

12. **Existing Para:- STANDARDS AND SAFETY:**
    2. Manufacturer **and Supplier** should have ISO 13485 certification for quality standards
    Read as:- Manufacturer should have ISO 13485 certification for quality standards.

13. **Existing Para:-** Point 5.1 Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables/ reagents (open, closed system): Machine should be supplied with following transducers:
    2 No. BARC Approved whole body lead aprons with all attachments.
    Read as:- All Accessories (mandatory, standard); Spare parts should be supplied with the machine:-
    2 No. lead aprons with **thyroid shield, gonad shield and all protection attachments.**

Item No.28
Digital Radiography System(HF)

1. **Existing Para:- 2.1-B: TUBE:** A Dual focus Rotating anode X-ray tube. Large Anode Heat storage capacity for high patient throughput (250KHU or more).
   Read as:- A Dual focus Rotating anode X-ray tube. Large Anode Heat storage capacity for high patient throughput **(600 KHU or more).**

2. **Existing Para:- 2.1-A: High Frequency Generator:** Constant Power output of 65KW**.**
   Read as:- 2.1-A: High Frequency Generator: Constant Power output of **65KW or more.**

3. **Existing Para:-** Display of Acquired x-ray image.
   Read as:- Deleted.

4. **Existing Para:-** Movements of table top should be: Transverse movement: 18cm or more.
   Read as:- Movements of table top should be: Transverse movement: **14cm or more.**

5. **Existing Para:-** 2.1: F. Vertical Bucky (VB) Stand: Motorized Tilting should be -30 degree to + 90 degree.
   Read as:- 2.1: F. Vertical Bucky (VB) Stand: Motorized Tilting should be **–20 degree** to + 90 degree.

6. **Existing Para:-** 2.1: F. Vertical Bucky (VB) Stand: Vertical Up Down Movement Speed should be 60mm/sec or more.
   Read as:- Deleted.

7. **Existing Para:-** 2.1: Size of detector must be 43cm x 43cm. Active Image matrix 3K x 3K.
   Read as:- Size of detector must be 43cm x 43cm. Active Image **matrix 2.8 x 2.8K**.

8. **Existing Para:-** Processed image should appear in less than 8 seconds.
   Read as:- Processed image should appear in **less than 9 seconds.**

9. **Existing Para:-** Pixel size should be less than 150um (Smaller pixel size is proffered) Detector resolution should be more than 3.3 lp/mm. DQE (Detector Quantum Deficiency) should be more than 65%.
   Read as:- Pixel size should be **less 200 microns** and detector resolution **2.50 lp/mm or more.**

10. **Existing Para:-** Point 4.1 Power Requirements: Power supply: 230V, AC, 50Hz. 15 Amps, three phase, Line resistance < 0.4 ohms.
    Read as:- Point 4.1 Power Requirements: Power supply: 230V or **440V three phase.** AC, 50Hz.

11. **Existing Para:-** Point 5.1 Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables/ reagents (open, closed system): Machine should be supplied with following transducers:
2 No. BARC Approved whole body lead aprons with all attachments.
Read as:- All Accessories (mandatory, standard); Spare parts should be supplied with the machine:-
2 No. lead aprons with **thyroid shield, gonad shield and all protection attachments.**

Item No.29
Mobile X-ray machine(HF)

1. **Existing Para:-** 200 programmers or more There should be a provision that the control should get off, if no key is pressed for 10Min.
Read as: - Deleted.

2. **Existing Para:-** Point 5.1 Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables/ reagents (open, closed system): Machine should be supplied with following transducers:
2 No. BARC Approved whole body lead aprons with all attachments.
Read as: - All Accessories (mandatory, standard); Spare parts should be supplied with the machine:- 2 No. lead aprons with **thyroid shield, gonad shield and all protection attachments.**

3. **Existing Para:-** Red mA: 150mA or more.
Read as:- Red mA: **100mA or more.**

Item No.30
Mammography

1. **Existing Para:- 2.1: A) X-RAY GENERATOR:**
Maximum mA output should be more than 190mA
mAs Range for large filament should be from 1 mAs to 700 mAs or more.
Read as:- Maximum mA output should be more than **130mA**
mAs Range for large filament should be from 1 mAs to **600 mAs or more.**

2. **Existing Para:-** 2.1: C) CONTROL PANEL: mAs Range should be from 1 mAs to 700 mAs or more.
Read as:- 2.1: C) CONTROL PANEL: mAs Range should be from 1 mAs to **600 mAs or more**.

3. **Existing Para:-** Point 2.1 (Page 149) Power of generator should be more than 5KW.
Read as:- Power of the generator should be **5 KW or more.**

4. **Existing Para:-** Point 2.1 (Page 150) Large format LCD display on the stand.
Read as:- Deleted.

5. **Existing Para:-** Point 2.1 (Page 151) Motor operated oscillating grid of size 18 x 26 cm.
Read as:- Point 2.1 (Page 151) Motor operated oscillating grid of size **18 x 24 cm**.

4. **Existing Para:-** Automatic selection of filter as per the KV selected (Molybdenum Filter and Aluminum Filter) should be provided.
Read as:- Automatic selection of filter as per the KV selected (Molybdenum Filter and **Rhodium Filter**) should be provided.

5. **Existing Para:-** STANDARDS AND SAFETY:
   2. Manufacturer **and Supplier** should have ISO 13485 certification for quality standards.
   Read as:- 2. Manufacturer should have ISO 13485 certification for quality standards.

6. **Existing Para:-** Point 5.1 Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables/ reagents (open, closed system): Machine should be supplied with following transducers:
   2 No. BARC Approved whole body lead aprons with all attachments.
   Read as: - All Accessories (mandatory, standard); Spare parts should be supplied with the machine:- 2 No. lead aprons with **thyroid shield, gonad shield and all protection attachments.**

Group: Emergency Response System

Item No. 51
Portable Hand Held Glucometer

Existing Para: 2.2 Settings Should have easy code entry technique and display of sugar in Mg/dl and NOT in mili moles.
Read as: Should have easy code entry technique or should be code free; display sugar in Mg/dl and not in millimoles

Added Para: STANDARDS AND SAFETY**:** "ISO 15197:2013 or registration with DCGI"

Item No. 54
Transport Ventilator

Existing Para:
2.1 - 8: Visual and audible alarms Accessories and tubing should be supplied for adult, pediatric & neo-natal size requirements.
Read as:
2.1 - 8: Visual and audible alarms
2.1- 9 : Accessories and tubing should be supplied for adult, pediatric & neo-natal size requirements.

Existing Para: 2.3 (1) (b): Pressure (inspiratory) up to 80 cmH2O
Read as: 2.3 (1) (b): Pressure (inspiratory) should be in range 60- 80 cmH2O

Existing Para: 2.4: User's interface: Manual and Automatic
Read as: 2.4: User's interface: Should be able to set parameters by Manual and Automatic (Predefined values).

Existing Para:
5 (5.3): Consumables/reagents (open, closed system): Battery, leakage adapter
Read as:
5 (5.1): Accessories & Spares: Battery, leakage adapter.
5(5.3) Consumables / reagents (open, closed system): Full face mask, breathing circuit, carry bag, filters.

Existing Para: 2.1.6: Inlet gas supply (O2) pressure range at least 35 to 65 psi.
Read as: 2.1.6: Inlet gas supply (O2) pressure range at least 35 to 95 psi.
Existing Para: 2.3.1a) Tidal volume up to 100 ml.
Read as: 2.3.1 a) Tidal Volume upto 2000ml minimum.

Existing Para: 2.3.1d) Respiratory rate: up to 60 breaths per minute.
Read as: 2.3.1d) Respiratory rate: upper limit should fall in range 60-120 breaths per minute.

Existing Para: 2.3.1i) Inspiratory and expiratory times up to at least 2 sec and 8 sec respectively.
Read as: 2.3.1i) Inspiratory and expiratory times should fall in range 2 sec and 8 sec respectively.

Existing Para: 3.2 Weight (lbs, kg): <5kgs
Read as: 3.2: Weight (lbs, kg) <8kgs

Existing Para: 2.1-7: Medical air compressor integral to unit, with inlet filter.
Read as: 2.1-7 deleted

Existing Para: 2.3-1h) Fi02 between 21 to 100%
Read as: 2.3-1h) Fi02 value should fall in range between 21 to 100% 02.

Item No. 55
Drug Vending Machine

Existing Para: 2.1-4. Powder coated steel body
Read as: Powder coated MS body.

Existing Para: 2.1-6. Compatible with external IT based command system
Read as: compatible with GSM/GPRS/web based secured back end portal/secured web pages.

Existing Para: 2.1-9. Minimum 6 coils per tray for tablets x 7 tray minimum
Read as: trays as 6 nos per machine.

Existing Para: 2.1-14. Steel tray for solidity and strength
Read as: MS steel trays.

Existing Para: 2.1-17. compatible with GSM based external command to machine with bluetooth based command transmission for vending medicines
Read as: Compatible with GSM/GPRS based transmission.

Group: Neonatal and Pediatric Care ICUs

Item No. 57
MOBILE X-RAY

1. **Existing Para:-** 2.1 7) Automatic exposure control facility required.
   Read as:- Deleted.
2. **Existing Para:-** 2.1 8) Tube power rating at least 20 kW.
   Read as:- Deleted.
3. **Existing Para:-** 2.2 Foot switch should available for trigger X-Rays .
   Read as:- Hand switch with exposure from 1 metre or more.
4. **Existing Para 2.2.6:-** Foot switch should available for trigger X-rays.
   Read as: - Foot switch should available for trigger X-rays or should be able to trigger from at least one meter away from control panel.

5. **Existing Para:-** Point 3.1 Unit should have max. 7 foot in height, 2 foot in width and 5 foot in length.
   Read as:- Deleted.

6. **Existing Para 3.2**:- Weight (lbs, kg) - Maximum 500 Kg.
   Read as: - Weight (lbs, kg) Maximum 200 Kg.

Item No. 59
ECG UNIT

Added Para: Minimum 3 channel required in ECG machine.

Item No. 61
BLOOD GAS ANALYZER

1. **Existing Para 2.1.7:** Should measure analyze Hct and minimum measuring range 15-70%.
   Read as:- Should **measure Hct**, minimum measuring range 15-7O%.

2. **Existing Para 2.1.8:** Should calculate analyze tHb and minimum measuring range 3.0 - 23g/dL.
   Read as:- Should measure tHb, **within minimum range** 3.0-23 g/dl.

3. **Existing Para 2.1.10:** Software includes printouts of Levey-Jenning charts for quality control requirements;
   Read as:- Software **should provide printouts of numeric values/**Levey-Jenning charts for quality control requirements;

4. **Existing Para 2.1.11:** Should have disposable cartridges for 300 a minimum of 300 samples; no membrane maintenance or replacement is required;
   Read as: Should have disposable cartridges of 300 **or reagent for 300 test** and none with expiry date atleast 3 months from date of delivery of device.

5. **Existing Para 3.2:** Weight (lbs, kg): Max.10 kgs excluding the cartridges.
   Read as: - Weight (lbs, kg): Max.10 kgs excluding the cartridges **and should have stand for easy transportation.**

6. **Existing Para 5.3:** consumables/reagents (open, closed system) 1) Cartridges-combination of various tests;
   Read as: Consumables /reagents (open, closed system): 1) **Min. 300 Cartridge (none with expiry date atleast 3 months from date of delivery of device.)-**combination of various tests. **or reagent for 300 test and none with expiry date atleast 3 months from date of delivery of device.**

Item No. 64
Intensive Care Ventilator (Neonatal & Paediatrics)

1. **Existing Para 2.1.4:** Should have built in color screen TFT/LCD display of minimum 8" for display of waveforms and monitored value
   Read as: - Should have built in color screen TFT/LCD display of **minimum 8 inch or more** for display of waveforms and monitored value.

2. **Existing Para 2.1.8:** Should have facility of log book, for events and alarms with date & time;
   Read as:- Should have facility of log book, for events and alarms with date & time; **and trend for all parameters for minimum 48 hrs or more.**

3. **Existing Para 2.1.9.2:** Inspiratory pressure (upto 60cm of H2O); 9.3) Respiratory rate 1 to 80 bpm;
   Read as:- Inspiratory pressure **within range 10- 60cm of H2O;**

4. **Existing Para 2.1.9.3:** Respiratory rate 1 to 80 bpm
   Read as:- Respiratory rate **1 to 100 bpm or above.**

5. **Existing Para 2.1.9.9:** Pressure/low Trigger
   Read as:- Pressure/flow Trigger

6. **Existing Para 2.3:** User's Interface – Manual and Automatic
   Read as:- User's interface - Should be **able to set parameters Manually and Automatic (Predefined).**

7. **Existing Para 4.2.3:** Internal, replaceable, rechargeable battery allows operation for at least four hour in the event of power failure.
   Read as:- Internal, replaceable, rechargeable battery allows operation for **at least one hour** in the event of power failure.

Item No. 65
Transport Ventilator (Neonatal & paediatrics)

1. **Existing Para 2.1.2:** Invasive Modes (CMV and SIMV) and Non-invasive Mode (CPAP).
   Read as:- Invasive Modes (CMV and SIMV) and Non-invasive Mode (CPAP) **with pressure support.**

2. **Existing Para 2.1.11:** The device should be capable of operation in various environments such as Emergency, Ambulance, Aircraft, Hospital and MRI.
   Read as:- Deleted.

3. **Existing Para 2.1.12:** The device should be MRI conditioned up to 3 Tesla, 430 G/cm.
   Read as:- Deleted.

4. **Existing Para 2.3**: User's Interface – Automatic
   Read as:- User's interface - **Should be able to set parameters Automatic (predefined) and Manually.**

5. **Existing Para 5.1: accessories & spares -** full face mask, 4 reusable breathing circuit of silicone material (2 for pediatric and 2 for neonates), carry bag, ventilator connecting tubes.
   Read as:- accessories & spares: **battery, leakage adapter.**

6. **Existing Para 5.3: consumables / reagents (open, closed system) -** battery, leakage adapter.
   Read as: - consumables / reagents (open, closed system) **full face mask, 4 reusable breathing circuit of silicone material (2 for pediatric and 2 for neonates), carry bag, ventilator connecting tubes.**

Item No.66
Defibrillator

1. **Existing Para 2.1.2:** The machine should have facility for ECG monitoring,defibrillationn, transcutaneous pacing, defibrillation and synchronized cardioversion with CPR feedback to measure chest compression rate and depth in real time and visual on screen feedback.
   Read as:- The machine should have facility for ECG monitoring,defibrillationn, transcutaneous pacing, defibrillation and synchronized cardioversion with CPR **(real time on screen/audible) information.**

2. **Existing Para 5.1.2:** 3 No. Reusable CPR feedback sensor.
   Read as:- No. Reusable CPR feedback sensor. **(If device have CPR feedback).**

3. **Existing Para 5.1.3:** 300 gel sheet or pads for monitoring and defibrillation.
   Read as:- 50 gel sheet or pads for monitoring and defibrillation**.(If device have CPR feedback).**

Item No. 67
Syringe pump

1. **Existing Para 2.2.5:** Must work on commonly available 20, 30 and 50 ml syringes.
   Read as: - Must work on commonly available **10, 20, 30 and 50 ml syringes**.

2. **Existing Para 2.2.12:** Comprehensive alarm package required including: occlusion alarm, near end of infusion pre-alarm and alarm, volume limit pre-alarm and alarm, low battery pre-alarm and alarm, AC power failure, drive disengaged, syringe loading error, maintenance required.
   Read as:- Comprehensive alarm package required including: occlusion alarm, **near end of infusion alarm, volume limit alarm, low battery alarm**, AC power failure, drive disengaged, syringe loading error.

3. **Existing Para 2.4:** User's Interface - Automatic
   Read as:- User's interface - **should be able to set parameters manual and automatic (pre defined).**

4. **Existing Para 5.3: consumables / reagents (open, closed system) -** Battery, syringe holder, PMO lines.
   Read as:- consumables / reagents (open, closed system) **Battery.**

Item No. 68
Infusion Pump (Volumetric)

1. **Existing Para 2.2.9:** Comprehensive alarm package required including: occlusion alarm, near end of infusion pre-alarm and alarm, volume limit pre-alarm and alarm, low battery pre-alarm and alarm, AC power failure, drive disengaged.
   Read as:- Comprehensive alarm package required including: occlusion alarm, **near end of infusion alarm, volume limit alarm, low battery alarm**, AC power failure, drive disengaged, **syringe loading error.**

2. **Existing Para 2.4:** User's Interface- Automatic
   Read as:- User's interface - **should be able to set parameters manual and automatic (pre defined).**

Item No. 73
Oxygen concentrator

1. **Existing Para 2.1.6:** Unit capable for supplying oxygen to two outlets simultaneously using two independent low meters.
   Read as:- Unit capable for supplying oxygen to two outlets simultaneously using two independent **flow meters.**

2. **Existing Para 3.1: Dimensions (metric) -** Max spec: 640 mm (H) x 410 mm (W) x 410 mm (D).
   Read as:- Dimensions (metric) **should be less than** Max spec limit: 640 mm (H) x 410 mm (W) x 410 mm (D).

Item No. 74
Phototherapy

1. **Existing Para 2.1.2:** Irradiance to be minimum 35 μW/cm2/nm at 40 cm height and UV should not exceed 10-4 W/m2 in 180nm to 400nm.
   Read as:- Irradiance to be minimum 35 μW/cm2/nm at **35 cm or more** height and UV should not exceed 10-4 W/m2 in 180nm to 400nm.

2. **Existing Para 2.1.11:** Green indicator light shall be provided to indicate that equipment is ready for normal use.
   Read as:- Indicator light shall be provided to indicate that equipment is ready for normal use.

3. **Existing Para 2.1.16:** There should be intuitive method to indicate the light surface is at the appropriate treatment distance.
   Read as:- Alarm or indicator should be provided in case the light surface is **too close to skin.**

4. **Existing Para 3.1: Dimensions (metric) -** minimum spec: 1650mm Height X 750mm Width X 500mm Length.
   Read as:- minimum spec: 1650mm Height X **500mm Width X 500mm Length or above**

5. **Existing Para 5.1:** accessories (mandatory, standard, optional) - Complete set of replacement tubes to allow 3 months‟ continuous operation Two replacement sets of fuses, if replaceable type used.
   Read as:- **One** complete set of replacement **light source for continuous operation**, Two replacement sets of fuses, if replaceable type used.

Item No.77
Monitor

1. **Existing Para 1.3:** Operates from mains voltage or from internal rechargeable battery. Operator can set audio visual alarm levels for low or high levels of each parameter independently. Allows display of single, 3 lead ECG or simultaneous display of at least 5 waves ECG selected from up to 12 points. Display to be digital of all active parameters and trace display for at least three selectable parameters. Continuous display on screen of neonatal or infant ECG, respiration and heart rates, invasive/non-invasive blood pressure, body temperature and SpO2.

Read as:- Operates from mains voltage or from internal rechargeable battery. Operator can set audio visual alarm levels for low or high levels of each parameter independently. Allows display of single, 3 lead ECG or simultaneous **display of at least 5 waves ECGs**. Display to be digital of all active parameters and trace display for at least three selectable parameters. Continuous display on screen of neonatal or infant ECG, respiration and heart rates, invasive/non-invasive blood pressure, body temperature and SpO2.

2. **Existing Para 2.1.2:** Should have facility for charging from both 12V DC & 220V AC.
   Read as:- Should have facility for charging **from 220V AC**.

3. **Existing Para 2.1.3a.ii:** ECG cable -12 lead.
   Read as:- ECG cable.

4. **Existing Para 2.1.3a.v:** All probes should be supplied in 2 pairs should be re-usable and should include adult, pediatric & neonatal size cuff/leads. The material of the probe should be such that it is non-breakable.
   Read as:- All probes should be supplied in 2 pairs should be re-usable and should include **pediatric & neonatal size cuff and leads.**

5. **Existing Para 5.1: accessories & spares -** 2 pairs, 12 lead ECG cable. 2 packs of 100 disposable ECG connection electrodes. Two sets of reusable SpO2 probes including adult, pediatric & neonatal probes Two sets of NIBP cuffs of each size Two external skin temperature probes.
   Read as: - **accessories & spares:** 2 pairs ECG **cable**. 200 disposable ECG connection electrodes. Two sets of reusable SpO2 probes **including pediatric & neonatal probes**, Two sets of NIBP cuffs of each size, Two external skin temperature probes.

Item No. 78
Baby Weighing Scale

1. **Existing Para 2.1.8:** Accuracy: 5g, resolution: 1g, limit: 10gm to 15kg.
   Read as: Should read as Graduation : 5g, **Accuracy +/- 2%,Weighing range : 10gm to 20kg**

2. **Existing Para 4.2: Battery operated -** 4XAA battery (rechargeable) or equivalent; one hour backup.
   Read as:- Battery operated**: rechargeable battery with at-least 1 hour battery back up.**

Group: Operational Theatres

Item No. 102
Operation Table Orthopaedic

1. **Existing Para 2.1.1:**Should have OT Table type base made of high quality **304 stainless steel** with double table, split leg type and can take x ray photography.
   Read as: -All metal components of the table should be made of corrosion resistant and disinfectant proof-Stainless steel and can take x ray photography.

2. **Existing Para 2.1.2** Should have **imported Y type** sealing ring with good sealing performance and durability.
   Read as: - Should have good sealing ring to ensure good sealing performance and durability.

3. **Existing Para 2.1.3:**Should have a **Rotary brake** device hitch is easy for moving operating table.
   Read as: Should have a brake.

4. **Existing Para 2.1.6:Double-decked** can do X- Ray.
   Read as: - with guide rails for X- Ray cassettes.

5. **Existing Para 2.1.16:**The table top must be made of durable radiolucent Bakelite material capable of withstanding exposure to frequent C-Arm imaging, without diminishing the image clarity.
   Read as: - The table top must be made of **radiolucent material capable** of withstanding exposure to frequent C-Arm imaging, without diminishing the image quality.

6. **Existing Para 3.1:**Dimensions (metric)
   Max: Length:2050 ±50 mm ;
   Width:480 ±20 mm ;
   Height:750-950 ±50 mm
   Read as: - Dimensions (metric)
   Max: Length:2050 ±50 mm ;
   Width: 480-590mm
   Height:750-950 ±50 mm

7. **Existing Para 3.2:**Weight (lbs, kg) - Max: 150 Kg (excluding battery)
   Read as: - weight tollerable should be 250kg

8. **Existing Para 3.5:**Heat dissipation
   Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism.
   Read as: - DELETED

9. **Existing Para 4.4 :**protection :Should have over-charging cut-of with visual symbol.
   Read as: - DELETED

10. **Existing Para 6.1.2 :**Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
    Read as: - Storage condition: Capable of being stored contineously in ambient temperature of 0 to 50 deg C and relative humidity of **15 to 95%**

11. **Existing Para 6.2.2 :**Sterilization not required.
    Read as: - DELETED

12. **ADDED PARA**: 2.1.17Operation table should be suitable for sitting surgery and HIP surgery.
    2.1.18 OR table should have in built battery

Item No. 104
Electro Surgical Unit

1. **Existing Para 2.1.5 :**Bipolarcoagulation in **3 or more modes** (forced coagulation, spray coagulation and soft coagulation)
   Read as: - There should be Forced coagulation, Spray Coagulation and Soft coagulation options available on the unit.

2. **Existing Para 2.1.10 :**Touch-controlled interface to set parameters
   Read as: - LCD/Touch controlled with minimum **5" size** for interface to set parameter.

3. **Existing Para 4.1 :Recharging unit:** Input voltage- 220V-240V AC, 50Hz
   Read as: - Input Voltage-220-240V AC, 50 Hz

4. **Existing Para 4.5 :** power consumption: 60 W
   Read as: - Standby power consumption: 60 W **.**

Item No. 108
Shadow Less Lamp Ceiling Type Major

Existing Para 2.1.1: Double Dome
Read as: - Double dome, Per dome illumiance should fall in the range 140000lux- 190000lux

Item No. 113
Operation Table Electro-Hydraulic(Electrical With Manual Over Side)

ADDED Para :

2.1.19 OR table should have inbuilt battery back .
2.1.20. OR table should have system in built so that in case of technical failure OR table should have "Manual overrider"

Group: Preclinical Items

Item No. 136
Physiograph single channel with standard accessories

Added para:- " **Digital Model is also acceptable**"

Item No. 138
Kymograph with accessories.

Added para:- " Digital Model is also acceptable"

Item No. 143
Stadiometer

Existing Para:- 1. Stadiometer (with head rod)
Read as:- Stadiometer with head rest.

Existing Para:- 6. Should be provided with standard length rod for calibration.
Read as :- Deleted.

Item No. 159
Micropipette set (2ul-1000ul)

Existing Para:- Range 0.1 to 2 ul.
Read as: - Range **0.2 to 2 ul**

Item No. 174
Critical Flicker Fusion

Existing Para:- Stimulus Colour: White
Read as: - Stimulus Colour: **White LED/ Green & Red Lights**

Existing Para:- Product should be US FDA/European CE/BIS approved
Read as: - Product should be **FDA/CE/BIS** approved

Item No. 177
Bioelectric Impedance Body Composition Analyzer

Existing Para:- 2.4: Should have multiple operating frequency : 5KHz,50KHz,500KHz.
Read as: - Should have multiple operating frequency : 5KHz,50KHz, **250KHz**

6.

Added under Section-VII at the end of all technical specifications:

GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

   a) Comprehensive Warranty as per Conditions of Contract of the TE document for complete equipment from the date of installation, commissioning and Turnkey Work from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Hospital/Institution/Medical College.
   b) 95% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
   c) All software updates should be provided free of cost during Warranty period.

2. After Sales Service:

   After sales service centre should be available at the city of Hospital/Institution/Medical College on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by Tenderer/Indian Agent. Undertaking by the Principals that the spares for the equipment shall be available for at least 10 years from the date of supply.

3. Training:

   On Site training to Doctors/ Technicians/ staff is to be provided by Principal/ Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the consignee.

4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey:

   a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of

Warranty period may be quoted for next 5 years (or as specified in the List of Requirement) on yearly basis for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period

b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
c) Cost of CMC will not be added for Ranking/Evaluation purpose.
d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
e) There will be 95% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
f) During CMC period, the supplier is required to visit at each consignee's site at least once in **3 months** commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
g) All software updates should be provided free of cost during CMC.
h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
i) The payment of CMC will be made as stipulated in GCC Clause 21.

Turnkey (wherever applicable):

Turnkey is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with HOD of Hospital/Institution/Medical College concerned. Turnkey details of each Hospital/Institution/Medical College are given at the end of Technical Specification. The Tenderer to quote prices indicating break-up of prices of the Machine and Turnkey Job of each Hospital/Institution/Medical College. The Turnkey costs may be quoted in Indian Rupee will be added for Ranking Purpose.

The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

The Turnkey Work should completely comply with AERB requirement, if any.

Note 1: Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1 A (iii). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.

Note 2: General: Bidders are requested to make sure that they should attach the list of equipment for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer/ Tester for Medical equipment to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipment. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipment checked for electrical safety compliance

with Electronic Regional Test Labs / Electronics Test and Development Centres across the country on every preventive maintenance call.

Note 3: Supplier should provide adequate training of personnel and supply only non-locked open software and standard interface interoperability conditions for networked equipment in hospital management information system (HMIS)

Note 4: Training shall be given to the doctors, nurses, operators with proper training material, adequate operating manual & preliminary troubleshooting.

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note:

Prospective bidders are advised

1. **to ensure the validity of your EMD as per this revised schedule.**
2. **to check the website regularly prior to the closing date and time of online submission of tenders.**

-- End --