AMENDMENT No. 2

Date: 19/11/2013

Subject: Amendment to the tender Enquiry Document

Ref: Tender Enquiry No.: HLL/PCD/PMSSY-II/04/13-14 dated 09/09/2013

The pre-bid meeting for the referred tender enquiry was held on 17/09/2013. Based on pre-bid discussions following amendments are being incorporated in the referred tender enquiry document.

SECTION-I

NOTICE INVITING TENDERS (NIT)

(1) Existing:

Sl. No.	Equipment Name	Qty.	EMD Amt. (Rs.)
1	Cardio tocography machines with central station	1	70,000
2	Therapeutic auto transfusion (cell separator) system fully automatic	1	80,000
3	Gamma Camera Single Head with accessories	1	220,000
7	Fundus Camera	1	200,000
13	Infusion pump	67	67,000

Amended as:

Sl. No.	Equipment Name	Qty.	EMD Amt. (Rs.)
1	Cardiotocography machines with central station ***(10 Cardiotocography machines + 1 Central Station per set)***	***2 Set (20+2)***	**1,40,000**
2	Therapeutic auto transfusion (cell separator) system fully automatic	***Item is deleted***	
3	Gamma Camera Single Head with accessories	***Item is deleted***	
7	Fundus Camera	***Item is deleted***	
13	***Volumetric Infusion pump***	67	67,000

SECTION - VI

LIST OF REQUIREMENTS

(1) Existing:

Sl. No.	Equipment Name	Institution	Dept.	Qty.	Total Qty.	Warranty period (yrs.)	CMC period (yrs.)
1	Cardio tocography machines with central station	GMCA	OBG	1	1	2	5
2	Therapeutic auto transfusion (cell separator) system fully automatic	GMCA	CVTS	1	1	2	5
3	Gamma Camera Single Head with accessories	GMCA	Nuclear Medicine	1	1	5	5
7	Fundus Camera	JNMC	OPD & Trauma	1	1	2	5
13	Infusion Pump	JNMC	OPD & Trauma	30	67	2	5
			OBG	10			
		DRPGMC	Cardiology	20			
			Nephrology	7			

Amended as:

Sl. No.	Equipment Name	Institution	Dept.	Qty.	Total Qty.	Warranty period (yrs.)	CMC period (yrs.)
1	Cardiotocography machines with central station ***(10 Cardiotocography machines + 1 Central Station per set)***	GMCA	OBG	2 Set	2 Set	2	5
2	Therapeutic auto transfusion (cell separator) system fully automatic	***Item is deleted***					
3	Gamma Camera Single Head with accessories	***Item is deleted***					
7	Fundus Camera	***Item is deleted***					

Sl. No.	Equipment Name	Institution	Dept.	Qty.	Total Qty.	Warranty period (yrs.)	CMC period (yrs.)
13	***Volumetric Infusion pump***	JNMC	OPD & Trauma	30	67	2	5
			OBG	10			
		DRPGMC	Cardiology	20			
			Nephrology	7			

SECTION – VII

TECHNICAL SPECIFICATIONS

Item Sl. No. 5

PLASMA STERLIZER UNIT

(1) Existing:

1.1 Hydrogen peroxide sterilization system may include exposing an article to be sterilized to a plasma generated from a gas mixture. The exposure of the article to the plasma is carried out at a pressure of from 0.1 to 10 torr and a chamber temperature of less than 63.degree. C. for a time period sufficient to effect sterilization. The apparatus for plasma sterilization of articles includes a plasma generator and a sterilizing chamber or it may be through Vaporized Hydrogen peroxide gas.

Amended as:

1.1 Hydrogen peroxide sterilization system may include exposing an article to be sterilized to a plasma generated from a gas mixture. The exposure of the article to the plasma is carried out at a pressure of from 0.1 to 10 torr and a chamber temperature of less than 63.degree. C. for a time period sufficient to effect sterilization. The apparatus for plasma sterilization of articles includes a plasma generator and a sterilizing chamber. ***(Should be based on Gas plasma technology)***

(2) Existing:-

3.4 The sterilizer should have usable volume of 90 to 150 liters.

Amended as:

3.4 The sterilizer should have usable volume of ***100 to 120*** liters.

(3) Existing:-

5.2 Voltage corrector/ stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz or 400 VAC 3 phase 50 Hz).

Amended as:

5.2 ***Suitable UPS for One hour backup should be provided for the smooth functioning of the equipment.***

Item Sl. No. 6

HEART LUNG MACHINE WITH ACCESSORIES

(1) Existing:-

3.1) 2. Each individual roller pump should be capable of running independently on 220 V/50Hz supply.

Amended as:

3.1) 2. Each individual roller pump should be capable of running independently on 220 V/50Hz ***or 24 V DC*** supply.

(2) Existing:-

3.1) 8. Should have unidirectional hand crank facility as a critical safety feature hand crank loading should be from top for faster access.

Amended as:

3.1) 8 - Should have hand crank facility as a critical safety feature hand crank loading should be from top for faster access.

(3) Existing:-

3.2) Should have a venous control module with single pole mast with electronic venous line occluder.

Amended as:

3.2) – Deleted

(4) Existing:-

3.7 C.MONITORS: TEMPERATURE: 6 temperature displays 3 for patient monitoring and 3 for cardioplegia monitoring with digital display in Celsius with 6 necessary compatible temperature probes with 3 of them for nasal, rectal and esophageal use

Amended as:

3.7 C.MONITORS: TEMPERATURE: ***6/4 temperature*** displays for patient monitoring and for cardioplegia monitoring with digital display in Celsius with 6 necessary compatible temperature probes with 3 of them for nasal, rectal and esophageal use.

Added Para:-

1. Temperature control module should have 2 chambers and have touch display.

ACCESSORIES

1. Ten adult and ten pediatric reusable blankets to be provided with each unit.

2. Temperature probes for adult and pediatric patient to be provided with each unit.

3. Water flow tubes for the heating cooling unit of heart lung machine should be supplied for all the available ports.

Item Sl. No. 8

Operating Microscope - Neuro

(1) Existing

7 - Microscope should have 180 W xenon bulb or above.

Amended as:

7 - Microscope should have **300 W xenon** bulb with standby lamp.

(2) Existing

12 - 3-chip modular camera with necessary attachment for recording and viewing should be provided.

Amended as:

12 – ***HD*** 3-chip modular camera with necessary attachment for recording and viewing should be provided.

(3) Existing

13 - Video editing software should be provided with the recording system.

Amended as:

13 - Video editing software should be provided with the recording system **with USB facility.**

Added Para –

1. **The system should be compatible with Neuro Navigation system.**
2. **One touch balancing of the system.**

Item Sl. No. 9

Anaesthesia m/c with ventilator

(1) Existing:-

1. - Anaesthesia machine constructed from welded tubular / epoxy powder painted steel. Stainless steel top and 1 no. lockable drawers and electrical outlet to be provided. Should have large castor wheel with foot brake. Gas specific, high pressure forged brass gas blocks with integrated pin indexed yoke for oxygen and nitrous oxide with long life metal diaphragm with non-interchangeable gas supply inlet (Pipeline connection) for oxygen, N2O and air with color coded HP antistatic tubes.

Amended as:

1. - Compact and modular, three gas anaesthesia workstation with an integrated ventilator for adult to infants and integrated airway monitor for airway pressures and volume and should have 3 drawers and electrical outlet to be provided. Should have large castor wheel with foot brake. Gas specific, high pressure forged brass gas blocks with integrated pin indexed yoke for oxygen and nitrous oxide with long life metal diaphragm with non-interchangeable gas supply inlet. Pipeline connection for oxygen, N2O and air with colour coded HP antistatic tubes.

(2) Existing:-

3. - Having mechanical hypoxic guard incorporating nominal basal flow of at least 100 ml for minimal flow anesthetic techniques with system on / off switch

Amended as:

3. - Having **pneumatic** hypoxic guard incorporating nominal basal flow of at least **50ml** for minimal flow anesthetic technique with system on/off switch.

(3) Existing:-

4.- Having reservoir based audible oxygen failure alarm of at least 7 seconds.

Amended as:

Para 4.- **It should have electronic visual and Auditable alarms.**

(4) Existing:-

10. - Should be integrally fitted with at least 2 kg capacity reversible canister, double chamber type of CO2 absorber system having provision to bypass. Absorber system through a switch and ventilate with bag.

Amended as:

10. - Should be integrally fitted with reversible canister of CO2 absorber system having provision to bypass. Absorber system through a switch and ventilate with bag **(Soda lime canister should be single chamber > 800 grams).**

(5) Existing:-

11.- All sensor connection shall be internal to help prevent disconnection.

Amended as:

11.- "All sensor connection shall be internal**/ external** to prevent disconnection"

(6) Existing:-

14.- The ventilator should have bellows and be integrally mounted to absorber system.

Amended as:

14.- The ventilator should have bellows**/piston** and be integrally mounted to absorber system.

(7) Existing:-

15.- Should have large LCD display for patient data like, TV, MV frequency 02 conc., P Mix. P Mean and air way bar graph along with set data simultaneously.

Amended as:

15.- Should have large **10"** LCD display for patient data like, TV, MV frequency 02 conc., P Mix. P Mean and air way bar graph along with set data simultaneously.

(8) Existing:-

16.- The display screen should be mounted in alarm for easy viewing.

Amended as:

16.- The display screen should be **Touch Screen** and mounted in arm or **integrated in the machine** for easy viewing.

(9) Existing:-

22. - Monitor should be with multi-parameter module with minimum 15 inches colour TFT display with 8 channels.

Amended as:

22. - Monitor should be with multi-parameter module with minimum 15 inches colour TFT **touch screen** display with 8 channels.

(10) Existing:-

Accessories-2. Disposable domes with complete kit (100 in No.)

Amended as:

Accessories-2. Disposable domes with complete kit **or disposable IBP transducers**. (100 No.)

(11) Existing:-

Accessories 4. Disposable anaesthesia breathing circuits.

Amended as:

Accessories 4 Should have following accessories: - Disposable anaesthesia breathing circuits- **10 nos** - Re-usable & autoclavable circuits - **03 nos.**

Added Para-

1. **The system must be US-FDA or European CE approved product.**
2. **Accessories-**
    i. **Reusable 3 lead ECG leads with cables - 2nos**
    ii. **Reusable SpO2 probes (adult & paediatric) - 2nos each**
    iii. **Reusable NIBP cuff (adult, child and neonate) - `5 nos each**
    iv. **Reusable temperature probes (rectal) - 1 no**

Item Sl. No. 10

Defibrillator with monitor

1. **Existing:-**

2.2 - Should monitor vital parameters (ECG, NIBP, HR, SPO2 and EtCO2 [optional] and display them.

Amended as:

2.2 - Should monitor vital parameters (***ECG, HR, SPO2 and EtCO2 and display them***).

2. **Existing:-**

2.4 Should work on Manual and Automated external defibrillation (AED) mode. Manual selection maximum up to 360 J.

Amended as:

2.4 Should work on Manual and Automated external defibrillation (AED) mode. Manual selection maximum up to 200 J.

3. **Existing:-**

3.1 Should be a Low Energy Biphasic defibrillator monitor with Recorder, within a maximum energy of 360 Joules.

Amended as:

3.1 Should be a Low Energy Biphasic defibrillator monitor with Recorder, within a maximum energy of **200** Joules.

4. **Existing:-**

3.2 - Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles. Should have Automatic Lead switching to see patient ECG through paddles or leads.

Amended as:

3.2 - Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles. Should have Automatic/**Manual** Lead switching to see patient ECG through paddles or leads.

5. **Existing:-**

3.5 - Should have charging time of less than 5 seconds for maximum energy. Charging indicator should be there.

Amended as:

3.5 - Should have charging time of less than **8** seconds for maximum energy. Charging indicator should be there.

6. **Existing:-**

3.6 - Should have Display- TFT coloured LCD at least 8" diagonal for viewing messages and ECG waveform of 5 seconds.

Amended as:

3.6 - TFT coloured LCD display for viewing messages and ECG waveform of 5 seconds.

7. **Existing:-**

3.7 Should have internal and external paddles with paddles contact indicator – for good paddle contact. Both Adult and paediatric should be available for both internal and external paddles. Switch for delivering the shock should be available on the internal paddles.

Amended as:

3.7 Should have internal and external paddles. Both Adult and paediatric should be available for both internal and external paddles. Switch for delivering the shock should be available on the internal paddles.

8. **Existing:-**

3.8 Should have event summary facility for recording and printing at least 250 events and 50 waveforms.

Amended as:

38 Should have event summary facility for recording and printing at least **100** events and 50 waveforms.

9. **Existing:-**

3.10 Should be capable of printing Reports on Event summary, configuration, self-test, battery capacity etc.

Amended as:

3.10 Should be capable of printing Reports on Event summary, configuration, self-test etc.

Item Sl. No. 12

ICU Ventilator

1. **Existing:-**

4 Facility to measure and display
a End tidal CO2 with capnography.

Amended as:

4 Facility to measure and display

a. End tidal CO2 with capnography. It should be integrated with the ventilator (**price to be quoted separately)**

2. **Existing:-**

4. Facility to measure and display
b) 3 waves- Pressure and Time, Volume and Time and Flow and Time.

Amended as:

4. Facility to measure and display

b) **4 waves**- Pressure and Time, Volume and Time, Flow and time, EtCo2 and Time.

3. **Existing:-**

4. Facility to measure and display
c) 3 loops- P-V, F-V, P-F with facility of saving of 3 Loops for reference.

Amended as:

4. Facility to measure and display

c) **2 loops**- P-V, F-V with facility of saving of **2** Loops for reference.

4. **Existing:-**

5. Trending facility for 72 hours with minimum 5 minutes resolution for recent 24 hours

Amended as:

5. Trending facility for ***at least 24 hours with minimum 5 minutes resolution.***

5. **Existing:-**

8. g) Intrinsic PEEP and PEEPi Volume.

Amended as:

8. g) Intrinsic PEEP

6. **Existing:-**

11. Expiratory block should be autoclavable and no routine calibration required.

Amended as:

11. Expiratory block should be autoclavable and no routine calibration required **and disposable expiratory valves for highly infectious patients - 20 nos.**

7. **Existing:-**

12) a Intrinsic Peep & Intrinsic PEEP Volume.

Amended as:

12) a Intrinsic Peep.

8. **Existing:-**

12) b Occlusion Pressure.

Amended as:

12) b **Deleted**

9. **Existing:-**

14. Automatic Patient Detection facility preferable.

Amended as:

Deleted.

10. **Existing:-**

16 a) Imported standalone Medical Air compressor

Amended as:

16 a) Medical air compressor (standard)". **It should be from the same manufacturer and price should be offered separately.**

11. **Existing:-**

18) d. Battery back-up for minimum 30 min.

Amended as:

18) d. Battery back-up for minimum 60 min.

Added Para:-

1. Ventilator should be US-FDA or European CE approved.

2. Permanent oxygen cell to be provided along with the machine or 10 oxygen sensors to be supplied along with the machine.

3. Trolley, hinged arm and other parts and accessories should be from the same principal company/same manufacturer.

4. Ventilator to be supplied with

a. Reusable and autoclavable patient circuit -2 Nos. each for Adult and pediatrics.

b. Expiratory valve – 2Nos.

Item Sl. No. 13

Volumetric Infusion Pump

1. **Existing:-**

2**.** The Equipment should have high levels of safety from air embolism by integrating at least two ultrasonic air detection sensors.

Amended as:

2**.** The Equipment should have high levels of safety from air embolism by integrating at least **One** ultrasonic air detection sensors.

2. Existing:-

3. Heating process should be done by an electromagnetic induction heating system.

Amended as:

3. **Deleted.**

3. Existing:-

4. The Equipment should have two infra –red temperature sensors for accurate delivery of fluids at 37ºC.

Amended as:

4**. Deleted.**

5. Existing:-

8. The Equipment should have a recirculate mode for pre – warming of fluids during transport.

Amended as:

8. The Equipment should have pre – warming of fluids during transport.

6. Existing:-

9. The Equipment should have an interactive on-board display system which displays information about the rate of infusion, total volume infused, real temperature of fluids, line pressure etc.

Amended as:

The Equipment should have an interactive on-board display system which displays information about the rate of infusion, total volume infused etc.

Added Para :- Battery backup should be at least 2 hrs.

Item Sl. No. 14

Patient monitor – 3 parameter

1. Existing:-

3.1 Minimum 15 inches multicolored TFT touch display screen.

Amended as:

3.1 Minimum **10** inches multicolored TFT touch display screen.

2. **Existing:-**

3.15 Should have inbuilt 3 Ch thermal recorder with selectable recording speed of 50, 25, 12.5,6, 3mm/sec and 50mm/ min.

Amended as:

3.15 Should have inbuilt 3 Ch thermal recorder with selectable recording speed of 25 & 50 mm/sec .

3. **Existing:-**

3.16 Battery backup of up to 4 hours, when fully charged .

Amended as:

3.16 Battery backup of ***at least 2 hours***, when fully charged.

4. **Existing:-**

7.1 Should be US FDA, CE, UL or BIS approved product.

Amended as:

7.1 - It should be USFDA or European CE or BIS approved product.

Item Sl. No. 15

Patient monitor – 5 parameter

1. **Existing:-**

3.1 Minimum 15 inches multicoloured TFT touch display screen.

Amended as:

3.1 Minimum **10** inches or more multicoloured TFT touch display screen.

2. Existing:-

3.3 Digital and waveforms/traces display of all parameters. Specification include – monitoring of heart rate & respiratory rate in addition to above to make it a complete monitor.

Amended as:

3.2 Digital and **5** waveforms/traces display of all parameters. Specification include – monitoring of heart rate & respiratory rate in addition to above to make it a complete monitor.

3. Existing:-

3.16 Should have inbuilt 3 Ch thermal recorder with selectable recording speed of 50,25,12.5,6, 3mm /sec and 50mm/ min.

Amended as:

3.16 Should have inbuilt 3 Ch thermal recorder with selectable recording speed of **25 & 50** mm /sec .

4. Existing:-

3.17 Battery backup of up to 4 hours, when fully charged.

Amended as:

3.17 Battery backup of ***at least 2 hours***, when fully charged.

5. Existing:-

4.1 ECG: 3/5 Lead Cable with clip – 2 sets per monitor

Amended as:

4.1 ECG: **5** Lead Cable with clip – 2 sets per monitor

6. Existing:-

7.1 Should be FDA, CE, UL or BIS approved product

Amended as:

8.1 It should be **USFDA or European CE approved** product.

Item Sl. No. 16

Syringe Pump

1. **Existing:-**

3.1 Syringe should be side loading.

Amended as:

3.1 Syringe should be **front** loading.

2. **Existing:-**

3.3 Bolus rate should be programmable to 40 – 500 ml/hr or more with infused volume display. Reminder audio after every 0.5 ml delivered bolus. SAVE last Bolus rate even when the AC power is switched OFF.

Amended as:

3.3 Bolus rate should be programmable to 40 – 500 ml/hr or more with infused volume display. Reminder audio after ***every 1 ml delivered bolus***. SAVE last Bolus rate even when the AC power is switched OFF.

3. **Existing:-**

3.5 Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.

Amended as:

3.5 Keep Vein Open (KVO) range should be from 0.1 to 5 ml/hr. User should have choice to disable KVO whenever desired.

4. **Existing:-**

3.7 Must Work on commonly available ISI/CE/FDA APPROVED/CERTIFIED 20, 50/60 ml Syringes with accuracy of minimum of +/-2% or better.

Amended as:

3.7 Must Work on commonly available ISI/CE/FDA APPROVED/CERTIFIED **5, 10**, 20, 50/60 ml. Syringes with accuracy of minimum of +/-2% or better.

5. Existing:-

3.10 Should 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, Drive disengaged and preventive maintenance.

Amended as:

3.10 Should 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 and Drive disengaged.

6. **Existing:-**

5.2 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%.

Amended as:

5.2 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 30-90%.The unit shall be capable of being stored continuously in ambient temperature of 0 -50˚ C and relative humidity of 20-90%

7. Existing:-

7.5 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection , water ingress.

Amended as:

7.5 ***Deleted.***

8. Existing:-

7.6 Electrical Safety Classification Class I/II, Type CF and Internally powered equipment.

Amended as:

7.6 **Deleted.**

Item Sl. No. 17

Neonatal Ventilator

1. **Existing:-**

Should be able to provide following ventilator modes:

Controlled/assisted controlled mechanical ventilation - volume targeted (CMV/ACMV)

Controlled/assisted controlled mechanical ventilation – pressured targeted PCMV/PACMV), synchronized intermittent mechanical ventilation (SIMV), spontaneous ventilation – pressure support CPAP spontaneous ventilation – pressure support, minimum tidal volume (PS_Vtmin), mandatory rate ventilation (MRV), airway pressure release entlation (APRV), PRVC, non-invasive ventilation, combination modes, inverse ratio ventilation.

Amended as:

Should be able to provide following ventilator modes:

Controlled/assisted controlled mechanical ventilation - volume targeted (CMV/ACMV)

Controlled/assisted controlled mechanical ventilation – pressured targeted PCMV/PACMV), synchronized intermittent mechanical ventilation (SIMV), spontaneous ventilation – pressure support CPAP spontaneous ventilation – pressure support, minimum tidal volume (PS_Vtmin), ***mandatory rate ventilation (MRV)/Assist Control***, airway pressure release entlation (APRV), PRVC, non-invasive ventilation, combination modes, inverse ratio ventilation.

2. **Existing:-**

Should have facility for following settings:

Tidal volume: 20 to 2000ml.

Amended as:

Should have facility for following settings:

Tidal volume: **2** to **1500** ml.

3. **Existing:-**

Should have facility for following settings:

Pressure support slope: 50 to 150 cm H_2O

Amended as:

Should have facility for following settings:

Pressure support slope: **0 to 50** cm H_2O

4. **Existing:-**

Should have facility for following settings:

Inspiratory trigger sensitivity : flow (0.1 to 50L/min) and pressure to 5cm H_2O.

Amended as:

Should have facility for following settings:

Inspiratory trigger sensitivity : flow (0.1 to **10L**/min) and pressure to 5cm H_2O.

5. **Existing:-**

Should have facility for following settings:

Expiratory trigger threshold : 0 to 30 l/min to max 0.5 to 3 sec

Amended as:

Should have facility for following settings:

Expiratory trigger threshold/**pause time**: 0 to 30 l/min to max ***0 to 3 sec.***

6. **Existing:-**

Should have facility for following settings:

Sign/sign frequency: 1 to 2x Vt: 1 to 10 cycles / 1-200 cycles

Amended as:

Deleted.

7. **Existing:-**

Manual cycle, inspiratory pause, expiratory pause, prolonged expiration.

Amended as:

Manual cycle, inspiratory pause, expiratory pause.

8. **Existing:-**

Machine should have necessary certificates as IEC/CE/FDA or equivalent.

Amended as:

Machine should have necessary certificates as **European CE or US FDA approved**.

Added Para

1. Ventilator to be supplied with

a. Expiratory Reusable and autoclavable patient circuit -2 Nos.

Item Sl. No. 18

5 part fully automated Haematology Analyser

1. **Existing:-**

2. System must be based on principal of flow cytometric method using semiconductor laser.

Amended as:

2. System must be based on principal of flow cytometric method using semiconductor laser/**optical light source**.

2. **Existing:-**

3 - True 5 part differential analysis by 3 dimensional measurement of volume, conductivity and scatter.

Amended as:

3. Deleted.

3. Existing:-

5. Must be capable of performing at least 75 samples/ hour in primary mode.

Amended as:

5. Must be capable of performing at least 75 samples/ hour in ***all mode***.

Item Sl. No. 19

C-Arm with Image Intensifier

1. **Existing**

F.5 - Lead apron (2 piece)/ lead screen, lead goggles and thyroid shield - 4 nos.

Amended as:

F.5 – Lead free Lead apron/ lead screen, lead goggles and thyroid shield - 6 nos each.

Item Sl. No. 20

Multiparameter Monitor (Complete Monitoring System)

1. **Existing:-**

3.2 Separate CPU/Module rack.

Amended as:

3.2 Separate ***CPU/Module rack/Pods/New Modular*** Technology

2. **Existing:-**

3.4 Combination of single, dual and multiparameter modules.

Amended as:

3.4 It should be ***combination of only single parameter module.***

3. **Existing:-**

3.7 Should have Facility to monitor and display - ECG, Respiration, NIBP, SpO2, CO2 with capnography, Temp, Cardiac output NMT, BIS/Entropy, EEG & IBP(2 channels).

Amended as:

3.7 Facility to monitor and display - ECG, Respiration, NIBP, SPO2, CO2 with Capnography, Temp, Cardiac Output, NMT, BIS, EEG & IBP – 2 Nos.

4. **Existing:-**

3.9 EtCO2 -Side stream. Display both inspired and expired values, showing capnography.

Amended as:

3.9 EtCO2 -***Side/Main stream***. Display both inspired and expired values, showing capnography.

5. **Existing:-**

3.10 NMT Module/monitor: For measurement and display of TOF count, TOF %, ST, DBS, Tetanic and Trend for continuous usage. Automatic measurement facility in selected time interval. Automatic selection of supramaximal current. Include standard accessories.

Amended as:

3.10 NMT Module **(Inbuilt):** For measurement and display of TOF count, TOF %, ST, DBS, Tetanic and Trend for continuous usage. Automatic measurement facility in selected time interval. Automatic selection of supramaximal current. Include standard accessories.

6. **Existing:-**

4.4 IBP: Include four nos. per monitor of reusable pressure transducer with bracket, holder and 100 nos disposble domes per monitor.

Amended as:

4.4. IBP: Include four nos. per monitor of reusable pressure transducer with bracket, holder and 100 nos disposble domes **or 100 Nos. disposable IBP transducer per monitor.**

7. **Existing:-**

4.8 EEG Modules- with all accessories. Should display at least two channels.

Amended as:

4.8 - EEG Modules- with all accessories. Should display at least **Four** channels.

8. **Existing:-**

4.9 BIS/Entropy Module: Adult Sensors-200 numbers. Spectral analysis modules by compressed spectral array.

Amended as:

4.9 ***BIS Module***: Adult Sensors-200 numbers. Spectral analysis modules by compressed spectral array.

All other terms and conditions of the tender enquiry remain unaltered.