

22-08-2017

Amendment No. 1**Sub: Amendment to the referred tender enquiry****Ref.: Tender Enquiry HITES/PCD/PMSSY-III/11/ANST/17-18 dated 31-07-2017**

The following changes are being incorporated in the above referred Tender Enquiry Document

**Section I
Notice Inviting Tender**

(2) Tender timeline:

Existing:

Sl. No.	Description	Schedule
d.	Closing date & time for submission of online bids	12.08.2017, 06:00 PM

Read as:

Sl. No.	Description	Schedule
d.	Closing date & time for submission of online bids	12.09.2017, 06:00 PM

**Section VII
Technical Specification**

SCH 01. 12 Channel ECG Machine		
Para	EXISTING SPECIFICATION	READ AS
1	Twelve channel LCD display for all 12 leads along with on screen details.	Twelve channel 6" or more LCD display for all 12 leads along with on screen details.
2	Recording for 12 channels simultaneously and have option for user selectable any lead as Rhythm lead. Can able to print ECG at A4 size paper.	Recording for 12 channels simultaneously and have option for user selectable any lead as Rhythm lead. Can able to print ECG at A4 size paper through inbuilt printer.
3	Recording speed selection of 5, 10, 25 & 50 mm/sec.	Recording speed selection of 5, 10/ 12.5 , 25 and 50 mm/sec.
5	Facility to enter patient information (Name, Age, Sex, Height, Weight, doctor's name, Hospital's name which get updated in system and is recorded on the recorder A4 paper	Facility to enter patient information (Patient ID, Name, Age, Sex, Hospital's name) which get updated in system and is recorded on the recorder A4 paper
6	Patient memory function, up to 30 patients.	Patient memory function 20 patients or more

	Mains and in built rechargeable battery backup atleast 2 hrs	Mains and in built rechargeable battery backup at least 2 hrs/ 30 ECG
10	Should have USB port to send the data in the Computer.	Should have USB port/SD card (to be supplied by the bidder)/ equivalent port to send the data in the Computer.
		Added para under BOQ:
		ECG paper for 500 patients

SCH 02. Blood and Fluid Warmer		
Para	EXISTING SPECIFICATION	READ AS
1	Should be able to warm fluid /blood at a temperature range of 37-40c.	Should be able to warm fluid /blood at a temperature range of 37-43 deg C.
2	Should be able to maintain or warm the water/blood when at a flow rate of 3L/hr.	Should be able to maintain or warm the fluid/blood when at a flow rate of 2L/hr.
4	Alarms for disconnections, less water (if applicable) & over temp.	Deleted
5	Disposable tubing set for Fluid/Blood-100 Nos.	Disposable tubing set for Fluid/Blood-500 Nos for fluid and 100 nos for blood.(price to be quoted separately)
6	Should have over temp, alarm test system.	Should have over temp alarm
7	Should be useful for both in Adult & Paed. Patient.	Deleted
9	It should be compatible with standard IV set commonly available in Indian market.	Deleted
		Added para: Should have Clamp for mounting on the IV stand
	BOQ	BOQ
2	Disposable tubing set for Fluid/Blood 100	Disposable tubing set for Fluid/Blood-500 Nos for fluid and 100 nos for blood.(price to be quoted separately)

SCH 03. Non-invasive ventilator		
Para	EXISTING SPECIFICATION	READ AS
e	Rise Time: 150 to 600 msec	Rise time: 150 to 400 mSec
		Added para: Battery backup of 1 hour or more
	BOQ	BOQ
2	Masks with all sizes (Oral & Nasal) 2 sets each	Reusable Masks with all sizes (Oral & Nasal) small, medium, large - 2 sets each

SCH 04. High-end Monitor for ICU with CNS		
Para	EXISTING SPECIFICATION	READ AS
1	Advanced high end modular/New Modular patient monitor having integrated noninvasive, invasive measurement & features suitable for neonate, pediatrics & adult patients.	Advanced high end modular patient monitor having integrated noninvasive, invasive measurement & features suitable for neonate, pediatrics & adult patients.
	System must have minimum 24 hours review data including graphical and tabular trends,	System must have minimum 24 hours review data including graphical and tabular trends, arrhythmia

	arrhythmia event recalls, alarms. Full disclosure for user selectable waveform, hemo and lung trends.	event recalls, alarms. Full disclosure for user selectable waveform, hemo and lung trends (Either on patient monitor or on CNS)
16.b	Each monitor to be supplied with following: Adult, Pediatric and neonate reusable SpO2 probe – 2 No. each(Ear lobe probes for neonates)	Adult, Pediatric and neonate reusable SpO2 probe – 2 No. each(Ear lobe probes/wrap around probes for neonates)
20	It should be possible to see data of other patient on the monitor in the same ICU and patients of other ICU's or the monitor by LAN cabling. The cabling should be done by the bidder.	Deleted
	BOQ	BOQ
4	Module for Two IBP 1 No	Module for Two IBP 1 No (if separate)
7	CNS of 19" LED and one 21" slave monitor.with cabling in the ICU. One CNS with 8 monitors (optional) 1 No	Deleted
8	laser printer 5 No	laser printer 1 No with each CNS
		Added para:
		6/10 lead ECG cable - 1 no
		Note: Monitor Qty - 1054 CNS - 95 nos Laser Printer - 95 nos

SCH 05. Recovery ward modular Monitors		
Para	EXISTING SPECIFICATION	READ AS
3	Portable with weight less than 8 kgs including battery.	Weight less than 9 kgs including battery.
15	CNS of 19" LED to be provided with one laser printer. The cabling has to be done by bidder in the HDU One CNS with 10 monitors (Optional)	CNS of 19" LED to be provided with one laser printer. The cabling has to be done by bidder in the HDU One CNS with 16 monitors (Price to be quoted separately)
	BOQ	BOQ
4	Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate) 1 No	Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated) 1 No
5	Module for 2IBP 1 No	Module for 2IBP 1 No if separate
13	CNS of 19" LED to be provided with one laser printer .The cabling has to be done by bidder in the ICU One CNS with 10 monitors (Optional) 1 no	CNS of 19" LED to be provided with one laser printer. The cabling has to be done by bidder in the HDU One CNS with 16 monitors (Price to be quoted separately)
		Added para in BOQ
		IBP cable 2 nos
		IBP transducers 10 nos
		ETCO2 sample line 10 nos

SCH 06. Transport Monitor		
Para	EXISTING SPECIFICATION	READ AS
16	Product should have Airworthiness RTCA DO-160 D, section 7,8,21 and Vibration standard MIL STD 810F, method 514.5 certifications. (Preferable)	Product should have Airworthiness RTCA DO-160 D, section 7,8,21 and Vibration standard MIL STD 810F, method 514.5 certifications.

SCH 07. Ventilator-Portable		
Para	EXISTING SPECIFICATION	READ AS
2.1	The portable ventilator should be light weight (< 13 kg)	The portable ventilator should be light weight (< 10 kg)
2.2	Should be microprocessor controlled, portable, light weight. Should operate with main electric supply as well as with battery. Should be able to work both with high pressure O2 (pipeline) and Inbuilt low pressure O2 source, connectors and high-pressure tubing of appropriate length to be supplied	Should be microprocessor controlled, portable, light weight. Should operate with main electric supply as well as with battery. Should be able to work both with high pressure O2 (pipeline) and Inbuilt low pressure O2 source, connectors (both sides) and high-pressure tubing of appropriate length to be supplied
3.2	Should have following modes of ventilation: CMV, Assist-contol, SIMV, PSPEEP, NIV	Should have following modes of ventilation: CMV, Assist-contol, SIMV, PS, PEEP, NIV
4.5	Air Hose-01	Deleted
4.7	NIV mask - 01	NIV mask-03 sizes, one piece each
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%	The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%
	BOQ	BOQ
6	Air Hose - 1 no	Deleted
8	NIV mask 1 no	NIV mask-03 sizes, one piece each

SCH 08. Anaesthesia Machine with Integrated Monitor & Ventilator		
Para	EXISTING SPECIFICATION	READ AS
8	Should be able to hold two seletatec vaporizers (Isoflurane, Sevoflurane & Desflurane) simultaneously. Vapourizers should be maintenance free. Cost of all vaporizers to be quoted separately. Any two vaporizers will be supplied as standard. The anesthesia machine should provide desflurane compensation.	Should be able to hold two seletatec vaporizers (Isoflurane, Sevoflurane & Desflurane) simultaneously. Vapourizers should be maintenance free. Cost of all vaporizers to be quoted separately. Isoflurane & Sevoflurane vaporizers will be supplied as standard.
II.4c	NIBP, 2 IBP , ETCO2	NIBP, 2 IBP
II.4d	Multi –Gas analysis with auto detection of all anesthetic agents	Multi –Gas analysis with auto detection of all anesthetic agents (Either on the machine or on the monitor)
II.4.e	Integrated BIS/entropy Monitoring.	Integrated BIS/entropy/anaesthesia depth Monitoring

13	Display of Anaesthesia ventilator data like wave forms for flow, pressure, agent and loops, and trends on patient monitors.	Display of Anaesthesia ventilator data like wave forms for flow, pressure, agent and loops, and trends on patient monitors (Display either on the monitor or on the machine)
	BOQ	BOQ
8	Module for ETCO2 - 1 No	Deleted

SCH 09. Anesthesia Workstation with monitor (Mid End)		
Para	EXISTING SPECIFICATION	READ AS
5.g	Gas Delivery System Should have O2 monitoring with paramagnetic/Galvanic fuel cell technology and should be covered under warranty for 5years and thereafter under CMC. Anaesthesia gas monitoring (N2O, CO2, MAC) with Anesthesia Agent	Gas Delivery System Should have O2 monitoring with paramagnetic/Galvanic fuel cell technology and should be covered under warranty for 5years and thereafter under CMC. Anaesthesia gas monitoring (Either on the machine or on the monitor)
6.a	Dual cascade type flow meter tubes for oxygen and N2O. Range 100ml /min to 10lit/min.	Dual cascade type flow meter tubes for oxygen and N2O (Or electronic gas mixing). Range 100ml /min to 10lit/min.
6.b	Calibrated in multiple scales. Single tube for air 100 ml to 14L/min	Calibrated in multiple scales. Single tube for air 100 ml to 10L/min
9.e	PEEP : 3 ~ 20m bar	PEEP : 4~ 20m bar
10.a	Airway Monitoring Integrated monitor (color display/EL) for electronic monitoring and display of following set and measured values	Airway Monitoring Integrated monitor (7" or more color display/EL) for electronic monitoring and display of following set and measured values
10.c	airway pressure, Frequency, Waveform and loop display for Airway pressure, flow and volume.	airway pressure, Frequency, Waveform and loop display for Airway pressure, flow and volume. (Either on monitor or on the machine)
11.b	Minute volume, airway pressure (incl stenosis and disconnect), Insp oxygen concentration, audio power supply fail alarm, Fail to cycle warning , low driving gas pressure, low battery Apnoea alarm	Minute volume, airway pressure (incl stenosis and disconnect), Insp oxygen concentration, audio power supply fail alarm, , low driving gas pressure, low battery Apnoea alarm
13	Monitor	Modular Monitor
13.e	Should have minimum ECG, NIBP, SpO2 (masimo/Nellcor technology), 2 IBPs, 2 Temp., EtCO2 monitoring side stream/Microstream based.(Price to be quoted separately for ETCO2)	Should have minimum ECG, NIBP, SpO2 (masimo/Nellcor technology), 2 IBPs, 2 Temp.
13.i	Anaesthesia depth monitoring by BIS (Price to be quoted separately)	Anaesthesia depth monitoring by BIS/entropy/equivalent (Price to be quoted separately)
	BOQ	BOQ
6	Module for 2IBP 1 No	Module for 2IBP 1 No if separate
7	Module for ETCO2 1 No	Deleted
8	Module for BIS 1 No	Module for BIS/Entropy/Anaesthesia depth monitoring 1 No

24	BIS Sensor 10	BIS/Entropy/Anaesthesia depth monitoring sensor 10 Nos
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SCH 10. Ventilator-High End (I.C.U)		
Para	EXISTING SPECIFICATION	READ AS
3	Compressed air / oxygen driven.	Compressed air / oxygen driven/ integrated non removable turbine based
4.e	Advanced/Intelligent mode like Pressure Regulated volume control, Closed loop Adaptive ventilation mode.	Advanced/Intelligent mode like Pressure Regulated volume control, Closed loop (Adaptive ventilation mode or equivalent mode)
4.g	Non-invasive ventilation	Non-invasive ventilation with leak compensation
	BOQ	BOQ
3	Imported Humidifier 1 No	Servo controlled Imported Humidifier 1 No
		Added Para
		Proximal flow sensor 1 no

SCH 11. Blood Gas Analyser		
Para	EXISTING SPECIFICATION	READ AS
2	Essential Measured parameters; pH, pCO ₂ , pO ₂ , SaO ₂ with co-oximetry, tHb, Lactates / Glucose, Na ⁺ , K ⁺ , Ca ⁺⁺ , Cl ⁻ . All these parameters should be measured simultaneously.	Essential Measured parameters; pH, pCO ₂ , pO ₂ , SaO ₂ with co-oximetry, tHb, Lactates, Glucose, Na ⁺ , K ⁺ , Ca ⁺⁺ , Cl ⁻ . All these parameters should be measured simultaneously.
5	Fast analysis time – less than 60 sec.	Fast analysis time – less than 120 sec.
8	Continuous reagent level monitoring with graphic display.	Continuous reagent level monitoring with graphic display/alarm .
13	Cost of reagents/Cartridge(including electrode if applicable) to be quoted for comparative evaluation.Reagents for two year and extendables for another three years @ at least 20 samples/day for all tests should be quoted and it will be taken for price comparison.	Cost of all consumables including reagents/Cartridge/paper/ electrode if applicable to be quoted for comparative evaluation.Consumables for two year and extendables for another three years @ at least 20 samples/day for all tests should be quoted and it will be taken for price comparison.
	BOQ	BOQ
2	Reagents/Cartridges per samples for all tests for first two years (365X20X2) - 14600 samples	All consumables including reagents/Cartridge/paper/ electrode per samples for all tests for first two years (365X20X2) - 14600 samples
3	Reagents/Cartridges per samples for all tests for next three years (365X20X3) - 21900 samples	All consumables including reagents/Cartridge/paper/ electrode per samples for all tests for next three years (365X20X3) - 21900 samples

SCH 12. Boyls Anaesthesia Machine		
Para	EXISTING SPECIFICATION	READ AS
8	The unit should have an independent measurement and display of fresh gas flow offering safety for low and minimal flow anaesthesia.	The unit should have an independent measurement and offering safety for low flow anaesthesia.
15	Should have ventilation mode of CMV & CPAP	Should have ventilation mode of CMV & PCV
		Added para in BOQ
		O2 sensor 1 no

SCH 13. Deep Vien Thrombosis (DVT Pump)		
Para	EXISTING SPECIFICATION	READ AS
5	Should deliver constant pre-set pressure ranges – Distal 52 pulse mince 10 % mmHg	Should deliver constant pre-set pressure ranges – Distal 40 - 160 mm Hg
6	Pro 45 pulse mince 10 % mmHg	Proximal 30-45 mmHg
8	Visual indicators for pressures and time present	Visual display screen for pressures and time present

SCH 14. Video Lyrangoscope		
Para	EXISTING SPECIFICATION	READ AS
4	Blade size: 2, 3, 4 and D blade – 1 no. each size should be quoted.	Blade size: 2, 3, 4 and Difficult airway blade – 1 no. each size reusable should be quoted .

SCH 15. PCA Pump		
Para	EXISTING SPECIFICATION	READ AS
1	Must provide various modes like Bolus, Bolus + set rate; Bolus + Time limited rate ; Bolus + Triggered rate , Bolus + decreasing rate	Must provide various modes like Bolus, Bolus + set rate; Bolus + Time limited rate ; Bolus + Triggered rate
2	Protected & differentiated access through electronic key .Mechanical key lock for safety against misuse	Deleted

SCH 16. Patient Warming system		
Para	EXISTING SPECIFICATION	READ AS
2	Should have Two Air flow setting for the air flow 48cfm / 49.9cfm/32cfm for adult and infant patient in same machine.	Should have Two Air flow setting for the air flow 30-50cfm for adult and infant patient in same machine.
4	Should have at-least 3 temperature control sensor	Should have at-least 3 temperature control setting
6	Should have Digital Hour Meter	Deleted
8	Three heater elements to eliminate flicker of OR lighting.	Three heater elements
9	Should have Temp. Range – Ambient to 43°C ± 1.5°C Max.	Should have Temp. Range – Ambient to 43°C or better

12	Should distribute even temperature across the blankets and patient.	Should distribute even temperature across the blankets
15	Should ensure even temperature from head to toe.	Should ensure even temperature at all point of blanket
3	II Accessories Adult Under-Body Blanket 10	Adult upper & lower body blanket - 10 nos each
4	II Accessories Paediatric Under-Body Blankets 5	Deleted
5	II Accessories Large Paediatric Under-Body Blankets 5	Deleted
	BOQ	BOQ
4	Adult Under-Body Blanket 10 No	Adult upper & lower body blanket - 10 nos each
5	Paediatric Under-Body Blankets 5 No	Deleted
6	Large Paediatric Under-Body Blankets 5 No	Deleted

SCH 17. Peripheral Nerve Stimulator		
Para	EXISTING SPECIFICATION	READ AS
2	Should have a percutaneous monopolar/ bipolar stimulating handle for localization of nerves without puncturing the nerve which should be autoclavable.	Should have a percutaneous monopolar/ bipolar stimulating handle for localization of nerves without puncturing the nerve which should be autoclavable/ETO sterilizable
10	Should have pause function to interrupt stimulation without delivering impulses test function	Deleted

SCH 18. Suction Machine		
Para	EXISTING SPECIFICATION	READ AS
1	High vacuum suction unit, run on electricity with two section jars of 4-5 liters capacity each. If one jar filled, it should be automatically connect to other jar.	High vacuum suction unit, run on electricity with two section jars of 4-5 liters capacity each. If one jar filled, it should be automatically/manually connect to other jar.
10	Manufacturer should have ISO 13485 certification.	Should be CE or USFDA for quality and safety purpose.

SCH 19. Oxygen Concentrator		
Para	EXISTING SPECIFICATION	READ AS
6	Unit capable for supplying oxygen to two outlets simultaneously using two independent flow meters.	Deleted
8	Dimensions (metric) should be less than Max spec limit: 640 mm (H) x 410 mm (W) x 410 mm (D).	Deleted

SCH 20. Fibre optic Bronchoscope		
Para	EXISTING SPECIFICATION	READ AS
3	Adult Scope: Distal end diameter should be 5 mm or less	Distal end diameter should be 5.2 mm or less

4	Adult Scope: Insertion tube diameter should be 5 mm or less	Insertion tube diameter should be 5.2 mm or less
8	Adult Scope: UP and DOWN Angulations should be 180 degree and 130 degree or better	UP and DOWN Angulations should be 140 degree and 130 degree or more.
1	Paediatric Scope: Field of View should be 120 degree or more	Should be 90 degree or more
3	Paediatric Scope: Distal end diameter should be 2.4 mm or less for adult	Distal end diameter should be 2.8 mm or less
4	Paediatric Scope: Insertion tube diameter should be 2.4 mm or less	Insertion tube diameter should be 2.8 mm or less
9	Paediatric Scope: UP and DOWN Angulations should be 180 degree and 120 degree or better	Deleted
	Neonate Scope: (Optional)	Deleted
1	Video Processor & Light source: Outputs - RGB, Y/C, VBS Composite, XGA & DV simultaneous	Outputs - RGB, Y/C, VBS Composite, XGA & DV simultaneous or DVI
2	Video Processor & Light source: It should have structure and edge enhancement option for better image quality	Deleted
3	Video Processor & Light source: It should have various iris control option for better light distribution	Deleted
5	Video Processor & Light source: Light source - Combined or separate LED with emergency backup facility.	Light source - Combined or separate LED/150W Xenon (covered under warranty)
6	Air pump - Inbuilt air pump with minimum two variable air flow control.	Deleted
9	Video Processor & Light source: One spare LED Lamp should be supplied.	Deleted
3	BOQ Flexible Fiberoptic Bronchoscope Neonatal (Optional) 1 No	Deleted

SCH 21. Defibrillator with CPR monitoring and TC pacing		
Para	EXISTING SPECIFICATION	READ AS
6	In manual mode the unit should provide energy selection at (1-10, 15, 20, 30, 50,70,85,100,150,200) joules and AED mode of upto 150 Joules.	In manual mode the unit should provide energy selection at (1-200 J in variable step) and AED mode of upto minimum 150 Joules.
7	It should have ability to measure chest compression rate and depth in real time with both visual & audible feedback and optional CPR index	It should have ability to measure chest compression rate and depth in real time with both visual & audible feedback

	on screen.	
11.c	The defibrillator should have facility to monitor following parameters SpO2 (Optional)	SpO2 Module integrated facility. (Optional)
11.d	The defibrillator should have facility to monitor following parameters NIBP (Optional)	NIBP Module integrated facility. (Optional)
14	In addition to standard accessories following items have to be supplied with unit Li-Ion smart battery – 1 No	Li-Ion smart battery – 1 No (100 shocks at full charge)

SCH 22. Defibrillator with ECG Monitor		
Para	EXISTING SPECIFICATION	READ AS
2.2	Should monitor vital parameters and display them	Should monitor 3 vital parameters and display them
	Should have a built in 50mm strip printer/ thermal recorder	Should have a built in min 48mm strip printer/ thermal recorder
3.6	Should have bright LCD / TFT display for viewing messages and ECG waveform of 4 seconds	Should have bright 5.5" or more LCD / TFT display for viewing messages and ECG waveform of 3 seconds
3.7	Single Adult and pediatric paddles should be available. Internal paddles should also be available (price to be quoted separately)	Single Adult and pediatric paddles should be available. Internal paddles (adult & pediatric) should also be available (price to be quoted separately)
3.13	Should be capable of delivering energy in increments of 1-2 joules up to 30J and increments of maximum 50J thereafter.	In manual mode the unit should provide energy selection at (1-200 J in variable step) joules and AED mode of upto minimum 150 Joules.
		Added para in BOQ
		Internal paddles (adult & pediatric) - 1 set each (price to be quoted separately)

SCH 23. Infusion Pump (Volumetric)		
Para	EXISTING SPECIFICATION	READ AS
3.1	Battery back-up operating time 5 hours.	Battery back-up operating time 4 hours.
3.3	Alpha numeric programming keyboard	Deleted
3.7	Flow rate range (primary) 0.1 to 99.9 ml/hr. (0.1 ml increments) and 1 to 1200 ml/hr. (1ml increments.)	Flow rate range (primary) 0.1 to 99.9 ml/hr. (0.1 ml increments) and 1 to 800 ml/hr. (1ml increments.)

SCH 24. Multiparameter Monitor- 5 Para		
Para	EXISTING SPECIFICATION	READ AS
2.3	Demonstration of the equipment is a must.	Demonstration of the equipment to be given if required.
3.4	Multichannel (up to 12 leads) ST segment analysis.	Multichannel ST segment analysis.

3.5	Automatic arrhythmia detection & alarm for standard and lethal arrhythmia	Automatic arrhythmia detection & alarm for standard arrhythmia
5.3	The supplier shall provide environment friendly furniture and wall fittings for the entire system. Cabling has to be provided by the supplier	Deleted

SCH 25. Pulse Oximeter

Para	EXISTING SPECIFICATION	READ AS
4	Accuracy SpO2 : 50 to 69% ($\pm 3\%$), 70 to 100 % ($\pm 2\%$)	Accuracy SpO2 : 50 to 69% ($\pm 3\%$), 70 to 100 % ($\pm 3\%$)
5	Display shows: SpO2(%), PR, Plethymograph & perfusion bar	Display shows: SpO2(%), PR, Plethymograph & perfusion bar/blip bar
7	Large bright display (More than 5 inch) readable from more than 6 feet distance	Large bright display (4 inch or more) readable from more than 6 feet distance
14	Device is produced by ISO 9001 certified manufacturer (Certificate to be submitted,	Device is produced by ISO 9001/ISO 13485 certified manufacturer (Certificate to be submitted
17	Should have RS 232C port for data transmission.	Should have RS 232C port or equivalent port for data transmission.
18	Signal averaging time 4 to 12 sec	Automatic Signal averaging time 4 to 12 sec

SCH 26. Syringe Infusion Pump

Para	EXISTING SPECIFICATION	READ AS
5	Bolus rate should be programmable to 40 to 1000 ml/hr or more with infused volume display and one key press bolus. Reminder audio after every 1 ml delivered.	Bolus rate should be programmable to 40 to 1000 ml/hr or more with infused volume display and one key press bolus. Reminder audio after every 1 ml delivered/programmable bolus should be available
10	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.	Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as disengaged plunger, unsecured barrel etc.
11	Manual pusher with plunger protection guard.	Manual / automatic pusher
14	Rechargeable Battery having at least 1 hours backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.	Rechargeable Battery having at least 4hours backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.
		Para to be added
		Clamp to be supplied with each machine
	BOQ	BOQ
2	Mounting device/ Docking Station for at least four pumps as per requirement so as to enable to power up to 4 pumps with one power cord when mounted on IV pole 1 no	Docking station 120 nos

SCH 27.Pediatric Fiber Optic Broncoscope		
Para	EXISTING SPECIFICATION	READ AS
4	Field of view should be more than 100 degrees	Field of view should be more than 90 degrees or more
5	Depth of focus should be 1-50 mm	Depth of focus should be 3-50 mm
6	Working channel diameter should be 1-1.2mm	Working channel diameter should be 1-1.25mm
7	Upward bending capability of the tip should be 180 degrees	Upward bending capability of the tip should be 140 degrees or more
		Added Para
		Light source 150 W Xenon or LED
		Video Processor, Light source & Monitor - Monitor 15 inches or more, HD Monitor of Medical Grade. It should be mountable on trolley. Xenon/LED Light Source and video processor with suitable trolley. Should be European CE with 4 digit notified body number/US FDA approved.

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

Note:

- i. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids**