

28-03-2019

**Amendment No. 3****Sub: Amendment to the referred tender enquiry****Ref.: Tender Enquiry HITES/PCD/PMSSY-III/38/Mix/18-19 dated 01/03/2019  
Amendment No. 01 dated 06-03-2019  
Amendment No. 02 dated 07-03-2019**

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

**Section I  
Notice Inviting Tender****Existing:**

Sch. No.	Event Number	Name of the item	Tendered Department	Qty.	Tender Fee in Rs.	EMD in Rs.
34	3000003906	800mA Digital X-Ray unit with Single Detector (Floor Mounted)	Radiology	10	5,000.00	24,00,000.00
36	3000003908	Colour Doppler 4D		14	3,000.00	6,44,000.00

**Read as:**

Sch. No.	Event Number	Name of the item	Tendered Department	Qty.	Tender Fee in Rs.	EMD in Rs.
34	3000003906	800mA Digital X-Ray unit with Single Detector (Floor Mounted)	Radiology	<i>Deleted</i>		
36	3000003908	Colour Doppler 4D		14	3,000.00	11,20,000.00

**Section VI  
List of Requirement****Existing:**

Sch. No.	Event Number	Name of the item	Qty.	Warranty in Years	CMC in Years
34	3000003906	800mA Digital X-Ray unit with Single Detector (Floor Mounted)	10	5	5

Read as:

Sch. No.	Event Number	Name of the item	Qty.	Warranty in Years	CMC in Years
34	3000003906	800mA Digital X-Ray unit with Single Detector (Floor Mounted)		<b>Deleted</b>	

**Section VII  
Technical Specification**

**Item No. 1  
Blood & Fluid Warmer**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 48 Para 1	Should be able to warm fluid /blood at a temperature range of 37-41 deg C.	Should be able to warm fluid /blood at a <b>set temperature range of 37-39 deg C.</b>
Page 48 Para 4	Disposable tubing set for Fluid/Blood-500 Nos for fluid amd 100 nos for blood.(price to be quoted separately)	The warmer should be compatible with any commercially available IV or BT set

**Item No. 2  
Peripheral Nerve Stimulator**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 48 Para 6	Impedance measuring range: <b>1 k<math>\Omega</math> – 90 k<math>\Omega</math></b> for target stimulation current > 0.5 mA	Impedance measuring range: <b>1 k<math>\Omega</math> – 60 k<math>\Omega</math></b> for target stimulation current > 0.5 mA
Page 48 Para 11	Should automatically switch off with a acoustic warning if not operated more than 10 minutes .	Should automatically switch off with a acoustic warning if not operated more than <b>10-20</b> minutes .

**Item No. 4  
General plastic surgical instruments (Burns & Plastic)**

Tender Page & Para	TENDER SPECIFICATION	Added Para
		Minimum 90% instrument should be from 1 manufacture and 10% can be from any reputed make of same quality standards as asked in technical specifications. If any vendor not quoting some of the instruments (max.10%) from same manufacture (manuf. Of minimum 90% instruments), then a Declaration from manufacture of majority of instruments should be submitted stating that they are not manufacturing rest of the instruments

**Item No. 5**  
**LED Head Light**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 59 Para 13	Extension cable for attaching the rechargeable battery and battery box to the clothing	<b>Extension cable/connection cable</b> for attaching the rechargeable battery and battery box to the clothing, if required

**Item No. 8**  
**High End Echocardiography system (4 D ECHO)**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 62 Para 4	System must be offered with a minimum 21 inch high resolution flat panel medical grade display monitor with infinite position adjustments. Company should provide wider monitor if available	System must be offered with a minimum 21 inch high resolution <b>OLED</b> flat panel medical grade display monitor with infinite position adjustments. Company should provide wider monitor if available
Page 63 Para 1	<b>Following Transducers ( Frequency tolerance +/-2MHz) should be supplied with the system</b> 4D (Live 3D) Echo matrix transducer for adult 4D (Live 3D) with frequency ranging from 1-5±1 MHz. This probe must support <b>a minimum of 2000 elements</b> for exceptional 4D (Live 3D) image quality on the matrix array transducer to simultaneous display of two real-time live high-quality image planes. This transducer should have either single crystal technology or pure wave technology for excellent Image quality on difficult to image patient. Please mention the crystal technology used in the transducer. Systems offered with normal transducers for adult echo are liable for rejection.	Following Transducers ( Frequency tolerance +/-2MHz) should be supplied with the system 4D (Live 3D) Echo matrix transducer for adult 4D (Live 3D) with frequency ranging from 1-5±1 MHz. This probe must support for exceptional 4D (Live 3D) image quality on the matrix array transducer to simultaneous display of two real-time live high-quality image planes. This transducer should have either single crystal technology or pure wave technology for excellent Image quality on difficult to image patient. Please mention the crystal technology used in the transducer. Systems offered with normal transducers for adult echo are liable for rejection.
Page 62 Para 6	System should be capable of supporting second generation 4D(Live 3D) matrix transthoracic transducer <b>capable of supporting a minimum of 2000 elements</b> for exceptional 4D (live 3D) Echo,4D(Live 3D) zoom, triggered full volume and triggered 3D colour volume with electro cautery suppression	System should be capable of supporting second generation 4D(Live 3D) matrix transthoracic transducer for exceptional 4D (live 3D) Echo,4D(Live 3D) zoom, triggered full volume and triggered 3D colour volume with electro cautery suppression
Page 63 Para 20	Latest PC (off-cart workstation) with permanent licence software for analysing and quantification of 2D and 3D data sets like Strain and Strain rate imaging, Tissue Motion Annular Displacement, Mitral valve 3D data sets, 2D Speckel tracking. CD/DVD writer with Image management software and colour laser Printer. PC should be offered with a flat panel 17" display monitor. (hardware essential for OFF cart quantification)	Latest PC (off-cart workstation) with permanent licence software for analysing and quantification of 2D and 3D data sets like Strain and Strain rate imaging, Tissue Motion Annular Displacement, Mitral valve 3D data sets, 2D Speckel tracking. CD/DVD writer with Image management software and colour laser Printer. PC should be offered with a flat panel 17" display monitor, <b>1 TB HDD, i7 processor, 8 GB RAM.</b> (hardware essential for OFF cart quantification)

**Item No. 9**  
**Portable Echocardiography System**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>Added Para</b>
		4D TEE adult probe with appropriate 4D software <b>(Optional)</b>
		<b>BOQ Sl.no.7:</b> 4D TEE adult probe with appropriate 4D software <b>(Optional)</b>

**Item No. 10**  
**Surgical Loupes**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page 65 Para 3	Magnification of 3.5-4.5X with field of view and depth should be around 100mm <b>calibrated at individual working distance of surgeon</b>	Magnification of 3.5-4.5X with field of view and depth should be around 100mm
Page 65 Para 7	The telescope manufacturer to have the facility to modify operating parameters as and when required by the surgeons	Para Deleted

**Item No. 11**  
**Cell Saver**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page 65 Para 2	System should work on centrifuge principle and should operate on 0- 6000 rpm with variable speed wash.	System should work on centrifuge principle and should operate on <b>0- 5600rpm</b> with variable speed wash.
Page 66 Point 10	Should be able to continue the procedure and maintain data even in case of power failure	Should be able to continue the procedure and maintain data even in case of power failure <b>for at least 30minutes with either inbuilt battery backup or with external UPS</b>
Page 66 Point 21(a)	Centrifuge- 0-10,000 rpm.	Centrifuge- 0-5600 rpm.
Page 66 Point 21(f)	Fuses- 4AT/240V	Para Deleted

**Item No. 12**  
**Electric operated sternum system**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Para 66 Para 1	Completely enclosed Motor 220V / 5 amp AC/DC with MCB Supported on a Mobile Folding Stand (Stainless Steel tubes & M.S. square bars, with castors). Should include a <b>Foot Control</b> , (Stainless Steel Body) with step-less speed	To be Amended as: Completely enclosed Motor 220V / 5 amp AC/DC with MCB Supported on a Mobile Folding Stand (Stainless Steel tubes & M.S. square bars, with castors). Should include a <b>Hand/foot Control</b> ,

Tender Page & Para	TENDER SPECIFICATION	READ AS
	control & ON / OFF switch with fuse.	(Stainless Steel Body) with step-less speed control & ON / OFF switch with fuse.

**Item No. 13**  
**Argon Plasma Coagulation System**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Pg 67 of tender document( 1.10)	Bipolar coagulation probe – , 01 in number	Bipolar coagulation probe – , 01 in number, <b>any reputed make</b>
		<b>Added Para:</b> All accessories except cylinders should be supplied from same principal company

**Item No. 14**  
**Ultrasonic Surgical aspirator**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Pg 68 of tender document(1.1)	Ultrasonic aspirators use mechanical ultrasonic vibration and an irrigation/suction system to fragment and remove soft tissue and high-water-content growths from various parts of the body <b>with integrated electro cautery</b>	Ultrasonic aspirators use mechanical ultrasonic vibration and an irrigation/suction system to fragment and remove soft tissue and high-water-content growths from various parts of the body . Should be supplied <b>with compatible electro cautery system</b>
Pg 69 of tender document(3.10)	Standard (straight & angled), Micro (straight & angled) and Laproscopic (Straight) handpieces - 1 each or Two Universal handpiece with all mentioned tips as standard and must be supplied with ESU compatibility attachments as standard.	Standard (straight & angled), Micro (straight & angled) and Laproscopic (Straight) handpieces - 1 each or Two Universal handpiece with all mentioned tips as standard and must be supplied with ESU compatibility attachments as standard. <b>Note: For reusable tips (made of titanium) undertaking from Manufacturer should be submitted stating that the tips are autoclavable and reusable.</b> <b>Also all the quoting firms should confirm in writing in their offer that they guarantee free of cost supply of Handpiece tips (reusable) during guarantee/warranty period of five years.</b> <b>If Disposable tips are being offered then Two universal handpieces with 30 tips each (ie. total 150 tips in total).</b>
Pg 69 of tender document(3.11)	Assorted tips for bone sculpting 01 nos. should be supplied	Para Deleted
Pg 69 of tender document(3.14)	Added Para: Compatible ESU should be offered and the ESU energy must be delivered at tip of the <b>all hanpieces</b> offered with Ultrasonic Surgical Aspirator. The ESU Should be	Compatible ESU should be offered and the ESU energy must be delivered at tip of the <b>2 or more</b> handpieces offered with Ultrasonic Surgical Aspirator. The ESU Should be FDA/European

Tender Page & Para	TENDER SPECIFICATION	READ AS
	FDA/European CE/ BIS approved and warranty responsibility of quoted ESU will be of bidder.	CE/ BIS approved and warranty responsibility of quoted ESU will be of bidder.
Pg 69 of tender document(4.1(6))	Instrument connection cables - 2 nos (Should be covered under warranty & CMC)	Instrument connection cables - 2 nos, <b>if required</b> (Should be covered under warranty & CMC)
Pg 70 of tender doc BOQ (9)	Assorted tips for bone sculpting	<b>Para Deleted</b>

**Item No. 15**  
**High Resolution Manometer System**

Tender Page & Para	TENDER SPECIFICATION	Added Para
		Catheter of manometry should be certified as per rules & regulations of CDSCO

**Item No. 16**  
**Balloon Enteroscopy System**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 71 Para 3.1.f	Flexible Portion Diameter app: 9.2 mm	Flexible Portion Diameter app: 9.3 mm or less
Page 71 Para 3.3	CCD Camera	CCD Camera ( <b>Chip on tip type</b> )
Page 71 Para 3.3.3	Should have Small and ergonomic camera head for superior control	Para Deleted
Page 71 Para 3.3.r	Should have Four button camera head design – control of six functions from the camera head	Para Deleted
Page 71 Para 3.4.e	Working Length app:1320mm-1350mm	Working Length app: <b>1320mm or more</b>

**Item No. 17**  
**Video Endoscopy System**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 72 Para 1.1	Build in HDTV compatible CCD	Build in HDTV compatible <b>CCD/CMOS</b>
Page 72	Accessories: (Price to be quoted separately and it should be valid for warranty period)	Accessories: (Price to be quoted separately and it should be valid for at least 2 years)
Page 72 1.5. Accessoris a	Hot Biopsy forceps with alligator cups with and without needle- 3each	Hot Biopsy forceps with alligator cups <b>with / without</b> needle- 3each
Page 73 of tender doc( 1.5. Accessoris n	Extra Xenon Bulbs- 2	Deleted
Page 73 of tender doc(1.5 p)	Grasping Forceps Rat Tooth, <b>Rubber Tip -5 Each</b>	Grasping Forceps Rat Tooth -5 nos

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 73 of tender doc 2.e	Depth of Field- 4-100mm	Depth of Field- 4-100mm <b>or better</b>
Page 73 of tender doc 2.g	Instrument Channel 2.0-2.2mm	Instrument Channel <b>2.0mm or more</b>
Page 73 of tender doc 2.j	Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted separately and it should be valid for warranty period)	Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted separately and it should be valid for <b>at least 2 years</b> )
Page 73 of tender doc 3.1	Build in HDTV compatible CCD	Build in HDTV compatible <b>CCD/CMOS</b>
Page 74 of tender doc 3.7.i	Accessories: (Price to be quoted separately and it should be valid for warranty period)	Accessories: (Price to be quoted separately and it should be <b>valid for at least 2 years</b> )
Page 74 of tender doc 4.4b	Direction of View: 5 Deg/10 Deg, backward oblique viewing	Direction of View: <b>5 -10 Deg</b> , backward oblique viewing
Page 74 of tender doc (4.4 (k))	Accessories: (Price to be quoted separately and it should be valid for warranty period)	Accessories: (Price to be quoted separately and it should be valid for <b>at least 2 years</b> )
Page 75 of tender doc (5.1)	Should be compatible with <b>Anlog</b> , HD-SDI AND DVI Output for HDTV monitor should be available	Should be compatible with HD-SDI AND DVI Output for HDTV monitor should be available
		<b>Added para in BOQ</b>
		2.p Grasping Forceps Rat Tooth -5 nos

**Item No. 18**  
**Endoscopic washer and disinfecter system**

Tender Page & Para	TENDER SPECIFICATION	READ AS
<b>Para A (Page 77) of tender doc</b>	<b>Automated Endoscope cleaning &amp; Disinfecter (RE-PROCESSOR).</b>	
Page 77 of tender doc (A 1)	Fully automatic microprocessor based endoscope re- processor. Should have facility of Re-processing of at least one endoscope per cycle.	Fully automatic microprocessor based endoscope re- processor. Should have facility of Re-processing of <b>at least 2 endoscope per cycle.</b>
Page 77 of tender doc (A 5)	Should have integrated sterile air filter (0.2µm) for channel purging and drying	Should have integrated sterile air filter <b>0.2µm/H14 HEPA</b> filter for channel purging and drying
<b>Para B (Page 78) of tender doc</b>	<b>Specification for Drying cabinet for Flexible endoscopes.</b>	
Page 78 of tender doc ( B 3)	The storage and drying cabinet should be supplied as standard version cassettes and endoscope fast connections	The storage and drying cabinet should be supplied as standard version <b>cassettes/adaptors/connectors</b> and endoscope fast connections
Page 78 of tender doc ( B 5)	Should have fully <b>expendable drawers &amp;</b> vertical storage position as well.	Should have vertical storage position
		<b>Added para:</b>

Tender Page & Para	TENDER SPECIFICATION	READ AS
		Should be supplied with suitable RO system of 50 LPH capacity & storage tank flat type 100 ltr. Capacity

**Item No. 19**  
**Transport Incubator with Ventilator**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Pag 78 Para 11	Portable SpO2 monitors with resusable neonatal probes (wrap type) - 10 nos should be quoted	Portable SpO2 monitor with <b>10 nos.</b> resusable neonatal probes (wrap type) should be quoted

**Item No. 20**  
**Endovision Camera System**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 79 Para D	Recording system with PC based station OR medical grade HD recorder capable of directly recording full HD quality photos(1920x1080p)and full HD quality videos(1920x1080p) with internal memory of 300GB or more / <b>external hard drive of 300 GB or more must be supplied.</b>	Recording system with PC based station OR medical grade HD recorder capable of directly recording full HD quality photos(1920x1080p)and full HD quality videos(1920x1080p) with internal memory of 300GB or more
<b>Page 79 Para A</b>	<b>Medical grade video camera</b>	
Page 79 Para A (1)	Digital Three Chip HIGH DEFINITION Endovision Camera: one (compatible with contemporary telescopes of Bronchoscope, Oesophagoscope, and Cystoscope)	Digital Three Chip HIGH DEFINITION Endovision Camera: one (compatible with contemporary telescopes of <b>rigid Bronchoscope</b> , Oesophagoscope, and Cystoscope)
Page 79 of tender doc (A 3)	Color system PAL/NTSC, power supply: 220-240 V, AC 50/60 Hz, automatic white balance with control	Color system PAL/NTSC, power supply: 220-240 V, AC 50/60 Hz, <b>white balance control</b>
Page 79 of tender doc (A 4)	The HD controller should have multiple standard video output of 1 x HD-DVI (1920x1080), one composite out for optimized display on LCD monitors.	The HD controller should have 2 or more HD video outputs
Page 79 of tender doc (A 5)	Integrated/optical zoom lens with manual and <b>automatic</b> control.	Integrated/optical zoom lens <b>with manual control.</b>
Page 79 of tender doc (A 8)	Peripherals should be consisting of: Mains cord, with zoom lens, camera control unit (CCU), <b>BNC connecting cable, length 180 cms</b> , 2 connecting cables for connecting video printer or recorders, DVI cable, length 300 cm, keyboard/Touch screen, US English character generator	Peripherals should be consisting of: Mains cord, with zoom lens, camera control unit (CCU), 2 connecting cables for connecting video printer or recorders, DVI cable, length 300 cm, keyboard/Touch screen, US English character generator
<b>Page 79 Para B</b>	<b>Light Source</b>	
Page 79 Para B (1)	Xenon light source 300 watts with adjustable light intensity from 0-100%.	Xenon light source 300 watts <b>or LED light source (equivalent to 300W Xenon)</b> with adjustable light intensity from 0-100%.

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 79 Para B (2)	It should have two spare Xenon Lamp supplied with the unit.	It should have two spare Xenon Lamp supplied with the unit <b>in case of xenon light source</b>
Page 79 Para C (1)	One 24-29 inches Medical grade LCD/LED, Resolution: full HD.	One 26" or more Medical grade LCD/LED, Resolution: full HD.
Page 79 Para C (2)	One 24-29 inches Medical grade LCD/LED, Resolution: full HD.	One 26" or more inches Medical grade LCD/LED, Resolution: full HD.
Page 80 of tender doc (D,E,G,H)	Recording System (Medical Image System),Viewing Software,Communication,Image Station	No change
Page 80 of tender doc (H)	Image station	Image station <b>(should be completely separate from recording system)</b>
Page 80 of tender doc (H). 3	TFT or LCD for the PC 19" size	TFT or LCD <b>or LED</b> for the PC 19" size
Page 80 of tender doc (H). 4	Laser black and white Printer with min memory 8mb + 12-18 pages per minute or higher : one	Should be supplied with color laser printer
Page 80 of tender doc (I)	Mobile Unit Trolley	Mobile Unit Trolley. <b>Should be from same OEM</b>
Page 80 of tender doc (J)	Compatible online UPS for supporting entire system.	Compatible online UPS <b>with 30 min battery backup</b> for supporting entire system.
		Camera and light source system should be USFDA or European CE with 4 digit notified body or BIS certified.

**Item No. 21**  
**Paediatric neuroendoscope**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 81, para 1	Straight-Forward-Tele- scope 6 °, enlarged view, auto- clavable, with angled eyepiece, with instrument channel diameter 3 mm, fiber optic light transmission incorporated, diameter 4 mm	Straight-Forward-Tele- scope 6 °, enlarged view, auto- clavable, with angled eyepiece, with instrument channel diameter <b>2.9 mm or more</b> , fiber optic light transmission incorporated, diameter <b>4 mm-6mm</b>
Page 81, para 2	Straight-Forward-Tele- scope 0 °, enlarged view, auto- clavable, with angled eyepiece, with instrument channel diameter 3 mm, fiber optic light transmission incorporated, diameter 4 mm	Straight-Forward-Tele- scope 0 °, enlarged view, auto- clavable, with angled eyepiece, with instrument channel diameter <b>2-3 mm</b> , fiber optic light transmission incorporated, diameter 4 mm
Page 81, para 5	Operating Sheath, O.D.: 6.5 mm, with graduated scale, with lateral stopcock and Inlet for catheter, with obturator for stereo-tactic positioning.	Operating Sheath, O.D.: <b>6.8 mm or less</b> , with graduated scale, with lateral stopcock and Inlet for catheter, with obturator for stereo-tactic positioning.
Page 81, para 11	Injection Needle, flexible, diameter 2.5 mm, working length 45 cm, disposable	Injection Needle, flexible, diameter 2.5 mm, working length <b>30 cm or more</b> , disposable
Page 81, para 13	Coagulating Electrode, bipolar, 5 Fr.	Coagulating Electrode, bipolar, 5 Fr. <b>With cable</b>
Page 81, para 14	Coagulating Electrode, unipolar, semi flexible, working length 28 cm, Diameter 5 Fr.	Coagulating Electrode, unipolar, semi flexible, working length 28 cm, Diameter <b>4 Fr. or more</b>
Page 81, para 16	Sheath insert for use of 30°, 70°, 120° diagnostic telescope through operating sheath	Sheath insert for use of 30°, 70°, 120° diagnostic telescope through operating sheath, <b>if</b>

Tender Page & Para	TENDER SPECIFICATION	READ AS
		<b>required</b>
Page 81, para 17	Sheath insert for use of 0° diagnostic telescope through operating sheath	Sheath insert for use of 0° diagnostic telescope through operating sheath, <b>if required</b>
Page 81, para	Price of all the above items should be freezed for 7 years.	Price of all the above items should be freezed <b>for 5 years.</b>
		<b>Added para:</b> Telescopes should be European CE with 4 digit notified body or USFDA or BIS certified

**Item No. 22**  
**Pediatric Open Surgical Instruments**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 82 Para g.iii	Small Curved ( <b>wishbone</b> ) frame arm – 2	Small Curved frame arm – 2
Page 82 Para g.xxi	Splanchnic Swivel Retractor (3.8x8.9cms) – 2	<b>Splanchnic or equivalent</b> Swivel Retractor (3.8x8.9cms) – 2
Page 84 Para 7.A	Instrument Sterlization Case/tray – 10	Instrument Sterlization <b>Case/tray/container</b> – 10
Page 85 Para B.1	Should be suitable for holding full sized Laparoscopy instruments	Should be suitable for holding full sized Laparoscopy instruments <b>45cm in length</b>
Page 85 Para c.2	Length – 15 inches, Width – 2.5 inches, Height – 1.5 inch	Para Deleted
Page 85 Para	Bidder should quoute all the instruments and 80% of Instruments should be from the same manufacturer. If any firm does not quote any instruments in particular set, that firm will be disqualified. This is for the sake of uniformity in price comparison.	Bidder should quoute all the instruments and 80% of Instruments should be from the same manufacturer. If any firm does not quote any instruments in particular set, that firm will be disqualified. This is for the sake of uniformity in price comparison. If the bidder is quoting instruments from other manufacturer, then a <b>Declaration should be submitted from primary manufacturer stating that those instruments (mentioning the list of instruments, max.20%) are not manufactured by them</b>
		Added Para: All instruments (100%) asked in the technical specifications should be European CE with 4 digit notified body or USFDA or BIS certified

**Item No. 25**  
**8 Channel EMG -NCS-EP system**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 88 Para 11	Low filter settings: 0.2 Hz to 3 KHz and high filter settings: 30 Hz to 10 KHz with AC interference notch filter 50 Hz	Low filter settings: <b>0.3 Hz to 3 KHz</b> and high filter settings: 30 Hz to 10 KHz with AC interference notch filter 50 Hz
Page 88 Para 19	Must have trigger EMG, Single Fiber EMG (jitter	Must have trigger EMG, Single Fiber EMG (jitter

Tender Page & Para	TENDER SPECIFICATION	READ AS
	analysis), Stimulated SFEMG, and QEMG with the system with their accessories (Including needle holders, reusable needles-1Nos/10 disposable, etc - 1set for each)	analysis), Stimulated SFEMG, and QEMG with the system with their accessories (Including needle holders, <b>single fiber EMG reusable needles-2Nos/20nos. disposable</b> , etc - 1set for each)
Page 88 Para 22	Should have EMG (Free run needle EMG, Real time MUAP analysis including recruitment, Interference pattern, Auto MUP detection <b>and classification</b> , and real time turn amplitude analysis) with continuous storage	Should have EMG (Free run needle EMG, Real time MUAP analysis including recruitment, Interference pattern, Auto MUP detection, and real time turn amplitude analysis) with continuous storage
Page 88 Para 23	EMG play back with waveform and sound for minimum 10 minutes should be possible in any PC.	EMG play back with waveform and sound for minimum <b>6 minutes</b> should be possible in any PC.
Page 88 Para 27	Should have Somatosensory Evoked potentials ( <b>SEP, SSEP and ESCP</b> ) <b>simultaneous SSEP</b> and SEP measurement with accessories	Should have Somatosensory Evoked potentials ( <b>SEP/SSEP/ESCP</b> ) with accessories
Page 88 Para 32	Should have autonomic Nervous System testing with SSR, RR interval & Microneurography	Should have autonomic Nervous System testing with SSR, RR interval
Page 89 Para 35 J	Single fibre EMG needle - 2 Nos. (Reusable)	Single fiber EMG reusable needles-2Nos/20 disposable, etc - 1 set
Page 89 Para BOQ 11	Single fibre EMG needle -(Reusable)- 2 nos.	Single fiber EMG reusable needles-2Nos/20 disposable, etc - 1 set

**Item No. 26**  
**EMG-NCV-EP MACHINE 4 channel**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 90 Para 9	Low filter settings: 0.05 Hz to 2 KHz and high filter settings: 10 Hz to 10 KHz with AC interference notch filter 50 Hz	Low filter settings: <b>0.3 Hz</b> to 2KHz and high filter settings: <b>30 Hz</b> to 10 KHz with AC interference notch filter 50 Hz
Page 90 Para 14	Should have EMG (Free run needle EMG, Real time MUAP analysis including recruitment, Interference pattern, Auto MUP detection <b>and classification</b> , and real time turn amplitude analysis) with continuous storage	Should have EMG (Free run needle EMG, Real time MUAP analysis including recruitment, Interference pattern, Auto MUP detection, and real time turn amplitude analysis) with continuous storage
Page 90 Para 15	EMG play back with waveform and sound for minimum 10 minutes should be possible in any PC.	EMG play back with waveform and sound for minimum <b>6 minutes</b> should be possible in any PC
Page 90 Para 18	Should have Somatosensory Evoked potentials( <b>SEP, SSEP and ESCP</b> ) <b>simultaneous SSEP and SEP</b> measurement with accessories	Should have Somatosensory Evoked potentials( <b>SEP/SSEP/ESCP</b> )measurement with accessories
Page 90 Para 21 J	Single fibre EMG needle - <b>2 Nos. (Reusable)</b>	Single fibre EMG needle - <b>2 Nos. reusable/20 nos. disposable - 1 set</b>
Page 90 BOQ 11	Single fibre EMG needle ( <b>Resusable</b> ) - <b>2nos.</b>	Single fibre EMG needle - <b>2 Nos. reusable/20 nos. disposable) - 1 set</b>

**Item No. 27**  
**Autonomic Function Testing Lab with Comprehensive Software**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page 91 Para 10	Should include required patient interface devices such as Manometer/valsalvahub, Chest expansion bellows, Patient Response Device, Calibration Verification Device, Sniff Magnitude Device, pulse oximeter	Should include required patient interface devices such as Manometer/valsalvahub, Chest expansion bellows, Patient Response Device, Calibration Verification Device ( <b>or auto calibration</b> ), Sniff Magnitude Device, pulse oximeter
Page 91 Para 11	Should supply complete system with all accessories Vibration Stimulator, Thermal Stimulator, Patient cue device, Patient Response device, Calibration Verification device	Should supply complete system with all accessories Vibration Stimulator, Thermal Stimulator, Patient cue device, Patient Response device, Calibration Verification device ( <b>or auto calibration</b> )

**Item No. 28**  
**Portable EEG 32 Channel**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Amendment no.1 Para 1	The system should be able to run on laptop battery for minimum 1.5 hours to acquire EEG signals artifact free in ward/ ICU and OT environment"	The system should be able to run on <b>laptop battery/mains power</b> for minimum 1.5 hours to acquire EEG signals artifact free in ward/ ICU and OT environment"
Amendment no.1 Para 12.g	Low filter settings: 0.1 Hz to 20 Hz	Low filter settings: 0.1 Hz to 5 Hz
Amendment no.1 Para 20	System should be USFDA/European CE approved	System should be USFDA/European CE/ <b>BIS approved</b>

**Item No. 29**  
**Video Polysomnography with 1 Camera**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page 95 Para 1	Digital EEG system with minimum 40 channels of amplifier.	<b>Polysomnography</b> /Digital EEG system with minimum 40 channels of amplifier.
Page 95 Para 3	Amplifier must also have built-in Oximetry(SPO2), patient event button and photic connectivity within the amplifire box	Amplifier must also have built-in Oximetry(SPO2), patient event button and photic connectivity within the amplifire box/ <b>PC</b>
Page 95 Para 3.c	Noise < 1.5 micro volt Peak to peak	Noise < <b>2 micro volt</b> Peak to peak
Page 94 Para 3(e)	Common mode rejection ratio: above 105 dB	Common mode rejection ratio: above <b>100 dB or less</b>
Page 95 Para 6	Amplifier must offer Ethernet /USB connectivity to acquisition PC with hi speed data transfer	Amplifier must offer Ethernet /USB/ <b>Wireless</b> connectivity to acquisition PC with hi speed data transfer

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 95 Para12	Should have facility to record patient video using high resolution (HD min 720p) camera for day and night recording (IR camera), <b>auto tracking</b> with fully synchronized Video – 1Nos (Price should be quoted saperatly) and machine should be up-gradable to 2 camera without any	Should have facility to record patient video using high resolution (HD min 720p) camera for day and night recording (IR camera) with fully synchronized Video – 1Nos (Price should be quoted separately) and machine should be up-gradable to 2 camera without any
Page 95 Para 12 d	Optical Zoom of 12 x or more and 10x digital zoom	<b>Optical Zoom of 10 x</b> or more and 10x digital zoom
Page 95 Para 12 e	Should have minimum 1 Mega Pixel	<b>Should have minimum 0.4 Mega Pixel</b>
Page 95 Para 11	Should have facility to configure data acquisition to start periodically in an automated fashion.	<b>Para Deleted</b>
Page 95 Para 12 j	Should be supplied with remote for easy operations and settings	Should be supplied with <b>remote/software controlled</b> for easy operations and settings
Page 95 Para 13	The system should be European CE with four digit notified body number / US FDA approved.	The system should be European CE with four digit notified body number / US FDA/ <b>BIS</b> approved
Page 95 BOQ Sl.no.3	High resolution video camera including all the accessories (Optional)-1 nos.	Para Deleted

**Item No. 31**  
**Ultrasonic surgical aspirator**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 96 Para 3.2	The hand piece must be cooled if required to prevent overheating by flow of water.	The hand piece must have inbuilt cooling mechanism
Page 96 Para 3.5	It should have safety features like optical signal for failed hand pieces and signal for failed unit	It should have safety features like optical signal for failed <b>hand pieces / malfunction</b>
Page 96 Para 3.1 0	Standard (short & long), micro (short & long), precision (short & long) handpieces - 1 each or Universal handpiece with all mentioned tips and bone sculpting reusable handpiece should be supplied	<b>Option A (Reusable accessories)</b> 1. Handpiece : Short Angled - 23 - 36 khz, Tip Diameter outside : 3.0 to 3.5 mm, inside : 1.8 to 2.2 mm. 2. Handpiece : Short Angled - 23 - 36 khz, Tip Diameter outside : 2.0 to 2.2 mm, inside : 1.0 to 1.4 mm.. 3. Handpiece: Long Angled - 34 – 36kHz, Tip Diameter Out Side : 1.7 to 2.0MM, Inside 1.1 to 1.4MM. 4. Handpiece: Short Angled - 34 – 36kHz, Tip Diameter Out Side : 1.7 to 2.0MM, Inside 1.1 to 1.4MM. 5. Bone cutting or sculpting Handpiece 34 -36khz <b>OR</b> <b>Option B (Reusable/disposable accessories)</b> <b>Two(2) Universal handpieces</b> with all mentioned tips including bone sculpting (shape

Tender Page & Para	TENDER SPECIFICATION	READ AS
		& sizes as mentioned in option A) should be supplied for Dissection Process For reusable tips (made of titanium) undertaking from Manufacturer should be submitted stating that the tips are autoclavable and reusable. Also all the quoting firms should confirm in writing in their offer that they guarantee free of cost supply of Handpiece tips (reusable) for guarantee/warranty period of five years. If Disposable tips are being offered then Two universal handpieces with 30 tips each mentioned including bone sculpting (shape & sizes as mentioned in option A) (ie. total 150 tips in total). (BOQ shall be revised accordingly)
Page 97 Para 3.11	Assorted tips for bone sculpting 10 nos. should be supplied	Para Deleted
Page 97 Para BOQ(9)	Assorted tips for bone sculpting 10 nos.	Para Deleted
<b>Page 97 Para 3.13</b>	All hand pieces/ instruments should be detachable.	Para Deleted
<b>Page 97 Para 4.1(1)</b>	Trolley	Trolley should be supplied from same principal company
<b>Page 97 Para 4.1(6)</b>	Instrument connection cables - 2 nos	Instrument connection cables - 2 nos, <b>if required</b>

**Item No. 33**  
**Portable - Colour Doppler**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page no.100 point 11	The system should have an ergonomic full alphanumeric soft keys keyboard with easy access scans controls and trackball/track pad. Provision for attaching an external keyboard and mouse should be present.	The system should have an ergonomic full alphanumeric soft keys keyboard with easy access scans controls and trackball/track pad <b>or the system should have touch panel screen</b> .
point no. 12	The system must have integrated high resolution TFT /LCD/LED of 11.5" inches or more	The system must have integrated high resolution TFT /LCD/LED of <b>11" or more</b>
point no. 24	In built battery backup should be atleast 30 min or more	In built battery backup should be atleast <b>1 hour</b>

**Item No.35**  
**Mobile X ray Machine**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page no.106 point 4	The tube stand should be fully counterbalanced/ Spring Balanced with rotation in all directions	The <b>tube head</b> should be fully counterbalanced/ Spring Balanced with rotation in all directions
Page no.107 point	Light Weight Lead Apron -2 Nos (Equivalent to	Light weight lead apron -2nos (equivalent to

Tender Page & Para	TENDER SPECIFICATION	READ AS
8.4	.25 mm lead)	<b>0.35mm or more lead)</b>
Added Para		The equipment should have US FDA or European CE or BIS certificate and certificate to be submitted.

**Item No. 36**  
**Color Doppler System - (4D)**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page no.107 point 1.3	The system shall include at least a 19" LCD monitor for both excellent image viewing as well as providing for workflow and productivity features.	The system shall include at least a <b>21" LCD/LED</b> monitor for both excellent image viewing as well as providing for workflow and productivity features.
Page no.108 point 16.D	3D / 4D Volume Convex Probe with post processing softwares such as MPR, SSD, Fetal cardiac evaluation etc,	3D / 4D Volume Convex Probe of frequency of probe: 1 to 5MHz with post processing softwares such as MPR, SSD
Page no.108 point 16.D	<b>Transducers (freq tolerance: <math>\pm 1</math> MHz)</b> 3D / 4D Volume Convex Probe with post processing softwares such as MPR, SSD, Fetal cardiac evaluation etc	<b>Transducers (freq tolerance: <math>\pm 1</math> MHz)</b> 3D / 4D Volume Convex Probe of frequency 1 to 5 MHz with post processing softwares such as MPR, SSD. BOQ to be changed accordingly
Page no.107 point 3.1	The system shall implement a feature, which enables to help streamlining the workflow. In particular the system should automatically invoke the correct mode and imaging parameter and advance to the next step within the examination with a one-button operation.	Deleted

**Item No. 37**  
**Urodynamic Machine**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page no.109 point no.1	The unit should be able to perform CMG, Pressure flow, EMG ,EMG with biofeedback, Video Urodynamics, Uroflowmetry ( with one wired and one wireless uroflometer )	The unit should be able to perform CMG, Pressure flow, EMG ,EMG with biofeedback, Video Urodynamics, Uroflowmetry ( with one wired and one wireless uroflowmeter ). <b>1.a. System should be supplied with EMG having both visual &amp; sound EMG (both needle &amp; patch EMG)</b> <b>1.b. Should be supplied with EMG biofeedback module for pelvic floor training</b>
Page no.109 point 2	Radiolucent motorised chair to be provided capable of supine and sitting position	Radiolucent electrohydraulic chair / table capable of supine and sitting position having perineal cut with minimum 300 mm longitudinal slide for C-ARM access. Should have swivel arm mechanism for Uroflow transducer.
Page no.109 point	Equipment should have 5-8 channels	Equipment should have <b>3 or more pressure</b>

Tender Page & Para	TENDER SPECIFICATION	READ AS
no.3		<b>channels</b>
Page no.109 point no.4	Should display atleast 10-16 display channel.	Should display <b>atleast 8</b> display channel.
Page no.109 point 11	Should be supplied with integrated travel cart to fit the complete UDS along with DC.	Should be supplied with integrated travel cart to fit the complete UDS along with <b>DC/PC</b> .
Page no.109 point 12	All in one PC computer Windows 7 or more, i5 processor, at least 4 GB RAM, 1 TB HDD with color laser printer, should have facility	All in one PC computer <b>Windows 10 or more, i7 processor</b> , at least 4 GB RAM, 1 TB HDD with color laser printer, should have facility
Page no.110 point no.27	Pressure transducers - 20 pcs.	<b>Reusable</b> pressure transducers - <b>3 Nos (to be covered under both warranty &amp; CMC)</b>
Page no.110 point no.27	Should be compatible for Hospital Information system	Deleted
Page no.110 point no.30	Should have automatic artifact recognition and compensation on flow transducer.	Deleted
		<b>Added para:</b> Should be supplied with 3D Bladder scanner for PVR measurement for complete urodynamic studies
BOQ.7	Pressure transducers 20pcs	<b>Reusable</b> pressure transducers - <b>3 Nos</b>

**Item No. 38**  
**OT Table - Urology**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page no.111 point A.8	The robust handset should offer controls namely Trend. /Reverse Trend, Lateral Tilt, Flexion/ Extension ,Height functions and slide. Auto levelling should be available	The robust handset should offer controls namely <b>Trendelenburg, Reverse Trend</b> , Lateral Tilt, <b>Flexion, Extension</b> ,Height functions and slide. Auto levelling should be available
		<b>Added para:</b> A.15 Table should have a mechanism/sensor to prevent/detect collision
Page no.111 point C.1	Length : 2000-2100 mm	Length : <b>1950</b> - 2100mm
Page no.111 , point C.2	Width : 500-600mm without side rail	Width : <b>500-550</b> mm without side rail
Page no.111 point C.4	Maximum height (without mattress): Minimum of 1040 mm	Maximum height (without mattress): Minimum of <b>950mm</b>
Page no.111 point C.8	Head section adjustment : - atleast +/-30 degree	Head section adjustment : - atleast <b>-30/+25</b> degree
Page 111, point C.12	Longitudinal Slide: atleast 250 mm	Longitudinal Slide: atleast 250 mm ( <b>125mm on each side</b> )
Page no.112 point D .10	Power lift stirrup set with side rail clamp - 1 set (price to be quoted separately)	<b>Pneumatic</b> lift stirrup set with side rail clamp - 1 set (price to be quoted separately)

**Item No. 39**  
**Mobile C-arm Image Intensifier**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page no.113 point E.b	<b>CCD camera</b> CCD camera with 1kx1k resolution for high resolution image acquisition	<b>CCD/CMOS camera</b>
Page no.113 point h	The offered model should be European CE with 4 digit notified body number or USFDA approved. Also should be AERB type approved product	The offered model should be European CE with 4 digit notified body number or US FDA <b>or BIS approved</b> . Also should be AERB type approved product
		<b>Added para:</b> 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. If non functioning period exceed 2 weeks at a stretch , a temporary standby machine of same specification must be provided

**Item No. 40**  
**Flexible Cysto-Nephroscope**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page no.114 1.2.c	Ball tip Fulgurating electrode 4.5 to 5 Fr – 2 Nos.	Ball tip Fulgurating electrode <b>4 to 5 Fr – 2 Nos.</b>
1.2.h	Appropriate rigid storage case - 1 no	Appropriate rigid storage case - 1 no <b>(from OEM)</b>
6.1	Should be US-FDA or European CE approved product	Should be US-FDA or European CE <b>with 4 digit notified body no / BIS approved product</b>
		<b>Added para:</b> Declaration from principal manufacturer that quoted items are brand new and not refurbished

**Item No. 41**  
**General Surgical Instrument set for Urology**

<b>Tender Page &amp; Para</b>	<b>TENDER SPECIFICATION</b>	<b>READ AS</b>
Page 114 Para A.2	BACKHAUS TOWEL HOLDING FORCEPS, 110MM,	BACKHAUS TOWEL HOLDING FORCEPS, 110MM - <b>8 Nos</b>
Page 114 Para A.3	TOWEL CLAMP, 115 MM LENGTH	TOWEL CLAMP, 115 MM LENGTH - <b>8 Nos</b>
Page 116 Para B	KIDNEY SET (TWO EACH)	KIDNEY SET <b>(ONE SET)</b>
Page 117	MIKULICZ ABDOMINAL RETRACTOR	MIKULICZ ABDOMINAL RETRACTOR <b>90x50mm</b>

Tender Page & Para	TENDER SPECIFICATION	READ AS
Para B.50		
Page 117 Para B.51	MIKULICZ ABDOMINAL RETRACTOR	MIKULICZ ABDOMINAL RETRACTOR <b>95x35mm</b>
Page 117 Para B.52	MIKULICZ ABDOMINAL RETRACTOR	MIKULICZ ABDOMINAL RETRACTOR <b>150x50mm</b>
Page no.117 point no. C 16	Head light with light source	Head light with light source - 300 watt Xenon Dual port light source
Page no.117 point no. C17	300 watt Xenon Dual port light source	Para Deleted
Page no.118 point no. E.2	BACKHAUS TOWEL HOLDING FORCEPS, 110MM,	BACKHAUS TOWEL HOLDING FORCEPS, 110MM - <b>6 nos</b>
Page no.118 point no. E.3	TOWEL CLAMP, 115 MM LENGTH	TOWEL CLAMP, 115 MM LENGTH - 6 nos
Page 121 Point.no.J	All instruments should be US-FDA or European CE approved with 4 digit notified body number (copy of certificate have to be enclosed with the bid)	All instruments should be US-FDA or European CE approved with 4 digit notified body number or <b>BIS approved</b> (copy of certificate have to be enclosed with the bid)
Page 121 Point.no.L	Corrosion free surgical grade stainless steel (Stainless steel alloy of 350-450 grade)	Corrosion free surgical grade stainless steel <b>SS 400 grade and bidder should submit original OEM certificate for the same</b>
		<b>Added para:</b> Bidder should submit country of origin certificate to be certified by chamber of commerce of that country

**Item No. 42**  
**Turp, Cystoscope & Optical Urethrotome**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page no.121 point 6	Toomey glass syringe 100 CC - 1 no	Toomey glass syringe <b>100 -150 CC</b> - 1 no
Page no.121 point 6	Toomey glass syringe of 100 cc with adaptor to fit with sheath - 1 no.	Toomey glass syringe of <b>100-150 cc</b> with adaptor to fit with sheath - 1 no.
Page no.121 point 8	Urethrotome sheath	Urethrotome sheath <b>with 1 working element</b>
Page no.122 point 11	OTIS Urethrotome parallel expanding (adjustable from 15-35 Fr)	OTIS Urethrotome parallel expanding (adjustable from 15-35 Fr) - <b>1 no</b>
Page no.122	All above mentioned equipment should be European CE or USFDA certified.	All above mentioned equipment should be European <b>CE with 4 digit notified body no or USFDA or BIS certified.</b>
		<b>Added para:</b> Declaration from principal manufacturer that quoted items are brand new and not refurbished
		<b>Added para:</b> There will be 95% uptime warranty during CMC

Tender Page & Para	TENDER SPECIFICATION	READ AS
		period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period. If non functioning period exceed 2 weeks at a stretch , a temporary standby machine of same specification must be provided

**Item No. 44**  
**Rotablator Machine**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Amendment no.2 Page2 Para 7	Diamond coated elliptical bur with sizes 1.25mm, 1.5mm, 1.75mm, <b>2mm, and 2.25mm, 2.38mm, and 2.5mm</b> , and with catheter length of 135cm in length	Diamond coated elliptical bur with sizes 1.25mm, 1.5mm, 1.75mm, and <b>with</b> catheter length of 135cm
Amendment no.2 Page2 Para 8	Compatibility with 0.014(tip)/0.09" rota wire with 325cm in length and floppy, standard and extra support system	Compatibility with 0.014(tip)/0.09" rota wire with <b>325cm or more</b> in length and floppy, standard and extra support system

**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**