

**INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,  
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Ref. No.: IGIMS/2021/<sup>1333</sup>/Store

Date: 08/11/2021

*E-Tender Notice No: 10/2021-2022/ Bio-Medical Equipment/ IGIMS/ Store*

**CORRIGENDUM**

Amendment Notice to the Tender Document bearing E-Tender Notice No. **10/2021-22/Bio-Medical Equipment /IGIMS/Store** for the Supply, installation and commissioning of Biomedical Equipment to the various dept. of IGIMS, Patna.

**Amendments mentioned hereunder are notified:**

Description	Specifications mentioned in the Bidding Document	Should be read as follows:
<b>Group: A – Pulmonary Medicine</b>		
<b>1: PFT Machine with DLCO &amp; Body Plethysmography</b>		
Point No.: 1	The Body box should be standard Aluminum/Acrylic with an internal volume of 700-900 Ltrs. It should be transparent with visibility from inside as well as from outside, operable from both sides, equipped with intercom.	The Body box should be standard Aluminum/Acrylic with an internal volume of 700-950 Ltrs. It should be transparent with visibility from inside as well as from outside, operable from both sides, equipped with intercom.
Point No.: 2	Should have a multiuse Pneumotach or heated Pneumotach with range, linearity resistance and accuracy meeting or exceeding American Thoracic Society - European Respiratory Society Standards.	Should have a multiuse Pneumotach or heated Pneumotach with range, linearity resistance and accuracy meeting or exceeding American Thoracic Society - European Respiratory Society Standards or Ultrasonic technology flow sensor meeting or exceeding American Thoracic Society - European Respiratory Society Standards
<b>2: Polysomnography System</b>		
Sl. No. A: Point-2	System must have continuous impedance monitored and reported during sleep study.	System must have desired impedance monitored and reported during sleep study.
Sl. No. B: Point-1(5)	Automatic Chin EMG referencing	<b>To be deleted</b>
Sl. No. B: Point-1(7)	ECG-7 channels (3 physical and 4 derived)	ECG -1 or more channel
Sl. No. B: Point-1(13)	Effort (chest & Abdominal)-ZRIP DuraBelt Integrated RIP driver	Effort (chest & Abdominal) Sensors
<b>Group-C: RIO</b>		
No Change.		
<b>Group-D: Anaesthesiology</b>		
No Change.		
<b>Group-E: G.I. Surgery</b>		
<b>1: Upper G.I. Endoscope with Accessories</b>		
Special Features: Point. No. 5	Should be equipped with special communication system with Xenon Light source to control all the features of light source with scope remote switches e.g. brightness, air flow etc.	Should be equipped with special communication system with Xenon/ LED Light source to control all the features of light source with scope remote switches e.g. brightness, air flow etc.

Special Features: Point. No. 7	Should be Equipped with chromo endoscopy (S-Technology/NBI/I-scan) facility.	Should be Equipped with chromo endoscopy (S-Technology/NBI/I-scan/ HBE) facility.
Special Features: Point. No. 8	Should be equipped with PIP feature and should be able to produce side by side display of live white light and chromo endoscopy images.	To be deleted
Special Features: Point. No. 9	Should have USB interface at front panel for Image & Video storage front / rear panel for compatible USB Printers	Should have USB interface at panel for recording.
Special Features: Point. No. 10	Should have following HD out-puts HD-SDI- 1no. DVI- 2 Nos	Should have HD out-puts HD-SDI/ DVI / both at least 2 in processor panel.
Gastro videoscope Point .01	Built in HDTV compatible CCD with close focus observation capacity	Built in HDTV/ HD compatible CCD/ CMOS with close focus observation capacity
Gastro videoscope Point .02	Should have optical enhancement technology/ chrome endoscopy technology i.e. NBI / BLI / OE i SCAN	Should have optical enhancement technology/ chrome endoscopy technology i.e. NBI /FICE/ BLI / OE / SCAN/ HBE
<b>2: OT Table for Advance Laparoscopic &amp; Bariatric Surgery</b>		
Point. No. 01	Mobile or table with electrical hydraulic drive via integrated batteries and mains power supply	Mobile or table with electrical hydraulic/ Electro Mechanical drive via integrated batteries and mains power supply
Point. No. 02	Provision for adjustment of base locked / unlocked via hand control unit/ Manual foot lever by means of a four post, self- levelling hydraulic locking system.	Provision for adjustment of base locked / unlocked via hand control unit by means of a four post, self-levelling hydraulic locking system.
Point. No. 05	It should be used for future OR integration.	To be deleted
Point. No. 07	The tabletop should be equipped with a powered kidney elevator for 110 mm or more between the back and the seat plate to enable stronger flexion to the patient's body.	The tabletop should be equipped with a powered kidney elevator for 75 mm or more between the back and the seat plate/ can be achieved by Motorized Flex Position of 220 degree to enable stronger flexion to the patient's body.
Point. No. 08	The back section should be completely detachable to allow the use of several positioning accessories.	The upper back section should be preferably detachable to allow the use of several positioning accessories.
Point. No. 10	Guide rails underneath the tabletop should allow for inserting of X-ray cassettes over the complete length, including the area of the central seat section.	Guide rails underneath the tabletop should allow for inserting of X-ray cassettes over the complete length.
Point. No. 12	The Leg Plate should be motorized and Split in nature with the facility of dual abduction and leg spread for MIS surgery with Crash Prevention feature to avoid accidental damage of the Base and/or Leg plate in low height positions	The Leg Plate should be Split in nature with the facility of dual abduction and leg spread for MIS surgery.
Point. No. 13	The adjustments of hydraulically powered motions can be controlled electrically from outside the intervention area via cable connected hand control and hand pendant with backlight.	The adjustments of hydraulically powered motions can be controlled electrically from outside the intervention area via cable connected hand control and hand pendant with backlight/ wireless hand control device.
Point. No. 14	The Table should have full manual back-up. All powered functions can be controlled manually via an additional control unit. Foot pump should be integrated in the table, which can be operated manually by a retractable foot lever in case of any failure.	To be deleted
Point. No. 16	The Table should have full manual back-up. All powered functions can be controlled manually via an additional control unit. Foot pump should be integrated in the table, which can be operated manually by a retractable foot lever in case of any failure.	The Table should have full manual./ Electrical Override back-up. All powered functions can be controlled manually via an additional control unit. Foot pump should be integrated in the table, which can be operated manually by a retractable foot lever in case of any failure.
Point. No. 17	In case of any technical failure, all table adjustments can be operated independently by activating the auxiliary control unit & footlever.	In case of any technical failure, all table adjustments can be operated independently by activating the auxiliary control unit.

Point.No. 19	For instant trouble shoot identification, the Table should have the provision of RS-232 Port for Device Control / self- diagnosis or remote or Computer Assisted Error Diagnosis for Easy and Fast Service	For instant trouble shoot identification, the Table should have the provision of service Control / self-diagnosis or remote or Computer Assisted Error Diagnosis for Easy and Fast Service
Point.No. 20	OR table additionally equipped with integrated or separate power drive unit to provide ease of manoeuvring when moving the table over longer distances.	OR table additionally equipped with integrated or separate power drive/ Manual 5 <sup>th</sup> wheel unit to provide ease of manoeuvring when moving the table over longer distances.
	Add	Motorized Leg movement: 30 degree or more upward and 100 degree or more downward.

### 5; Low Temperature Hydrogen Peroxide Gas Plasma Sterilizer

Point.No. 13	Sterilant (H <sub>2</sub> O <sub>2</sub> concentration ≥55%) should be in cassette/cartridges form with leak proof indicator to avoid exposure of concentrated H <sub>2</sub> O <sub>2</sub>	Sterilant (H <sub>2</sub> O <sub>2</sub> concentration ≥55%) should be in cassette/cartridges/ vial form with leak proof indicator to avoid exposure of concentrated H <sub>2</sub> O <sub>2</sub>
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### Group-F: Neurosurgery

#### 1. High End Microscope

<ol style="list-style-type: none"> <li>1. This should be a high end system with which High resolution view of anterior Segment (Wide angle and high Magnification view) is possible facilitating cataract surgery and recording of the same.</li> <li>2. Main Microscope with motorized zoom: Motorized; 4.2 x-21 x (0.42-2.1) with automatic reset.</li> <li>3. Focusing: Motorized with 55 mm travel and automatic reset</li> <li>4. XY Coupling: Motorized with 60 mm movement range and automatic reset Base: 33 X31"X 10"with 5 dual locking casters.</li> <li>5. Illumination: Light source: 12 v 100 w rated at 2,000 hours Minimum Illuminated fiels, 1882.9 mm.</li> <li>6. Pupillary distance: 50 mm -75 mm.</li> <li>7. Maintains a consistently stable, high quality red reflex regardless of pupil size centration lens tilt or patient eye movement.</li> <li>8. Unprecedented detail recognition and contrast in every phase of cataract surgery.</li> <li>9. Grater depth of focus with an approximately 50 mm longer focal length that maintains equivalent working destine</li> <li>10. XY Communication system: At- a- glance to unique parameters, such as XY and focus position full color. Touch screen display for simplified control and customization.</li> <li>11. Programmable wireless/ wired foot pedal control.</li> <li>12. XY Position: Allows constant confirmation of positioning within the XY field.</li> <li>13. Focus position: Enables awareness of excursion point.</li> <li>14. True magnification: Useful for evaluating procedures and gaining feedback.</li> <li>15. Provides a true 3D stereo assistant scope (Optional).</li> <li>16. 3D ASSISTANT Visualization: Does not take light form surgeon's optical pathway (Optional).</li> <li>17. Allows 180 swivel for postioning convenience.</li> <li>18. Features an independent magnification changer.</li> </ol>	<p><b>Specification</b></p> <p><b>Magnification</b>  Motorized zoom  Achromatic optics  18x magnification or more  User specific start position</p> <p><b>Focusing system</b>  Varioskop, aprochromatic 200-500 mm working range  Internal, motorized continuous speed  Magnification linked adjustment of focus speed  Electronically adjustable depth of field  Working distance displayed on touch screen and in the ocular  User specific start portion.</p> <p><b>Tubes and cobservation</b>  Main surgeon binocular tube should be Tilttable binocular tube 0 to 180 deg or better  Eye piece 10x or 12.5 x magnetic wide field eyepiece with integrated eye cups for main surgeon Binocular tube with dioptre correction of +5D to -5D  Binocular tube for face to face attachment , should be Tilttable binocular tube 0 to 180 deg or better  Eye piece 10 x or 12.5 x magnetic wide field eyepiece with integrated eye cups,for face to face attachment with dioptre correction of +5D to -5D  Symmetrically configured face to face attachment would be preffered  Stereo co observation tube remains fixed with tilting of Microscope Head. Stereo coobservation with minimum two joints for complete 360 deg rotation with straight Binocluar tube with Diopter setting and IPD adjustment</p> <p><b>System operation</b>  Multi function programmable handgrips.  Magnetic clutches for all 6 system axes  Central user interface , single windows operation means all the systems like microscope , Camera &amp; Fluorescene work from there.  Foot pedal control ( 16 button multi functional foot – control pedal should be provided)  XY robotic movement in 3 axes (variable speed)  Autobalance of the microscope, suspension system or entire system by single touch  Microscope auto balance independent of position or accessories  System should be compatible with any leading navigation</p>
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	<p>19. Objective: wd=165 mm or wd=175 or wd 190 or wd=200 mm</p> <p>20. Binocular Tube: 0-200° or more inclinable: f=170 mm</p> <p>21. Eyepieces: 12.5 X with widefield telescoping eyecups.</p> <p>22. Floor stand: Spring-adjusted articulating arm. Horizontal reach: Arm-47"End of optics-50 Vertical reach: 28" Rotational angle: 320°</p> <p>23. Speed adjustable for focus, zoom &amp; XV</p> <p>24. Reset of focus zoom &amp; XY position with a single push of a button</p> <p>25. Saves settings for future use: Pupillary distance, initial focus point, magnification level and more mandatory Accessories to be provide along with operating microscope.</p> <p>26. CCTV camera in the Microscope for recording and documentation.</p> <p>27. Video adapter with c-mount, fine focus, iris and XY adjustment.</p> <p>28. HD Systems for capture &amp; Recording.</p> <p>29. 36" LED TV Monitor for Display.</p> <p>30. Biom with lenses with inverter</p> <p>31. USB functionality for video and still image capture</p> <p>32. Video Recorder and other accessories needed for recording of high resolution video of surgeries through the microscope</p> <p>33. 2 sets of Autoclavable Silicone cover for all the adjustment knobs of the microscope</p> <p>34. Should operate from 110-240 V: 50-60Hz.</p> <p>35. All equipment should have safety certificate from a competent authority CE/ FDA (US)/STQC CB certificate /STQC S certificate of valid detailed electrical and functional safety test report from ERTL Copy of the certificate / test report shall be produced along with the technical bid.</p> <p>36. 2 KVA online UPS with 30 min back-up needed.</p> <p>Additional Offer during Negotiation</p> <ol style="list-style-type: none"> <li>UV and IR notch filters with AR coating</li> <li>Sterilizable covers for all knobs-I set extra</li> </ol>	<p>system and navigation image should be injected directly to surgeon's eye piece.</p> <p><b>Suspension system &amp; height</b> Microscope should have European CE/ US FDA certification.</p> <p><b>Fully integrated Video chain</b> Minimum 22" HD touch Screen Medical Grade. Integrated or inbuilt 3 – CMOS 3 CCD video camera or better. Camera must not be visible from outside. Full HD recorder with integrated HDD with HDMI input &amp; output port Video in for external sources. Image injection of CT,MRI and Endoscope images should be injected directly to surgeon's eye piece and controlled by hand switches / foot switch .</p> <p><b>Illumination system</b> 300 Watts Xenon lamp with 300 watts back up. Integrated light source and light guide. Integrated two ways illumination brightens shadows. Display of remaining lamp life time. System information when exceeding individual light threshold. Focus light ink- working distance controlled light intensity.</p> <p><b>Intra operative Fluorescence</b> The quoted model should be capable of getting it upgraded to tumor Fluoresce attachment in built system or better.</p> <p><b>After sale &amp; service</b> After sales &amp; service will be provided by the manufacturer company . Should have sufficient stock of spare in their local office.</p> <p><b>Electrical Data</b> Voltage : 115/230 V +/- 10 % Current :maximum 1500 mAmp Frequency : 50-60 Hz.</p> <p><b>CE/FDA</b> Microscope should have European CE/ US FDA certification.</p>
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**Group- K: Trauma & Emergency**

No Change.

**Group- L: Skin & VD**

**3: ND- YAG LASER**

Point No. 03	The device should have Photoacoustic Therapy Pulse mode.	The device should preferably have Photoacoustic Therapy Pulse mode.
Point No. 09	The device should have spot-size in the range of 2mm-8mm and should deliver adequate energy at all spot sizes.	The device should have spot-size in the range of 2mm-8/ 15 mm and should deliver adequate energy at all spot sizes.

**Group- N: Obstetrics & Gynaecology**

**I: Cardiotocography (CTG) Machine for Fetal Monitoring**


Point No. 01	<b>Ten or more</b> inches high tech color TFT screen with TLT adjustment up to 90 degrees , touch screen menu settings interface.	<b>8 inches or more</b> color touch screen high resolution display and also can be used with gloves on
Point No. 02	Twin monitoring module as standard feature.	Monitoring single, twins and triplets using the same ultrasound frequency, allowing only one monitor to be used, further improving efficiencies.
Point No. 06	Highly sensitive 14 elements , transducer for FHR detection, effective 1 Mhz pulse Doppler transducer . FHR toco & FM parameters with waveforms display & digits display simultaneously Basic	Pulsed directional Doppler system operates at 1.0 MHz. The multicrystal design has been optimized for wide angle even coverage. 8 Crystal Transducer has a proven track record for providing the best performance across all

	parameters: FHR, TOCO, AFM, Events marker. Special patient event marker and clinical event marking button.	mums for small to large, including HI- BMI mums, & has been shown to reduce the need for using invasive FSEs, reducing risk, cost, patient discomfort & fetal injury.
Point No. 09	Retractable in built long life high resolution thermal printer. Patient storage data of 24 hours with playback and printing facility . High performance rechargeable Li-ion battery with 2 hours back up	Retractable in built long life high resolution thermal printer with 45 mter of length, patient storage data in excess of 6000 hours of patient records and 100 hours of paper out memory. High performance rechargeable Li-ion battery with 4 hours back up
<b>Group- P: Paediatrics</b>		
<b>1: Portable Paediatric/ Neonatal Color Doppler/Echocardiography System</b>		
Transducers Point 1	1-8 MHz Broadband phased Array Transducer for pediatric Cardiac imaging.	3-8 (+/- MHz) Broadband phased Array Transducer for pediatric Cardiac imaging.
<b>3: Automated Peritoneal Dialysis (P.D. Cyler Machine)</b>		
<b>To be deleted (equipment withdrawn)</b>		
<b>5: Paediatrics Ventilator</b>		
3.Technical specification Point. 3.2(b)	3loops p-v,f-v,p-f	2 loops P-V,F-V
3.Technical specification Point. 3.5(e)	Insp. Flow (Resultant) 0.2 to 180 LPM; continuous Flow 0-40 IPM	Insp. Flow (Resultant) 0.4 to 150 LPM, continuous Flow 0-40 IPM
<b>Group- R: Physiology</b>		
No Change.		
<b>Group- S: Gynaecological Oncology</b>		
No Change.		
<b>Group- V: Dentistry</b>		
No Change.		

Note:

1. All other specification, terms and conditions of the original tender documents shall remain unchanged.
2. This amendment shall be part of the tender document and become effective immediately is supersession to the earlier corresponding version.

The document also can be downloaded from [www.eproc.bihar.govt.in](http://www.eproc.bihar.govt.in) and the IGIMS website [www.igims.org](http://www.igims.org).

  
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