

Proceeding of the Pre- bid meeting held on 18/11/2017 at 11.00AM and 20.11.2017 at 3:00 P.M. in the Conference hall IGIMS, Patna regarding discussion and suggestion given by the Prospective bidders in the pre-bid meeting on technical specification , terms & conditions for supply, Installation commissioning of different kinds of Biomedical Equipments at IGIMS, Patna against Tender Notice no 14/2017-18/Biomedical Equipment/IGIMS/Store.

Members Present:-

- 1: Dr. Prabhat Kumar Sinha
Medical Superintendent-IGIMS, Patna
2. Dr. B P Singh
HOD Cardiology-IGIMS, Patna
3. Dr. Jayant Prakash
HOD Pediatric Medicine -IGIMS, Patna
4. Dr. Manish Mandal
HOD G I Surgery -IGIMS, Patna
5. Dr. Santosh Kumar
HOD Orthopedics -IGIMS, Patna
6. Dr. Sanjay Kumar Suman
HOD Radiology -GIMS, IGIMS, Patna
- 7 Dr. Rakesh Kumar Singh
HOD ENT -IGIMS, Patna
8. Dr. Pawan Kumar Jha
HOD General Surgery-IGIMS, Patna
9. Dr. Jyuit Ram Keshri
Asstt. Prof. Biochemistry-IGIMS Patna
10. Sri Shailendra Kr.Singh
Sr. Biomedical Engineer
IGIMS Patna
11. Sri Birendra Singh
SO Cum Procurment Consultant
IGIMS ,Patna
12. Sri Binay Kumar Panday
Sr. Physiotherapist,
IGIMS, Patna

During the course of discussion , proposal were put up by prospective bidders before committee for consideration/ amendments . After details discussion, following change have been made and approved in Tender Notice no. 14/2017-18/Biomedical Equipment/IGIMS/Store

Group- A-(Trauma & Emergency)

(1) Portable Transport Ventilator

1. Should be wall mounted (fixed) but easily detachable when required.
2. Should be supplied with a separate cylinder from which oxygen can be drawn when it is needed to transport the patient out from the ambulance to the hospital.
3. Should be operable from DC power / AC power / Internal Battery.
4. Should be light weight (<6 Kgs)
5. Give a wide range of ventilation modes (PRVC, Volume and Pressure control, CMV, SIMV, CPAP).
6. Emergency valve for spontaneous breathing if oxygen supply fails.
7. Should have a built in humidifier.
8. Breath rate should be adjustable from 0 to 80 breaths/ minute
9. Ability to ventilate all patient categories, from infant to adult (20-2000 ml).
10. Should have pressure control and volume control ventilation
11. Should have facility for PEEP/ CPAP (0-20 cm H₂O)
12. Should have work with high pressure oxygen (centralized pipe line) and low pressure oxygen (Flow meter)
13. Should have apnea alarm, high pressure limit, low minute volume alarm, disconnect alarm, low external power alarm, low battery alarm, high and low oxygen inlet pressure alarm along with facility for alarm silence/ reset.
14. Should have display for various alarms.
15. Should have adequate length of tubing to reach the patient.
16. Should have display for airway pressure, respiratory rate, tidal volume, mode of ventilation, FiO₂.
17. Should be shock and vibration compliant to ensure uncompromised performance during transport.
18. Additional battery backup (>6 hrs) should be provided for ventilation for long period. One extra battery to be provided per ventilator.
19. Should be interfacable with other monitors (of all types) to provide a large clear display of parameters (optional)
20. Large screen (at least 10") display and touch screen simple user interface
21. Software upgradable free for five years
22. All accessories, including masks for extra adult/pediatrics/neonatal tubings to be quoted separately
23. System should be US-FDA and European CE Certified

Warranty / after sale service: -

1. Three year comprehensive onsite warranty of entire system (Spares and labour) including all accessories. This will be followed by 7 years CMC.
2. During warranty period as well as during Comprehensive Annual Maintenance Contract Period, firm will maintain the system with all spares, accessories. During warranty period, no additional amount is to be paid towards supply of any accessories. During Comprehensive Annual Maintenance Contract Period, it will be maintained within the quoted CAMC rate.
3. List of consumable with price should be quoted separately

(2)Fumigation Machine
(For the use of ICU & OT Sterilization)

1	Make and Model	
2	Timer Device	Electronic Timer- Adjustable (5 ~ 60 minutes)
3	Design	Portable
4	Particle Size	1 ~ 40 Microns -Controllable (Dry fog ~ Wet Fog)
5	Input Power	230 Volts Single Phase AC, 50/60 Hz.
6	Liquid Flow Rate	1 ~ 18 Ltrs. / Hr. (Adjustable) Optional 1 ~ 5 Ltrs. / Hr. (Adjustable)
7	Particle Throw	Visible upto 15 ~ 20 Fts. & more
8	Area Coverage	Upto 10000 cubic. Fts (uniformly with rotostand)
9	Motor Speed	20,000 RPM (approx.)
10	Dry Weight	5 to 10 Kgs
11	Certification	ISO and CE Certified

**(3)SPECIFICATION OF FLEXIBLE INTUBATION VIDEO ENDOSCOPE
(ADULT SIZE + PED SIZE) non fiber**

- Flexible intubation Endoscope with CMOS chip in tip for digitally transferring the image to the screen there should be NO optical Fiber bundles/non fiber optics. Intubation Endoscope should display full frame 4/3 or 16/9 Imaging and not the circular image.
- For adult outer diameter of scope should be ranging 4.8-5.5 mm with working length of 65cm or more. Up and down tip deflection should be same ranging 120-160 degrees. Working channel should be 2.0 -2.3 mm and it should take ETT from 5.5 sizes onwards.
- For Paediatric outer diameter of scope should be ranging 3.0-4.1 mm with working length of 65 cm or more. Up and down tip deflection should be same ranging 120-160 degrees Working channel should be 1.4 -1.6 mm and it should take ETT from 3.5 sizes onwards.
- Flexible intubation scope should display good quality picture by connection it with 7 inch or more TFT monitor/integrated LED light source
 - TFT monitor/Screen should have feature control buttons on the screen with HDMI output for connecting to a big source (7 Inch or More).
 - Automatic/manual white balance facility should be available
 - Monitor should run on battery, when fully charge should work for more than 60 minutes
 - Monitor should be upgradable
- Documentation of Video & still images should be possible with operation buttons on the scope to be recorded on SD card and USB pen drive present in the monitor
- It should be light weight, high resolution & potable flexible scope
- Airway Guide (cum bite block) for Oral intubation should be provided with the set.
- ET TUBE HOLDER has to be a part standard accessory and 5 piece should be provided
- Set should include-suction Adaptors (Disposable) , Cleaning brush & Leakage tester as standard accessories
- Container for sterilization and storage of scope should be provided
- One imported Trolley to hang scope as well monitor should be provided

- Ten reusable suction caps to be also provided
 - Equipment should be European CE/ US FDA approved
 - Suitable for following applications-
 - Bronchoscopy
 - Endotracheal intubation
 - Foreign body removal
 - Bronchial lavage
 - Inspection of the Airways
 - Dilatation tracheotomy
 - Biopsy forceps, grasping forceps should be provided with alligator jaw
 - Trolley from same manufacturer
 - USFDA or CE European approved
- Note: All** equipments/ accessories should be reusable/ Autoclavable/ chemical sterilization

Warranty / after sale service: -

1. Three year comprehensive onsite warranty of entire system (Spares and labour) including all accessories. This will be followed by 7 years CMC.
2. During warranty period as well as during Comprehensive Annual Maintenance Contract Period, firm will maintain the system with all spares, accessories. During warranty period, no additional amount is to be paid towards supply of any accessories. During Comprehensive Annual Maintenance Contract Period, it will be maintained within the quoted CAMC rate.
3. List of consumable with price should be quoted separately

(4) Technical Specifications: DVT Pump

1. Make Model of equipment
2. Should be light – weight, portable and sturdy with a strong hanging hook which can fit on to the bed side/trolley side
3. Should be compatible with power input of Indian electric supply
4. Should be quiet and vibration free
5. Should have an illuminated on/off power switch
6. Large, easy to read display
7. Should have audible/visible alarm system for pressure faults and low battery power
8. Should have 40+5 mmHg set pressure for thigh/calf garment
9. Should have appropriately designed garments for calf compression
10. Should be compatible with a power input of 220-240 volts
11. Garments: Should provide 5 pairs of garments of each sizes
 - a. Should be made of softer brushed nylon and polyester
 - b. Should be reusable / **Disposable**
 - c. Should have single tubing connection between the garment and the pump for quick connection
 - d. Should have full range of calf, thigh and foot designs with standard adult sizes with options for small, medium, large and extra-large sizes.
12. Should have integrated battery back-up at least for 3 hrs.
13. Should have sequential compression, cuff squeezes distal portion of calf first and then proximal
14. It should be approved by US FDA or CE Certified
15. Accessories and Consumables – Price of all accessories and spares (i.e. Garments with tubing and batteries) should be quoted and should be fixed for 10 years
16. Guarantee & Warrantee:

The Company should provide 3 years warrantee plus 7 years CAMC (with spares and free labours).
If any part of the equipment is not covered under warranty, the vendor must provide advance information.

(5)Blood Gas Analyzer - ABG (Cartridge base Portable)

1. Fully automatic, upgradeable, fast electrolyte & Blood gas analyzer (Full parameter).
2. Essential Measured parameters; pH, pCO₂, pO₂, SaO₂, tHb, Lactates, Na⁺, K⁺, Ca⁺⁺, Cl⁻, & Blood sugar. All these parameters should be measured simultaneously calculated parameters should include BE, BE ecf, HCO₃, Anion Gap etc.
3. Fast analysis time – less than 60 sec.
4. Maintenance free electrodes with individual electrodes ON/OFF facility.
5. Fully automatic all parameters at user-defined intervals.
6. Continuous reagent level monitoring with graphic display.
7. Data display on well-illuminated, adequate size LCD color touch screen display.
8. Data print out on built in graphic printer.
9. Built in auto Quality control facility.
10. Suitable **ON-LINE UPS** with 30 min backup.
11. **Cost of 1000 Test cartage to be quoted for comparative evaluation.**
12. Stand by blood gas in case of breakdown.
13. Should have local service facility
14. It must be US-FDA approved.

Warranty / after sale service: -

- a. Three year comprehensive onsite warranty of entire system (Spares and labor) including all accessories. This will be followed by 7 years CMC.
- b. During warranty period as well as during Comprehensive Annual Maintenance Contract Period, firm will maintain the system with all spares, accessories.
- c. During warranty period, no additional amount is to be paid towards supply of any accessories.

During Comprehensive Annual Maintenance Contract Period, it will be maintained within the quoted CAMC rate.

Group-B (Radiology)

1:WHOLE BODY 16-SLICE CT SCANNER

Tender Specification	Amendment after pre-bid meeting
1.Make and Model of System	
2. Certification - (USFDA and European CE Certified)	
3. General requirements: a) The system should be of latest slip-ring technology allowing full and continuous rotation, multi-slice scanning (16 slices per rotation) with true isotropic volume acquisition and sub-millimeter resolution of at least 0.6 mm for whole body and vascular applications. b) Please specify the pitch used for each application to achieve this resolution. c) True future upgradeability to higher slices per rotation and future applications should be possible. The speed should be adequate for all body, neurological, and cardio-vascular imaging examinations.	
4. X-ray Generator: High frequency, with power output of 48 kW or more to support continuous and sustained operation	
5. X-ray Tube: a) Tube Current: 30-600 mA or more mA rating at peak generator power must be mentioned. b) The system should have mechanism for real time mA modulation for both Z-axis and angular dose modulation. Specify mA modulation in relation to ECG available. c) Tube Voltage: 80-140 kV or more. Specify steps d) Anode Heat Storage Capacity. (Minimum 5 MHU) Specify (in MHU). e) Mention anode temperature monitoring system. f) Heat dissipation: Specify (in KHU/min) g) Filter and beam limiting devices: Their Al equivalent (at least 5 mm) and other specific features to reduce radiation dose to the patient must be specified. h) Specify focal spot size and number according to IEC recommendations. Automatic selection of focal spots should be possible.	a) Tube Current: 30-400 mA or more mA rating at peak generator power must be mentioned
6. Gantry a) Aperture: 70 cm or more. b) Tilt: +/- 30 degree. 25 c) Entire range of rotation times for full 360 degree should be specified. Minimum rotation time should be 0.5 seconds or less for whole body applications. d) Remote controlled tilt from operator table should be possible. e) Maximum scan FOV should be at least 50 cm. f) Laser alignment lights should define accurately actual scan plane. It should operate over full range of gantry tilt. g) Specify if multi slice capability available in both tilted & non-tilted gantry positions.	a) Tilt: +/- 30 degree. And tilted helical or spiral mode should be available
7. Patient Table a) Maximum load: 200 kg or more with 1 mm positioning accuracy. b) Table speed: Horizontal – Up to 100 mm or more/sec. c) Vertical table travel: range and speed should be specified.	

<p>d) Scan range, with and without headrest: should have at least 150 cm metal free Scannable range.</p> <p>e) Facility of positioning aid for horizontal isocentric positioning of the patient.</p> <p>f) The table should be of carbon fibre.</p>	
<p>8. Spiral CT</p> <p>a) Scan time: Minimum scan time for full 360-degree rotation should be 0.5 seconds or less. Specify minimum and maximum.</p> <p>b) Minimum slice thickness should be 0.6 mm or less and maximum 10 mm or more. Slice thickness and range should be freely selectable for prospective and retrospective reconstruction.</p> <p>c) Slice increment: specify range and selectable slice thickness.</p> <p>d) Pitch factor (volume pitch): Variable between 0.5 to 1.5 or more and should be user selectable. Specify all possible pitch selections.</p> <p>e) Gapless spiral length: 150 cm or more. Please specify the total length of Spiral achievable without inter scan delay and the time taken and pitch used.</p> <p>f) Specify single continuous &#39;spiral-on time&#39; - minimum 120 seconds or more.</p> <p>g) The system should optimize radiation dose and resolution for each selection.</p> <p>h) Bolus triggered spiral acquisition should be possible.</p> <p>i) True isotropic volume acquisition and sub-millimeter resolution of at least 0.6 mm for all body, angio / Vascular applications. Please specify the pitch used for each application to achieve this resolution.</p>	<p>f) Specify single continuous &#39;spiral-on time&#39; - Minimum 100 seconds or more.</p>
<p>9. Topogram:</p> <p>a) Length and width: specify range.</p> <p>b) Scan times: specify range. Specify real-time viewing option available.</p> <p>c) Views: should be feasible in frontal and lateral views</p> <p>d) Should be possible to interrupt acquisition manually if necessary.</p>	
<p>10. Data acquisition system:</p> <p>a) Detector: Please specify the no. of detectors, detector design, type of detector.</p> <p>b) Number of rows with their thickness, number of elements (min 750) in each row. 26</p> <p>c) Channels per row and number of projections.</p> <p>d) Geometric and absorption efficiency of the detectors in %.</p> <p>e) Z-axis coverage with sub millimeter scan should be more than 10 mm.</p> <p>f) In built mechanism for adapting the tube current during each scan. This should enable radiation dose reduction where body part thickness is less. Specify mechanism used in the system.</p> <p>g) There should be in-built pediatric protocols adapted to weight and/or age.</p> <p>h) Specify available mechanisms to reduce the effective patient dose.</p>	<p>e) Z-axis coverage with sub millimeter scan should be 20 mm.</p>
<p>11. Image Reconstruction:</p> <p>a) Real time reconstruction speed: 10 images per sec or more at 512 x 512 matrix.</p> <p>b) Display matrix: 1024 x 1024 or more.</p>	

<p>c) Reconstructed slice thickness range should be less than one mm (& lt; 1) to 10 mm, freely selectable. Interslice reconstruction interval 0.1 mm</p> <p>d) Specify scan field and reconstruction field.</p>	
<p>12. Monitors:</p> <p>a) Full flat screen LCD monitors of at least 19 inch or more.</p> <p>b) These should be of non-interlaced progressive display type.</p> <p>c) Image refresh rate should be fast and preferably instantaneous and flicker free.</p> <p>d) Monitor resolution of imaging quality (2k x 2k) or more.</p>	<p>a) Full flat screen LED/LCD monitors of at least 19 inch or more.</p>
<p>13. Consoles:</p> <p>a) The main console should simultaneously allow scan, reconstruct and archive with RAM at least 8 GB or more, HD to store at least (min 1Terabyte) 250000 images of 512 matrix size and perform functions such as registration, scheduling, protocol selection, volume rendering, volume measurements, multi- planar reconstruction and standard evaluation applications and all available post-processing functions without the help of the satellite workstation as well as film exposure. Custom- designed keyboard should include controls for scan, display and archive including emergency stop and patient intercom. Patient registration facility including online registration/pre- registration should be possible. Scanning of the patient, exposing films and transfer of images to work station must be possible concurrently. If the operator console is equipped with two monitors, the cursor should move within and between the two monitors in a smooth and continuous manner under the control of a mouse, with the cursor remaining visible during its movement.</p> <p>b) An independent satellite workstation with hard disc of 1 TB or more (to store 500000 images of 512 x 512 matrix), with all functions of the operator console including simultaneous viewing and all post processing functions and filming independently without the help of the main console.</p> <p>c) Data transfer between the 27 operator console & amp; the satellite workstation should be instantaneous. All special (optional) soft ware's including Perfusion CT, osteo CT, Dental CT are to be installed in this workstation also.</p> <p>d) Post processing software: VRT, MIP, MinIP SSD, Image fusion, vessel segmentation, and virtual endoscopy software to be provided on the workstation.</p> <p>e) Cine display should be available, both interactive and automatic, and should have a minimum image refresh rate of 8-10/sec.</p> <p>f) Window width and centre should be freely selectable.</p>	<p>b) Two independent Independent workstation with hard disc of 1 TB or more (to store 500000 images of 512 x 512 matrix), with all functions of the operator console including simultaneous viewing and all post processing functions and filming independently without the help of the main console.</p>
<p>14. Image evaluation tools</p> <p>a) Parallel evaluation of multiple ROI in circle, irregular and polygonal forms.</p> <p>b) Statistical evaluation for area/volume, SD, Mean, Min/Max and histogram.</p> <p>c) Profile cuts: horizontal, vertical and oblique views.</p> <p>d) Distance and angle measurement, freely selectable positioning of co-ordinate system, grid and image</p>	

<p>annotation.</p> <p>e) Facility to reduce streak artefacts in areas such as posterior fossa of head, clavicle, shoulder and body parts with metallic implants.</p>	
<p>15. Post processing tools</p> <p>a) 2-D, including image zoom and pan, image manipulations, including averaging, reversal of grey-scale values, and mirroring; image filter functions, including advanced smoothing algorithm and advanced bone correction.</p> <p>b) Real-time multi- planar reconstruction (MPR) of secondary views, with viewing perspectives in all planes including curved and orthogonal MPR.</p> <p>c) CT angiography with MIP, MinIP, SSD, VRT and other advanced 3D applications and colour coding for different tissues. Post-processing for CT angiography should be fully automated.</p> <p>d) Virtual endoscopy of colon, bronchi and vessels with VR, MIP, MinIP and SSD display, automatic tracking, forward and reverse path selection. Manipulation of endoscope angle and diameter.</p> <p>e) Spatial alignment and visualization of two different data sets of one patient generated on different modalities or with different acquisition times.</p> <p>f) Volume measurements.</p>	
<p>16. Optional items:</p> <p>a) Bolus triggered Brain Perfusion CT study (at least 3-level) with automatic CBF, CBV, MTT, TTP maps, ROI placing, comparing ROI, saving maps.</p> <p>b) Neuro DSA with automatic bone removal software</p> <p>c) Fusion CT: fusion of morphological data obtained on CT, MR or DSA.</p> <p>d) Dental CT: high-resolution evaluation of teeth and jaws with automatic panoramic and paraxial reconstruction, evaluation of mandibular canal and life size filming.</p> <p>e) Radio- therapy planning software: Tumor localization, measurement, contouring and treatment planning</p> <p>f) Lung CT: low dose lung CT protocols for advanced lung nodule detection, assessment and follow-up. Lung segmentation software for nodule detection</p> <p>g) Bone CT: for bone mineral density assessment and quantification for metabolic bone diseases.</p>	
<p>17. Patient communication system:</p> <p>An integrated intercom & automated patient instruction system (API) to be provided.</p>	
<p>18. Image quality:</p> <p>a) Low contrast resolution – specify low contrast resolution with 20 cm CATPHAN phantom. Specify surface dose, mAs, slice thickness and HU used.</p> <p>b) Specify High contrast resolution at 0% and 10% MTF with full FOV.</p> <p>c) Specify cross-field homogeneity.</p>	
<p>19. Image documentation & archival:</p> <p>a) DICOM connectivity to be optimised for networking with other imaging systems.</p> <p>b) Filming parallel to other activities, including independent scanning, documentation and post-processing and configurable image text.</p> <p>c) Archiving: CD and DVD writer should be provided for</p>	

<p>archival, along with 1000 DVDs. Specify minimum number of uncompressed and compressed images that it can store per disc. Option of viewing these discs on any PC without DICOM viewer should be available. Warranty of the system should protect against obsolescence of this device.</p>	
<p>20. Accessories to be provided</p> <p>a) Facility for non-invasive monitoring of oxygen saturation, blood pressure, respiratory rate and skin temperature for both pediatric and adult patients.</p> <p>b) Dry Imager laser camera with resolution 16 bits/ 500 dpi or more, minimum three ports, able to support multiple film sizes (including 17"x14"), throughput of 90 films or more per hour and DICOM 3.0 Compatible.</p> <p>c) Suitable single barrel pressure injector with complete accessories & 1000syringes, tubing and connector. These should be provided over a period of 3 years.</p> <p>d) UPS (of appropriate kVA) for the complete unit. It should be possible to run the entire equipment including patient scanning for at least 30 minutes.</p> <p>e) Two sets of standard patient positioning accessories and restraining devices.</p> <p>f) A complete set of operator manuals incorporating the newer applications.</p> <p>g) Appropriate lead glass for radiation protection for the operator in the gantry room.</p> <p>h) Good quality wrap-around ultra- lightweight zero lead aprons (4 No.) along with a stand for the aprons.</p> <p>i) 2 No's of Tables & chairs, 1 no. of Instrument (medicine) trolley, collapsible wheel chair with rubberized swivel wheels & Patient trolley</p> <p>j) 3 no of LED view box – three / four film size.</p>	<p>i) 2 No's of Tables & chairs, 1 no. of medical patient trolley,</p>
<p>21. Phantom for calibration.</p>	
<p>22. Turnkey work Preparing the site with all civil, mechanical ,electrical, cooling and other works.</p>	<ul style="list-style-type: none"> - Civil & Electrical work according to AERB - 120x 80 cm console lead glass between console & main - _Integrated communication device between main& console room - One small changing room with cloth hanger, mirror - Furniture (Godrej/Juari) 1 steel almirah,2 no high back revolving chair,2 no. mid back revolving chair,1 on 6 feet multipurpose desk with shelves for console. - 1 no.drug trolley, 1 no revolving stool. - Radiation protection - Air conditioning both room - AERB CERTIFICATION OF SITE
<p>23. Training Onsite training of doctors and technicians for at least 15 days.</p>	

(2) Full Room DR System

	Specification of full room DR (Digital Radiography) System	Specification for Auto-position, Auto tracking & auto centering full room DR (Digital Radiography) System
	Flat panel detector made up of amorphous silicon and CSL scintillator on top	Flat panel detector made up of amorphous silicon and Csl scintillator on top
	Pixel size- 140 microns or more.	Pixel size- 140 microns or less
	Special resolutions- 3.5 pl/mm	Special resolutions- 3.5 lp/mm
	Detector must be swapping between vertical and table Bucky	Deleted
	Microprocessor based high frequency generator	Microprocessor based high frequency generator- 100KHz or more
	Capacity: more than 80 KW	Capacity: 80 KW or more
	mA output should be 800mA to 1000mA @ 80kv	mA output should be 1000mA @ 80kv
	Generator capacity must be capable of giving mAs up to 500 mA	Generator capacity must be capable of giving up to 500 mAs
	Anode heat storage capacity should be at least 300 KHU. Higher HKU will be preferred	Anode heat storage capacity should be 600 KHU or more. Higher KHU will be preferred
	Vertical auto stitching must be available with necessary stitching stand and accessory.	Vertical & Horizontal auto stitching must be available with necessary stitching stand and accessory.
	i7 7 th generation PC based work station having 2Tb hard disc, latest solid state HDD, RAM 8 GB or more, 21 inch latest high quality medical monitor / LED monitor.	i7 7 th generation PC based two work station having 1Tb hard disc, latest solid state HDD, RAM 8 GB or more, 21 inch latest high quality medical monitor / LED monitor. (one work station will install in HOD room)
	Must be AERB, USA FDA and European CE approved.	Must be AERB, USA FDA, European CE approved.AERB valid NOC with declaration on non judicial stamp paper. In case of NOC from AERB valid type approval certificate has to be submitted prior to submission of invoice for payments.
	Vertical travel range: 400 mm to 1900 mm.	Vertical travel range: 0 to 1800 mm or more.
	g. Two good quality table and chairs	g. Two good quality table chairs and one Godrej storewel.
	TURN KEY WORK	<ul style="list-style-type: none"> - Civil & Electrical work according to AERB - 120x 80 cm console lad glass between console & main - Integrated communication device between main& console room - One small changing room with cloth hanger, mirror - Furniture (Godrej/Juari) 1 steel almirah,2 no hish back

		<p>revolving chair,2 no. mid back revolving chair,1 on 6 feet multipurpose desk with shelves for console.</p> <ul style="list-style-type: none"> - 1 no.drug trolley, 1 no revolving stool. - Radiation protection - Air conditioning both room - AERB CERTIFICATION OF SITE
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Group- C(Cardiology)

Multiparamonitoring with Central Monitoring System

	Tender Specification	Amendment after prebid
	Monitor should have 17” independent flat panel display.	Monitor should have 17” or more independent flat panel display.
	Patient monitoring network shall be able to support up to 1,000 monitoring nodes.	Omitted

Group- D(TB & Chest)

DELETED

Group- E(Paediatric Medicine)

Neonatal multipara monitor

	Tender Specification	Amendment after pre bid
	It should have Compact design, TFT screen more than 12” configurable with at least 4 wave form in single screen	It should have Compact design, TFT screen more than 10” or more configurable with at least 4 wave form in single screen

Group-F (ENT)

SI No. (c) Navigation System

SI No	Tender Items	Modification after pre-bid.
	Wide range of conventional as well motor driven navigations system	Wide range of conventional as well motor driven or equivalent navigations system.
	Camera and console can be separated and attached to standard rails (Maquet) – space-saving and close to the patient	Camera and console can be separated and attached together space-saving and close to the patient.
	Probe with glass-spheres, autoclavable	Probe with glass-spheres/Reflective spheres , autoclavable
	Frontal Sinus Ostium Seeker.	Frontal Sinus Ostium Seeker./Pointer
	High precision and better orientation through waypoint navigation.	High precision and better orientation through waypoint navigation or equivalent.
	The Monitor size must be above 26”	
	curette 0 degree,	curette 0 degree, /Pointer
	curette 55 degree	curette 0 degree, /Pointer
	curette 90 degree	curette 0 degree, /Pointer
	All the navigated instruments should be able to autoclaved for 30 cycles as per company brochure.	All the navigated instruments should be able to autoclaved..
	Cost of this instruments to be quoted separately @ 250 cases in a year for a period of 10 years which will be taken for the purpose of price evaluation. The above system should be integrated in endoscopic equipment cart.	Cost of this instruments to be quoted separately @ 250 cases in a year for a period of 10 years which will be taken for the purpose of price evaluation or list of the consumables should be quoted separately & freezing the price for next 5 years.
	The above system should be integrated in endoscopic equipment cart	Deleted.

(d) ENDOSCOPIC-3D CAMERA SYSTEM:1set.

3D Camera system

	Integrated video laparoscope, 10 mm, 0° direction of view •	Integrated 3 D Nasal endoscope, 4 mm, 0° direction of view
	Integrated video laparoscope, 10 mm, 30° direction of view	Integrated video endoscope, 4 mm, 30° direction of view
	Sterilization options: Autoclavable, Sterrad® 100S, NX, 100NX; Steris® system, V-Pro, and Et	deleted

Group-G(General Surgery)

a)Video Assisted Thoracis Surgery (VATS)set:

SI No	Tender Specification	Amended specification
	Technical Specifications for VATS Set with 3D Camera and Other Image Management Systems :- Endoscopic – 3D Camera System : The 3D Endoscopic Camera system should offer excellent imaging with extraordinary depth perception. The system should consist of : 3D – Camera Head : <ul style="list-style-type: none">• Integrated video laparoscope, 10 mm, 0° direction of view, 70° angle of view.• Integrated video laparoscope, 10 mm, 30° direction of view, 70° angle of view.• Two distal image sensors, optimized for stereoscopic endoscopy.• Precise control of the two image sensors via cutting–edge electronics in the endoscope handle.• Precise alignment of the two sensors.• Slender and light design – weight should not be more than 400 gm for optimal ergonomics, integrated in a fine titanium case.• Sterilization options : Autoclavable, low temperature sterilization like plasma and EtO.• Safety class CF defib.• Extremely easy operation, very short setup time before surgery. 3D Camera Control Unit (CCU) : The camera control system should have : <ul style="list-style-type: none">• DVI–D output for transmitting the 3D signal in 1080p format at 50 / 60 Hz to a 3D monitor.• HD–SDI and S–Video output for simultaneous signal transmission to standard 2D monitors.• Easy switching between 2D and 3D modes.• Integrated USB interface for saving captured video or still images in 2D.• Overall system rated safety class CF defib.	

Technical Specifications :-

Camera System :

- USB Port – For Captuting direct 2D still & videos.

AGC : Microprocessor controlled.

Video Output – FULL HD signal at DVI-D socket – HD–SDI signal at BNC socket.

- RGBS signal at DSUB socket.
- S – Video at 4 – pin mini – DIN socket.

(2 x)

- FBAS signal at BNC socket.

Weight should not be more than 3.5 kg.

Input Keyboard for title generator, 5–pin DIN Socket.

Operating Voltage 100 – 240 V AC, 50 / 60 Hz.

Design Meets IEC 601–1, 601–2–18, CSA 22.2 nc. 601, UL 2601 – 1 and CE according to MDD, protection class I / CF defibrillation – safe.

3D Monitor :

- Medical Grade FULL HD monitors 32" – The system should have facility to display in 3D and 2D modes.
- Various Signal Inputs : DVI–D for 3D signal, HD–SDI for 2D signal in HD, S–Video for 2D signal in standard resolution.
- Should be supplied with 20 pieces of light, passive circularly polarized 3D glasses.

Technical Specifications :

3D Monitor :

LCD Panel 32 inch (16 : 9 aspect ratio).

Screen Dimensions : 776 mm (W) x 443 mm (H) x 114 mm (Diagonal).

Number of Pixels : 2,073,600 pixels (1,920 x 1,080).

Viewing Angle ~ Horizontal : 178 degrees, Vertical : 178 degrees (3D : TBD).

Contrast Contrast 1000 : 1.

Luminance : 340 cd / m2.

Reaction Time : 6 – 8 ms.

Display Mode.

Dual Display Mode.

Triple Display Mode.

PIP and POP Mode.

Mirror Image Mode.

Xenon / LED Light Source and Light Cable :

Specifications :

High intensity light source.

Special Feature :

- High light intensity, with 300 watt xenon lamp / LED Light
- High colour temperature – more than 6000 K corresponds to brightness of sunlight resulting in high visual and photographic clarity for colour rendition.
- Monitoring of lamp function.

Technical Specifications :

Lamp Type	: Xenon lamp, 300 watt / LED Type
Colour Temperature	: Approx. 6000 K.
Light Outlets	: 1.
Light Intensity Adjustment	: Continuously adjustable from 0 to 100%.
Certified to	: IEC 601–1, CE label according to MDD, protection class 1 / BF.

Fiber Optic Light Cable :**Specifications :**

Size 3.5 mm, length 250 cm.

Equipment Cart :

Equipment Cart, wide, high, rides on 4 antistatic dual wheels equipped with locking brakes, mains switch on cover, central beam with integrated electrical sub-distributors with 12 sockets, grounding plugs, Dimensions in mm (w x h x d) : Equipment Cart : 830 x 1474 x 730, Shelf : 630 x 25 x 510, Caster Diameter : 150 mm consisting of : Base Module, Equipment Cart Wide Cover, Equipment Cart Wide Beam Package, Equipment Cart High 3x Shelf, Wide Drawer Unit with Lock, Wide 2x Equipment Rail, Long Camera Holder.

Recording System :**Modular and Preconfigured System with Integrated Touch Screen for Intraoperative****Documentation of Still Images and Videos.****Essential Features of the System :**

Full control from the sterile field via camera head buttons, integrated touch screen (with transport lock and retractable), optional foot switch.

Parallel (synchronic or independent) recording of two image sources.

Still images and videos (optional with audio) in 2D or 3D (with optional 3D–Camera System).

Water mark feature.

Intelligent, adaptive storage management.

Storage location is freely definable and configurable.

Storage on internal memory (2 TB, FIFO), USB storage media via 2.0 and 3.0, optical media, network drive, FTP or via DICOM.

Automatic storage in the background to reduce the time between the interventions.

Easy management and overview of open / automatic save processes.

Import of patient data via keyboard or DICOM work list.

Intra and postoperative printing via optional printer (local or network).

Various adaptable templates for printing to choose from.

Integrated surgical checklist following the WHO standard or customizable.

Basic functions for the editing of still images and videos.

Playback of 2D and 3D content (optional 3D system required).

Integrated file-viewer for still images, videos and checklists from diverse data sources.

Integrated security software as a protection against malware, independent from security patches of the operating system and it is only possible to run certified software.

Structured and clear user guidance, optimized for touch screen control.

Scalable range of functions.

Low noise generation and fast system start due to SSD-technology.

Technical Data :

Input Voltage : 100 – 240 V AC.

Input Frequency : 50 – 60 Hz.

Power Output : 350 Watt.

CPU : Intel® Core™ i7 – 2600 @ 3.4 GHz.

Internal Memory : SSD (70 GB) I HDD (2 TB).

Memory RAM : 8 GB.

Connectors : 3x 1 GB Ethernet (RJ 45), 6x USB 2.0, 2x USB 3.0.

Image Format : BMP, JPG, JPG 2000.

Video Format : MPEG-4, MPEG-2, MOV.

Video Signal Inputs : 2x DVI-D.

Color System : PAL, NTSC.

Resolution Still Images : Up to 1920 x 1080, Aspect Ratio 16 : 9.

Resolution Videos : Up to 1920 x 1080 Progressive Scan for 25 / 30 frames.

Dimension : 305 mm x 165 mm x 355 mm (w x h x d).

Weight : 8.00 kg.

Preinstalled Printer : SONY UP-DR 80 MD.

Type Approval : IEC 60601-1-1, EN60601-1, EN60601-2.

Classification : CE, MDD.

Protection Class : 1 / B.

Medical Device : Yes.

Touch Screen ~

Screen : 12".

Resolution : 1280 x 800.

Aspect Ratio : 16 : 10.

Dimension : 305 mm x 71 mm x 305 mm (w x h x d).

Weight : 5.44 kg.

Total Height (Basic Unit with Touch Screen) : 226 mm.

Communication (DICOM) Functions ~

Modality Worklist Information Model.

VL Endoscopic Image Storage.

Video Endoscopic Image Storage.

Secondary Capture Image Storage.

Delivery Contents ~

Basic Unit with Integrated DVD / CD – Burner (Blu–Ray Reader).

Software Package.

USB Silicone Keyboard with Touch Pad.

ACC Connecting Cable (To Control the System via the Camera Head Buttons).

DVI Connecting Cable : 200 cm.

HDMI–DVI Cable : 200 cm.

Power Cable : 300 cm.

Signal Management – Qty 1.

A compact solution enables the easy and efficient distribution and individual routing of several high-resolution video signals, even without an integrated OR.

The HD Video Router shall be a Medical–Grade video routing system that accepts up to 4 DVI–D inputs and 4 DVI–D outputs.

This shall be utilized to connect various imaging devices such as the Endoscopic Camera, Surgical Camera, Room Camera, Surgical Displays, etc...

Routing the desired input to the desired output shall be possible via 4 membrane buttons on front panel.

In addition, this system shall be able to also operate as a distributor in that any of the selected inputs is simultaneously broadcasted over the 4 outputs at the push of a button.

System should have following features :

- Two Operating Modes – switcher or router.
- Convenient use via four membrane keys. LEDs on the front panel display the operating mode in use.
- Easy switching or routing of DVI–D sources in the OR or during live transmission. The simultaneous connection of a documentation system enables the recording of up to four sources.
- Convenient distribution of DVI–D sources in the OR to various monitors or documentation systems, management system can be controlled via a front–button operation, it should have ~
 - Video Inputs : 4 x DVI–D.
 - Video Outputs : 4 x DVI–D.
 - Operation : 4 membrane keys with LED display.
 - Max. Video Resolution : 1920 x 1080 p; 50 / 60 Hz.
 - External Dimensions (w x h x d) : 305 x 83.7 x 249 mm.

VAT Instruments :

1. Rod Lens Telescope 30°, enlarged view, diameter 10 mm, length 31 cm, autoclavable fiber

	<p>optic light transmission incorporated. – Qty 1.</p> <p>2. Rod Lens Telescope 30°, enlarged view, diameter 5 mm, length 29 cm, autoclavable. – Qty 1.</p> <p>3. Telescope, 10 mm, length 32 cm, variable direction of view from 0° – 120°, twisting controller to select the desired view of direction, fiber optic light transmission incorporated. – Qty 1.</p> <p>4. Straight Forward Telescope 0°, enlarged view, with angled eyepiece, diameter 10 mm, length 27 cm, fiber optic light transmission incorporated, with 6 mm instrument channel, autoclavable. – Qty 1.</p> <p>5. Trocar, size 11 mm, consisting of : trocar only with blunt tip, cannula without valve, with insufflation stop-cock, length 10.5 cm automatic valve. – Qty 1.</p> <p>6. Pneumatic Holding Arm, set, for point setter consisting of : Point Setter Arm OR Table Adaptor Lock Adaptor, clamping jaws clamping jaw, large clamping jaw, small clamping jaw, for fiber scopes pressure regulator, 7 bar 0 single-use cover with elastic tip, 42 x 164 cm. – Qty 1.</p> <p>7. Straight Forward Telescope 0°, working distance 25 – 75 cm, diameter 10 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code : green. – Qty 1.</p> <p>8. Suction Tube, insulated, with trumpet valve, for unipolar coagulation, size 5 mm. – Qty 1.</p> <p>9. Dissecting and Biopsy Forceps, rotating, size 5 mm, length 43 cm, with connector pin for unipolar coagulation, single action jaws, with luer lock adaptor for cleaning, consisting of : plastic handle, without ratchet outer tube with insert, insulated. – Qty 1.</p> <p>10. Coagulating Electrode, insulated, for unipolar coagulation, size 5 mm. – Qty 1.</p> <p>11. Powder Blower with bulb, size 5 mm, working length 42 cm, consisting of : sheath for powder blower, rubber bulb, tube and bottle. – Qty 1.</p> <p>12. Trocar, size 11 mm, autoclavable consisting of : trocar, with blunt tip, trocar cannula, flexible, without valve, length 8.5 cm. – Qty 4.</p> <p>13. Plastic cannula autoclavable for use with flexible trocar size 11 mm, package of 5. – Qty 4.</p> <p>14. Trocar, size 6 mm, autoclavable consisting of : trocar, with blunt tip, trocar cannula, flexible, without valve, length 8.5 cm. – Qty 4.</p> <p>15. Plastic cannula autoclavable for use with flexible trocar size 6 mm, package of 5. – Qty 4.</p> <p>16. Trocar, size 6 mm, consisting of : trocar with blunt tip, cannula with thread, length 4 cm. – Qty 4.</p> <p>17. Trocar, size 6 mm, consisting of : trocar, only with blunt tip, cannula with thread, length 6 cm. – Qty 4.</p> <p>18. Trocar, size 11 mm, consisting of : trocar only, with blunt tip, cannula with thread, length 6 cm. – Qty 4.</p> <p>19. Trocar, size 6 mm consisting of : trocar with blunt tip, cannula without thread, length 6.5 cm, with insufflation stopcock, silicon leaflet valve size 6 mm. – Qty 4.</p> <p>20. Trocar, size 11 mm consisting of : trocar with blunt tip, cannula without thread, length 6.5 cm,</p>
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	with insufflation stopcock, silicon leaflet valve, size 11 mm. – Qty 4.
21.	Trocar, size 13 mm, consisting of : trocar with blunt tip, cannula with thread, length 4 cm. – Qty 4.
22.	Trocar, size 13 mm, consisting of : trocar with blunt tip. cannula with thread, length 6 cm. – Qty 4.
23.	Parenchymal Forceps, atraumatic, straight jaws, single action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions, with ratchet, outer tube with working insert. – Qty 2.
24.	Parenchymal Forceps, atraumatic, double curved jaws, single action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions, with ratchet, outer tube with working insert. – Qty 2.
25.	Lung Forceps, atraumatic, fenestrated, curved jaws, single action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions, outer tube with working insert. – Qty 2.
26.	Dissecting and Grasping Forceps, curved jaws, double action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions, outer tube with working insert. – Qty 1.
27.	Lung Nodule Forceps, atraumatic, fenestrated, curved jaws, single action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions, outer tube with working insert. – Qty 1.
28.	Grasping Forceps, cobra-jaws, 1 x 2 teeth, straight jaws, single action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions outer tube with working insert. – Qty 1.
29.	Grasping Forceps, straight jaws, single action jaws, size 5 mm, length 28 cm, consisting of : metal handle with 4 locking positions, outer tube with working insert. – Qty 1.
30.	Parenchymal Forceps, atraumatic, curved jaws, single action jaws, size 5 mm, length 28 cm, for use with linear stapler. – Qty 2.
31.	Dissecting Forceps, insulated, curved jaws, double action jaws, size 5 mm, length 28 cm, with connector pin for unipolar coagulation, consisting of : insulated metal handle with 4 locking positions, insulated outer tube with working insert. – Qty 2.
32.	Scissors, insulated, straight jaws, curved scissor-blades, double action jaws, size 5 mm, length 28 cm, with connector pin for unipolar coagulation, consisting of : insulated metal handle with 4 locking positions, insulated outer tube with working insert. – Qty 2.
33.	Scissors, insulated, distally angled outer sheath, curved scissor-blades, scissor blades open horizontally to angulation, double action jaws size 5 mm, length 28 cm, with connector pin for unipolar coagulation, consisting of : insulated metal handle with 4 locking positions, insulated outer tube with working insert. – Qty 2.
34.	Scissors, insulated, distally angled outer sheath, straight scissor-blades, scissor blades open parallelly to angulation, single action jaws, size 5 mm, length 28 cm, with connector pin for

	<p>unipolar coagulation, consisting of : insulated metal y-handle with 4 locking positions, insulated outer tube with working insert. – Qty 2.</p> <p>35. Biopsy Forceps, insulated, distally angled outer sheath, single action jaws, size 5 mm, length 28 cm, with connector pin for unipolar coagulation, consisting of : insulated metal y-handle with 4 locking positions, insulated outer tube with working insert. – Qty 2.</p> <p>36. Biopsy Forceps, insulated, straight, single action jaws, size 5 mm, length 28 – 35 cm, with connector pin for unipolar coagulation, consisting of : insulated handle, insulated outer tube with working insert. – Qty 2.</p> <p>37. Surgical Sponge Holder, for atraumatic dissection of tissue layers, size 10 mm, length 30 cm, consisting of : handle, outer sheath, insulated sponge holder insert. – Qty 2.</p> <p>38. Powder Blower with bulb, size 5 mm, working length 30 cm, consisting of : sheath for powder blower, rubber bulb, tube and bottle. – Qty 2.</p> <p>39. Suction – Coagulation Cannula, with connector pin for unipolar coagulation with handle, size 5 mm, length 28 – 35 cm. – Qty 2.</p> <p>40. Dissecting Forceps, rotating, dismantling, with connector pin for bipolar coagulation, distally angled outer sheath, double action jaws, curved jaws, jaws open horizontally to angulation, size 5 mm, length 20 cm, color code : light blue consisting of : outer sheath with forceps insert. – Qty 2.</p> <p>41. Dissecting Forceps, model, dismantling, with connector pin for bipolar coagulation, distally angled outer sheath, double action jaws, curved, jaws open horizontally to angulation, size 5 mm, length 28 cm, color code : light blue, consisting of : plastic handle, with 4 ratchet positions forceps insert with outer sheath. – Qty 2.</p> <p>42. Scissors, model, dismantling, with connector pin for bipolar coagulation, distally angled outer sheath, single action jaws, straight scissor blades, scissor blades open vertically to angulation, size 5 mm, length 28 cm, color code : light blue consisting of : plastic handle, with 4 ratchet positions scissors insert with outer sheath. – Qty 2.</p> <p>43. METZENBAUM Scissors, model, rotating, dismantling, with connector pin for bipolar coagulation, curved jaws, more slender scissor blades, double-action jaws, size 5 mm, length 20 cm, color code : light blue consisting of : plastic handle metal outer sheath, insulated MW scissors insert. – Qty 2.</p> <p>44. Suction – Coagulation Cannula, with connector pin for bipolar coagulation, distally angled sheath, for use with handle, size 5 mm, length 28 cm. – Qty 2.</p> <p>45. Suction and Irrigation Cannula, with lateral holes, distally angled sheath, for use with handle, size 5 mm, length 28 cm. – Qty 2.</p> <p>46. Dissecting Electrode, L-shaped, with connector pin for unipolar coagulation, distally angled sheath, size 5 mm, length 28 cm. – Qty 2.</p> <p>47. Palpation Probe and Knot Pusher, distally angled sheath, size 5 mm, length 28 cm. – Qty 1.</p> <p>48. Needle Driver Parrot–Jaw straight handle with ratchet length 33 cm. – Qty 1.</p>
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49.	Assistant Needle Driver Flamingo Jaw straight handle length 33 cm. – Qty 1.
50.	Rib Spreader, self-retaining, blade depth 40 mm, blade width 30 mm. – Qty 1.
51.	Rib Spreader, self-retaining, blade depth 60 mm, blade width 30 mm. – Qty 1.
52.	Dissecting Forceps, self-retaining, with ratchet, S-shaped, length 330 mm. – Qty 1.
53.	Dissecting Forceps, self-retaining, with ratchet, S-shaped, length 280 mm. – Qty 1.
54.	Grasping Forceps, with ratchet, fenestrated, S-shaped, medial joint, length 330 mm. – Qty 1.
55.	Dissecting Scissors, S-shaped, medial joint, length 330 mm. – Qty 2.
56.	Dissecting Scissors, S-shaped, medial joint, length 280 mm. – Qty 1.
57.	Dissecting Scissors, S-shaped, distal joint, length 330 mm. – Qty 1.
58.	Dissecting Scissors, S-shaped, distal end angled, medial joint, length 260 mm. – Qty 1.
59.	Dissecting Forceps, atraumatic, bayonet-shaped, insulated, working length 220 mm. – Qty 1.
60.	Dissecting Forceps, with multiple teeth, bayonet-shaped, insulated, working length. – Qty 1.
61.	Suction Tube, with trumpet valve, curved, working length 250 mm. – Qty 1.
62.	Unipolar Coagulating Electrode, knife tip, malleable, working length 400 mm. – Qty 1.
63.	Unipolar Coagulating Electrode, ball tip, malleable, working length 400 mm. – Qty 1.
64.	Needle Holder, S-shaped, with ratchet, length 270 mm. – Qty 1.
65.	Sling Passer, working length 250 mm. – Qty 1.
66.	Retractor, with 3 teeth, S-shaped length 270 mm. – Qty 2.
67.	Retractor, with 3 teeth, distal end curved, length 270 mm. – Qty 1.
68.	Lung Spatula, S-shaped, working length 270 mm. – Qty 1.
69.	Sponge and Dissecting Forceps, length 20 cm. – Qty 1.
70.	Sponge and Dissecting Forceps, length 30 cm. – Qty 1.
71.	Sponge and Dissecting Forceps, with ratchet, length 20 cm. – Qty 1.
72.	Biopsy Forceps, with suction channel, length 20 cm. – Qty 1.
73.	Biopsy Forceps, with suction channel, length 30 cm. – Qty 1.
74.	Biopsy Forceps, with oval jaws, size 8 mm x 16 mm, length 20 cm. – Qty 1.
75.	Biopsy Forceps, with oval jaws, size 8 x 16 mm, length 30 cm. – Qty 1.
76.	Distending DCI Video Mediastinoscope, length 20 cm, distension in horizontal and radial direction, with connection on holding system via mechanical central clamp or universal clamping jaw, for use with DCI HOPKINS Telescope and DCI camera head -QTY 1
77.	DCI Forward-Oblique Telescope 30°, diameter 4 mm, length 14 cm, autoclavable, fiber optic light transmission incorporated, with 90° adaptation to the DCI camera head, for use Distending DCI Video Mediastinoscope- QTY 1
78.	Single-Chip Camera Head, Image 1 with 2 free programmable Camera Head buttons , focal length f = 16mm, for use with DCI Endoscopes – QTY 1
79.	Fiber optic light able, 3.5 mm, length 320 cm, for use with Endovision DCI camera head - QTY 1

80.	Scissors, rotating, with connector pin for unipolar coagulation, size 5 mm, length 25 cm, curved, double action jaws, consisting of : Plastic Handle, without ratchet Outer Tube, insulated and Scissors Insert. – Qty 2.
81.	CLICKLINE Scissors Insert with Outer Sheath, curved, double action jaws, spoon-shaped jaws, length of blades 17 mm, size 5 mm, length 36 cm, sterile, for single use, package of 10. – Qty 2.
82.	Coagulation and Suction Cannula, Ø 5 mm, curved, insulated, with connector pin for unipolar coagulation, length 20 cm. – Qty 2.
83.	Coagulation and Suction Cannula, Ø 5 mm, curved, insulated, with connector pin for unipolar coagulation, length 30 cm. – Qty 2.

Group- H(Physiotherapy Unit)

SI No.	Item	Technical specification as per tender	Modification to be made
a	High power laser for Physiotherapy	High power laser for Physiotherapy	Item name may be modified to LASER for Physiotherapy
		<ul style="list-style-type: none"> Microprocessor based scanning LASER machine. 	<ul style="list-style-type: none"> Microprocessor based scanning LASER machine with minimum power output of 240mw.
		<ul style="list-style-type: none"> External Battery back up 	Online UPS of required capacity with a backup of 30 minutes.
		<ul style="list-style-type: none"> Mobile mounted on trolley. 	Unit should be mounted on trolley
		<ul style="list-style-type: none"> Slandered accessories. 	<ul style="list-style-type: none"> Slandered accessories: -Protective Goggles(2) Meridian point detection kit Probe.
K	Hand Evaluation Kit	<ul style="list-style-type: none"> Finger Goniometer and other standard accessories. 	<ul style="list-style-type: none"> “and other accessories “ may be deleted.

Group- I (Liver Transplant unit)

(b)Thrombosis(DVT Pump)

Tender	Tender Specification	Amendment after pre-bid
SI no 5	Should not require DVT sleeves below cuffs.	Deleted
SI no.6	Should deliver constant pre-set Pressure ranges: a) Distal: $52 \pm 10\%$ mmHg b) Proximal: $52 \pm 10\%$ mmHg	Should deliver constant pre-set Pressure ranges:as customized by user a:- Distal: $40 \pm 10\%$ mmHg b: Proximal: $30 \pm 10\%$ mmHg
SI no 10	Should have I.S.O. certificate	Should have I.S.O. certificate/European CE/USFDA

SI No.(C) Infusion Pump:-

	Tender Specification	Amendment after pre bid
	Should have battery backup of 10 hours or more when fully charged with a provision to display residual battery life in hours and minutes	Should have battery backup of 4 hours or more when fully charged with a provision to display residual battery life in hours and minutes

Group- J

Fully Automated Biochemistry Analyser Machine on PPP Mode (Public Private Partnership) in Biochemistry Pathology , Ward & Advance Cardiac Care, Following amendment /addition is made herewith in the Group-J

Tender SI no. 13, 14, 15 Page no. 75 to 82	Deleted
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Financial Bid (For Group – J Only).

Appendix - A		
TEST DETAILS		
Sr. No.	Description	
		CGHS - Patna Rate Per Unit Test (Updated rate will be applicable as and when notified by the concerned authority)
		As per list attached (Annexure-1)
1	ACID PHOSPHATASE (ACP)	(Bidders are required to mention the rate against each investigation as per Annexure – 1)
2	ADA	
3	AFP	
4	ALANINE AMINOTRANSFERASE (ALT/GPT)	
5	ALBUMIN	
6	ALKALINE PHOSPHATASE (ALP IFCC)	
7	Ammonia	
8	Apo A1	
9	Apo B	
10	ASO	
11	ASPARTATE AMINOTRANSFERASE (AST/GOT)	
12	B HCG	
13	B12	
14	C3	
15	C4	
16	CA 125	
17	CA 15.3	
18	CA19.9	
19	CALCIUM (ARSENAZO)	
20	Carbamazepine	
21	CEA	
22	CHOLESTEROL	
23	CK MB MASS	
24	CK-MB	
25	CL	
26	CORTICOL	
27	CREATINE KINASE &CK (NAC)]	
28	CREATININE	
29	CRP	
30	D-DIMER	
31	DIRECT BILIRUBIN	
32	Estradiol	
33	Feritin	
34	Feritine	
35	FSH	

36	FT4	
37	GAMMA-GLUTAMYLTRANSFERASE-GGT IFCC	
38	GLUCOSE (Hexokinase Method)	
39	HbA1c	
40	HBDH	
41	HCG	
42	HDL	
43	IgA	
44	IgG	
45	IgM	
46	INORGANIC PHOSPHOROUS	
47	IRON	
48	K	
49	LACTATAE DEHYDORGENASE-LDH IFCC (L-P)	
50	LACTATE	
51	LDL	
52	LH	
53	LIPASE	
54	Lp(a)	
55	MAGNESIUM	
56	MICROALBUMIN	
57	Myoglobin	
58	NA	
59	NT-PROBNP	
60	Opitates	
61	PRESEPSIN	
62	PROCALCITONINE	
63	Progesterone	
64	Prolactin	
65	PSA	
66	RF	
67	Serum Ferritin	
68	Testosterone	
69	TIBC	
70	TOTAL BILIRUBIN	
71	TOTAL PROTEIN	
72	TOTAL PROTEIN ALB/GLO RATIO	
73	TRIGLYCERIDES	
74	TROPONIN I/T	
75	UNSATURATED IRON BINDING CAP. UIBC	
76	UREA/BUN	
77	URIC ACID	
78	URINARY / CSF PROTEIN	
79	URINE MICROALBUMIN	
80	Valproic Acid	
81	Vitamin B12	
82	Vitamin D	
83	ú AMYLASE	
<ul style="list-style-type: none"> The bidders are instructed to mention rate of other investigations as per Annexure – 1 (CGHS - Patna Rate), which can be done on the proposed equipments. 		

Financial bid envelop should only contain the percentage of revenue sharing being offered to “Indira Gandhi Institute of Medical Sciences Patna.

The financial bids shall be submitted in the following format

Sl. No.	CGHS- Patna rate for Treatment / Procedure / Investigation List (Non-NABH/Non NABL rates)	Revenue Share offered to IGIMS - Patna in % (Note: Minimum Revenue Sharing to the Institute will be 30%, However, bidder are required to quote 30% or above. L1 will be decided based on highest revenue sharing offered to this institute.)
	Complete rate list is being attached as Annexure – 1. Bidders are required to mention the individual rate against each investigation as per Annexure -1	

Remarks:

- In case two or more bidders offered same revenue sharing, L 1 will be decided based on the no. of similar type of work in Govt. Institution/ Reputed Pvt. Hospital (Not less than 700 beds.)
- Even after above conditions, two or more bidders offered same revenue sharing, decision will be taken through lottery.

Signature with stamp of bidder

Performa for Price bid & CAMC is being again uploaded

PRICE SCHEDULED FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA.

1	2	3	4	5							6
				Price per unit (Rs.)							
Scheduled	Brief description of goods Make: Model:	Country of origin	Qty. nos.	Ex-factory/ex-warehouse /ex-showroom/off-the shelf	Excise duty(if any) % and value.	Sales tax/vat/octroi (if any % and value.	Packing and forwarding charge	Inland transportation , insurance for a period including 3 months delivery, loading/unloading and incidental cost till consignee site.	Incidental services (including installation and commissioning, supervision, demonstration and training) at the consignee site.	Unit price (at consignee site basis)(g)	Total unit price (At Consignee Site) Basis Rs. 4x5(g)
				(a)	(b)	(C)	(d)	(e)	(f)	a + b + c + d+ e + f	

Total quoted price in Rs.

In Words:

Note:

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warrantee shall be quoted separately as per price scheduled.

Place:

Name:

Date:

Business Address; -

Signature of Bidder with date;-

Seal of the Bidder;-

Annexure - II
COMPREHINSIVE ANNUAL MAINTENANCE CONTRACT PRICES SCHEDULE

S. No.	Item Description	1 st Yr.	2 nd Yr.	3 rd Yr.	4 th Yr.	5 th Yr.	6 th Yr.	7 th Yr.	Total Comprehensive Annual Maintenance Contract over a period of seven years after expiry of warranty period of three years from the date of successful installation. (a + b + c + d + e + f + g + h + i)
a	b	c	d	e	f	g	h	i	j
1.	Name of the Equipment: Make: Model: Qty.:								
2.	Name of the Equipment: Make: Model: Qty.:								

Scope of Contract (details as mentioned in the Clause No. – 13 of “Instruction to Bidder” & Clauses No.: 3, 4 and 5 of “Condition of Contract”):

- a) The rate of Comprehensive Annual Maintenance Contract as mentioned above should cover the Complete System. Complete System should include the basic unit and allied supporting components like UPS, Stabilizer, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit.
- b) **Preventive maintenance visit:** Four Maintenance visits at regular interval for usual maintenance & supervision failing which 25% of the contract amount per visit would be deducted as penalty.
- c) **Break down maintenance visit:** As & when required
- d) **Response Time:** within 48 Hours.
- e) Uptime Guarantee: 95% of 365 days
- f) The above-mentioned charges should includes labour charges for maintenance and breakdown visits per year, spares, accessories and all type of consumables required for the maintenance of the supplied items. If any spares / consumables /accessories etc. are not covered under above-mentioned charges; it should be clearly mentioned with frequency of replacement and with rate. The validity of rate of such items should also be mentioned clearly. What will be the rate of escalation on the quoted rate after expiry of the validity of rate of such item must be mentioned.
- g) Payment of Comprehensive Annual Maintenance Contract would be made on half yearly basis after completion of work and satisfactory working report. In no case, advance payment is to be considered.

Seal and Signature of the bidder with date

Last date and time for submission of completed bidding documents is extended up to 28/12/2017 at 4.00PM.

Received bids (Technical only) will be opened on 29.12.2017 at.3.00PM in the Conference Hall IGIMS, Patna

Other terms & conditions will remain the same as per bidding document.

Sd/- (Sri Birendra Singh) SO Cum Procurment Consultant	Sd/- (Sri Shailendra Kr.Singh) Sr.Biomedical Engineer IGIMS, Patna	Sd/- Sri Binay Kr. Panday Sr.Physiotherapist- IGIMS, Patna	Sd/- (Dr. Jyuit Ram Keshri) Asstt. Prof. Biochemistry- IGIMS Patna
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Sd/- (Dr. Pawan Kumar Jha) HOD General Surgery- IGIMS, Patna	Sd/- Dr. Rakesh Kr. Singh) HOD ENT -IGIMS, Patna	Sd/- (Dr. Sanjay Kr. Suman) HOD Radiology - GIMS, IGIMS, Patna	Sd/- (Dr. Santosh Kumar) HOD Orthopedics -IGIMS, Patna
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Sd/- (Dr. Manish Mandal) HOD G I Surgery - IGIMS, Patna	Sd/- (Dr. Jayant Prakash) HOD Pediatric Medicine -IGIMS, Patna	Sd/- (Dr. B P Singh) HOD - Cardiology- IGIMS, Patna	Sd/- (Dr.P. K. Sinha) Medical Superintendent- IGIMS, Patna
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Sd/-
Prof. (Dr.) N. R.Biswas
Director
I.G.I.M.S. – Patna.