### AMENDMENT No - VI Dated 30/11/2015

Sub.: Procurement of Medical Equipment for Kalpana Chawala Government Medical College, Karnal.

Ref: Tender Enquiry No.: HSCC/KCGMC/Medical Equipment/2015/02 dt. 06.10.2015

This is in continuation to Amendment No. I, II, III, IV & V, the Bid submission date is being extended from 15.12.2015 to 17.12.2015 for Equipments under Sr. No. 2, 3, 4, 24, 26, 27, 32 & 35 <u>ONLY</u> as per Revised Schedule mentioned below (for all other items it shall be 15.12.2015 as mentioned at Amendment V):

Sl. No.	Description	Revised Schedule
i.	Closing date & time for receipt of tender	17.12.2015 at 02:30 P.M.
ii.	Time and date of Opening of Techno – Commercial Tenders	17.12.2015 at 03:00 P.M.

The amended Specifications for Items under Sr. Nos. 2, 3, 4, 24, 26, 27, 32 & 35 & revised quantity and EMD for some items are attached below. All other terms and conditions of the tender enquiry document shall remain unchanged. Bidders are also advised to be guided by the EMD clause mentioned in the Tender Document & submit in the form of DD/ BG/Bankers Cheque & also to check whether the EMD (in case of EMD is in the form of Bank Guarantee) being submitted are valid for 165 days from the revised date of opening. Additional Sheet has been inserted in Price Schedule for submitting optional / essential etc items, if any, in the Tender Document. Bidders are also requested to resubmit their offers, if uploaded earlier.

Prospective bidders are advised to regularly visit HSCC website/ CPPP website for corrigendum /amendments etc. if any, as these will be notified on these portals only. No separate advertisement will published in the news papers in this regard.

CGM, HSCC India Limited For and on behalf of DGMER, Panchkula

#### NIT & LIST OF REQUIREMENTS

With reference to the <u>NIT & List of Requirement</u> mentioned in Tender Enquiry No.: HSCC/KCGMC/Medical Equipment/2015-02 dt. 06.10.2015 the <u>Quantity & EMD</u> of <u>only</u> following items have been amended as mentioned below (Quantity and EMD of other items remains unchanged):

Sl	Name of the Article	Qty.	DEPARTMENT	EMD (in IRs)
No.				
<mark>3a</mark>	Diagnostic Cystoscope (Surgery - 2 Nos)	<mark>2</mark>	Various Departments	640,000
<mark>3b</mark>	Cystoscope - Paediatrics (Paed Surgery)	<mark>1</mark>		
<mark>3c</mark>	Resectoscope (Surgery - 2 Nos & Obs/Gyn - 2 Nos)	<mark>4</mark>		
<mark>24a</mark>	Diagnostic Laparoscope (Surgery - 1 No, & Obs/Gyn - 6 Nos)	7	Various Departments	5,40,000
<mark>24b</mark>	Operative laparoscope (Surgery - 1 No & Obs/Gyn - 1 No)	2		
<mark>24c</mark>	Resectoscope (Surgery - 2 Nos & Obs/Gyn - 2 Nos) DELETED from here (Read at 3c)	<mark>0</mark>		
<mark>32</mark>	Cystoscope - Paediatrics (Paed Surgery) DELETED from here (Read at 3b)	0	SURGERY	<mark>0</mark>
<mark>33</mark>	Rigid Bronchoscope (sets) (Paed Surgery - 2 Nos & TB Chest - 1 No)	2	Various Departments	10,000
<mark>34</mark>	Oesophageal dilators (sets) (Paed Surgery)	1	SURGERY	1,000
<mark>35</mark>	Paediatrics Sigmoidoscope Video Flexible	1	SURGERY	40,000
<mark>40</mark>	Ultrasound (Coloured) ( <i>Radiology - 1 No, Surgery - 2 Nos, Medicine - 1 No &amp; Obs/Gyn - 5</i> Nos)	<mark>9</mark>	Various Departments	360,000

### Technical Specification of <u>following items</u> stands amended as follows:

### Sr. No. 2) Flexible Endoscope, Upper GI & Colonscope

	Flexible Endoscope, Upper GI & Colonscope	
Sr.	Description	Amended Specification
No.		
	Please refer to the Note provided at the end for the Technical Specifications of Instruments. Complete set of Instruments	
	should be quoted otherwise the bids shall be summarily rejected.	
Α	Video Gastro-scope – Should have the following:	
	Capable of producing Chrome Endoscopy images like NBI/SPIES/I-SCAN, with following features:	
a	High Definition	
b	Forward viewing	
с	Observation range: minimum 5mm or less, maximum 100 mm or more	
d	Field of view: 140 degrees or more	
e	Distal end diameter: 11 mm or less	
f	Bending capabilities: up-200 degrees or more	
g	Down-120 degrees or more	No change
h	Left- 120 degrees or more	No change
i	Right-120 degrees or more	No change
j	Forceps channel diameter; minimum 2.8mm	
k	Working length: 1040 mm or more	To be now read as "1030 mm or more"
B	Video Colonoscope – Should have the following:	
	Capable of producing Chrome Endoscopy images like NBI/SPIES/I-SCAN	
а	High Definition	
b	Forward viewing	
с	Observation range: minimum 4mm or less, maximum 100 mm or more	
d	Field of view: 140 degrees or more	
e	Distal end diameter: 14 mm or less	
f	Bending capabilities: up - 180 degrees or better	
g	Down-180 degrees or better	
h	Left-160 degrees or better	
i	Right - 160 degrees or better	
j	Forceps channel diameter: minimum 3.8 mm	To be now read as "3.7/3.8 mm minimum".
k	Working length: 1650 mm or better	To be now read as "1600mm or better"

(		
	The following items should also be included in both the scopes:	
•	Carrying Case	
•	ETO Cap	
•	Leakage Tester	
•	Caps for Working Channel	
•	Irrigation Tube	
•	Bite protector (in Gastroscope only)	
•	Biopsy Forceps	
•	Cleaning Brush	
•	Cleaning Valve	
•	Snare	
•	Injection needle	
	Each of the above Scopes should be supplied along with each of the following:	
	HIGH DEFINITION VIDEO PROCESSOR	
	Special Features:	
a	a. High definition digital output: DVI 1280 X 1024/ 1920 X 1080	To be now read as "High definition digital output: DVI (1280 X 1024/ 1920 X 1080 - <b>Optional</b> )".
b	b. Colour enhancement technology	
с	c. Capable of connection to image capture device for recording HD still and video images	
	XENON LIGHT SOURCE	
а	a. 300watts Xenon Light Source	To be now read as "100 to 300 Watts Light source (Xenon or LED Light Source)".
b	b. Backup lamp halogen/Led/Xenon	
С	c. Lamp life of xenon bulb should be 500 hrs	To be now read as "Lamp life of Xenon bulb should be 500 hrs / LED bulb should be 30000 hrs".
d	d. Lamp life of back up lamp, should be atleast 500hrs, with one or multiple bulbs	To be now read as " Back up lamp should be available / Spare Light source".
e	e. 300w Xenon light source can be combined unit/ integrated with HD video processor	To be now read as "100 to 300 watts Light source (Xenon or LED Light Source) can be separate unit or integrated with the HD video processor

	Video Monitor: System should be supplied with a 19" or more size High Definition Medical Grade Monitor (LED / LCD) Max Resolution 1280 x 1024	
	Suction Machine	
	The Machine should offer quiet, low vibration operation, thus creating a pleasing environment for carrying out examinations and facilitating stress-free, concentrated work.	
	Should have	
1	High suction capacity of 30 liters/minute	
2	Maintenance free cylinder and piston system	
3	Hydrophobic bacterial filter to protect the pump	
4	Easy to clean.	
5	Should be medical grade and European CE (EN type)/ USFDA approved.	
	Technical data:	
	Suction capacity: 30 liters/minute	
	Vacuum: up to 85kPa, up to 640mmHg	
	Line voltage: 230VAC, 50/60 Hz	
	Protection Class: Protection class I; BF;	
	Equipment Cart	
	Should be imported and have following specifications-	
	Equipment cart rides on 4 antistatic wheels, equipped with atleast 02 locking brakes, 3 fixed shelves, 1 with handles and lockable drawer, scope hanger to mount flexible scope.	
	All the offered products should be USFDA or European CE (EN type certified) approved, no discontinued products or recalled products (in past also) should be quoted.	
		Following items are to be added as part of the equipment:
		Computer with recording software & printer
		UPS 1.5KVA on line with half hour back up

### Sr. No. 3) Diagnostic Cystoscope, Paediatric Cystoscope & Resectoscope

	Diagnostic Cystoscope		
Sr.	Description	Qty	Amended specification
No.			
	Technical Specification:-		
	Please refer to the Note provided at the end for the Technical Specifications of Instruments. Complete set of Instruments	-	
	should be quoted otherwise the bids shall be summarily rejected.		
Part	Instruments for (a) Diagnostic Cystoscope, (b) Telescope and Instruments for Cystoscope -		
Α	Paediatrics (Paed Surgery), (c) Instruments for Resectoscope Set		
<b>3.</b> a	Diagnostic Cystoscope		
(i)	TELESCOPES		
•	Forward Viewing HD 4mm Telescope 0 degree, enlarged view, autoclavable, fiber optic transmission incorporated Forward Viewing HD 4mm Telescope 30 degree, enlarged view, autoclavable, fiber optic transmission incorporated	01 No. 01 No.	To be now read as "Forward Viewing 4mm Telescope 0 degree, enlarged view, autoclavable, fiber optic transmission incorporated with HD". To be now read as "Forward Viewing 4mm Telescope 30 degree, enlarged view, autoclavable, fiber optic transmission
			incorporated with HD".
(11)	CYSTOSCOPE – UKETHROSCOPE		
•	19 Fr. Cysto Sheath with Standard Obturator		To be now read as "19/19.8 Fr".
•	21 Fr. Cysto Sheath		To be now read as "20/21 Fr".
•	23 Fr. Cysto Sheath		To be now read as "22/23 Fr".
•	21 Fr. Cysto Standard Obturator		To be now read as "20/21 Fr".

•	23 Fr. Cysto Standard Obturator	To be now read as "22/23 Fr".
•	21 Fr. Cysto Visual Obturator	To be now read as "20/21 Fr".
•	23 Fr. Cysto Visual Obturator	To be now read as "22/22.5/23 Fr".
•	Double Horn Bridge	To be now read as "Double horn or two way bridge".
•	Rigid Optical biopsy forcep,30 degree	
٠	Rigid Optical Stone Crushing Forcep (30 degree scope)	
٠	Bladder syringe adapter, Cysto sheath	
•	Flexible Grasping Forcep, 5 Fr.	To be now read as "Flexible Grasping Forcep, 5 to 7 Fr".
•	Flexible Biopsy Cup, 5 Fr.	To be now read as "Flexible Biopsy Cup, 5 to 7 Fr".
•	Flexible Scissor, 5 FR.	To be now read as "Flexible Scissor, 5 to 9 Fr".
	Telescope and Instruments for Cystoscopy should be of same manufacturer for system compatibility, all items except trolley should be USFDA or European CE (EN type) certified, certificate should be submitted with tender documents.	
3 h	Telescone and Instruments for Cystoscope - Paediatrics (Paed Surgery)	
•	Compact integrated pediatric cystoscope 12 deg, size 8/9 Fr, working channel 5 Fr., working length 150mm, fiber optic transmission incorporated	To be Read as "Compact integrated pediatric cystoscope 0-12 deg, size 8/9 Fr, working channel 5 Fr., working length 150mm or more, fiber optic transmission incorporated"
•	Coagulation Button electrode, size 3Fr., working length 250mm	To be Read as "Coagulation Button electrode, size 3Fr., working length 250mm or more".
•	Coagulation Needle electrode, size 3Fr., working length 250mm	To be Read as "Coagulation Needle electrode, size 3Fr.,

			working length 250mm or more".
•	Monopolar high frequency cord		
•	Grasping forceps, size 4/5 Fr		<b>To be now read as</b> "Grasping forceps, size 3/4/5 Fr".
•	Biopsy forceps, size 4/5 Fr		<b>To be now read as</b> "Biopsy forceps, size 3/4/5 Fr".
•	Micro scissor, size 4/5 Fr		<b>To be now read as</b> "Micro scissor, size 3/4/5 Fr".
	Telescope and Instruments for Cystoscopy should be of same manufacturer for system compatibility, all items except trolley should be USFDA or European CE (EN type) certified, certificate should be submitted with tender documents.		
3.c.	Instruments for Resectoscope Set		
(i)	Telescope		
	Forward Viewing HD 4mm Telescope 30 degree & 0 degree, enlarged view, autoclavable, fiber optic transmission incorporated	01 No.	To be now read as "Forward Viewing 4mm Telescope 0 degree & 30 degree & 70 degree, enlarged view, autoclavable, fiber optic transmission incorporated".
(i)	Instruments, qty 01 of each type	01 each type	
•	24 Fr Standard Flow Resectoscope sheath (Inner).	-	
•	24/26 Fr Continuous Flow sheath set(Inner/Outer).		
•	24/26 FrResectoscope Standard Obturator.		
•	24/26 FrResectoscope Visual Obturator.		
•	Working Element-Passive (Iglesias).		No change
•	Working Element- Active (Baumrucker).		Deleted
•	Bladder Syringe Adapter, Inner sheath.		
•	Bladder syringe adapter, Outer sheath.		
•	Ellik Evacuator.		To be replaced with:
•	Ellik adapter, Inner Sheath.		Sterilizable bottle

•	Ellik adapter, Outer Sheath.	evacuator (bard type or equivalent) - qty 02".
•	Laser bridge (for use with straight fire laser).	
•	Stone Crushing Forcep Adapter, Outer Sheath.	
•	27 Fr Standard Flow Resectoscope Sheath Adapter.	
•	4Fr 30 degree Cutting Loop Electrode, .012 (minimum 10 Nos. each).	
•	24 Fr 90 degrees Cutting Loop Electrode, .012 (minimum 10 Nos. each).	<b>To be replaced with:</b> 24 Fr, 45/90 degrees Cutting Loop Electrode, .012 (minimum 10 Nos. each).
	All items should be ideally from same manufacturer, should be USFDA or European CE (EN type) approved	
Part B	High Definition Camera System for Resectoscope	
	Each set should consists of following items:	
1	Full High Definition Digital Camera	
•	It should have pure digital signal with high definition video of 1920x1080p (min) native resolution and progressive scan technology both on camera head and console, Should have controls on camera console and camera head.	No change
•	It should be compatible with Aspect ratio of 16:9	
•	The system should have Optical zoom to enhance the quality of Image size & cross specialty standardization of the camera system, regardless of the telescope used.	<b>To be added:</b> Soak-able camera head and coupler should be in one piece to avoid damage to camera.
•	Zoom, white balance control and two peripheral controls on camera Head	
•	Integrated Gain/Shutter/Enhancement with automatic brightness control	
•	Video Outputs: two DVI, one SVHS and one direct fiber optic output	
•	The system should automatically optimize all settings. The system should be ready- to- use as soon as it is connected to the camera control unit.	
•	The system should be Menu driven, thus allowing the surgeon to program the camera head functions as per the surgical needs & requirement.	No change
•	The system should have coupler, which can be used with any make of standard laparoscopes, cystoscopes and resectoscopes	
2	LED / XENON Light Source	To be now read as
•	220 Volts, 225-300 watts.	"LED light source 220volts, 225-300watts OR Xenon light source 300 watts or more".

•	Light Engine: Red, Green & Blue Led's,	Deleted
•	Increased patient safety & added protection in OR with safelight technology Intuitive simple user interface with LCD touch screen.	No change
٠	Standby Mode	
•	Universal Jaw Assembly to adapt any make of Fiber Optic Cable	<b>To be now read as</b> "Universal Jaw Assembly/ adaptor to adapt any make of Fiber Optic Cable".
•	Should have more than 5000 hours bulb life	<b>To be now read as</b> "Should have more than 25000 hrs bulb life (with one or spare bulbs)".
3	Fiber Optic Light Cable	
•	Size should be diameter > 5.5mm, length >160 cm	<b>To be now read as</b> "Size should be diameter 4.5mm or more, length 160 cm or more".
4	High Resolution Monitor	
•	High Definition LED 26" or more Flat Panel Monitor	
•	PAL system compatible	
•	Composite, S-Video and DVI inputs	
•	Compact & Lightweight design	
•	Resolution over 1100 lines, Native Resolution 1920 x 1080p or above.	
•	The monitor should support Direct Fiber input.	
5	Trolley (Indian)	
•	Trolley should be capable to mount above-mentioned system	
•	Should have space to keep CO2 cylinder	
•	Should have movable arm to mount monitor	
6	Appropriate plastic tray/cage for sterilization	
	Sterilization Tray for disinfection.	
	Plastic Container for Sterilization/Storage.	
•	All the items except trolley & plastic tray/cage should be of same manufacturer for system compatibility, all items except trolley	
	& plastic tray/cage should be USFDA or European CE certified, certificate should be submitted with tender documents.	

### NOTE:

2 Nos Diagnostic Cystoscopes (3.a) are required for **Surgery Department**, 1 No Paediatric Cystoscope (3.b) is required for **Paediatric Surgery Department** and 4 Nos Resectoscopes (3.c) are required for **Surgery Department** (2 Nos) & Obstetrics / Gynaecology Department (2 Nos). Accordingly, 4sets of Part B are required. (Surgery Department (2 Nos) & Obstetrics / Gynaecology Department (2 Nos).

All the items at Part A comprising of Diagnostic Cystoscopes, Paediatric Cystoscope & Resectoscopes should be ideally from same manufacturer.

### Sr. No. 4) Uroflowmetery (Video Urodynamic)

The Tendered Technical specification is totally replaced by the **<u>COMPLETELY AMENDED SPECIFICATIONS</u>** as follows:

Amendments in specification
1.General Information : - For Urodynamics: Cystometry, Pressure-Flow Studies, Urethra Pressure Profiles (stress and rest), Leak Pressure (Cough Leak Pressure, Vasalva Leak
Pressure), EMG, biofeedback, and all ICS standard analysis.
2. The urodynamic system must consist of two separated parts - the Contaminated Unit and the Non-contaminated Unit (PC/Laptop). Each part has an independent IP-address
of its own. Two parts can be connected by cable or Bluetooth wireless.
The measurement is operable only by the Contaminated Unit and not by the PC/laptop to avoid possible contamination & infection through intercontact.
The Contaminated Unit can be integrated to a urodynamic chair and can be upgraded to a fully integrated urodynamic system with chair.
3. The pressure channel must have
At least 10 pressure channels (8 direct measuring + 2 calculated)
• The measuring ranges $\pm 1000$ cmH2O
• The accuracy at least of $\pm 1\%$
4. Flow channel must have
• At least 2 flow channels
• A Clipper for performance of the minimal invasive diagnose of incontinence ( <b>Optional</b> )
• The measure range at least from 0 to 200 ml/s
• The resolution of 1 ml, max. loading 1500 ml
• The accuracy must be at least $\pm 1\%$
The integrated artifact detection and compensation system (Artifact-killer)

#### 5. Infusion channel

- Infusion volume must be measured directly by a weight transducer and not be calculated
- The weight capacity of the transducer must be 0 5 kg
- The accuracy of infusion must be at least  $\pm 1\%$

### 6. Infusion pump

- The Infusion rate (pump speed) must be stepless adjustable from 1 to 199 ml/min,
- The perfusion rate can be reduced less than 5 ml/min
- The accuracy must be at least  $\pm 1\%$

#### 7. EMG channel must have

- At least 2 EMG channels
- The minimum sampling rate of 8 Hz
- The oversampling rate of minimum 15 KHz

#### 8. For UPP performance:

- Rest profile and stress profile can be performed within one session and with one single catheter
- The Perfusion must be carried out by the roller pump, not by an additional pouch,
- The UPP-puller must be integrated on the urodynamic system and not be mounted on a separate puller stand
- UPP-puller speed from 0.25 to 5.0 mm/sec with the accuracy at least  $\pm 2\%$
- UPP-puller bow removable for re-sterilization

#### 9. Video urodynamic (Optional)

- The Contaminated Unit can be located inside the examination (X-Ray) room and the Non-contaminated Unit outside
- The video signal sampling must be only in streaming model, not burst model
- The quality of sequences must minimal 25 frames/s, 100KB for PAL and at least 30 frames/s, 100KB for NTSC.
- The video sequence must be saved on the hard disk, not in RAM,
- The length of video recording is unlimited, only depending on the size of the hard disk ;
- Up to 99 single pictures can be shot and shown on the screen simultaneously

#### 10. Separated one PC-station with special Pro urodynamic software, flat screen 22", colour printer for performing the following:

- Flowmetry, cystometry, pressure-flow studies, urethral pressure profiles (stress and rest), VLPP, CLP and all measurements with evaluation according to the ICS standards and able to be combined
- Option for 4/8 channel rectomanometry with 3-D sphincter display and evaluation
- The PC-station could be located outside the examination room, connecting the urodynamic unit in the examination room via bluetooth or via hospital internal intranet

11.	Disposables to be provided along with the system:
	<ul> <li>Pump tube with anti-reflux valve and extension tube against ascending infections – 5 no.</li> <li>Urodynamic set with colour lines marking for Pves, Pura, Pabd</li> <li>Kinking resistant tubes proved for optimal pressure transmission – 5 no.</li> <li>EMG-electrodes for optimal signal transmission with less invasive surface electrodes – 1 no.</li> </ul>
	<ul> <li>Catheter program with colour marked luer lock connections and body temperature – 5 no.</li> <li>Sensitive adaptation of stiffness for excellent application and comfortable placement of</li> </ul>
	• <u>Catheters :</u>
	<ul> <li>5 Fr. Cystometry catheter with Tieman tip for children or PFM (2 ways) with minimum 50 ml/min perfusion and stylet for introduction- 5 no.</li> <li>6 Fr. Cystometry catheters (2 ways) with minimum 80 ml/min perfusion - 5 no.</li> <li>9 Fr. Cysto/UPP catheters (3 ways) with minimum 100 ml/min perfusion - 5 no.</li> <li>9 Fr. 2-way rectal catheters latex free - 5 no.</li> <li>12 Fr. 2-way rectal catheters with Latex - 5 no</li> </ul>
12.	• 12 Fr. 2-way rectal catheters with Latex – 5 no System must have ISO, European CE or US FDA Certification.

### Sr. No. 24) Diagnostic Laparoscope (7 Nos.) & Operative Laparoscope (2 Nos)

	Diagnostic Laparoscope (7 Nos.), Operative Laparoscope (2 Nos), and Resectoscope (4 Nos)		
Sr.	Description	Qty	Amended specification
No.			
	Please refer to the Note provided at the end for the Technical Specifications of Instruments. Complete set of Instruments	_	
	should be quoted otherwise the bids shall be summarily rejected:		
Part	High Definition Camera System for Laparoscope and Resectoscope		
Α			
	Each set should consists of following items:		
1	Full High Definition Digital Camera		
•	It should have pure digital signal with high definition video of 1920x1080p (min) native resolution and progressive scan		No change
	technology both on camera head and console, Should have controls on camera console and camera head.		
•	It should be compatible with Aspect ratio of 16:9		

•	The system should have Optical zoom to enhance the quality of Image size & cross specialty standardization of the camera system, regardless of the telescope used.	To be added: Soak-able camera head and coupler should be in one piece to avoid damage to camera.
•	Zoom, white balance control and two peripheral controls on camera Head	
•	Integrated Gain/Shutter/Enhancement with automatic brightness control	
•	Video Outputs: two DVI, one SVHS and one direct fiber optic output	
•	The system should automatically optimize all settings. The system should be ready- to- use as soon as it is connected to the camera control unit.	
•	The system should be Menu driven, thus allowing the surgeon to program the camera head functions as per the surgical needs & requirement.	No change
•	The system should have coupler, which can be used with any make of standard laparoscopes, cystoscopes and resectoscopes	
2	LED / XENON Light Source	To be now read as
•	220 Volts, 225-300 watts.	 "LED light source 220volts, 225-300watts OR Xenon light source 300 watts or more".
•	Light Engine: Red, Green & Blue Led's,	Deleted
•	Increased patient safety & added protection in OR with safelight technology Intuitive simple user interface with LCD touch screen.	No change
•	Standby Mode	
•	Universal Jaw Assembly to adapt any make of Fiber Optic Cable	<b>To be now read as</b> "Universal Jaw Assembly/ adaptor to adapt any make of Fiber Optic Cable".
•	Should have more than 5000 hours bulb life	<b>To be now read as</b> "Should have more than 25000 hrs bulb life (with one or spare bulbs)".
3	Fiber Optic Light Cable	
•	Size should be diameter > 5.5mm, length >160 cm	To be now read as "Size should be diameter 4.5mm or more, length 160 cm or more".
4	High Resolution Monitor	
٠	High Definition LED 26" or more Flat Panel Monitor	
•	PAL system compatible	
•	Composite, S-Video and DVI inputs	
•	Compact & Lightweight design	
•	Resolution over 1100 lines, Native Resolution 1920 x 1080p or above.	

•	The monitor should support Direct Fiber input.	
5	Insufflators	
•	High flow of 45ltr or above with LCD display	No change
•	Microprocessor controlled & Software driven for upgradeability	
•	Soft approach pressure control for safe recovery of abdominal pressure	
•	Should have Neonatal mode & visual and audible alarms with min 0.1 L flow rate internal leakage detection capability	No change
•	Integrated Gas heating, having internal venting system for safety	No change
•	Should have video on screen display; Unit should include heated tubing, hose & yoke	"video on screen display" to
6	Suction irrigation pump	be deleted
•	Should have total fluid consumption:0-3]	No change
•	Average operation time of pump: 2min10min	
•	Should have irrigation flow rate: 0-21/min	No change
•	Should have irrigation pressure: 0-750mmHg	No change
•	Should have Suction floe Rate: 0-21/min	Deleted
•	Should have Suction pressure: 0-600mmHg	
•	Should have reusable tube set	
•	Should have irrigation floe rate max: 81/min. Should have suction vacuum pressure for suction	No change
•	Should have suction flow rate max: 1-81/min, should have suction pressure: 60KPa	No change
7	Desktop / Laptop Computer with Laser Printer	
•	Should be supplied with Desktop / Laptop having Recording Device along with Laser Printer.	
8	Trolley (Indian)	
•	Trolley should be capable to mount above-mentioned system	
•	Should have space to keep CO2 cylinder	
•	Should have movable arm to mount monitor	
•	All the items except trolley & Desktop/Laptop should be of same manufacturer for system compatibility, all items except trolley	
	should be USFDA or European CE certified, certificate should be submitted with tender documents.	
Part B	Telescopes for both Operative & Diagnostic laparoscope and Resectoscope	
Ъ	Fach set should consists of following items with quantity as specified against each item:	
1	Instruments for Lanaroscony	
(i)	Telescopes	
•	High definition wide Angle Full Screen, Forward-Oblique and lateral scope, Optimal center-to-edge resolution for enhanced	To be now read as "High
	picture quality, Fiber optic light transmission incorporated, Standard ocular window for coupling the camera head, Scratch	definition wide Angle Full
	resistance sapphire quoted tip lens	Screen, Forward-Oblique
		and lateral scope, Optimal
		center-to-edge resolution
		for enhanced picture

			quality, Fiber optic light transmission incorporated, Standard ocular window for coupling the camera head, Scratch resistance sapphire quoted tip lens".
•	Angle of view: 30°, Diameter 10 mm, Length 30cm	01	To be now read as "Angle of view: 0° and 30°, Diameter 10 mm, Length 28 - 30cms - qty 01 each".
•	· Angle of view: 0°, Diameter 5 mm, Length 30cm	01	No change
(ii)	Laparoscopic Hand Instruments & Accessories:		
а	Trocars & Reducers	01 each type	
•	Trocar 10 mm with Cannula	02 Nos.	
•	120 mm Veress Needle	12	
•	5 mm Aspiration Needle, 17 Gauge, 33cm	01	
•	5.5 mm Cannula Sleeve with Automatic Valve, Stop Cock	03 each	
•	Trocar, Pyramid Tip, 5.5 mm	03 each	
(b)	5mm Hand Instruments, with Insulated Shaft, Modular Design, Inner Shaft Flush Port, 360° Rotation & Shaft Rotation Lock, dismantalabe into 2/3 pieces (Handle & Insert), Qty 01 each type with Double Locking Mechanism.	01 each type	To be now read as "5mm Hand Instruments, with Insulated Shaft, Modular Design, Inner Shaft Flush Port, 360° Rotation & Shaft Rotation Lock, dismantalabe into 2/3 pieces (Handle & Insert), Qty 01 each type with Double Locking Mechanism (except for scissors and dissectors)".
•	Right Angled Dissector 33 cm		To be now read as "Right Angled Dissector 33- 36 cm".
•	Curved Kelly Dissector 33 cm		To be now read as "Curved Kelly Dissector 33- 36 cm".
•	Maryland Dissector 33 cm		To be now read as "Maryland Dissector 33- 36 cm".

•	Alligator Grasper 33 cm	To be now read as "Alligator Grasper 33- 36 cm".
•	Fundus Grasper 33 cm	To be now read as "Fundus Grasper 33- 36 cm".
•	Cobra Tooth Grasper 33 cm	To be now read as "Cobra Tooth Grasper 33- 36 cm".
•	Serrated, Fenestrated Grasper 33 cm	To be now read as "Serrated, Fenestrated Grasper 33- 36 cm".
•	Paddle Babcock Grasper 33 cm	To be now read as "Paddle Babcock Grasper 33- 36 cm".
•	Debakey Grasper 33 cm	To be now read as "Debakey Grasper 33- 36 cm".
•	Curved Metzenbaum Scissors 33 cm	To be now read as "Curved Metzenbaum Scissors 33- 36 cm".
•	5mm Hook Scissors 33 cm	To be now read as "5mm Hook Scissors 33- 36 cm".
•	Suction irrigation cannula	
•	Needle Holder - 01 No.	No change
(c)	10mm Hand Instrument, with Insulated Shaft, Modular Design, Inner Shaft Flush Port, 360° Rotation & Shaft Rotation Lock, dismantalabe into 2/3 pieces (Handle & Insert), Qty 01 each type01 each type	
•	Allis Grasper 33 cm	To be now read as "Allis Grasper 33 cm or more".
•	Pennington Grasper 33 cm	To be now read as "Pennington Grasper 33 cm or more".
•	Double Action Claw Grasper 33 cm	To be now read as "Double Action Claw Grasper 33 cm or more".
•	Mixter Dissector	
•	Clip applicator for medium/medium large clips.	

2	Instruments for Resectoscope Set		DELETED at
			<u>Laparoscope Group &amp;</u>
			<u>to be read at Sr. No. 3</u>
			<u>(Cystoscope).</u>
(i)	Telescope		
	Forward Viewing HD 4mm Telescope 30 degree & 0 degree, enlarged view, autoclavable, fiber optic transmission incorporated	01 No.	
(i)	Instruments, qty 01 of each type	01 each	
		type	
•	24 Fr Standard Flow Resectoscope sheath (Inner).		
•	24/26 Fr Continuous Flow sheath set(Inner/Outer).		
•	24/26 FrResectoscope Standard Obturator.		
•	24/26 FrResectoscope Visual Obturator.		
•	Working Element-Passive (Iglesias).		
•	Working Element- Active (Baumrucker).		
•	Bladder Syringe Adapter, Inner sheath.		
•	Bladder syringe adapter, Outer sheath.		
•	Ellik Evacuator.		
•	Ellik adapter, Inner Sheath.		
•	Ellik adapter, Outer Sheath.		
•	Laser bridge (for use with straight fire laser).		
•	Stone Crushing Forcep Adapter, Outer Sheath.		
•	27 Fr Standard Flow Resectoscope Sheath Adapter.		
•	4Fr 30 degree Cutting Loop Electrode, .012 (minimum 10 Nos. each).		
•	24 Fr 90 degrees Cutting Loop Electrode, .012 (minimum 10 Nos. each).		
•	All the three sets should be imported and should be European CE or USFDA approved.		
•	The quantity of each items under Part A should be of 5 Nos each.		To be replaced with:
			The quantity of each
			items under Part A
			should be 9 Nos/sets
			each.
	The quantity of items under Part B are indicated within bracket; Diagnostic Laparoscope (7 Nos.), Operative Laparoscope		To be replaced with:
	(2 Nos), and Resectoscope (4 Nos).		The quantity of
		[	individual items under
			Part B are indicated
			within bracket, total sets
			under part B are
			Instruments for

	Laparoscopy are 9 sets.
Part "A" and Part "B" should be compatible with each other	

### Sr. No. 26) LASER

Sr.	Description	Amended specification
No.		
	Should have following features:	
•	It should be able to fragment calculi of any size in the bladder, ureter or kidney and any stone fragment	It should be able to fragment calculi of any size in the bladder, ureter or kidney and any stone fragment, prostate.
•	It should have power output of 20watts.	It should have power output of 60 watts or better
•	It should have repetition rate of 5-15Hz.	It should be able to achieve repetition rate of 40 Hz or better
•	It should have Energy per Pulse of 0.5 - 2.5 Joules	It should be able to achieve energy per Pulse of 3.5 Joules
•	It should have pulse duration upto 500 microseconds.	
•	It should have Green-aiming beam of 1.0mw at 532nm, 3 intensity settings.	It should have Green-aiming beam of 1.0mw at 532nm, 3 intensity settings, 3 laser generator
•	It should have a closed loop, self-contained water to air exchanger cooling system.	
•	It should be useable with single phase 230V AC 50/60Hz,	
•	It should have Case saver mode to allow to finish the procedure if system does not deliver full energy due to some fault.	
•	It should have a shield to protect the Lase machine from Fiber misalignment or misfire	
•	It should be supplied with following accessories:	
-	365 Micron Reusable, Flexible Fiber - 5	
-	200 micron Reusable, Flexible Fiber - 5	

1	265 Migron Stripping and allowing (set) 2	
-	505 Micton Suppling and Cleaving (Set) - 2	
-	200 Micron Stripping and cleaving (set) - 2	
-	Fibre Inspection Scope- 1	
-	Ceramic Scissors- 2	
•	Should be USFDA approved	
		Prices of following essential accessories
		Prices of following essential accessories shall be part part of the LASER:
		Prices of following essential accessories shall be part part of the LASER: 1. Morcellator
		Prices of following essential accessoriesshall be part part of the LASER:1. Morcellator2. 550 Micron Reusable, Flexible Fiber
		Prices of following essential accessories shall be part part of the LASER:1. Morcellator2. 550 Micron Reusable, Flexible Fiber3. 500 Micron Stripping and cleaving

### Sr. No.27) Operating Microscope

The Tendered Technical specification is totally replaced by the **<u>COMPLETELY AMENDED SPECIFICATIONS</u>** as follows:

- LED/Xenon lamp microscope with high performance LED/300W xenon illumination in the microscope head.
- Should have 30 degree or more coupling
- Should have integrated high performance white light LED or 300w xenon with Light performance- min 120 K Lux (200mm) min 80 kLux (250mm) min 55 colour temperature, 5,500 K +/- 10%, main voltage 100-230 V, service life LED 50,000 hrs, colour temperature 5,500 K +/- 10%., incase of xenon additional bulbs should be quoted to match the bulb life of LED lamp.
- Should have automatic light control over tilt sensor.
- Should have optimized stereo effect by 24mm stereo basis.
- Should have integrated operating panel can be upgraded with an integrated camera module, which can later on be upgraded with HD or endoscope adapter
- Should have 5- step magnification changer- (0.4 / 0.6 / 1 / 1.6 / 2.5)
- Should have objective 200mm with manual fine focusing
- Should have scale projection for lens 200 mm, pivot mounted scale projection in the illumination field, and independent from the chosen magnification.
- Should have binocular straight tube f = 160 mm
- Should have 2x wide-field eyepiece of 16x.
- Should have Lateral double handle for proper hand gripping.
- Should have Mechanical support arm
- Should be supplied with dust cover
- Should be USFDA or European CE (EN certified) certified.

#### Sr. No.32) Cystoscope- Pediatrics

The item is being DELETED here & to be read at Sr. No. 3) Cystoscope.

#### Sr. No.35) Flexible Sigmoidoscope

The Tendered Technical specification is totally replaced by the <u>COMPLETELY AMENDED SPECIFICATIONS</u> as follows:

Set should consists of following:

#### A. Video Processor with inbuilt light source

- 1. It should be compact, lightweight Digital color video processor.
- 2. It should have single CCD color system
- 3. It should have 150watts Halogen lamp
- 4. It should have RGBS Connectors, Y/C Connectors and 1 Composite video connector
- 5. It should have following Power Requirements for operation: Voltage 220-230V, Frequency 50/60 Hz
- 6. Weight of processor with light source should not exceed 15Kgs.
- 7. Facility for automatic drying mechanism of scope is preferred.
- 8. It should have facility of extra illumination for more light apart from normal brightness control.
- 9. Panel button should be feather touch.

#### B. <u>Video Sigmoidoscope</u>

- 1. It should have minimum of two to three remote switches on the control body.
- 2. It should have minimum 140° Field of View.
- 3. It should have Tip Deflection Up: 180° Down: 180°,
- 4. Right: 160° & Left: 160°
- 5. Distal End Diameter should be minimum 13.4mm.
- 6. Insertion Tube Diameter should be 12.8mm
- 7. Minimum Instrument channel should be 3.8mm.
- 8. It should have working length of 1300mmor less.
- 9. It should have a rotatable PVE Connector for easier maneuverability by 180 Degree

- C. <u>19" Medical Grade Monitor</u>
  - Monitor with DVI input, RGB/ & Y/C Video facility
     Availability of NTSC/PAL Signals.
- **D.** Leakage Tester should be provided

#### E. Terms and condition:

- The products should be USFDA or European CE approved products
- No discontinued or recalled products should be quoted.