HSCC (I) Ltd

AMENDMENT -IV Dated 18.06.2019

IFB No.: HSCC/PUR/CNCI/KOLKATA/MEDICAL EQUIPMENT/07/A Dt. 10.05.2019

The reply to the pre bid queries for the above the referred IFB. the Bid sale, submission and opening date for the above the referred IFB has been extended & details of technical amendments given below:

SI. No.	Description	Existing Schedule	Revised Schedule
i.	Sale date of the tender	10.05.2019 to 21.06.2019, (Up to13.00 Hrs)	10.05.2019 to 25.06.2019, (Up to13.00 Hrs)
ii.	Closing date & time for receipt of tender	21.06.2019, 14:00 Hrs.	25.06.2019, 14:00 Hrs. IST
iii.	Time and date of Opening	21.06.2019, 14:30 Hrs.	25.06.2019, 14:30 Hrs. IST

The Following Items (as listed in NIT) **ONLY** have been bifurcated & changed:

SI. No.	Name of Article	Department	Qty	EMD Rs
3	Laparoscope set Operative with one endo vision system and insufflators system (one camera for two sets)	Gastrology Oncology	2	1,80,000.00
9	FESS Set with Micro-debrider for Anterior Skull Base	Head & Neck OT	1	60,000.00

AND NOW BE READ AS:

SI. No.	Name of Article	Department	Qty	EMD Rs
3A	Laparoscope Hand Instruments	Gastrology	2 Sets	90,000.00
3B	High definition Camera System with integrated USB recording System	Oncology	1 Set	90,000.00
9A	FESS Optics	Head & Necl	(1 Set	20,000.00
9B	FESS Instruments	OT	1 Set	20,000.00
9C	Micro-Debrider		1 Set	20,000.00

All other terms and conditions of the tender enquiry document shall remain unchanged.

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 newspapers in this regard.

Sr.CGM-1, HSCC (India) Limited

For and on behalf of Director, CNCI, Kolkata

Sl.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No			
	OTHER INFORMATIONS	-NA-	All offline Documents (like Original Offline EMD, Affidavit etc, as per Bid Document) are to be submitted in sealed envelope at HSCC, NOIDA Office: E-6(A), Sector - I, NOIDA - 201 301.
	OTHER INFORMATIONS	-NA-	The EMD shall be in favour of HSCC (I) Ltd.
	OTHER AMENDMENTS	-NA-	Last Date of Sale of Tender Document Stand Amended: From: 10.05.2019 to 21.06.2019 (upto 13:00 Hrs) To: 10.05.2019 to 25.06.2019 (upto 13:00 Hrs) Closing Date & Time stands Amended: From: 21.06.2019 (at 14:00 Hrs) To: 25.06.2019 (at 14:00 Hrs) & Date & Time of Bid Opening stands Amended: From: 21.06.2019 (at 14:30 Hrs) To: 25.06.2019 (at 14:30 Hrs)
	-NA-		

TECHNICAL QUERY REPLY

Item no. 3: Laparoscope set Operative with one endo-vision system and insufflators system (one camera for two sets)

Sl.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No			
	LAPAROSCOPES 10MM And 5mm		
	<u>Telecope 30 10MM : 01 pc</u> Forward oblique 30 degree enlarged view size 10MM rod lenses system, Length: 30-31cm, Autoclavable,	One Bidder vide their mail have requested to amend as "Length 33cm"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
	Fiber optic light transmission incorporated.	Another Bidder vide their letter have requested to amend as "Length: 30-33 cm"	
	Telecope 30 5MM : 01 pc Forward oblique Telescope 30° enlarged view, Size 5.0mm rod lenses system, Lengh: 29-30cm, Autoclavable, Fiber optic light transmission incorporated.		As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
	HAND INSTRUMENTS	One Bidder vide their mail have requested "Need to identify Local Supplier" Another Bidder vide their letter have requested	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
		that "Hand Instrument should be separated from Endovision system"	
	Trocar & Cannula 11MM: Cannula Size: 11mm diameter, should have multifunction valve and automatic valve to prevent damage of sharp instrument and quipme tip lens while passing through the Cannula valve. It should have stopcock for CO2 insu. Trocar should have pyramid tip up with pin hole near the tip for safety outlet of CO2 gas. The working length of the canula should be 100-110mmQty 02	One Bidder vide their mail have requested "Need to identify Local Supplier"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
	Trocar & Cannula 6MM: Cannuta Size:6mm diameter : should have multifunction valve and automatic valve to prevent damage of sharp instrument and quipme tip lens while passing through the Cannula valve. It should have	One Bidder vide their mail have requested "Need to identify Local Supplier"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith

stopcock for CO2 insu.		
Trocar should have pyramid tip up with pin hole near the tip for safety outlet of CO2 gas. The working		
length of the canula should be 100-110mmQty 02		
Reducar 11-5mmQty 01	One Bidder vide their mail have requested "Need to identify Local Supplier"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
Veress needle: Veress needle of working lengh 10cm with luer lock one eachQty 01	One Bidder vide their mail have requested "Need to identify Local Supplier"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
Grasping Forcep Fenestrated curved :Qty 01	One Bidder vide their mail have requested "Need to identify Local Supplier"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
High Definition Camera system with integrated USB recording system		
1. Three Chip High definition Camera System		
The system should be truly Digital HDTV endoscopic video camera. The system should have the maximum Resolution of 1920X1080 pixels progressive scan and the consistent use of 16:9 formula for input & Output to guarantee genuine HDTV.	One Bidder vide their mail have requested for amendment as "the system can be either UHD or HD endoscopic video camera with resolution of 1920x1080 or 3840x2160p"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
The system should have facility of Optical & Digital Zoom lens to enhance the quality of image size & cross specialty usage of the camera system. Regardless of the telescope used.	One Bidder vide their mail have requested that "our system has only digital zoom while optical zoom can be got through C-mount camera head & Zoom Coupler"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
USB port for capturing Full HD Videos/HD in external USB drive and direct interface of USB printer to facilitate direct printouts.	One Bidder vide their mail have requested that "Internal storage is available while recorded videos can be transfer to USB with Interface tablet."	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
	Another Bidder vide their letter have requested to amend as "Optional USB port Internal recorder/ External HD Recording device must be supplied with minimum 500GB internal hard drive."	
System should have facility of controlling additional equipment like light surce insufflators and recording device from the camera head.		

System should have facility to offer various visualization modes for surgery and diagnosis by color contrast for recognition of the finest tissue structure and their differentiation.	Another Bidder vide their letter have requested to delete this specification. Remarks: Company specific.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
Parallel live display of visualisation modes besides white light mode (Picture in picture)	Another Bidder vide their letter have requested to delete this specification. Remarks: Company specific.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
Modular design digital full HD camera module should be compatible for use with video flexible GI endoscopes. (Compatible with Universal Flexible GI Endoscope but not with flexible scope with camera processor)	Another Bidder vide their letter have requested to delete this specification. Remarks: Company specific.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
All equipments quoted should be from the same manufacturer to ensure best system compatibility.All equipments quoted should be USFDA &		
European CE approved.		
Technical Specification		
Image Sensor: 3X1/3" CCD-Chip	One Bidder vide their mail have requested that their image sensor is C MOS Sensor	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
	Another Bidder vide their letter have requested to amend as "3 Chip CCD/CMOS"	
Pixel: 1920*1080	One Bidder vide their mail have requested to amend as "1920*1080 or 3840x2160p"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
AGC: Microprocessor controlled		
Lens: Integrated zoom lens F=15-31mm (2X optical zoom)	One Bidder vide their mail have requested that they have 16-34mm and 14-29mm	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
Min Light Sensitivity: 1.17 Lux (f=1.4mm)		
Control Buttons: 3 (2 of them freely programmable)	One Bidder vide their mail have requested to amend as "3 (2 of them freely programmable) or 2 buttons"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
	Another Bidder vide their letter have requested to amend as "Minimum 3"	

Video Output: 2×DVI-D output, 1×3G-SDI output, 3×camera input For communications with compatible camera module LAN connector, 4X USB connector (2 front, 2 back)	One Bidder vide their mail have requested to amend as "For communications with compatible camera module, LAN connector, 4X USB connector (2 front, 2 back) "	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
	Another Bidder vide their letter have requested to amend as "2×DVI output"	
Input: Keyboard Input for character generator	One Bidder vide their mail have requested they have tablet interface	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith
	Another Bidder vide their letter have requested to amend as "Optional Key board"	as per annexure 1 enclosed nerewan
Power Supply: 100-240 VAC 50/80 Hz		
LED Light Source: LED Light source 175 Watt	Another Bidder vide their letter have requested to amend as "Should be minimum 300 Watt LED"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCL as per annexure 1 enclosed herewith
CO2 Electronic Insulator 30 L/M and above Flow rate:	One Bidder vide their mail have requested that they have 50L insufflator	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC as per annexure 1 enclosed herewith
Electronic CO2 Insulator with pin index correction		· ·
Should have an adjustable flow rate of 0 to 30Ltr per minute or above and a pressure range adjustable between 0-30mm Hg	One Bidder vide their mail have requested that "ours is more 0 to 40L/M"	As per bidder query and CNCI requirement, the specification has been amended/revised by CNC. as per annexure 1 enclosed herewith
Preser and actual value for pressure and flow should be displayed together on the front panel in digital display		
Constant, monitoring of inta-abdominal pressure, any overpressure is released immediately withback flow with ecoustic alarm		
Should be supplied with suitable trolley with castor wheels and appropriate electric points		
All the items/ equipments should be from the same manufacturerfor better system compatibility and should be USFDA approved		
All the sets, scopes, instruments, flexibles and accessories should be from the same manufacturer so		

as to ensure full system compatibility and sharing of endo-vision system across all departments and specialities.		
-NA-	 Another Bidder vide their have requested to add following Additional Point for incorporation in the existing Tender Technical Specification: The System should be compatible to chromo endoscopy to facilitate to see submucosal pattern. USB port capturing of video & still images or external recorder from the same manufacturer. Order copy can be from other dealers but same product should be acceptable. Three numbers of light cable to be provided with the system. Compatible trolley to be provided (Indigenous). LED light source can be 175 watts or more. 	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 1 enclosed herewith

Item no. 4: OT Table (Imported)

Sl.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No			
	4. Inbuilt kidney bridge or break position or motorised kidney elevator.	One Bidder vide their letter have requested to amend as "The table should have 70mm or more inbuilt motorized kidney elevator." Another Bidder vide their letter have requested to amend as "The table should have 70mm or more inbuilt motorized kidney elevator."	Tender specification prevailed.

5. Should have a manual override function for all major positions and movements with an accessory	One Bidder vide their letter have requested to amend as "Should have a manual override "	Tender specification prevailed.
remote control other than the primary remote control.		
······································	be operated manually by foot pump In case	
	of Power or electrical component failure.	
	Also It should have a electrical override	
	panel In the table column in case of remote	
	failure."	
	Remarks: Manual override is mandatory, in	
	case of any electrical or remote failure all	
	functions can be operated manually by foot pump control.	
	Another Bidder vide their letter have requested	
	to amend as	
	"Should have integrated manual override	
	function for all articulating positions and	
	movements which can be controlled with an	
	accessory remote control other than the	
	primary remote control."	
	One Bidder vide their letter have requested to amend as "Should have integrated manual	
	override function	
	for all articulating positions and movements	
	which can be controlled with an accessory	
	remote control other than the primary	
	remote control."	
	Another Bidder vide their letter have requested	
	to amend as	
	"Should have a manual override function	
	for all major positions and movements with an additional control unit which can be	
	operated manually without any requirement	
	of power other than primary remote	
	control"	
6. Radiolucent five section table top in head section,	One Bidder vide their letter have requested to	Tender specification prevailed.
back section, seat section with perineal cut with	amend as "Radiolucent five section table top	

facility to seal the perineal cut has to be provided leg section and inbuilt kidney bridge or inclinable backextension which performs the same function kidney bridge. Also the head and leg plate should beinterchangeable.	back section, seat section with perineal cut with facility to seal the perineal cut has to be	
	to amend as "Radiolucent five section table top in head section, back section, seat section with perineal cut with facility to seal the perineal cut has to be provided, slit leg section and inbuilt motorized kidney elevator. Also, the head and leg plate should be interchangeable."	
7. All metal components of the table should be m of corrosion resistant aluminium or stainless stee which is disinfectant proof, with four antistatic ca with caps and central locking facility. The base column should have telescopic cover of stainless and fiberglass/ ABS laminate to prevent ingress of fluid into the system.	Iamend as "All metal components of the tableastorsshould be made of corrosion resistantaluminum or stainless steel which issteeldisinfectant proof, with four antistatic	Tender specification prevailed.
	Another Bidder vide their letter have requested to amend as "All metal components of the table should be made of corrosion resistant aluminum or stainless steel which is disinfectant proof, with four antistatic castors with caps with auto-levelling facility with central hydraulic locking. The base column should have telescopic cover of stainless steel and	

	fiberglass/ ABS laminate to prevent ingress of fluid into the system."	
10. The table should have manual movement control facility in case of remote failure and also operate onmains/ battery power with internal/ external charger.	One Bidder vide their letter have requested to amend as "The table should have integrated manual movement control facility for all articulating positions in case of remote failure and operate on mains and/or integrated battery."	Tender specification prevailed.
	Another Bidder vide their letter have requested to amend as "The table should have integrated manual movement control facility for all articulating positions in case of remote failure and operate on mains and/or integrated battery."	
11. The table should be integrated with a self- diagnostic program	One Bidder vide their letter have requested to remove this point. Remarks: Self-diagnostic program is not at all related with patient safety and surgical procedures. These features does not add any value to the performance / qualities of the table. It is only a sophisticated feature. Every Manufacturer has its own software to diagnose and rectify the problems. Also it does not have any value addition practically. Local service facility is important to cater to immediate after sales service requirement.	Should be read as "11. The table preferably should be integrated with a self-diagnostic program."
-NA-	 Another Bidder vide their letter have requested to add the following Para Table should be operated by Hand control, electrical over ride panel and manual override by foot pump. Table should have steel base covered by ABS material for easy cleaning and maintenance. The table should have a provision to 	Tender specification prevailed.

Technical	Data	 memorize any two positions. It should be erasable and reprogrammable. The provision should be available on both the remote handset and as well as the override panel. The table should have an emergency stoop, in case of any malfunction. The provision should be available on both the remote handset as well as the override panel. The table should have an electrical override panel on the column of the table. Safety lock should be available in side rails to prevent accessories falling off. 	
A. Height or below a	adjustment – Minimum 650 mm-700 mm nd maximum 1100 mm or above mum and minimum height is without	One Bidder vide their letter have requested to amend as Height adjustment – Minimum 650 mm-700 mm or below and maximum 950 mm – 1000 mm or above (Both maximum and minimum height is without mattress) Remarks: All your required surgeries required low height only. Another Bidder vide their letter have requested to amend as "Height adjustment: minimum 600 mm or below, maximum. 1100 mm or above." One Bidder vide their letter have requested to amend as "Height adjustment – Minimum 650 mm-700 mm or below and maximum 1050 mm or above (Both maximum and minimum height is without mattress)" Another Bidder vide their letter have requested to amend as Height adjustment: minimum 600 mm or below, maximum. 1100 mm or above	Should be read as "Height adjustment – Minimum 650 mm-700 mm or below and maximum 1050 mm or above (Both maximum and minimum height is without mattress)"

 C. Back section adjustment 30 to 70 degree up and	One Bidder vide their letter have requested to	Tender specification prevailed.
40 degree down	amend as	
	Back section adjustment 90 degree up and	
	90 degree down	
	Remarks : 90 degree up is required to use in	
	beach chair position and 90 degree down	
	required when you stand behind the patient.	
	Another Bidder vide their letter have requested	
	to amend as "Back section adjustment 30 to	
	90 degree up and	
	40 degree down."	
	One Bidder vide their letter have requested to	
	amend as	
	"Back section adjustment 30 to 90 degree up	
	and 40 degree down"	
D. Leg section adjustment 90 degree down, 10	One Bidder vide their letter have requested to	Tender specification prevailed.
degree up	amend as "Leg section should be motorized	
	with 105 deg	
	down movement for greater perineal access	
	and40 deg Up movement."	
	Another Bidder vide their letter have requested	
	to amend as	
	"Leg section should be motorized with 105	
	deg down movement for greater perineal	
	access and 40 deg Up movement."	
	One Bidder vide their latter have requested to	
	amend as	
	"Leg section adjustment 90 degree down, 30	
	degree up"	
F. Head rest 25 degree	One Bidder vide their letter have requested to	Tender specification prevailed.
	amend as	
	Head 90 degree up and 90 degree down	
	Remarks: 90 degree up is required for better	
	positioning and 90 degree down is required	

	when you stand behind the patient.	
	Another Bidder vide their letter have requested to amend as " " Head rest +/- 40 degree or more "	
G. Longitudinal shift 300 mm or more	One Bidder vide their letter have requested to amend as Longitudinal shift 380 mm or more Remarks: It's required for operating heavy patients.	Should be read as "Longitudinal shift 280 mm or more"
	One Bidder vide their letter have requested to amend as "Longitudinal shift 400 mm or more in both directions." Another Bidders vide their letter have requested to amend as "Longitudinal shift 400 mm or more in both directions" Another Bidder vide their letter have requested to amend as " "Longitudinal shift 280 mm or more"	
H. Max width 540 mm or better	One Bidders vide their letter have requested to amend as "Max width 530 mm or better." Another Bidder vide their letter have requested to amend as "Max width 530 mm or better"	Should be read as "Max width 530 mm or better"
I. Length 1960mm or better	One Bidder vide their letter have requested to amend as " "length 2100 mm or better."	Tender specification prevailed.
J. The table should be able to take the weight of 225 kg or more in all positions and functions (includingreverse orientation)	One Bidder vide their letter have requested to amend as The table should be able to take the weight of 350 kg or more in all positions and functions (including reverse orientation) Remarks: It's required for operating heavy patients.	Tender specification Prevailed.
	Another Bidder vide their letter have requested to amend as "The table should be	

	able to take the weight of 400 kg or more in	
	normal mode and 225 or more	
	in reverse mode or reverse orientation."	
	Another Bidder vide their letter have	
	requested to amend as	
	"The table should be able to take the weight	
	of 400 kg or more in normal mode and 225	
	or more in reverse mode or reverse	
	orientation."	
 Specification for gynaecology		
2. Swivel Mounted - Rinsing basin with holder -02	One Bidder vide their letter have requested to	Tender specification prevailed.
no.	amend as	
	Rinsing basin with holder – 02 no.	
	Remarks: It should not be swivel mounted.	
	Swivel type will occupy more space. Basin	
	should be under the table. So whenever it is	
	required we just pull out and push in.	
5. Leg support servo assisted - 02 pair	One Bidder vide their letter have requested to	Tender specification prevailed.
	confirm whether it is Leg Stirrups.	
-NA-	One Bidder vide their letter have requested for	Tender specification prevailed.
	the following considerations	
	1. All the accessories name are specific	
	imported Table name. Kindly change the	
	accessories name to universal name.	
	2. Gynec & Uro accessories list are same. So	
	please confirm whether we need to provide	
	two sets for each table.	
-NA-	One Bidder vide their letter have requested	Tender specification prevailed.
	that apart from the existing Tender Technical	
	Specification the table should have the	
	following important and necessary features to	
	state of the art and a quality product:	
	1. OR table additionally equipped with	
	integrated power drive unit to provide ease of	
	manoeuvring when moving the table over	
	longer distances	
	2. OT Table should be future ready for	

	Integration Technology 3. Leg Plate down movement should have Anti-Crush Feature so that Accidental damage of Leg Plate in Low Height Position can be avoided 4. The table should have heavy duty antistatic swivel castors with central hydraulic locking through hand held controller for easy maneuverability. It should have self-leveling floor locks. 5. OR table should have special service software for quick, uncomplicated definition of technical status and failure tracing. 6. RS-232 Port for Device Control & Computer Assisted Error Diagnosis for Easy Service. 7.OR Table should have Interchangeable position for Head Plate so that it can connect with leg plate. 8. Control of the adjustment motions: The adjustments of the hydraulically powered motions are controlled electrically from outside the intervention area via cable connected hand	
	control. Hand pendant with backlight and/or display.	Tender specification prevailed.
	All powered functions can be controlled manually also (override system) via an additional control unit, stored safely on the side of the lift column. Integrated into the table's foot construction, should be a foot pump operated via a retractable foot lever. It should be a fully functional manual system in the case of some type of failure or table should have a completely independent electronic drive system to maintain table in working order in the event of main motor failing. <u>Table should be European CE and USFDA</u> <u>Certified</u>	

		 Another Bidder vide their letter have requested to amend as OR table additionally equipped with integrated power drive unit to provide ease of manoeuvring when moving the table over longer distances OT Table should be future ready for Integration Technology Leg Plate down movement should have Anti-Crush Feature so that Accidental damage of Leg Plate in Low Height Position can be avoided The table should have heavy duty antistatic swivel castors with central hydraulic locking through hand held controller for easy maneuverability. It should have self-leveling floor locks. OR table should have special service software for quick, uncomplicated definition of technical status and failure tracing. RS-232 Port for Device Control & Computer Assisted Error Diagnosis for Easy Service. OR Table should have Interchangeable position for Head Plate so that it can connect with leg plate. Control of the adjustment motions: 	Tender specification prevailed.
--	--	---	---------------------------------

the intervention area via cable connected hand control. Hand pendant with backlight and/or display. All powered functions can be controlled manually also (override system) via an additional control unit, stored safely on the side of the lift column. Integrated into the table's foot construction, should be a foot pump operated via a retractable foot lever. It should be a fully functional manual system in the case of some type of failure or table should have a completely independent electronic drive system to maintain table in working order in the event of main motor failing.	Tender specification prevailed.
Table should be European CE and USFDA Certified	

Sl.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No			
	1. Top Mount Strong Arm plus holder and	One Bidder vide their letter have requested as	Should be read as "1. Top Mount Strong Arm plus
	positioner with attached frame clasping device	given below:	holder and positioner with attached frame clasping
	5. heavy Duty rail clamp	Specifications not clear : Which type of	device (For Liver, Stomach, cytoreductive surgery)
	6. Universal Bar, large with clasper bar	retractor needed - Ring or Arm Retractor	2. heavy Duty rail clamp
	7. Extension Bridge kit	and for which specific surgery?. Single field	3. Universal Bar, large with clasper bar (Double
		post or double filed post required?	field post)
			4. Extension Bridge kit
	All Instruments and container should be from the	One Bidder vide their letter have requested	Point added " should be supplied with suitable
	same manufacturer	that if container is required, it should be	container for sterilization"
		added in the specifications.	

Item no. 5: Abdominal Retractor (Thompson Type)

Item no. 6: Abdominal Retractor (Omnitract Type)

Sl. No	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
INU	1. Field post 12"(30cm)	One Bidder vide their letter have requested to amend as "Should be between 18 to 24" as	Should be read as "1. Field post 18" (45 cm)"
		12inches is very less for field post"	
	2. Horizontal flex bar	One Bidder vide their letter have requested amend as "Should be changed to Vertical	Should be read as "2. Vertical extension bar"
		extension bar"	
	All Instruments and container should be from the	One Bidder vide their letter requested have	Point added " should be supplied with suitable
	same manufacturer	that if container is required, it should be	container for sterilization"
		added in the specifications.	

Item no. 7: Trans Oral Ultrasound Surgical System (TOUSS)

-	m no. /: Trans Oral Ultrasound Surgical System (10)		CNCI Desision for our Amondments of
Sl.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No		One Bidder vide their letter have suggested to	
		go for " 3Dimaging system with flexible tip	
		3D scope to get the real time depth	
		perception which would provide better	
		images and hence better visualization" and	
		have requested as below:	
	The System should comprise of the following:		
	(C)3 CCD Full HD Auto cleavable Camera head	Kindly amend it as 3D endoeye flexible tip	Should be read as " (C) 3D endoeye flexible tip "
	(D)Full HD Video Image Processor	Kindly amend it as 3D processor	Should be read as " (D)3D processor"
	(F) 26" Full HD Medical Grade Monitor	Kindly amend it as 31 inch or more 3D	Should be read as " (F) 31 inch or more 3D
		monitor	monitor"
	(H)Therapeutic Flexible Video Pharyngo-		
	Laryngoscope with early cancer detection capability		
	•Should come with Mounting connector, for		
	retractor/optic/bite guard.		
	(D) 3 CCD Full HD Autoclavable Camera Head	Kindly amend it as 3D Endoeye flexible tip	Should be read as " (D)3D Endoeye flexible tip"
	•The full HD camera head should have resolution of		Points deleted.
	1920 * 1080 pixels.	Kindly Delete	
	•Should have motorized optical zoom ranging from	Kindly Delete	Points deleted.
	0.0X to 1.8X and can be varied seamlessly.		
	•Should have motorized focus function which can	Kindly Delete	Points deleted.
	be varied step Lesly from coarse to fine image.		
	•Should have 3 programmable buttons which can be	Kindly Delete	Points deleted.
	configured through the processor.		
	The camera head must be autoclavable.	Kindly amend it as 3D scope should be	Should be read as "3D scope should be
		compatible with ETO &Sterrad means of	compatible with ETO &Sterrad means of
		reprocessing techniques	reprocessing techniques"
		Kindly add below points	
		• The 3D scope should be of 10mm in diameter	Points added "The 3D scope should be of 10mm in
		with High Resolution Dual Lens Chip on tip	diameter with High Resolution Dual Lens Chip on
1		Technology	tip Technology"
		• The 3D scope should have Flexi Tip with	Points added "The 3D scope should have Flexi Tip
			Points added "The 3D scope should have Flexi Tip with DOV 0 deg"

	deflection facility of 0-100 deg. in all 4	orthogonal deflection facility of 0-100 deg. in all 4
	directions, namely up, down, right and left.	directions, namely up, down, right and left.
	 The 3D scope should have Integrated Light 	• The 3D scope should have Integrated Light Cable
	Cable and Camera connectors	and Camera connectors
	• The 3D scope should be focus free with	• The 3D scope should be focus free with Depth of
	Depth of Field of 18-100mm with a wide Field	Field of 18-100mm with a wide Field of View of 80
	of View of 80 deg.	deg.
	• The 3D scope should be light weight & easy	• The 3D scope should be light weight & easy to
	to handle	handle
	• The 3D scope should have effective working	• The 3D scope should have effective working
	length of 330mm or above.	length of 330mm or above."
(E) Full HD Video Image Processor	Kindly amend it as 3D processor Full HD	Should be read as "3D processor Full HD processor
	processor	"
	Kindly add following points	Points added "Should have Dual Lens technology
		for Left & Right image Signals"
	• Should have Dual Lens technology for Left &	-
	Right image Signals	
	 Should have 2 High Definition Camera 	Points added "Should have 2 High Definition
	Processors for Left & Right Image signals	Camera Processors for Left & Right Image signals"
	 Should have a mixer for synchronizing 	Points added "Should have a mixer for
	& processing of both Left & Right Image	synchronizing
	signals from camera processors to transmit 3D	& processing of both Left & Right Image signals
	image	from camera processors to transmit 3D image"
	Processor Should be compatible with routine	Points added "Processor Should be compatible
	3D scopes, 2D video telescopes &	with routine 3D scopes, 2D video telescopes &
	flexible endoscopes for various applications	flexible endoscopes for various applications"
	o 3D Polarized Glasses - 10 nos.	Points added "3D Polarized Glasses - 10 nos."
G) Full High Definition Information Management		Should be read as "G) Full High Definition
System:		Information Management System:
Should have internal hard disk drive of 500GB and		Should have internal hard disk drive of 4 TB and
should have facility of recording on		should have facility of recording on
Blu Ray Disc/DVD Disc or USB memory stick if		Blu Ray Disc/DVD Disc or USB memory stick if
required by user.	Kindly amend it as 4TB memory space	required by user."
(F) Powerful 300W Xenon Light Source LED		
Light of equivalent wattage/illumination.		
An Autoclavable type Optic fibre light guide cable to		Points deleted.
be provided for better protection against mechanical		
and thermal stress.	Kindly Delete	

Length should be around 3 meter.	Kindly Delete	Points deleted.
The light guide cable should be autoclavable.	Kindly Delete	Points deleted.
(H) 26" Full HD Medical Grade Monitor	Kindly amend it as 3D medical grade Monitor	Should be read as "3D medical grade Monitor of
	of size 31 inch or more	size 31 inch or more"
Should have minimum 26 inches size.	Kindy amend minimum size should be 31 inch	Should be read as "minimum size should be 31 inc
	or more	or more"
Therapeutic Flexible Video Pharyngo-		
Laryngoscope with early cancer detection		
capability	Kindly add following	
	Should have 4 way angulation	Points added "Should have 4 way angulation
	UP /Down : 130 deg	UP /Down : 130 deg
	left right : 70 degree	left right : 70 degree"
	Depth of Field : 2-50	Points added "Depth of Field : 2-50"
	Distal end diameter : 4.8mm	Points added "Distal end diameter : 4.8mm"
	Insertion tube diameter : 4.9 mm	Points added "Insertion tube diameter : 4.9 mm"
	field of view : 90 degree	Points added "field of view : 90 degree"
	Working channel : 2mm	Points added "Working channel : 2mm"
	NBI	Points added "NBI"
	Laser compatible	Points added "Laser compatible"
C.Integrated Bipolar and Ultrasonic Coagulation & Cutting Unit for Head Neck Surgery		
Front Actuated Lap Surgery Probe 5mm diameter, length 35 cm (5pcs)	Kindy increase quantity to 15 Pcs	Should be read as "Front Actuated Lap Surgery Probe 5mm diameter, length 35 cm (15pcs)"
Open Surgery Front Actuated Probe 5mm diameter,		Should be read as "Open Surgery Front Actuated
length 20 cm(5pcs)	Kindly increase quantity to 15 pcs	Probe 5mm diameter, length 20 cm(15pcs)"
General Requirements:		
All Product should be from same manufacturers	All Product should be from same	Should be read as "All Product should be from san
	manufacturers except 3D monitor	manufacturers except 3D monitor"
	kindly add following instruments required for procedure:	Points added:
	1) Hand Instruments	1) Hand Instruments
	• FK self-retaining tumour grasping forceps, flexible, with 3 grasping teeth, working length 23 cm, 4 mm diameter of shaft	• FK self-retaining tumour grasping forceps, flexible, with 3 grasping teeth, working length 23 cm, 4 mm diameter of shaft

	• Divertible blade, concave, working	• Divertible blade, concave, working length
	length 22 cm	22 cm
	Laryngoscope holder and chest	• Laryngoscope holder and chest support,
	support, with rod for adults, with rod fixation	with rod for adults, with rod fixation screw, for use
	screw, for use with the laryngoscopes, 9.5 cm	with the laryngoscopes, 9.5 cm diameter of ring,
	diameter of ring, rod length 34 cm	rod length 34 cm
	• Rod for children (not shown), 9.5 cm	• Rod for children (not shown), 9.5 cm
	diameter of ring, rod length 24 cm	diameter of ring, rod length 24 cm
	• Flexible tension arm, L-stand, 470 x	• Flexible tension arm, L-stand, 470 x 170
	170 mm, 18.5" x 6.7" with lock	mm, 18.5" x 6.7" with lock
	• Adapter, for retractor/laryngoscope	Adapter, for retractor/laryngoscope
	• Adapter, for retractor/optic/mouth gag	Adapter, for retractor/optic/mouth gag

Item no. 9: FESS Set with Micro-debrider for Anterior Skull Base

SI.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No			
	2) Specifications For Forceps for FESS		
		One Bidder vide their mail have requested as given below:	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
		Most of the Equipment manufacturers do not manufacture instrument & feedback for the	
		same has been received from manufacturer to	
		isolate some equipment. To be published as	
		separate item, which will also ensure	
		participation from more instruments	
		manufacturer also. Items to be separated:	
		FESS Endoscopy System	
		FESS Instrumentation	
		Microdebrieder	
	Blakesley nasal Forceps, Straight, 120 mm Length,	One Bidder vide their letter have requested to	As per bidder query and CNCI requirement, the
	3.6 mm - 01	amend as "Blakesley Nasal Forceps, Straight	specification has been amended/revised by CNCI
		110 mm, Length 3.6 mm, size 0 – 01".	as per annexure 2 enclosed herewith
	Blakesley nasal Forceps, Straight, 120 mm Length,	One Bidder vide their letter have requested to	As per bidder query and CNCI requirement, the
	4.8 mm - 01	amend as "Blakesley Nasal Forceps, Straight	specification has been amended/revised by CNCI
		110 mm, Length 4.8 mm, size 1 – 01".	as per annexure 2 enclosed herewith

Blakesley nasal Forceps, Straight, 120 mm Length, 5.6 mm - 01	One Bidder vide their letter have requested to amend as "Blakesley Nasal Forceps, Straight 110 mm, Length 5.6 mm, size 2 – 01".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
Blakesley nasal Forceps, Upturned, 140 degree, 120 Length, 3.6 mm - 01	One Bidder vide their letter have requested to amend as "Blakesley Nasal Forceps, 45degree Upturned, 110 mm Length, 3.6 mm, size 0 – 01".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
Blakesley nasal Forceps, Upturned, 140 degree, 120 Length, 4.2 mm - 01	One Bidder vide their letter have requested to amend as "Blakesley Nasal Forceps, 45degree Upturned, 110 mm Length, 4.2 mm, size 1 – 01".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
OstrumAntrum punch forceps, 3x7 mm - 01	One Bidder vide their letter have requested to amend as "OstrumAntrum Punch, upside backward cutting, straight, length 9cm". Remarks: Mentioned dimensions 3*7 mm is not relevant to the Ostrum Punch Instrument.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
3) Specifications For Bipolar Coagulation Forceps	-	
3) Specifications For Bipolar Coagulation Forceps	Another Bidder vide their email have requested to delete this specification.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCL as per annexure 2 enclosed herewith
Bipolar coagulation Forceps insulating angular, Blunt for nose, with Integrated suction channel for with cut- off hole, Length 19 cm for use with Bipolar high frequency cord -02	One Bidder vide their letter have requested to amend as "Bipolar coagulation Forceps insulating angular, Blunt for nose, with Integrated suction channel for with cut-off hole, Length 18-20 cm for use with Bipolar high frequency cord -02".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
4) Specifications for Micro-debrider		
4) Specifications for Micro-debrider	Another Bidder vide their email have requested to Separate these specification.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCL as per annexure 2 enclosed herewith
(b) Multi-Function Foot Pedal		
1. Watertight, with 3 metre cable	One Bidder vide their letter have requested to amend as "Watertight, with 1- 3 metre cable".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCL as per annexure 2 enclosed herewith
3. Toggle stop – Single action to fully open or close the blade window	One Bidder vide their letter have requested to amend as "Single action to fully open or close the blade window". Remarks: Company specific.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith

5) Specifications for Consumables -		
(a) For Debrider		
1. A Set of Straight Blades for Debrider- 2.5 mm, 4 mm. 3.5mm 5pc each	One Bidder vide their letter have requested to amend as "A Set of Straight Blades for Debrider- 3 mm, &4 mm.5pcs each".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
2. A Set of Angled Blades for Debrider- 4 mm – 12 deg, 40 deg, 60deg5pc each	One Bidder vide their letter have requested to amend as "A Set of Angled Blades for Debrider- 4 mm – 12 deg, 40 deg, 65deg 5pcs each".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
4. A Set of Longer Blades for Debrider- 4 mm, 11 cm 5pc each	One Bidder vide their letter have requested to delete this point as the same items are already asked for in Point no 1 & 3.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
6. A Set of Burrs for Debrider- 3 5pc each	One Bidder vide their letter have requested to amend as "A Set of Burrs for Debrider - 3 mm-4 mm diameter, 5pcs each".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
(b) For Otology Drill		
1. Straight attachment – Exposed tube of 80mm- 85mm, length 115-120mm Qty-2	One Bidder vide their letter have requested to amend as "Straight attachment – Exposed tube of 70 mm-75mm, length 115-120mm Qty-2".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
2. Angled Attachment – Exposed tube of 80mm- 85mm, length 138 – 140mm Qty-2	One Bidder vide their letter have requested to amend as "Angled Attachment – Exposed tube of 70mm-75mm, length 138 – 140mm Qty-2".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
(c) Cutting Accessories :		
1. Extra Coarse Diamond (Polishing) Bur 2mm – 2 Nos	One Bidder vide their letter have requested to amend as "Extra Coarse Diamond (Polishing) Bur 2mm – 5 Nos. each for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
2. Extra Coarse Diamond (Polishing) Bur 3mm – 3 Nos	One Bidder vide their letter have requested to amend as "Extra Coarse Diamond (Polishing) Bur 3mm – 5Noseach for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
3. Extra Coarse Diamond (Polishing) Bur 4mm – 2 Nos	One Bidder vide their letter have requested to amend as "Extra Coarse Diamond (Polishing) Bur 4 mm – 5Noseach for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
4. Extra Coarse Diamond (Polishing) Bur 5mm – 1	One Bidder vide their letter have requested to	As per bidder query and CNCI requirement, the

No	amend as "Extra Coarse Diamond (Polishing) Bur 5 mm – 5Noseach for medium and long handpiece".	specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
5. Fluted (Cutting) Bur Aggressive 2mm – 2 Nos	One Bidder vide their letter have requested to amend as "Fluted (Cutting) Bur Aggressive 2mm – 5Nos each for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
6. Fluted (Cutting) Bur Aggressive 3mm – 3 Nos	One Bidder vide their letter have requested to amend as "Fluted (Cutting) Bur Aggressive 3mm – 5Noseach for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
7. Fluted (Cutting) Bur Aggressive 4mm – 4 Nos	One Bidder vide their letter have requested to amend as "Fluted (Cutting) Bur Aggressive 4mm – 5Noseach for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
8. Fluted (Cutting) Bur Aggressive 6mm – 2 Nos	One Bidder vide their letter have requested to amend as "Fluted (Cutting) Bur Aggressive 6mm – 5Noseach for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
9. Fluted (Cutting) Bur Aggressive 1mm – 2 Nos	One Bidder vide their letter have requested to amend as "Fluted (Cutting) Bur Aggressive 1mm – 5Noseach for medium and long handpiece".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
(d) Burs for Stapedectomy& Cochlear Surgeries		
 Pointed Drill 0.5mm – 2Nos Plain Round Drill 0.5mm – 2 Nos 0.7MM ROUND FLUTED BUR – 2 Nos 	One Bidder vide their letter have requested to remove the said point from the existing Tender Technical Specification. Remarks: Recommended for not use the same Drill for Stapedectomy as torque amd RPM required is very high and not suitable for stapes bone.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
6) Specifications For 4 K Display with High Definition		
(i) Chip CMOS/CCD High Definition Endoscopic Camer		
• Control of ICG fluorescent viewing from the camera head	One Bidder vide their letter have requested to amend as "Control of ICG fluorescent viewing from the Camera Head/Footswitch".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
• Programmable buttons to adjust the cavity	One Bidder vide their letter have requested to	As per bidder query and CNCI requirement, the

backlighting and intensity of I vibrancy from the camera head	th fl	mend as "Programmable buttons to adjust ne cavity backlighting and intensity of ICG uorescence vibrancy from the camera head automatic adjustment".	specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
• Intuitive touch screen LCD i operation	re	One Bidder vide their letter have requested to emove the said point from the existing 'ender Technical Specification.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
(ii)Objective Zoom lens:			
• Zoom lens with snap on lock	aı	One Bidder vide their letter have requested to mend as "Zoom lens with snap on ock/Integrated zoom".	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith
 mentioned below. 1. Specifications for Endoscop 2. Specifications for Forcpes f 3. Specifications for Bipolar C 4. Specifications for Micro De 5. Specifications for Consuma 6. Specifications for 4K Displat The above mentioned 6 items for FESS Set withMicroDebrid different manufacturers. Eg. Endoscopes and 4K technor not make debridersand power Manufacturers of Forceps and As per your demand these all p there is any requirement of compatibilit with 4K imaging system. Rather we suggest you to kind 	er have given their request let ecification for FESS Set with es for FESS or FESS oagulation Forceps brider bles by with high definition imagin have been collectively taken u ler" while these all products a blogy are available from a sing ools. instruments do not make 4K of products should be from the sa patibility arises in between the y withendoscopes with forcep by split the sl no 9 into at least vious 6 components as mentio	tter as given below: Micro Debrider which has 6 different parts as ag systems under a single nomenclature as "Specification are not similar and discretely available from gle manufacturer but these manufacturers do display with high definition imaging systems. ame manufacturer. This point stays valid if hese all 6 components. But the point is there is ps, forcpes with debrider, and consumables at three separate items of tender where each ane below. Please note, these parts are	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 2 enclosed herewith As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI
 "Endoscopes for FESS" wit "Forceps for FESS" and "B "Micro Debrider" and "Con 	h "4K imaging system" (Point polar Coagulation Forceps" (I sumables" (Point 4 & 5)	t 1 & 6)	as per annexure 2 enclosed herewith

Item no. 10: ELECTRIC POWERED MICRO DRILL SYSTEM

SI. No	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
NO	MOTOR CONTROL UNIT: 1 No		
	Must be equipped with at least 3 ports to connect 3 hand pieces, 2 ports for connecting 2 foot switches & integrated irrigation facility.	One Bidder vide their letter have requested to amend as "Must be equipped with at least 2 ports, to connect 2 hand pieces and at-least 1 port to connect footswitch". Remarks: As 3 ports for hand pieces and 2 ports for footswitch are not available with all the manufacturers.	Tender specification prevailed.
	Should be supplied with compatible irrigation Cassettes – 10 Nos.	One Bidder vide their letter have requested to amend as "Should be supplied with compatible irrigation cassettes / irrigation tubing set -10 Nos."	Tender specification prevailed.
	FOOTSWITCH: 1 NO		
	Can operate 2-3 hand pieces sequentially attached to the same motor control unit.	One Bidder vide their letter have requested to amend as "Can operate at-least 2 hand pieces sequentially attached to the same motor control unit." Remarks: As 3 hand piece slot are not available with all the manufacturers.	Tender specification prevailed.
	Micro Sagittal Saw: 1 No		
	Should run from the same Motor Control Unit meant for the Micro Drill. Should cut in same horizontal plane, Should have Maximum speed of 25000 cpm. Dimension – length 134- 136mm, diameter 19-21mm, mass 0.14-0.16kg	One Bidder vide their letter have requested to amend as "Should run from the same Motor Control Unit meant for the Micro Drill. Should cut in the same Tender specification prevailed. Horizontal plane, Should have Maximum speed of 20000-25000 cpm /rpm. Dimension – length 134-136 mm, diameter 19-21 mm, mass 0.14-0.16 kg". Remarks: Range provided for better participation.	Tender specification prevailed.
	Micro Oscillating Saw: 1 No		
	Should cut in same horizontal plane, Should have Maximum speed of 20000 cpm. Dimension: Length – 162-164mm, Diameter – 19 – 21mm, mass – 0.180-0.185kg, Excursion – 7-8 degree arc	One Bidder vide their letter have requested to amend as "Should cut in same horizontal plane, Should have Maximum speed of 15000-20000 cpm/rpm. Dimension: Length ~	Tender specification prevailed.

Micro Reciprocating Saw: 1 No Should have Maximum speed of 14000 cpm,	162-164 mm, Diameter ~ 19-21 mm, mass ~0.180-0.185 kg, Excursion ~ 7-8 degree arc".Remarks: Range provided for betterparticipation.One Bidder vide their letter have requested to	Tender specification prevailed.
Dimension: Length 165-170mm, Diameter 18- 20mm, Mass 0.19-0.21Kg, Excursion 3mm	amend as "Should have maximum speed of 14000-15000 cpm/rpm, Dimension : Length 165-170 mm, Diameter 18-20 mm, Mass 0.19-0.21Kg, Excursion 3 mm". Remarks: Range provided for better participation.	
Compatible hand switch: 2 nos	One Bidder vide their letter have requested to amend as "Optional Hand Switch: 2 Nos". Remarks: Company specific	Tender specification prevailed.
Cutting Accessories : Oscillating & Sagittal Saw		
1. Sagittal/Oscillating Blades Precision Thin (9.0 x 0.38 x 25.0mm) – 5 Nos	One Bidder vide their letter have requested to amend as "1. Oscillating cutting edge: 9-10 mm; Thickness: 0.3-0.4 mm; Length: 25-26 mm, Qty: 10 Nos." Remarks: Range provided for better participation and quantity need to be increased for longer use.	Tender specification prevailed.
2. Sagittal/Oscillating Blades Precision Thin (16.5 x 0.38 x 18.5mm) –5 Nos	One Bidder vide their letter have requested to amend as "Sagittal Blades: Cutting edge: 10- 16.5 mm; Thickness: 0.3-0.4 mm; Length: 15-18.5 mm, Qty: 24 Nos." Remarks: Range provided for better participation and quantity need to be increased for longer use.	Tender specification prevailed.
Cutting Accessories : Reciprocating Saw		
1. Reciprocating Blade – Cutting edge – 14.5 mm, thickness38mm – 5 Nos	One Bidder vide their letter have requested to amend as "1. Reciprocating Blade- Cutting edge ~ 14-14.5 mm, thickness ~ 0.25-0.38 mm – 24 Nos." Remarks: Range provided for better participation and quantity need to be increased for longer use.	Tender specification prevailed.

2. Reciprocating Blade – Cutting edge – 22.5 mm,	One Bidder vide their letter have requested to	Tender specification prevailed.
thickness38mm – 5 Nos	amend as "2. 1. Reciprocating Blade- Cutting	
	edge ~ 22-22.5 mm, thickness ~ 0.25-0.40	
	mm – 24 Nos."	
	Remarks: Range provided for better	
	participation and quantity need to be increased	
	for longer use.	
Cutting Accessories : Micro Drill:		
1. Tapered side cutting carbide bur, Head Diameter	One Bidder vide their letter have requested to	Tender specification prevailed.
1.6mm – 5 Nos	remove the said point from the existing	
	tender technical specification.	
	Remarks: As the above are available with	
	specific company.	
2. Tapered Side cutting Bur, Head Diameter: 3.2mm	One Bidder vide their letter have requested to	Tender specification prevailed.
- 5 Nos	remove the said point from the existing	
	tender technical specification.	
	Remarks: As the above are available with	
	specific company.	
9. 2.0mm Wire Pass Drill Bit – 5 Nos	One Bidder vide their letter have requested to	
	remove the said point from the existing	Tender specification prevailed.
	tender technical specification.	
	Remarks: As the above are available with	
	specific company.	

Sl.	Tendered Technical Specification	Bidder's Queries	CNCI Decision for any Amendments, if any
No		One Bidder vide their letter have requested to amend as:	
1.	Required is Macintosh blades with closed European Metal finish size2, 3 and 4 with integrated	Kindly delete Macintosh blade Required with closed European Metal finish size2, 3 and & Add following points	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
	camera chip and LED light illumination for obtaining more than 50000 Lux of	a) Kindly add 3 Chip CMOS/CCD Full HD camera	
	brightness.	The full HD camera head should have resolution of 1920 * 1080 pixels.	
		Should have 3 programmable buttons which can be configured through the processor	
		Should have motorized focus function	
		b) Kindly add Full HD Video Image processor:	
		A full high definition processor should have resolution of 1920x1080 pixels or higher	
		Should have real time optical enhancement of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions	
		Should have USB slot to take still pictures of endoscopic images	
		3) Kindly add Powerful 300 watt Xenon light source/LED light source	
		equivalent (to Xenon 300 Watt) with 3 numbers of Autoclavable Light Guide Cable	
		4) Kindly add Telescope 4mm ,0,30,70 Degree Telescope with HD imaging One each	
		Remarks: Tender heading is for Video Video laryngoscope with Camera System where as Macintosh Blade is required for intubation purpose .Both are contradicting	

Item no. 12: Therapeutic Flexible VideoLaryngoscope with NBI

	Also system requires complete imaging chain like video processor ,Light source and camera system	
One special blade for difficult intubation with device for introduction of suction catheter for size 16-18 Fr., angle of view should be approx 80 degree.	 Kindly delete Macintosh blade & add following specification for Video laryngoscope Therapeutic Flexible Video Pharyngo-Laryngoscope with early cancer detection capability 1) Should have 4 way angulation UP /Down : 130 deg left right : 70 degree 2) Depth of Field : 2-50 3) Distal end diameter : 4.8mm or less 4) insertion tube diameter : 4.9 mm or less 5) field of view : 90 degree 6) Working channel : 2mm 7) Should have real time optical enhancement(Mucosal enhancement) Remarks: Therapeutic Video Pharyngo-Laryngoscope with early 	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
	cancer detection capability	
One miller size 0 & 1 blade should present in the set.	Kindly delete Blade	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
Screen 7inch or more in size for display with feature control buttons on the screen withcomposite output for connecting to a big screen.	It should be amendment as 26 Inch medical grade monitor of same make. LCD Screen with LED backlit Remarks: To see complete Full HD images minimum 24 inches or more monitor is required	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
Automatic/ manual white balance facility should be available Documentation of Video & still images should be possible on data card or USB drive with JPEG	 This should be part of camera head Recording Software with Computer system should be supplied 1) Should have HD medical grade recording software for reporting purpose 	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
and MPEG4 format which can be easily transferred to the computer/laptop. Documented videos& still images	 Computer should be i5 processor Should be supplied with Compatible printer for report 	

should be easily recalled on the monitor	printing	
Magill forceps for foreign body removal and for assisting nasal intubation. Safety bag or box for screen to be provided	Kindly amend it as Should be supplied with compatible leakage tester ,biopsy & Grasping forceps -3 Numbers	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
IV Stand for positioning the monitor, with tray for laryngoscopes should be provided	Compatible trolley from same OEM should be provided to provide space to house all mentioned equipment's	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
Accessories like protection cap, tray for cleaning and sterilization of blades (at least two blades at a time) should be provided	Kindly delete as this is required for rigid laryngoscope with blades	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
Blades and connection cable should be fully immersible in disinfecting solution	Kindly delete	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
-NA-	 One Bidder vide their letter have requested to amend entire specification and have suggested detail technical specification (copy enclosed) as given below: Tender Technical Specification for Therapeutic Flexible Video Laryngoscope with NBI :~ Therapeutic Flexible Video Pharyngo-Laryngoscope with early cancer detection capability: Compatible with electrosurgical and laser treatments. Distal end & Insertion tube outer diameter should be 5 mm or less. Field of view should be 85 degree or more. Depth of field should be 2 mm or less. Angulation range should be approx. Up 130 deg or more and Down 100 deg or more. Working length should be around 300 – 400 mm. Instrument Channel should be around 1.5 – 2.5 mm. Early Cancer Detection capability (Mucosal enhancement). Should be supplied with compatible Leakage Tester, Biopsy Forceps and Rat Tooth Grasping Forceps etc. 	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 3 enclosed herewith
	 Full HD Video Image Processor : A full high definition processor should have resolution of 1920 * 1080 pixels or higher (4K). 	

- Should have compatibility for selecting Progressive / Interlaced	
output.	
 Optical image enhancement of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions. 	
- Should have a USB slot so as to take still pictures or videos (HD)	As per bidder query and CNCI requirement,
Endoscope Images.	the specification has been amended/revised by
3 Chip Full HD / 4K Autoclavable Camera Head :	CNCI as per annexure 3 enclosed herewith
 The full HD camera head should have resolution of 1920 * 1080 pixels or higher (4K). 	
 Should have motorized optical zoom ranging from 0.9X to 1.8X 	
and can be varied seamlessly.	
 Should have motorized focus function which can be varied steplessly from coarse to fine. 	
- Should have programmable buttons which can be configured	
through the processor.	
- The camera head must be autoclavable.	
Powerful 300W Xenon Light Source / LED Light Source (equivalent to Xenon 300) :	
 A powerful 300 watt xenon lamp with emergency lamp facility or LED Light Source. 	
- Automatically adjusts light intensity to achieve ideal illumination.	
- An autoclavable type optic fiber light guide cable to be provided	
for better protection against mechanical and thermal stress.	
- Length of cable should be around $3 - 4$ meter.	
- The light guide cable should be autoclavable.	
Large Full HD Medical Grade Monitor :	
- Should have minimum 26 inches size to 60 inches (Large Screen).	
 Medical grade high monitor with resolution of minimum 1920 * 	
1080 or higher (4K).	
– LCD Screen with LED Backlit preferable.	
Telescope : (Optional Accessories)	
-4 mm, 0°, 30°, 70° & 90° telescopes with HD Imaging capability	
(one each).	As per bidder query and CNCI requirement,
-160 - 180 mm working length.	the specification has been amended/revised by
 Detachable eyepiece type. 	CNCI as per annexure 3 enclosed herewith

- Autoclavable type.	
Other Points :	
 It should be US FDA certified. 	
 All products should be from the same manufacturer. 	
 Should have installation of same product base in reputed Govt. Institutes. 	
 Should have a service facility in Kolkata. Should provide 5 years warranty with AMC & CAMC rate for another 5 years after completion the warranty. 	

Item no. 13: Micro Laryngoscopy including TLM (mlScopySet)

	Bidder's Queries	CNCI Decision for any Amendments, if any
Video-Laryngoscope with integrated 45° angled eyepiece Forward Telescope 150 Adult size 01	One Bidder vide their letter have requested to amend as "Video-Laryngoscope with integrated 45 degree angled eyepiece Forward Telescope 15 degree Adult size ~ 01"	Should be read as "Video-Laryngoscope with integrated 45 degree angled eyepiece Forward Telescope 15 degree Adult size ~ 01"
Anterior commissure scope Adult size- 22cm02	One Bidder vide their letter have requested to amend as "Anterior commissure scope Adult size- 17- 22cm~ 02"	Should be read as "Anterior commissure scope Adult size- 17- 22cm~ 02"
Laryngoscope holder and chest support Adult size (ring 9.5 cm, rod 34 cm)01	One Bidder vide their letter have requested to amend as "Compatible laryngoscope holder and chest support Adult size (ring 9.5 cm, rod 34 cm) ~ 01"	Should be read as " Compatible laryngoscope holder and chest support Adult size (ring 9.5 cm, rod 34 cm) ~ 01"
Laryngoscope holder and chest support Child size (ring 9.5 cm. Rod 24 cm)01	One Bidder vide their letter have requested to amend as "Compatible laryngoscope holder and chest support Child size (ring 9.5 cm, rod 24 cm) ~ 01	Should be read as "Compatible laryngoscope holder and chest support Child size (ring 9.5 cm, rod 24 cm) ~ 01"
• - - - - - - - - - - - - - - - - - - -	eyepiece Forward Telescope 150 Adult size 01 Anterior commissure scope Adult size- 22cm02 Laryngoscope holder and chest support Adult size (ring 9.5 cm, rod 34 cm)01 Laryngoscope holder and chest support Child size	eyepiece Forward Telescope 150 Adult size 01amend as "Video-Laryngoscope with integrated 45 degree angled eyepiece Forward Telescope 15 degree Adult size ~ 01"Anterior commissure scope Adult size- 22cm02One Bidder vide their letter have requested to amend as "Anterior commissure scope Adult size- 17- 22cm~ 02"Laryngoscope holder and chest support Adult size (ring 9.5 cm, rod 34 cm)01One Bidder vide their letter have requested to amend as "Compatible laryngoscope holder and chest support Adult size (ring 9.5 cm. Rod 24 cm)01Laryngoscope holder and chest support Child size (ring 9.5 cm. Rod 24 cm)01One Bidder vide their letter have requested to amend as "Compatible laryngoscope holder and chest support Child size (ring 9.5 cm. Rod 24 cm)01

Item no. 14: OPERATING MICROSCOPE

Sl. No	Tendered Technical Specification	Bidder's Queries One Bidder vide their letter have requested to amend as	CNCI Decision for any Amendments, if any
1	High Intensity Illumination through fibre optic high output LED (Equivalent to Xenon 300W) light cable.	Should have 300W Xenon illumination through fibre optic light cable with the back upof 300 W xenon with easy lamp change over facility. Illumination should be controlled easily by hand switch and foot switch as per surgeon requirement.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
2	180-degree dual stereo attachment with beam splitting ratio 70%/30% (approx.)	180-degree dual stereo attachment by beam splitting option with $10x/12.5x$ eyepieces with Diopter correction – 8D to + 5 D.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
3 & 4	The attachment should provide convenient working condition for the entire surgical team and any type of surgery.	No change required or should be eliminated not making any sense.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
5	Binocular tube should have with a variable viewing angle tube of 30 to 150.	Should have variable motorized working distance from 200 mm (+/- 25 mm) to 500 mm (+/- 25 mm).	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
6	Binocular tilt 0- 180 degree	Inclinable binocular tilt 180 degree or more.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
7	Eyepieces 10x to 12.5x	Should have eyepieces 10x to 12.5x.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
8	Magnification changing: Continuous zooming (Electric/Manual): through fire handles with magnetic brakes.	Should have motorized magnification upto14x or more. The motorized magnification should be activated through hand and foot switch or control panel. The handgrip should have buttons for adjustment of focus, zoom, illumination, XY movements and other components with electromagnetic brakes.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
9	Additional waterproof footswitch control optional	Foot switch with 12 functions or more should be supplied.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
10	Zoom video adaptor with zoom TV objective and continuously adjustable focal length of 35 mm to	An objective lens of continuously adjustable focal length from 200 mm (+/- 25 mm) to 500	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI

	100 mm for adaptation of full HD/4 K CCD/	mm (+/- 25 mm) for adaptation of full HD.	as per annexure 4 enclosed herewith
11	Beam splitter with beam splitting ratio 50% / 50% (approx.)	Should have beam splitter with suitable splitting ratio.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
12	Attachment for second observer with wide field eyepiece 10x and inclined low binocular.	Should have attachment for second observer with wide field eyepiece 10x and 160 degree or more inclined binocular.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
13	Tube with provision for IPD adjustment through adjuster.	No change required	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
14	Full HD/4K resolution camera head with control unit.	Should have an integrated HD camera OR 4K resolution camera head with control unit.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
15	Full HD/4K resolution LED medical grade monitor not less than 21 inch in size.	Should have integrated digital video image recording, editing and archiving system.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
16	Spare lamps: Halogen Lamp (2 no's)	Spare lamps: two spare 300W xenon lamps to be supplied along with conventional xenon lamp & back up (300W xenon)	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith
		An additional point for floor stand to be added: Compact microscope based on counterweight balancing system (Contrives Technology) and floor stand should have one touch automatic balancing mechanism.	As per bidder query and CNCI requirement, the specification has been amended/revised by CNCI as per annexure 4 enclosed herewith

ANNEXURE-1

LAPAROSCOPIC INSTRUMENT SET WITH CAMERA SYSTEM AND INTEGRATED USB RECORDING FACILITY

1A. LAPROSCOPIC HAND INSTRUMENTS

Item with Specification.	Qty
Trocar & Cannula 11MM :	02
Cannula size :11 mm diameter; should have multifunctional valve and automatic valve to prevent damage of sharp instruments and quipme	
tip lens while passing through the cannula valve. It shoulds have stopcock for CO2 insufflation.	
Trocar should have pyramidal tip with pin holes near the tip for	
safety outlet of CO2 gas. The working length of the canula should be 100-110 mm.	
Trocar & Cannula 6MM :	02
Cannula size :6mm diameter; should have multifunctional valve and automatic valve to prevent damage of sharp instruments and quipme tip	
lens while passing through the cannula valve. It shoulds have stopcock for CO2 insufflation.	
Trocar should have pyramidal tip with pin holes near the tip for	
safety outlet of CO2 gas. The working length of the canula should be 100-110 mm.	
Reducer 11-5mm	01
Veress Needle:	01
Veress needle of working length10cmm with luer lock one each	
Grasping Forcep Fenestrated curved:	01
Atraumatic, fenestrated, curved grasping forcep with unipolar connection, insulated sheath, handle without ratchet. Should be dismantable	
into three parts namely, outer tube, handle and inserts. Length between 35-36cm, size: 5.0mm	
Grasping Forcep Non Toothed Straight:	01
Atraumatic, straight grasping forcep with unipolar connection, insulated sheath, handle without ratchet. Should be dismantable into three parts	
namely, outer tube, handle and inserts. Length between 35-36cm, size: 5.0mm	
Bowel Grasping Forcep:	01
Bowel Grasper fenestrated, size: 5.0mm, length 5-36cm, handle with ratchet, insulated shaft.	
Unipolar curved Kelly dissecting and Grasping Forcep:	01
Kelly curved dissecting and grasping forceps insulated, atraumatic, working length 36 cm, size: 5mm, dismountable into handle, insert and	
working tube. Handle without ratchet.	
Unipolar Tooth Grasping Gorcep:	01

CNCI Decision on Pre Bid Query Held at CNCI Kolkata on 16.05.2019

IFB No. HSCC/PUR/CNCI/Kolkata/Medical Equipment/07/A dt. 10.05.2019

Tiger Jaw 2x4 teeth insulated. Dismantable into different parts, insert, handle and working tube, Working length of 36 cm, size: 5mm. Handle	
with ratchet.	
Scissor curved Unipolar:	01
METZENBAUM curved scissor 10mm, length of blade 12mm, connection for unipolar HF cable, dismountable into insert, tube and handle.	
Working length 36 cm, size: 10mm, handle without ratchet.	
L-shaped hook dissector (detachable & replaceable TIP) with unipolar HF connection.lap (with 6 pcs of spare tips)	01
Claw Forcep:	01
10 mm claw forcep 2x3 teeth short with ratchet.	
Nathanson Liver Retractor (Small, Medium, Large) 1 each with a common holding system	01
Clip Applicator:	01
Medium Large clip applicator dismantable rotating size: 10mm, length 36cm, for Titanium clips with ratchet to lock the jaw holding the clip.	
Two Way Suction irrigation cannula, size: 5mm	01
Puncture Needle, size: 5mm, length 36cm	01
Unipolar HF Cable:	01
Unipolar HF cable suitable to connect with forcep and electrosurgical unit.	
Fan retractor:	01
Fan retractor with simple opening of the fan by axial movement of the outer sheath, dismountable and distendable, size: 10mm, length: 36cm	

All the instruments should be USFDA & Eurpoean CE certified

All instruments should be form same manufacturer

All instruments should be fully autoclaveable& reusable

The scopes should have a standard couplers compatible to all international camera systems

1B. High Definition Camera System, with integrated USB recording system

Telescope 30° 10MM : 01 pc

Forward oblique 30 degree enlarged view, size: 10 MM rod lenses system, Length:30- 33 cm, Autoclavable, Fiber optic light transmission incorporated.

Telescope 30° 5MM: 01 pc

Forward Oblique Telescope **30**° enlarged view, size: 5.0mm rod lenses system ,Length:29-33 cm, Autoclavable, Fiber Optic Light Transmission Incorporated.

lo	Specification
	Three Chip High definition Camera System
	The system should be truly Digital UHD or HDTV endoscopic video camera. The system should have the maximum Resolution of 1920 X 1080 pixels or 3860 X 2160p progressive scan and the consistent use of 16: 9 formats for Input & Output to guarantee genuine HDTV.
	• The system should have facility of Optical & Digital Zoom lens to enhance the quality of Image size & cross specialty usage of the camera system, regardless of the telescope used.
	• USB Port for Capturing FULL HD Videos/ HD Stills in External USB drive and direct interface of USB Printer to facilitate direct printouts or External recorder from same manufacturer should be provided.
	• System should have facility of controlling additional equipments like light source/ insufflators and recording device from the camera head.
	• The system should be provided with chromo endoscopy facility to see sub mucosal pattern.
	• All equipments quoted should be from the same manufacturer to ensure best system compatibility
	• All equipments quoted should be USFDA & Eurpean CE approved
	Technical Specifications:
	Image sensor: 3X1/3" CCD-Chip/CMOS.
	Pixels 1920 x 1080 or 3840X2160p
	AGC: Microprocessor controlled
	Lens: Integrated Zoom Lens $f = 15-31 \text{ mm} (2x \text{ optical zoom})$
	Minimum light sensitivity: $1.17 \text{ Lux } (f = 1.4 \text{ mm}).$
	Control buttons: 3 (2 of them freely programmable).
	Video output: For Communication with compatible camera
	module, LAN Connection, 4xUSB connection (2x
	front, 2x back)
	Input: Keyboard/Touchscreen input for
	character generator.
	Power Supply 100-240 VAC 50/60 Hz Certified to : IEC 601-1, 601-2-18, CSA 22.2 No. 601,UL 2601
	Certified to : IEC 601-1, 601-2-18, CSA 22.2 No. 601,UL 2601 CE according to MDD, proception class 1/CF

H	ligh Definition Medical Grade Monitor
Т	he monitor should have:
Н	DTV display in original 16: 9 HDTV format.
1	080 p/ 50 & 1080 p/60 displays possible.
L	ED crystal display.
Ν	fax. Resolution of 1920X1080.
S	creen diagonal – 26".
D	besk top with pedestal.
S	hould have the facility of PIP mode.
:	Specifications
	HD TFT Flat Screen Monitor with stand size 26",
	Aspect Ratio 16:9 HD format
	Brightness : 500 cd/m2
	Maximum viewing angle : 178° vertical
	Contrast ratio: 1400 : 1
	Reaction Time – 8ms
	Rated power : 115 watts
	Power Supply 100-240 VAC
	Screen Dimensions : 643 x 396 x 87mm
	Video Inputs: 2* DVI-D, 2* 3G SDI, 1* S Video, Composite 1* RGB/VGA, 1* RS 232, 1* RJ 45 Interface.
	Output: 1* DVI, 1* 3G SDI, 1* S-Video
A	ccessories External 24VDC Power Supply, Mains Cord, Pedestal.
C	ertified to : EN 60601-1, protection class IPX 1
L	ED Light Source with Fiber optic cable
	Lamp type:- LED 175 Watt or more
•	Color Temperatures 5500K and above
•	Light Outlets – 1
•	Light Intensity Adjustment :- Continuously adjustable either manually or
	automatically by cameras video output signal.
•	Should be supplied with Diameter 3.5mm, Length 300cm.
•	Certified To :- IEC 601-1 & UL 544 CE According to MDD, protection class 1/CF

Fibre Optic Light Cable. Thickness 4.8mm Length 300 cm. 03 nos.
CO2 Electronic Insufflator 30 L / M and Above Flow Rate :01 no.
Electronic CO2 Insufflators with pin index connection.
Should have an adjustable flow rate of 0 to 30 ltr. per minute or above and a pressure range adjustable between 0-30 mm Hg.
Preset and actual value for Pressure and flow should be displayed together on the front panel in digital display.
Constant monitoring of intra-abdominal pressure; any overpressure is released immediately with back flow with acoustic alarm.
Compatible trolley to be provided (Indigenous).
Comparise noncy to be provided (indigenous).

All the instruments should be USFDA & Eurpoean CE certified

All instruments should be form same manufacturer

All instruments should be fully autoclaveable & reusable

The scopes should have a standard couplers compatible to all international camera systems

SPECIFICATION FOR FESS SET WITH MICRODEBRIDER

9A) FESS OPTICS :

1) Specifications For Endoscopes for FESS

(i) Telescope 0° 4.0 mm & 2.7 mm:	02 each
Straight forward telescope,0 degree enlarged view, size: 4 & 2.7 mm Rod lenses system, Length:18-19 cms, Autoclavable,	
Fiber optic light transmission incorporated.	
(ii) Telescope 30° 4.0 mm & 2.7 mm	02 each
Forward oblique 30 degree enlarged view, size: 4 & 2.7 mm Rod lenses system, Length:18- 19 cms, Autoclavable,	
Fiber optic light transmission incorporated.	
(iii) Telescope 45° 4.0 mm:	02 each
Straight Forward Telescope 45 degree enlarged view, size: 4 mm	

ANNEXURE-2

Rod lenses system, Length:18-19 cms, Autoclavable, Fiber Optic Light Transmission Incorporated

(iv) Telescope 70° 4.0 mm: Straight Forward Telescope 70 degree enlarged view, size: 4 mm Rod lenses system, Length:18-19 cms, Autoclavable, Fiber Optic Light Transmission Incorporated	02 each		
(v) Telescope 15° 4.0 mm Straight Forward telescope 15 degree diameter 4mm and length 17 cms, should be autoclavable and should have 45 degree angled eyepiece. Fiber optic light transmission incorporated.	02 each		
(vi) Telescope handles for 4 mm telescope round as well as flat (for each scope	es) 01 Each		
 Other points: Should be supplied with suitable autoclavable container It should be US FDA/ European CE certified. Products should be from same manufacturer Supplier Company will have to give training to doctors and staff of Operation theatre, regarding the handling and maintenance of the instrument. Origin Company should have Service facility in Kolkata Local dealer Spare parts should be easily available Good after sales back up Installation List 			
9B) FESS Instrument :			
 2) Specifications For Forceps for FESS Sickle Knife, Sharp tip, 190 mm Sickle Knife Blunt Tip, 190 mm Turbinectomy Scissors, Straight, Serrated Blades Blakesley nasal Forceps, Straight, 110 mm Length, 3.6 mm Size 0 Blakesley nasal Forceps, Straight, 110 mm Length, 4.8 mm Size 1 Blakesley nasal Forceps, Straight, 110 mm Length, 5.6 mm Size 2 Blakesley nasal Forceps, Upturned, 45 degree, 110 Length, 3.6 mm Size 0 Blakesley nasal Forceps, Upturned, 45 degree, 110 Length, 4.2 mm Size 1 Nasal Dressing forceps, Tilleys, Straight Serrated 	$ \begin{array}{c} -01 \\ -01 \\ -01 \\ -01 \\ -01 \\ -01 \\ -01 \\ -01 \\ -01 \\ -01 \end{array} $		

OstrumAntrum punch forceps, upside backward cutting, Straight, Length 9 CM	- 01	
StammbergerAntrum Punch, Straight, Upward Cutting, 1 mm		- 01
Kerrison's Bone Punch, Straight, Upward cutting, 1 mm	- 01	
Kerrison's Bone Punch, Straight, Upward cutting, 2 mm	- 01	
Kerrison's Bone Punch, Straight, Downward cutting, 1 mm		- 01
Antrum curette, forward cutting, 19 cm	- 01	
Stammberger Mushroom forceps Straight		- 01
Giraffe Forceps, Upwards curved, cup size diameter 3mm, double action	- 01	
Antrum Grasping Forceps, Jaws opening backwards, curved downwards	- 01	
Antrum Grasping Forceps, Jaws opening backwards, curved upwards		- 01
Myle's Forceps, through cutting, Straight		- 01
Irrigation cannula, Slightly Curved, 145 mm		- 01
Irrigation cannula, Short Curved, 145 mm		- 01
Antrum Ball probe, slightly curved, double ended		- 01
AntrumMonopolar suction tube, standard curved	- 01	
Trocar for Sinuscopy, with beak, outer diameter 5 mm, length of the cannula		- 01
8.5 cm, for use with telescope with diameter 4 mm		
Ultra Stop Antifog solution 25 ml, Pipette bottle	- 04	
Disifection storage system (soak basin, perforated storage tray and lid)	- 02	

3) Specifications For Bipolar Coagulation Forceps

Bipolar coagulation Forceps insulating angular, Blunt for nose, withIntegrated suction channel for with cut-off hole, Length 18 - 20 cm for use with Bipolar high frequency cord -02 FreersMuco-Perichondrium Elevator with suction -01 Antrum Curette Forward cutting, 19 cm -01 Antrum Ball probe -01 Bipolar High Frequency cord, Length 300 mm -01 Bipolar suction forceps 45 degree Upturned with suction channel for bipolar -01 Coagulation area working length 12.5 cm for use with bipolar high frequency Bipolar High Frequency Cord, with two 2 mm cable sockets for bipolar -01 Coagulation forceps and standard pin for connection to all current bipolar cables length 40 cm-01 Frontal Sinus Currette, 55 degree Curved, Oval, Forward cutting, length 19 cm -01

Other points:

- It should be US FDA /European CE certified.
- Should be supplied with suitable autoclavable container
- Products should be from same manufacturer

- Reprocessing basket for camera head 01 no
- Key board with USB and mouse pad 01 no
- Telescope protection sheath (as per specified number).
- Supplier Company will have to give training to doctors and staff of Operation theatre, regarding the handling and maintenance of the instrument.
- Origin Company should have Service facility in Kolkata
- Local dealer
- Spare parts should be easily available
- Good after sales back up
- Installation List

9C) Micro-Debrider :

(a) Table Top Console

- 1. Motor Power Supply : Quick connectors of the push-pull type
- 2. Peristaltic Pump : Adjustable in step and easy to prime
- 3. Blade ID : Auto recognition of blades and burrs with defaults to recommended settings
- 4. Console should have provision to connect High Speed Otological Micro Motor . It should have touch screen panel for easy operation.

(b) Multi-Function Foot Pedal

- 1. Watertight, with 1-3 metre cable
- 2. Speed control via foot pedal.
- 3. Single action to fully open or close the blade window

(c) Debrider Hand Piece

- 1. Type : Brushless & complete disposable suction pathway
- 2. Straight Suction thru the hand piece
- 3. Speed in Continuous rotation : 500 to 12,000 rpm
- 4. Speed in Oscillation mode : 500 to 5,000 rpm
- 5. Speed for Otology Drill Motor : 500 to 60,000 rpm
- 6. Motor Cable : Push–Pull type at Console end
- 7. Instruments : Disposable Straight & angled shaver blades for Adenoids, Frontal sinus, maxillary sinus and Sinus burrs.
- 8. Sterilization : Autoclave motor and cable.

Consumables -

(a) For Debrider

- 1. A Set of Straight Blades for Debrider- 4 mm. 3.5mm5pc each
- 2. A Set of Angled Blades for Debrider- $4 \text{ mm} 12^{\circ}, 40^{\circ}, 65^{\circ}$ 5pc each
- 3. A Set of Sharp Edge Blades for Debrider- 4 mm 5pc each
- 4. A Set of Straight Blades for Debrider- 4 mm Convex 5pc each

5.	A Set of Burrs for Debrider- 3mm,4mm diameter	5pc eac	ch	
6.	Tube sets with option of Declog	5pc eac	ch	
(b)	For Otology Drill	_		
1.	Straight attachment - Exposed tube of 70mm-75mm, length 115-12	0mm	Qty-2	
2.	Angled Attachment – Exposed tube of 70mm-75mm, length 138 – 1	40mm	Qty-2	
3.	Straight Hand piece – Exposed tube of 50-55mm, length 85mm – 90	mm	Qty-2	
<u>(c)</u>	(c) Cutting Accessories :			
1.	Extra Coarse Diamond (Polishing) Bur 2mm- 5 Nos each for mediu	m and lo	ong handpiece	
2.	Extra Coarse Diamond (Polishing) Bur 3mm - 5 Nos each for mediu	im and lo	ong handpiece	
3.	Extra Coarse Diamond (Polishing) Bur 4mm - 5 Nos each for mediu	im and lo	ong handpiece	
4.	Extra Coarse Diamond (Polishing) Bur 5mm - 5 Nos each for mediu	im and lo	ong handpiece	
5.	Fluted (Cutting) Bur Aggressive 2mm – 5 Nos each for medium and long handpiece			
6.	Fluted (Cutting) Bur Aggressive 3mm - 5 Nos each for medium and	long ha	ndpiece	
7.	Fluted (Cutting) Bur Aggressive 4mm - 5 Nos each for medium and	long ha	ndpiece	
8.	Fluted (Cutting) Bur Aggressive 6mm - 5 Nos each for medium and	long ha	ndpiece	
9.	Fluted (Cutting) Bur Aggressive 1mm - 5 Nos each for medium and	long ha	ndpiece	

Other points:

- It should be US FDA/ European CE certified.
- Should be supplied with suitable autoclavable container
- Products should be from same manufacturer
- Supplier Company will have to give training to doctors and staff of Operation theatre, regarding the handling and maintenance of the instrument.
- Origin Company should have Service facility in Kolkata
- Local dealer
- Spare parts should be easily available
- Good after sales back up
- Installation List

ANNEXURE-3

TECHNICAL SPECIFICATION THERAPEUTIC FLEXIBLE VIDEO LARYNGOSCOPE WITH EARLY CANCER DETECTION CAPABILITY

1) Therapeutic Flexible Video Pharyngo-Laryngoscope with early cancer detection capability :

- Compatible with electrosurgical and laser treatments
- Distal end diameter 4.8 mm or less & Insertion tube outer diameter should be 4.9 mm or less
- Field of view should be 90 degree or more
- Depth of field should be 2 -50 mm
- 4 way Angulation range should be approx. Up &Down 130 deg, Left & right 70 Deg
- Working length should be around 300 400 mm
- Instrument Channel should be around 1.5 2.5 mm
- Early Cancer Detection capability (Mucosal enhancement)
- Should be supplied with compatible Leakage Tester, Biopsy Forceps and Rat Tooth Grasping Forceps etc.
- Should be compatible with Electrocautery& laser treatment.
- Should have real time optical enhancement (Mucosal Enhancement)
- Should be supplied with compatible leakage tester, biopsy & grasping forceps.- 3 nos.

2) Full HD Video Image processor :

- A full high definition processor should have resolution of 1920 * 1080 pixels or higher (4K)
- Should have compatibility for selecting Progressive / Interlaced output
- Real time optical image enhancement of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions.
- Should have a USB slot so as to take still pictures of Endoscope images.

3) 3 Chip Full HD / 4K Autoclavable Camera head :

- The full HD camera head should have resolution of 1920 * 1080 pixels or higher (4K).
- Should have motorized optical zoom ranging from 0.9X to 1.8X and can be varied seamlessly.
- Should have motorized focus function.
- Should have programmable buttons which can be configured through the processor.
- The camera head must be autoclavable.

4) Powerful 300 watt XenonLight source/ LED Light sourceequivalent to Xenon 300W

- A Powerful 300 Watt Xenon Lamp with emergency lamp facility or LED Light source
- Automatically adjusts light intensity to achieve ideal illumination
- 3 nos. Autoclavable type Optic fiber light guide cable to be provided for better protection against mechanical and thermal stress

- Length of cable should be around 3 -4 meter
- The light guide cable should be autoclavable.

5) Full HD Medical Grade Monitor:

- Should have minimum 26 inches size (Large Screen)
- Medical grade high monitor with resolution of minimum 1920 * 1080 or higher (4K)
- LCD Screen with LED Backlit preferable

6) Telescope:

- 4mm, $0^{\overline{0}}$, 30^{0} , 70^{0} Telescope with HD imaging (One each)
- 146-180 mm working Length
- Autoclavable
- 6) High Definition Recording System: (Should have following specifications)
 - Desktop(i5 processor based medical grade video/Image HD quality recording system software with option of patient data entry
 - HD Quality display for review.
 - Should be supplied with compatible printer for report printing.
 - Should be supplied with 4 TB internal storage capacity and provision for easy retrieval of data in other e-storage such as Hard disc/USB.

7) Endoscopy Trolley / Video cart

- Should be from same manufacturer.

Other points:

- The device should be USFDA/European CE certified
- All products should be same manufacturer EXCEPT High Definition Recording System:
- Should have installation of same product base in reputed Govt Institutes
- Should have a service facility in Kolkata
- Should provide 5 years warranty with AMC & CAMC rate for another 5 years after completion the warranty.

ANNEXURE-4

OPERATING MICROSCOPE [ENT-01 nos., Surgical Oncology 1 nos.]:

- 1. Compact microscope based on counterweight balancing system
- High Intensity 300 watt Xenon Illumination through fibre optic Light Cable. Xenon illumination with integrated 300 watt Xenon back-up with easy lamp change over facility. Illumination can be controlled easily by hand switch and footswitch as per surgeon requirement.
- 3. 180 degree dual stereo attachment with beam splitting ratio 70% / 30 %. Or 50%/50%(approx.) with 10x/12.5X eyepieces with Diopter correction +5D to -8 D
- 4. Should have variable motorized working distance from 200mm (+/-25mm) to 500 mm (+/-25mm).
- 5. Binocular: Tilt 0 $^\circ$ -180 $^\circ$
- 6. Should have one touch automatic balancing mechanism.
- 7. Magnification changing with continuous zooming. Magnification should be 18x or more & motorized via multifocal lens activated through Hand and Foot Switch or Control panel. Also have facility for manually adjustable override. Both hand grip programmable for adjustment of zoom, focus, illumination and other components with friction brake mechanism /magnetic brakes
- 8. Waterproof Foot Switch control with 12 or more function footswitch.
- 9. Zoom video adapter with zoom TV objective and continuously adjustable focal length of 200 mm to 500 mm for adaptation of Full HD.
- 10. Attachment for second observer with wide-field eyepiece 10X and inclined low Binocular
- 11. Tube with provision for IPD adjustment through adjuster.
- 12. Fully Integrated HD/ Full HD grade Camera head with control unit
- 13. HD/ Full HD Medical grade Monitor 21 inch or more.
- 14. Should have integrated digital video image recording and archiving system with storage capacity of 1 TB.
- 15. Spare Lamps: Two Spare Xenon Lamps to be supplied along with conventional Xenon lamp & back up (300Watts)

Special features in Surgical oncology microscope Qty. 01 nos. :

1. Should have the inbuilt hardware and software for tumor fluorescence & also possibility for vascular anastomosis verification and vascular clipping verification.

General Requirements:

- The device should be USFDA approved and European CE certified
- All products should be same manufacturer
- Should have installation of same product base in reputed Govt Institutes
- Should have a service facility in Kolkata
- Should provide 5 years warranty with AMC & CMC rate for another 5 years after completion the warranty.