

DEPARTMENT OF SURGERY

S No	NAME OF EQUIPEMENT	SPECIFICATIONS	Qty.	Suggested Manufacturers Name	Aprox Unit cost (Rs)	Usage
1	LOWER GI FLEXIBLE ENDOSCOPE WITH VIDEORECORDING AND MONITORING SYSTEM (With Inbuild Recording system)	<ul style="list-style-type: none"> • Colonovideo Scope should be latest CCD Chip technology with minimum 400K pixels CCD resolution • Scopes should have Autoclvable Suction & Air water buttons to avoid infections & better saftey management • Retroflexion capability • optimum field view • Should be Super Image scope showing full screen circular imgae. • Should be light in weight & controls should be eaisly operatable. 	1	1. Karl storz 2. Olympus	30lakh	An instrument set used to see and find the earlier disease in lower gastro intestinal tract even earlier cancer can be detected with this instrument
2	BIPOLAR TURP SET	Resection in saline solution <ul style="list-style-type: none"> • It should have one 30 degree & and one 12 degree telescope,4mm,autoclavable. • Cutting loop,bipolar • Cutting loop,bipolar • Resctoscope sheath • Working element 	1	1. Karl storz 2. Olympus	12 lakh	A instrument set to operate the Prostate gland pathology with the help of Saline it is more safer than standard TURP Set to reduces The Post

		<ul style="list-style-type: none"> • Compatible HF cord. <p>It should have soft, standard and forced coagulation.</p> <p>Automatic activation of coagulation current as soon as coagulation electrodes touches tissue with both prongs.</p> <p>Bipolar application with nacl irrigation solution.</p> <p>Spray coagulation.</p>				TURP syndrome Due to Glycine in poor Immunocompromised person
3	HOLMIUM LASER 100 WATT	<p>It should be able to Enucleate, Ablate and Resect circulated adenoma tissue in BPH treatment of any size.</p> <p>It should be able to fragment calculi of any size in the bladder, ureter or kidney and any impacted stone fragment.</p> <p>It should be able to ablate superficial bladder tumors, urethral & ureteral tumors.</p> <p>It should be able to treat invasive bladder carcinoma & condylomas and lesions of the external genitalia.</p> <p>It should have power output of 100watts.</p> <p>It should be supplied with following accessories:</p>	1	1. Karl storz 2. Olympus	1 Crore	Very Effective to break down stone and enucleation of Prostate Gland

		550 Micron Reusable, Flexible Fiber 1 365 Micron Reusable, Flexible Fiber 1 200 micron Reusable, Flexible Fiber 1 550 Micron Side Fire Fiber for Ablation 1 550 Micron Stripping and cleaving (set) 1 365 Micron Stripping and cleaving (set) 1 200 Micron Stripping and cleaving (set) 1 Fibre Inspection Scope 1 Ceramic Scissors 1 Accessories Bag 1 Laser Safety Goggles 3 Laser Safety Glasses 3 It should have Tissue Morcellator				
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4	GREEN LIGHT LASER XPS System	<table border="1"> <tr> <td data-bbox="541 167 720 297">Laser Type</td> <td data-bbox="730 167 1108 297">Diode-pumped solid state laser</td> </tr> <tr> <td data-bbox="541 305 720 435">Wavelength</td> <td data-bbox="730 305 1108 435">532 nm</td> </tr> <tr> <td data-bbox="541 443 720 605">Power Settings</td> <td data-bbox="730 443 1108 605">20-120W in 10W increments—vaporization</td> </tr> <tr> <td data-bbox="541 613 720 695">Cooling</td> <td data-bbox="730 613 1108 695">Air cooled</td> </tr> </table>	Laser Type	Diode-pumped solid state laser	Wavelength	532 nm	Power Settings	20-120W in 10W increments—vaporization	Cooling	Air cooled	1	1. Karl storz 2.American medical system USA	1.5 Crore	To Evaporate the prostate tissue this is very useful in poor immunocompromised patient and even can be used in high risk patient
Laser Type	Diode-pumped solid state laser													
Wavelength	532 nm													
Power Settings	20-120W in 10W increments—vaporization													
Cooling	Air cooled													
5	HIGH DEFINITION CAMERA	HD Camera Control Unit 220V It should be Medical Grade Camera with the True Digital Output, High Definition Digital Circuit Chip With 8steps Built-in Digital Enhancer. Electronic Zooming,	1	1. Karl storz 2. Olympus 3.Stryker 4.Wolf	10 Lakh	To View the real time Image during Operation								
6	RIGID CYSTOURETEROSCOPE WITH Pneumolithotripter	It should made of high quality stainless steel, 360° shaft rotation, variable resistance and specially designed handle	1	1. Karl storz 2.Stryker	10 Lakh	To Break the stone and remove stone from ureter without incision								
7	PCNL WITH LITHOTRIPTER	Ureteroscope of standard diameter of 8 fr & 9.5 fr each with following qualities- Autoclavable, with angled eyepiece, fiber optic light Transmission incorporated, 2 lateral irrigation ports and 1 working channel For instruments With Instrument port	1	1. Karl storz 2.Stryker	10 lakh	To Break the stone and remove stone from Kidney with minimal incision								

8	FLEXIBLE FIBROPTIC CYSTOURETEROSCOPE	Channel Width: 3.6Fr Working Length: 670mm Field of View: 90° Direction of View: 0° Depth of Field: 2-50mm Outer Diameter: 4.9Fr Outer Diameter Insertion Tube: standard size for ureteroscopy purpose Max Angulation Up: 275° Max Angulation Down: 275°	1	1. Karl storz 2.Stryker	10 lakh	Flexible instrument patient Friendly to break down uretric and kidney stone
09	OT ceiling Light	Technical data- Reflector system 4 Illumination intensity 140000 LUX. LED servie life 50,000 hrs Color temperature 5,500 K Colour rendering index 90 Ra Temperature increase in surgens head area<2 deg centigrade Index light spot 200-250 mm Brightness adjustment- nearly 0%-100% from panel or remote control <ul style="list-style-type: none"> • Power 230 VAC/50/60 HZ 	3	1. Karl storz 2. Olympus	5 Lakh	OT Light used in Operation Theater it Hangs from ceiling so that good illumination can be obtained during surgery.
10	Harmonic (Ultrasonic Based tissue detector)	<ul style="list-style-type: none"> ➤ It should have a Table top model Ultrasonic Generator with Fluidic and Ultrasonic modes. ➤ It should have reusable tip of titanium alloy and should be autoclavable 	1	1.Johnson And Johnson 2.Covidien	10 Lakh	An Instrument which used to seal the vessel and used to cut the tissue so that surgery

		<ul style="list-style-type: none"> ➤ It should have a compact trolley with castors to accommodate the Generator ➤ It should have a Power cord (110-240 VAC 50/60 Hz) ➤ It should have double Footswitch for Ultrasonic scissors ➤ It should have separate connecting cables (2 each) for Ultrasonic handpieces & Curved Ultrasonic Instruments. ➤ It should have Ultrasonic hook of 5mm dia with working length of 300mm ➤ It should have Ultrasonic scissor 5mm dia with working length of 325mm ➤ It should have Ultrasonic hook of 10mm dia with working length of 170mm for open surgery ➤ It should have Ultrasonic scissor 5mm dia with working length of 190mm for open surgery ➤ The complete set should be CE certified 				become more safer
11	FLEXIBLE CYSTONEPHRO FIBEROSCOPE	<p>It should consist of the following</p> <p>—</p> <ul style="list-style-type: none"> • Should allows endoscopic 	1	1. Karl storz 2.Olympus 3.Wolf	10 Lakh	Flexible instrument patient Friendly to

		<p>monitoring while performing urodynamic operative procedure. Large angel of view & deflectable distal tip for better orientation up to 110 degree.</p> <ul style="list-style-type: none"> • Waterproof, fully immiscible for cleaning & disinfection. Sterilizable via Et0 & FO gas, Steris & starred. • Working length 37 cm with distal tip diameter of 15.5 Fr. <p>Following accessories are to be included: case for scope Grasping forcep for small fragments Biopsy forceps pressure compensation cap for ventilation during gar sterilization leakage tester withybulb and manometer Cleaning brush Stone basket Endovision HD camera with LED light source.</p>				diagnosis and Management of earlier renal pathology
12	VESSEL SEALER	<p>Reusable/ disposable Should have following characteristics-</p> <ul style="list-style-type: none"> • Reliable sealing with easy transection of the sealed tissue • Easy application of the instrument to the target tissue 	1	<p>1.Martin 2.Enseal J & J 3Convident Force 4. Olympus</p>	10 Lakh	To seal the vessel during operation so operation is safer and less blood is loss during

		<ul style="list-style-type: none"> • Modular system with different shaft lengths for laparoscopic applications as well as open surgery • Activation of the current should be performed directly by means of the push buttons integrated into the electrode handle. There should be no foot switch necessary for activation 				surgery
13	FLEXIBLE Upper GI ENDOSCOPE & SIDE VIEWING Camera, Monitor And Recording Setup	<ul style="list-style-type: none"> • Should be latest CCD Chip technology with minimum 400K pixels CCD resolution • Scopes should have Autoclavable Suction & Air water buttons to avoid infections & better safety management • optimum field view • retroflexion capability • Should be Super Image scope showing full screen circular image. • Should be light in weight & controls should be easily operatable 	1	1. Karl storz 2. Olympus	30 Lakh	An instrument set used to see And find the earlier disease in upper gastro intestinal tract even earlier cancer can be detected with this instrument including Stomach, upper gastro intestinal tract disease can be detected earlier
14	Electro Surgical Energy Device with vessel Sealing capacity Based Upon Tissue Impedence	Should be able to coagulate vessels upto 7 mm Should contain seal foot paddle as well Bipolar foot paddle System feedback mechanism providers	8	1.Karl Storz 2.Covidone 3. Valley lap 4.J & J	10 Lakh	To Do safer Surgery either open or Laproscopic , it seals the vessels automatically an

		<p>audible tone wen successful seal cycle is complete</p> <p>Instrument have option of hand control with sealing & dissection in both 10 mm laparoscopic handsets</p> <p>Indicator for Re- Grasp should be activated as necessary</p> <p>Seal strength should be measured by the Bar indicator on the system generator</p> <p>System should be compatibale of return electrode monitoring polyhesive contact quality monitoring system</p> <p>System should be US FDA approved</p> <p>Accessories –</p> <p>Laparoscopic sealer instrument with Shaft Diameter 5 mm, Shaft rotation<180 dg</p> <p>Laparoscopic sealer instrument with Shaft Diameter 10 mm, Shaft rotation<360 dg</p> <p>Standard Instrument for open procedure resection with instrument length 18 cm, Jaw angles= < 30 deg.</p> <p>Sealer devider for open procedure with instrument of shaft diameter 10mm, cm, Shaft rotation<360 dg Jaw angles straight</p> <ul style="list-style-type: none"> • Connector Adaptor for normal bipolar attachement 				<p>surgery becomes safer</p>
15	FLEXIBLE lateral	(a)Upper GI Endoscope	1	1. Karl storz	10 Lakh	An Instrument set to

	Viewing Endoscope Upper GI For ERCP	<p>It should be an integrated video processor with In-built light source and should have the following</p> <p>Features / specifications:</p> <p>(a) Light weight & compact unit around 13-14 kgs or less .</p> <p>(b) Video output : Y/C , RGB and VBS Composite(NISC).</p> <p>(c) Large and small size option of display of images.</p> <p>(d) 3 modes image enhancement.</p> <p>(e) Average & Peak levels of iris adjustment.</p> <p>(f) Colour settings for Red & Blue with +/-7 to 10 steps.</p> <p>(g) Facility to store data for 10-12 patients</p> <p>(h) 150 watts halogen lamp.</p> <p>(i) Quick change-over of lamps in case of emergency.</p> <p>(j) Lamp should be easily replaceable by user at site.</p> <p>(k) Dedicated Keyboard.</p>		2. Olympus		be used for common bile duct stone removal
16	THORACOTOMY SET	<p>Finochetto chest wall retractor (Adult)-1</p> <p>Rib approximator-1</p> <p>Rib respiratories (right & left)-2</p> <p>Periosteum elevator - 2</p> <p>Lung retractors - 1 set</p>	1	<p>1.Columbia</p> <p>2.Alanscott</p>	10 lakh	To do surgery on thorax it is used to give easy acces during surgery

		<p>Lung holding forceps - 1 Vascular forceps 8"-2 Vascular clamps - different shapes - 8" - 1 set Bulldog clamps straight - 5 Bulldog clamps - angled - 5</p>				
17	LAPROSCOPIC BARIATRIC SURGERY SET	<p>1) Camera unit - (sterilizable head and cable, video control unit) 2) Connector cables from camera to monitor 3) Video Monitor 4) Light Source 5) Light transmission fibre-optic cable 6) Insufflator 7) Carbon Dioxide Cylinder 8) Carbon dioxide pressure regulator valve (optional - see description below) 9) Tubing and Luer-lock adapter for carbon dioxide to patient 10 Suction irrigation apparatus (optional) 11) Cautery machine with cables and foot control 12) Power control equipment (Transformer/spike and surge suppresser) 13) Power extension cord 14) Telescope 15) Trocars and cannulas- 2 x 11mm, 2 x 5.5mm, 11 to 5.5mm reducer(1), 11-7mm reducer(optional)</p>	1	<p>1.Karl Storz 2. Stryker</p>	30 lakh	Used in obese patient to do surgery to reduce the weight

		16) Verress Needle (optional) 17) 2 Atraumatic graspers 5mm (4) 18) 1 toothed grasper 19) 1 curved dissector 5mm (4) 20) 1 clip applicator with suitable clips 10cm 21) 1 dissection hook (4) 22) 1 pair scissors 23) 1 suction irrigation cannula 24) 1 sterilization ring applicator 25) Maryland forceps (4) 26) mixer forceps (4)				
18	BARIATRIC SURERY TABLE	Extra low height of 25 inch compared to a standard height of 32 inch Steep head up tilt of 60 degree High load capacity of 200 kg and 350 kg Specialized attachments for patient sit-up position Adjustable width and length to accommodate tall and wide patients Split leg position for easy access to surgeons Zero auto-leveling Dual control console Non-hydraulic leak proof design C-arm compatible compliant with global quality standards of CE and ISO 13485	1	*Karl Storz *Megnatek *Maquet	10 lakh	Heavy patient can be operated on this Table

		Future upgradability				
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