

Department of Ophthalmology

Sr.No	Name of Instrument	Specification	Qty required	Suggested Manufacturers Name	Approx Unit cost (Rs.)	Usage
01	532 nm green laser-double frequency Nd-YAG	<p>High reliability High stability Single longitudinal mode Ultra-compact</p> <p>SPECIFICATIONS</p> <p>Wavelength 532 nm</p> <p>Transverse mode Single mode, TEM00, M2 = 1.0 - 1.1</p> <p>Laser version SLM version Low noise version Standard version</p> <p>Model No. and output power CL532-200-S</p> <p>Longitudinal mode Single longitudinal mode Multiple Multiple</p> <p>Coherence length > 300 meters 0.5 - 3 mm 0.5 - 3 mm</p> <p>Spectrum linewidth < 10-5 nm 0.15 nm, nominal 0.15 nm, nominal</p> <p>Output noise (rms) < 0.5% (1Hz –100 MHz) < 0.5% (1Hz –100 MHz) ~ 30% at 500 kHz</p> <p>Output stability (rms) < 2% over 2 hours; Ultra-stable option: 0.5% or 0.25% over</p>	1	<p>*Zeiss</p> <p>*light med lightlac</p> <p>*Iridex</p> <p>*Lumenis</p> <p>*Nidek</p> <p>*Appasammy</p>	3500000/-	Laser treatment of various retinal disorder like diabetic retinopathy, age related macular degeneration, Retinal view occlusion retinal vasculitis.

	<p>24 hours Beam diameter (1/e²) 0.36 mm Beam divergence 2 mrad Option: 2X - 5X laser beam expanders are available to change beam size and divergence e.g. 0.7 mm beam with 1 mrad divergence; or 1.4 mm beam with 0.5 mrad divergence Beam pointing stability < 0.005 mrad/°C Polarization ratio 50:1, >100:1 option available; 45° off vertical, for ≥ 300 mW laser, vertical linear polarization Operation temperature 10 °C to 35 °C Warm-up time < 1 minute Operation voltage 90-250 VAC or 12VDC OEM version 11-16VDC; Typical power consumption: 10 W Dimensions and weight of laser head 3x3x12 cm³ (1.2x1.2x4.7 in³) with a fixed 6 mm thick plate, 0.3kg (0.6 lb) 7x3.6x18.5 cm³ (2.8x1.4x7.3 in³), 0.6 kg (1.3 lb) for lasers ≥ 400 mW, type 2 size Dimensions and weight of power supply AC: 5x14x15 cm³</p>				
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		<p>(2x5.5x6 in3), 0.5 kg (1 lb); Option CL-2005 power display AC: 5 x 16 x 15 cm3 DC: 8.5x3.5x12.7 cm3 (3.3x1.4x5 in3), 0.2 kg (0.5 lb) Fiber coupling option: Single mode and multi-mode fiber delivery Modulation option: TTL on/off, 1 kHz to 10 kHz; and Analog modulation option CL-2005 power supply option: Power adjustable and power digital display Laser beam is output from this aperture 4.5 mm diameter hole, 4 places Base Plate Top View Front View</p>				
02	Synaptophore	<p>Specifications: 1. Autoflashing device 2. After image test 3. Hadinger brushes 4. Slides for simultaneous macular perception Simultaneous parafoveal perception</p>	1	<p>*Haag Streit *Balliwala & Homi, *Roslane meditech</p>	150000/-	Orthoptic treatment of disorder of eye alignment and movement (Squint) both in children & adults.

		<p>Simultaneous foveal perception slides for fusion slides for stereopsis slides after image test 5. Set of slides for measurement of torsional deviation</p>		<p>*Optolab *Appasammy</p>		
03	Specular microscope for donor cornea	<p>Features</p> <ul style="list-style-type: none"> • Ultra-wide Viewing Field - 0.48 x 0.6mm • (Analysis Area - 0.2 x 0.28mm) • Dual Camera System • For Finder and Cornea: Dual screen provided • by two high-resolution cameras • Long-life LED Illumination • Built-in Thermometer: display of the media • temperature • Built-in Pachymeter • corneal viewing chambers • Compact Design • Dimensions: 200(W) x 225(H) x 220(D) mm • Weight: 6.1 kg • New software KSS-EB10 • Allows view of broad tissue area to zoom 	1	<p>*Konan *HAI Labs</p>	1500000/-	To evaluate endothelial cell density of donor cornea for corneal transplant.

		<ul style="list-style-type: none"> • into specific areas of interest with averaged • cell counts and morphology statistics. • Integrated database • Creating a file for Filing System • Widely recognized analysis method: • Center Method / Flex-Center Method • Center Method Flex-Center Method • <input type="checkbox"/> Accessories • Power cable • Chamber holder • Chamber cap • Vial adaptor set (cap, main unit and spacer) • Micrometer • •Dedicated software • USB sentinel key • computer specifications • Viewing Filed 0.48 X 0.60 mm Illumination LED: dominant wavelength 525 nm • Analysis Area 0.20 X 0.28 mm Display LCD: temperature and pachymetry • Chamber • Compatibility 				
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		<ul style="list-style-type: none"> • Electrical AC100 – 240V 50/60Hz 50VA • Vial Dimensions up to 35 mm diameter Size 200(W) X 255(H) X 220(D) mm • Thermometer 0°C ~ 45°C Interface USB 2.0 • Stage Ranges • Translation: X & Y=16mm, Z=20mm • Tilt: 7° • Weight 6.1kg (without computer) • Cameras Dual CMOS: Finder and Cornea • Operating Conditions • Ambient temp: 10°C to 40°C • Relative humidity: 30% to 85% • Atmospheric pressure: 70 Kpa to 106 k 				
04	Chair Unit with refraction set with slit lamp with cordless indirect ophthalmoscope.	<p>SPECIFICATIONS</p> <p>Base dimensions Floor space required</p> <p>Height : 7.6''</p>	3	<p>*Appasamy</p> <p>*Meditech</p> <p>*Plantec</p>	175000/-	Complete eye examination with recording of vision and evaluation of each structure of eye.

		Length : after reclining 9.6” Width : 4” Input voltage and power : 110/230V Output : 3V, 6V, 12V Net Weight : 194 Kgs. Gross Weight : 225 Kg. Essential ADD-ONS: Slit Lamp Binocular indirect ophthalmoscope Trial lens set Chart projector (with remote) Accessory ADD ons : Keratometer or autorefractometer Direct ophthalmoscope and streak retinoscope Sight tester (Phoropter)				
05	High end vitrectomy machine	. Equipment console:- User Interface : TET, 10.4" Touchscreen, 640 x 480 dpi, VGA colour. Surgeon record: Each surgery data recorded internally and can be retrieved or	1	* Alcon (Acucurus) * Zeiss * Appasamy	800000/-	Surgical treatment of vitreo retinal disorder like citreous hemorrhage retinal detachment diabetic retinopathy

		<p>take print for statistically purpose</p> <p>Automatic Cart for Bottle :</p> <p>Programmable and controlled by pedal and console</p> <p>Function change indication :Audiable tone indication</p> <p>Dual independent lamps (Xenon andMercury)</p> <p>Safty : Error message in display if any malfunction of unit</p> <p>Programmability: 15 main program and 14 subprogram for each program.</p> <p>Customized Module : Diathermy module, Phaco and fragmentomemodule, pneumatic cutter module, Air exchange module, silicon oil infusion & extraction Module and active extrusion module.</p> <p>Foot Pedal : Double linear or logirthem control foot pedal with additional 4 bumper with fully customized as per the surgeons desire like functions, program changes, macro control, pitch liear movements and adjustable force</p> <p>High Speed Vitrectomy :</p> <p>Cutting frequency - 5000 cuts /min, 20, 23 and 25 guage compatible,Pneumatic and Electric Drive for pneumatic and electric vitrectomy.</p>				macular hole.
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		<p>Vitrectomy Due Mode, Downwards dual linear control of cutting speeds and aspiration for core.</p> <p>Vitrectomy (Anterior and posterior) :</p> <p>Cutter Type :Pnematic Guillotine cutter</p> <p>Cutters : 20G Resuable or disposable 23G, 25G and 27G</p> <p>Pressure : 2.5 Bar</p> <p>Pulse Time : 20ms + or - 1 ms</p> <p>Cutting rate : From 60 to 5000 cpm (higher cutting range)</p> <p>Retaining pressure : 1 Bar</p> <p>Actuating system : Pressurized air or Gas from Compressor</p> <p>Control : Fixed, Linear, Curve linear and independent flow and vacuum and cutting control with adjustable duty cycle</p> <p>Aspiration : Using venture pump & peristaltic pump (dual)Range 10 to 500 mm of Hg.</p> <p>Infusion : Gas forced infusion system with 3 way connector for the global maintenance of anterior and posterior segment pressure.</p> <p>Diathermy :</p> <p>Operating frequency : 2.2 MHz</p> <p>Nominal Power : 1 SW at 100 ohm</p> <p>Posterior Vitrectomy MachineEssential</p>				
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	<p>Accessories</p> <p>1 Xenon + 1 Mercury Lamp Assembly</p> <p>Fragmentation Handpiece</p> <p>Xenon Lamp Replacement</p> <p>Mercury Lamp Replacement</p> <p>Fragmentation Needle 15 deg single use</p> <p>Posterior Procedural Pack includes</p> <p>Integrated Vented AFI</p> <p>High Speed (30-5000cpm) Anterior</p> <p>Vitreotomy Cutter Pack</p> <p>Silicone -Oil 5000 Centistoke Oil</p> <p>10 Dose Cylinder of SF6</p> <p>10 Dose Cylinder of C3F8</p> <p>Universal Gas Kit</p> <p>Cylinder Tank Stand</p> <p>Standard Gas Regulator</p> <p>Viscous Fluid Extraction Kits</p> <p>23G Single Use Endgripping VR Forceps</p> <p>25G Single Use Endgripping Forceps</p> <p>Plug Removal Forceps</p> <p>Stabilizing Plate</p> <p>23G 23G Reusable Backflush Cannula</p> <p>25G 25G Reusable Backflush Cannula</p> <p>Banana Plug Adapter</p> <p>25GMVR Blade</p> <p>20G Reusable Soft Tip</p> <p>Aspirating Cannula</p> <p>23G Soft Tip Cannula</p>				
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		25G Soft Tip Cannula Fluid Injection Kits 3 years warranty				
06	Vaccum steriliser	<p>Overall size – Width – 483-581mm Height – 403 – 468mm Depth – 607 – 703mm</p> <p>Cabinet - Width – 483-581mm Height – 362 – 441mm Depth – 502 – 526mm</p> <p>Chamber – Cylindrical type/retangular type</p> <p>Reservoir – W = 238 X H = 233 X D = 117 mm/ 4 L volume</p> <p>Tray - W = 184-291, H = 18-44, D = 340-432 mm</p> <p>Power source – AC 230V, 50/60 Hz</p> <p>Power consumption – 1600W</p> <p>Sterilizing agent – saturated steam of max. 2.10 bar pressure</p> <p>Control micro processor</p> <p>Exposure temperature – 121 degree – 134 degree C</p> <p>Vaccum pump – flowrate 20 L/min. – 30 L/min.</p> <p>Drying ability – less than 2% of the amount of moisture within porous load</p>	1	<p>*Ascot autoclave</p> <p>*Surgitech</p>	30000/-	For sterilization of various surgical instruments.

		<p>Air filter – minimum filtration efficiency 99.97% for 0.34 particles</p> <p>Pressure gauze – dial type, 760 mm Hg/ 4 bar</p> <p>Printer – optional</p> <p>Net weight – 40 Kg – 77 Kg</p>				
07	Trial lens set	<p>1.The lenses should be 20mm in aluminum, amount of 38mm diameter, anodized red for minus and black for plus. The Sphere lenses with handle and cylinder without handle.</p> <p>2.Trial lenses of good quality, the case made of melamine polished wood, sturdy and attractive finish.</p> <p>3. lenses--Spheres</p> <p>a. Concave and convex-0.12</p> <p>b. 0.25 to 4.0 in 0.25 steps</p> <p>c. 4.5 to 6.0 in 0.5 steps</p> <p>d. 7.0 to 14.0 in 1.0 steps</p> <p>e. 16.0 to 20.0 in 2.0 steps</p> <p>f. 0.25 to 3.5 in 0.25 steps</p> <p>g. 4.0 to 6.0 in 0.5 steps</p> <p>h. Prisms-1/2,1,2,3,4,5,6,8,10,12.</p> <p>4. Accessories-Trial frames, one adult size and one for child, adjustable with</p>	3	<p>*Balliwala and homi.</p> <p>*Segal optics</p> <p>*Shilpa optics</p> <p>*Chona optics</p> <p>*Appasamy</p>	10000-15000/-	Required for prescription of glasses for correction of refractive error.

		slots i. -Red glass ii. green glass iii. -Pin hole iv. -Slit v. -Two blank discs vi. two occluder vii. -cross cylinder +/- 0.25 and +/- 0.5				
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