Category (A) List of Ophthalmolic Equipments

S.	Name Of Item	Quantity	@ Rate	Amount
No.				
01.	Semi-automated chemistry			
01.	Semi-automated chemistry analyzer micro lab 300 Light Sources: Quartz-lodine lamp 12V-20W, wavelength range: Optical unit with 12 position filter wheel: 340, 405, 505, 546, 578, 620 nm standard Installed: 6 position for optional filters: photomateric: range: 01 to 23 absorbance: resolution 0.001 Abs Detector: Photo diode (320-1000 nm) Measurement Procedures: Kinetic measurement with linearity check: Kinetic, with linearity check and sample stope blank: two point kinetic, with or without reagent blank: End point, with or without regent blank: Bichromatic end point, with or without regent blank: Bichromatic end point, with or without reagent blank. Bichromatic end point, with or without reagent blank. Measurement mode: wavelength 1 and 2 Aspiration volume: Measurement delay: Aspirator system: internal pump of bellows type, driven by stepper motor: Back panel connection for waste: aspiration volume Programmable. Signal interface: Centronics type parallel port: RS 232 type serial port: PS2 type port for external keyboard. Standards and regulations: CE-IVD: CB:UL, Certification. Power Requirements: 100-240 VAC nominal, 50/60 Hz: battery back- up to retain data. Country Origin the Netherlands/German/Japan. or equivalent 2 Years free service/	01 No.		
02.	warranty, equivalent. Pathology Microscope Leica DM 1000 trinocular Microscope or Equivalent Head: Trinocular, 360 degree rotatable with locking screw E yepieces: HC plan S 10x/22 mm Eyepieces- both Focusing Nosepieces: Quintuple Hole nose-piece Objectives: Hi Plan 4xN plan 10x, 20x, 40x (100x Optional if desired) Substage: Height adjustable and center able Abbe condenser with Iris diaphragm aperture diaphragm for kohler Illumination: Halogen 12v 30w bulb with rheostat and ON/OFF switch focusing: coaxial coarse & fine adjustment with focus stop to prevent damage Country origin: the Netherlands/German/Japan. or equivalent 2 Yare for service/uwrravty. emivalent	01 No.		
03.	2 Years free service/ warranty, equivalent Cutting Instruments for			
05.	0			
	cataract surgery • Large needle holder • Micro needle holder (titanium) • Conjunctival Scissor • Corneal Scissor (titanium) • Vanas scissor (titanium) • Suture tying forcep (titanium) • Corneal forcep (titanium) • Corneal forcep (titanium) • Tooth forcep • B.P Knife handle • IRIS Reposter • Muscle hook • Lens dialor (titanium) • Chopper (titanium) • Wire lre Vectus • Wire speculum • Artery forcep mosquile • Plane forcep • Cautery Point • Plain scissor small • Simco Cannula 18/23 G	20 each.		

S. Name Of Item Quantity @ Rate Amount	
No.	
100. Cutting Instruments for Vitreoretinal Surgery (Reusable) 1. ILM Spatula 23,25 gauge curved and straight shaft Overail length: 152mm, Tip length: 40mm 2.75mmtip 2. Fine End Cripping forceps 23,25 Gauge Overail Length: 144mm 3. Serrated Forceps 23,25 gauge Overail Length: 146mm, tip length: 35mm, inside 1.50mm length of the jaw 4. Curved scissor 23,25 Gauge Overail length: 146mm, Tip length: 35mm, 1.25mm curved blades 5. Angled horizontal Scissor 23,25 Gauge Overail length: 146mm, Tip length: 315mm, has 30-degree bend 6. Vertical Scissors 23,25 Gauge Overail length: 146mm, Tip Length: 35mm, 45 degree angled vertical scissors with 1.75mm distal blade 7. Retinal diamound Knife Overail length: 186mm 8. Trocear Fixation plate, 35mm, 4.0mm Overail length: 186mm 9. Scleral Dypug (Set of 12 plugs, 4 each of 18,19 and 20 gauge)18G Black, 19G Red, 20 G Göld 10. Infusion Cannulas: 2.5mm,14.0mm, 26.0mm 11. Caliper Castroviejo caliper straight curved overail Length: 86mm measures 1.0mm incvrements 12. Scleral Depressor Scleral depressor Overail Length: 135 mm with and without marker Flat handle to tip, 5.0mm 13. Air Injection Cannulas: Air injection Cannulas: 19. Soften Overal berget: 30 Gauge: 27 gauge ovrail length: 32mm Angle to pp i 50mm	

S.	Name Of Item	Quantity	@ Rate	Amount
No. 05.	Vitrectomy Machine with xenon			
05.	illumination system and embedded			
	green laser			
	•			
	Pump System: • Venturi, Peristalic pump			
	Modes;3D, Momentary, Prop Vac, vit wet Sub modes, core, 50/50 shave Cut Rate: Ultra vit 7,500, 10000 or more and can be upgradeable INFUSION/ IRRIGATION:			
	Flow Rate: 0 to 20 cc/min IOP CONTROLLED INFUSION:			
	Set Point Range: 0-120 mmHg Flow Range: 0-20cc/min ASPIRATION/SUCTION: STANDARD & REDUCED			
	Pressure Range: 0-650 mmHg Vacuum Minimal Pressure Range: 0-600 mmHg Vaccum			
	 Flow Range: Posterior Modalities: 0-20 cc/min Anterior Modalities: 0-60 cc/min 			
	Vacuum: • Vitrectomy: 0 to 650 mmHg or more • Fragmentation: 0 to 650 mmHg or more • Extrusion: 0 to 650 mmHg or more			
	 Extraction: 0 to 650 mmHg or more Irrigation/Aspiration: 0 to 650 mmHg or more Phacoemulsification: 0 to 650 mmHg or 	01 No.		
	more Low Pressure Air Source (LPAS): • Pressure Range: 0 -120 mmHg at rated flow			
	Flow Rate: 1.2 slpm minimum at 120 mmHg DIATHERMY:			
	Frequincy: 1.5 Mhz ±10% ILLUMINATION: Advance xenon illumination system			
	 Light output through 20G, 23G, 25G fiber probe: 0-200 hrs: 16±6 lumens at 115% set point 			
	1.201400 hrs: 16±6 lumens at 115% FRAGMENTATION: • Sub modes: Linear, fixid, Mementary			
	Resonant Frequency: 39.0 ±1.9KHz Scissors: Sub Madea Reportional multi-aut			
	Sub Modes: Proportional, multi-cut Proportional Pressure: 0-50 psi Multi cut Rate: single cut to 450cpm PROPORTIONAL AND CONTINUOUS REFLUX: Pressure Range: 0 to 120 mmHg			
	Micro reflux : Pressure Range: 100±50mmHg Volume: 15±10uL1			
	VISCOUS FLUID CONTROL: • Sub Modes: Inject, Extract • Injection Pressure: 0 to 551.6 K pascal (0 to 80psi) 0 to 482.7 K Pascal at reduced (0 to 70 psi)			
	Extract Vacuum 0 to 650 mmHg AUTO-GAS FILLING (AGF): Maximum Gas Pressure: 10psig			
	 Miaximum Gas Pressure: Jupsig Fill Purity: 99.7% gas Concentration following 3 purges & 1 fill 			

S.	Name Of Item	Quantity	@ Rate	Amount
No.				
	AUTO-STOPCOCK:			
	Response Time: 0.5 seconds			
	minimum			
	 Pressure (Liquid): 0-120 mmHg 			
	Rated flow (Liquid): 20 cc/min			
	Pressure (LPAS): 0-120 mmHg			
	Rated flow (LPAS): 1.2 slpm			
	PHACOEMULSIFICATION:			
	TORISIONAL/ TRADITIONAL • Sub Modes: Burst, pulsed.			
	Sub Modes: Burst, pulsed, continuous			
	 Tip Stroke at 100%: 3.5+0.5 mils 			
	Resonant Frequency: 34 khz- 42khz			
	+ 10%			
	Pulse rate Range: 0-1000 or more			
	pulses per second			
	Burst Length: 2.5 sec – user			
	adjustable			
	Burst pulse duration: 5ms to			
	500ms or more			
	ANTERIOR VITRECTOMY:			
	Sub modes: wet, dry			
	Cut rate: 0 to 100 or more			
	GREEN LASER 532 mm (Built In):			
	Treatment beam: Class: IV			
	Aiming beam: Class II			
	Power less than 1mW DOCTOD MEMORIES:			
	DOCTOR MEMORIES: • Storage capacity:			
	Storage capacity: TONE VOLUMES at 1 Meter:			
	Diathermy: 40 to 65 dB, Continuous			
	tone			
	 Infusion: 0 -65 dB, short tones 			
	• Frag/Phaco/Vacuum: 0 to 65 dB,			
	continuous tone			
	Volume Accuracy; 6dB			
	REMOTE CONTROL			
	ELECTRICAL REQUIREMENTS:			
	• 100-120 Vac 50/60 Hz 12 A max			
	• 220-240 Vac 50/60 Hz 6 A max			
	FOOTWITCH MUST WATER TIGHT			
	MUST WATER TIGHT CONSTRUCTION			
	Country origin Japan or equivalent			
	2 Years free service and parts/			
	warranty			

	Name Of Item	Quantity	@ Rate	Amount
No. 06.	 Name Of Item OPERATION MICROSCOPE WITH X- Y TRANSLATOR FOR VITREO RETINA SURGERY, BINOCULAR FOR TEACHING WITH COMPLETE HD VIDEO SYSTEM & RECORDER . Type: Galleo and Optical Fiber free Intravitreal Surgery System . Magnification Continuous changes motorized zoom Magnification indication: 4.2/5/6/7/8/11/13/15/17/19/21 total magnification: 4.0X - 21.X Fey pieces - 12.5X/10x (+5D adjustibale in eye pieces is preferable) Binoculars -45 -90 degree binocular inclined with converging optics fine focusing - motorized Objective - F= between 175/200mm Illumination System Light source-halogen lamp Illumination - cold light coaxial illumination by fiber light guide Illumination Control - continuous adjustment Fitters - Heat absorbing. UV fiter, yellow fitter, and cobat blue, red free Illumination agles should be available and can be easily selected from footswitch. Full Illumination (4^{4°}, 2⁶, 2⁹) for brightness stereoscopic view and shadow contrast for superior observe clarity Multifunction footswitch to control all function e.g. illumination intensity, zoom magnification, and focus illumination angle selection for footswitch. Full Illumination equile on ad X-Y positioning Dual motorized focusing mechanism. Simultaneously cataract and vitreous surgery can be performed. Capable to give wide field of view up to or a Serrata XY Translator may allow the convenient movement with reset button. In Built observation - viewing system for vitrectomy procedure. Viewing system during vitrectomy procedure should have an independent focus mechanism (Illumination bub can be easily and immediately replaced. Electromagnetic brakes anable the surgery to do build can sparate from microscope head The incorporated Rc ut filter for the reduction of photo toxicity to the retina Optical head with built- in beam splitter. Ant: stain, water shedding cocated lens, illumination bub can be easily	Quantity 01 No.	@ Rate	Amount
	Appropriate UPS backup Country of origin Japan or equivalent 2 Years Free service/ warranty			

S.	Name Of Item	Quantity	@ Rate	Amount
No.				
07.	Optical Coherence Tomography in			
	combination with color fundus			
	photography, anterior segment,			
	fundus angiography, fundus auto			
	fluorescence & Angio OCT (OCT-A)			
	with 100,000 or more A-Scan/sec.			
	Invisible OCT scan for better penetration through			
	cataracts and hemorrhages. • Wide and Deep scans (12mm) to visualize			
	crystal clear Vitreous and choroid in a			
	single image			
	 Auto Rescanning with Smart track to 			
	provide fundus guided OCT Acquisition			
	combination scans & follow up functions			
	 7 layer Segmentation / 5 layers thickness 			
	 map / caliper function Accurate Choroidal thickness map 			
	 Accurate Choroidal thickness map En-face OCT imaging allow for 			
	independent dissection of vitreoretinal			
	surface, retina, RPE and Choroid			
	 Motion correction/ Compensation / 			
	rescanning function			
	 Able to analyze Drusen, ganglion cell, 3D 			
	Macula and RNFL	01 No.		
	 Quantitative vessel density analysis Fast & wide (12x12) scanning for OCT-A 			
	 Built-in non-mydriatic fundus camera 			
	• Anterior OCT with 16mm wide scan			
	 Anterior segment/ cormea module 			
	 In-depth resolution, Digital 2.6m/ optical 			
	function:8m			
	 Photographable diameter of pupil for OCT, 2.5mm. 			
	 Photographable diameter of pupil for 			
	fundus Image, 45": 4.0mm small pupil			
	diameter: 3.3mm			
	 Picture angle, 45[°]/30[°] or equivalent (digital 			
	zoom).			
	 Fixation target. both internal & external 			
	fixation target. o Enhanced Vitreous Visualization mode			
	 Enhanced Vitreous Visualization mode Fundus Angiography mode 			
	 Auto Fluorescien imaging mode 			
	 System Contain: 			
	Main Console unit with Fundus			
	Angiography & Auto			
	Fluorescein			
	Orignal motorized stand			
	Latest Desktop PC for OCT with LED monitor and color laser printer country of origin japan or equivalent			
	2 Years free service, parts/warranty			

S. No.	Name Of Item	Quantity	@ Rate	Amount
08.	Laser with indirect delivery system Treatment laser: diode pump solid state laser (L.1.0) Wave length: 532nm Output power: 50 to 1700mW Output type: Continuous wave, pulse 0.01 to 0.2 seconds Aiming beam: Red Diode, Spot size: 185-556um Variable according to the working distance Dual Delivery port (Endo and BIO Delivery unit) 5.7 inches color LCD with touch Control box Contents and quantity: Green laser Console one, Laser Indirect Ophthalmoscope with delivery cable one, delivery lenses two Country origin Japan or equivalent 2 Years free service, parts/ warranty	01 No.		
09	Air puff Computerized tonometry with pachymeter R/L fully automated measurement . Easy-to-Use touch screen control panel . The adjustable control panel can be positioned in any direction . Stabie IOP measurement with soft air-puff . corneal thickness measurement for IOP compensation . Built in thermal printer . Ocular Pressure measurement, measuring range 1 to 30 mmHg/ 1 to 60mmHg(1mmHg step) Average indication 1mmHg/0.1mmHg steps changeable Corneal Thickness Measurement measuring Rage 0.4 to 0.75 mm (0.001mm step) . Monitor: 8.5" WVGA color LCD monitor, touch panel . data transport Terminal USB (import), RS232C(Export), LAN (Export) Country of Origin Japan or Equivalent 2 years free service, parts/ warranty.	01 No.		
10	 Bipolar Diathermy Frequency: 1.5 mhz±10% Proportional control Wave shape: sinusoidal Output power 10 watts maximum at 100% setting with 75±10% ohm non-inductive load Power range: 0 1005 of maximum output power Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty 	01 No.		

S. No.	Name Of Item	Quantity	@ Rate	Amount
11.	Electrolysis Machine for Ophthalmic Uses Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty	01 No.		
12	 Charging hand held ophthalmoscope with desk Unique aspherical optical system Corneal and iris reflex elimination, dust proof Bright halogen illumination Recessed multi-coated viewing window Suitable for larger or small pupils Lens range: +1-10/15/20/40 D -1-10/15/20/25/35 D Apertures stat, fixation star with polar coordinates Suitable blue filter, large spot, small spot hemi spot Filter Red- free filter for all apertures Dust-proof needs no servicing Desk charger & rechargeable battery Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty 	03 Nos.		
13	TONOPEN Small and light weightMicro strain gauges transducerRang of measurement of 5-56 mmHgDouble sided LCD1 box of ocu film tip covers, carry case, manual DVDCountry of Origin Japan or Equivalent2 Years free service, parts / Warranty	01 No.		
14	Electronic Hess Screen Screen: high resolution LED screen that show the bright red and green points for the optical examination Support table for Monitor, Mouse and or Touch-pad Chin located atr 35cm from the screen centre Laptop computer with Hess digit Test Power supply Printer Functional Requirements Hess test: N ⁰ 3 preset sequences, N ⁰ 1 manual sequence Visual field coverage angle: 40 ⁰ (± 20 ⁰) both Horizontally and vertical positioning Resolution: ± 1mm Measurement Accuracy: ± Imm Data: Error in Prismatic diopters Examination management: automatic archiving in pdf file Print: Color printing of Hess Grid and data errors Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty	01 No.		

S.	Name Of Item	Quantity	@ Rate	Amount
No.		-		
15.	CARDIFF ACUITY CARD For acuity measurement in toddlers aged 1 to 3 years Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty	01 No.		
16	 OPTOKINETIC DRUM: Accurately tests for nystagmus when rotated at 8-10rpm Light weight drum of Professional quality witgh ball bearing for effortless spin mechanism Standard black and white striped drum for use 24" to 30" from patient Height of drum: 26cm Overall height 44 cm Ø = 18cm Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty 	01 No.		
17	A Scan Ultrasound A-Scan with built-in printer, foot- switch, 10 MHz A-scan Direct Contact Probe Live A- scan display Examination modes Automatic capture, normal cataract, dense Cataract, Aphakic Pseudophakic manual mode Perminant storage of 5 scans for later review and IOL calculation A-scan measurement review capability - Axial length, average and standard deviation for up to 5 scans - Post refractive surgery formulas (Myopic regression formula & hyperopic regression formula) IOL Formulas: Binkhorst, Regression-II,, Theoretic, Holladay, Hoffer-O, Haigis Immersion Capabilities Clinical accuracy +/-0.1mm Electrical accuracy +/-0.0484mm Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty	01 No.		

S.	Name Of Item	Quantity	@ Rate	Amount
No. 18.	PHACO Hexadisq Hand Piece-			
10.	Titanium , (6-crystal design) new version			
	Units 02 Easy Tip-Titanium, 2.8mm,30 degree, reusable 06 Units			
	Irrigation sleeve 19G for 2.8mm easy tip 06 units Irrigation sleeve 20G for 2.2mm easy tip 02 unts Test Chamber silicon 02 units Key for phaco tips 02 Units I/A tubing set, reusable 04 Units Country of Origin Switzerland or Equivalent 2 Years free service, parts / Warranty	02 Nos.		
19	Suction Machine with nozel and catheter	01 No.		
20	Ambo bag adult Country of Origin Japan or Equivalent 2 Years free service, parts / Warranty	01 No.		
21	Ambo Bag Baby Country of Origin Japan or Equivalent 2 Years free service, / Warranty	01 No.		
22	Baby circuit Country of Origin Japan or Equivalent 2 Years free service, / Warranty	01 No.		
23	Magil circuit Country of Origin Japan or Equivalent 2 Years free service, / Warranty	02 Nos.		
24	Bain circuit Country of Origin Japan or Equivalent 2 Years free service, / Warranty	01 No.		
25	Defibrillator with trolley Country of Origin Japan or Equivalent	01 No.		
26	Face Masks all Size Country of Origin Japan or Equivalent 2 Years free service, / Warranty	Each two		
27	LMA All size (Reusable) Country of Origin Japan or Equivalent 2 Years free service, / Warranty	Two Set		
28	Savoflurence Va[oprizer Country of Origin Japan or Equivalent 2 Years free service, / Warranty	01 No.		