



ANNEX-B- SPECIFICATIONS FOR SANDEMAN PROVINCIAL HOSPITAL AT QUETTA

ORTHOPAEDIC DEPARTMENT

S.No						QTY
1	Orthopaedic Surgery Set					4
	1	Bone Levers				
		a. Width 08mm, length 100 mm				
		b. Width08 mm, length 130mm				
		c. Width 18mm, length 130mm				
		d. Width18mm, length 150 mm				
		e. Width 18mm, length 190mm				
		f. Width 23mm , length 40mm				
		g. Width 23mm, length 80mm				
		h. Width 23 mm, length 140mm				
		i. Width 23 mm, length 160mm				
		Universal Chuk with T-Handle, cannulated				
	2	Bone Forceps				
		a. Self-Cantering, length 144mm				
		b. Self-Centering, length191mm				
		c. Self-Centering, length239 mm				
		d. Self-Centering, 258mm				
		e. Self-Centering, 277mm				

		f. Bone Holding Forceps with ball, length156mm				
		g. Reduction Forceps, serrated jaws, length146mm				
		h. Reduction forceps, serrated jaws, length 194 mm				
		i. Reduction Forceps, serrated jaws, length250mm				
		j. Patella Forceps, length171mm				
		k. Stagbeetle Forceps, length117mm				
		l. Reduction Forceps with points, length 126mm				
		m. Reduction Forceps with points, length222mm				
		n. Bone Spreader, blade width 5mm, length 144mm				
		o. Bone Spreader, Blade width 12mm, length 260mm				
		p. Fibular Forceps				
		q. Periarticular Reduction Forceps, small and large				

	3	Periosteal Elevator, 13mm wide , length 200mm				
	4	Periosteal Elevator, curved shaft, length 200mm				
	5	Hammer, weight 100 g, 350 g				
	6	Chisel handle				
	7	Chisel Blades 05 sizes				
	8	Gouges , 06 different sizes				
	9	Osteotomies , 06 different sizes				
	10	Bone Hook , sharp, small				
	11	Bone Hook , sharp, large				
	12	Triple Drill Guide				
	13	Wire Passer				
	14	Wire tightener				
	15	Cerclage Wire Tightener				
	16	Forceps for twisting wires, long				
	17	Forceps for twisting wires , small				
	18	Holding forceps for cerclage wires				
	19	Wire Bending Pliers				
	20	Parallel Pliers , flat nosed				

	21	Vice Grip				
	22	Wire Cutter , small				
	23	Wire Cutter , large				
	24	Wire cutter , long				
	25	Wire Cutter , short				
	26	Bending Iron for Kirchner Wires				
	27	Hand Chuck for Kirchner wires				

		Instruments for Removal of Damaged Screws				
	28	a. Reamers, hollow				
	29	b. Spare Reamer Tubes for Hollow Reamers				
	30	c. Extraction Bolts				
	31	d. Extraction Screws				
	32	e. Forceps for Screw Removal				
	33	f. Gouge				
	34	g. Instrument Case				
	35	Bone Cutting Forceps				
	36	Bone Rongeurs, Nibblers, straight, 18, 19, 20cm in length				
	37	Bone Rongeurs, curved, 18 and 20 cm in length				
	38	Bone Skid				
	39	Sterilization Tray				
		Amputation Saw				
	40	1. Plaster Saw				
	41	2. Plaster Spreader				
	42	3. Goniometer				
	43	4. Vernier Caliper				

	44	5. Bone Reamers for Austin More Prosthesis, small and large				
	45	6. Box Osteotome				
	46	7. Gigli saw				
	47	8. Bending Irons for DCP, large				
	48	9. Bending Iron for DCP , small				
		Intramedullary Bone Saw includes				
	49	a. Bone Saw Assembly.				
	50	b. Blades.				
	51	c. Cams				
	52	d. Chisels				

2	Mobile X-Ray Unit					2
	1	Mobile Microprocessor based X-Ray Unit.				
	2	High frequency, 30kW X-Ray Generator				
	3	300 mA at 100 kV				
	4	Digital display of all set parameters.				
	5	Rotating anode x-ray tube, with dual focus anode				

	6	heat storage capacity of at least 107 KHU				
	7	Electronic timer with exposure time of 1-2 msec.				
	8	Automatic over-load protection device and automatic line compensation. 220 V, 50 Hz.				
	Country of Manufacturer: USA/EU/Japan					
	Quality Certificate: FDA510K/CE MDD/ MHLW					

SURGERY DEPARTMENT

3	General Surgical Instruments					5
	1	YANKAUER SUCTION TUBE			1	
	2	FORCEPS HOLDER 12CM			1	
	3	FORCEPS HOLDER 14CM			1	
	4	FORCEPS HOLDER 18CM			1	
	5	KNIFE HANDLE NO. 3			1	
	6	KNIFE HANDLE NO. 4			1	
	7	KNIFE HANDLE NO. 7			1	
	8	OPERATING SCISSORS 5 1/2" STR. S/B			1	
	9	MAYO DISSECTING SCISSORS 6 3/4" STR. TC TIP			1	
	10	MAYO DISSECTING SCISSORS 6 3/4" CVD. TC TIP			1	
	11	METZENBAUM SCISSORS 7" CVD. TC TIP			1	
	12	METZENBAUM SCISSORS 8" STR. TC TIP			1	
	13	METZENBAUM SCISSORS 8" CVD. TC TIP			1	
	14	STANDARD DRESSING FORCEPS SERR 18CM			1	
	15	STANDARD TISSUE FORCEPS 1 X 2 T, 18CM			1	

	16	ADSON DRESSING FORCEPS SERR 12CM		1		
	17	ADSON TISSUE FORCEPS 1 X 2 T, 12CM		1		
	18	CUSHING DRESSING FORCEPS 7" SERR.		1		
	19	CUSHING TISSUE FORCEPS 7" 1 X 2 TEETH		1		
	20	HALSTEAD MOSQUITO FORCEPS 5" STR.		6		
	21	HALSTEAD MOSQUITO FORCEPS 5" CVD.		12		
	22	ROCHESTER-PEAN FORCEPS CVD 16CM.		4		
	23	ROCHESTER-PEAN FORCEPS 8" CVD.		4		
	24	ROCHESTER-OCHSNER FORCEPS CVD 20CM		4		
	25	MIXTER FORCEPS 9"		1		
	26	BABY MIXTER FORCEPS 5 1/4" FULLY CVD.		1		
	27	BACKHAUS TOWEL CLAMP 5 1/4"		12		
	28	FOERSTER SPONGE FORCEPS 9 1/2" STR. SERR.		2		
	29	CRILE WOOD NEEDLE HOLDER 6" T/C TIP		1		
	30	MAYO- HEGAR NEEDLE HOLDER 7" T/C TIP		1		
	31	MAYO- HEGAR NEEDLE HOLDER 8" T/C TIP		1		
	32	MAYO- HEGAR NEEDLE HOLDER 10 1/2" T/C TIP		1		
	33	POOLE SUCTION TUBE STR 23CM		1		

	34	U.S. ARMY RETRACTOR SET OF 2, 21CM		1		
	35	RIBBON RETRACTOR 30 X 330MM		1		
	36	DEAVER RETRACTOR 25 X 300MM		2		
	37	DEAVER RETRACTOR 38 X 300MM		2		
	38	DEAVER RETRACTOR 50 X 300MM		2		
	39	MORRIS RETRACTOR S/E 51X38MM		2		

	40	MORRIS RETRACTOR S/E 51X51MM			2		
	41	LANGENBACK RETRACTOR 22X6MM, 21CM			2		
	42	LANGENBACK RETRACTOR 44X13MM, 21CM			2		
	43	LANGENBACK RETRACTOR 64X25MM, 21CM			2		
	44	BELFOUR RETRACTOR W/ INTERCHANGEABLE BLADES 18CM			1		
	45	LAHEY GALL DUCT FORCEPS CVD 19CM			1		
	46	LAHEY SWEET GALL DUCT FORCEPS ANGLED 22.5CM			1		
	47	ALLIS TISSUE FORCEPS 4 X 5 T, 15CM			4		
	48	ALLIS TISSUE FORCEPS 5X6T, 19CM			4		
	49	BABCOCK TISSUE FORCEPS 16CM			2		
	50	BABCOCK TISSUE FORCEPS 20CM			2		
	51	DEBAKEY ATRAUMATIC TISSUE FORCEPS 1.5MM, 20MM			1		
	52	DOYEN INTESTINAL FORCEPS STR 21CM			2		
	53	DOYEN INTESTINAL FORCEPS CVD 21CM			2		
	54	MAYO ROBSON INTESTINAL CLAMP STR 21CM			2		
	55	MAYO ROBSON INTESTINAL CLAMP CVD 21CM			2		
	56	DENIS BROWNE INTESTINAL HOLDING FORCEP 18CM			2		
	57	LANE TISSUE FORCEPS 19CM			2		

RADIOLOGY DEPARTMENT

4	COLOR DOPPLER ULTRASOUND						1
		Color Doppler with Fully Digital Beam former having 2D / M-Mode and Doppler Facilities, (PW,					
		HPRF, & Color Flow Imaging) with High Resolution Imaging Doppler Signal Quality; having					
		1 DICOM Compatibility.					
		1) B-MODE Specification:					
		a) Viewing Depth: 30 cm Minimum (Both in B & W and Color).					
		b) Frame Rate: 500 f/sec or more.					
		c) Built-in cine loop with ability to vary reverse and slow motion of display; Internal					
		Memory 2000 / 200MB or more Color Images.					
		d) Real time and Freeze Image Magnification at least 10X or more with panning for Real,					
		Freeze and Memorized Images.					
		2 M-MODE SPECIFICATION:					
		a) Magnification: X2 or more.					
		b) Sweep Speed: Slow, Medium and Fast.					
		c) Color Display of M-Mode.					
		3) D-MODE SPECIFICATION:					

		a) Pulse-Wave Doppler Measurable Velocity Range.				
		b) HPRF Doppler.				
		3 CONTINUOUS-WAVE DOPPLER:				
		a) Measurable Velocity Range: Steerable.				
		b) Must have Doppler Beam Steering and Bi-Directional Stereo-Audio.				
		c) Colorized Spectrum Display.				
		d) Automatic Baseline and Velocity Range Control				
		e) Live Measurements for Doppler Spectrum				
		4 COLOR DOPPLER MODE SPECIFICATIONS:				
		- Both CW and PW Doppler must be Continuous Steerable in the Color Blood Flow Image				
		Mode in Real Time.				
		- 2D Image with Color, CW and PW Doppler.				
		- Windows based System for easy usage with Programmable Control Panel Keys.				
		- Tissue Harmonic Imaging with 4THI or more Frequency.				
		- Power Doppler.				
		- Triplex Mode for Simultaneous Display of Color B/M and D-Mode Displays.				
		- 200 db system dynamic range or more.				
		5 MEASUREMENT PACKAGE:				

		To provide Comprehensive Software Package for Measurement of Distance, Circumference, Area, Time Depth, ANGLE, Velocity, Frequency, Heart Rate, Volumes, Nuchal Thickness/				
		Measurement Software to be Provided as a Standard.				
		SYSTEM COMPLETE WITH FOLLOWING 6 FACILITIES AND ACCESSORIES:				
		Minimum 19-Inches LCD / LED Color Monitor, with Resolution 1280 x 1024/WXGA++				

		Pixels minimum.				
		- Foot-Switch.				
		- 3 Active Transducer Connector for Tran thoracic Probes DVD / CD Drive for Image				
		Storage to be Built-in to the System.				
		- 500 GB or more Hard Disk Drive to be Built- in to the System.				
		- Built-in DICOM Compatibility. (3.0 with all components)				
		- Touch Command Screen Control at least 8- inches LCD / TFT.				
		- Full DICOM (Upgradable)				
		7 UPGRADEABILITY :				
		- System Software must be Upgradable.				
		8 STANDARD PROBES :				
		- 2 – 6 MHz Multi-Frequency Convex Probe for B/M/CDI/PW.				
		- 5-9 MHz Multi-Frequency Linear Probe for vascular studies.				
		- 4-9 MHz Multi-Frequency Micro-Convex Probe for Peads.				
		- TVS/ENDOCAVITORY Color PROBE				
		NOTE:				
		All Probes must be supplied by same Manufacturer.				
		+ 1Mhz deviation from the quoted frequencies of probes would be considered as minor				

		deviation.				
		9 STANDARD RECORDING DEVICES:				
		- Thermal Paper Printer 256 Grey Scale (Sony/Mitsubishi) with fifty Rolls of Paper (Black & White). WITH HD				
		10 Tissue Harmonic imaging without contrast with 4 harmonic frequencies.				
		11 Pure Wave / Pulse Inversion / Differential Tissue Harmonic Imaging/CPI/HD-THI or				
		similar.				
		12 Auto Image Optimization / Quick Scan Imaging for Automatic STC / GAIN and Doppler				
		Spectrum Adjustment with Optimal Image Quality by using One Touch Operation.				
		13 B-Flow / Dynamic Flow Imaging / E-Flow/ X-Flow or Similar- for low flow vessels imaging.				
		14 Trapezoid Imaging / Virtual Convex Imaging with Linear Probe.				
		15 Compound / Aplipure/X-View Imaging for THI/both Frequency Compounding and				
		Spatial Compounding or similar in B/W and Color Mode.				
		16 Panoramic / SIESCAPE / Logic view or Similar Imaging with Measurements.				
		17 Voltage : 220V – 240V, 50 – 60 HZ				
		Accessories:				
		1- UPS: on line with sine waves 2 KVA with thirty minutes back up time/ battery for the system.				
		(IMPORTED				
	Country Of Manufacturer: USA/Europe/Japan					
	Certification: FDA/CE/MHLW					

Note:

the Certification (FDA/CE/MHLW) where applicable
e: Preferably - USA/Europe/Japan

ANNEX-B
SPECIFICATION FOR BOLAN MEDICAL COLLEGE HOSPITAL

S.No	Equipment	Specs	QTY
GYNAECOLOGY/OBSTETRICS DEPARTEMENT			
1	Laparoscopic Workstation & Instruments		1
		<p>Monitor:</p> <p>32" - 4K/3D LCD Monitor · High resolution and wide color gamut. · 4K upscaling function produces higher resolution. · Higher contrast with less color blurring. · 4K resolution and a wider color gamut. Wide Variety of 3D Image Display Functions · Different display settings. · 2D/3D observation changed by simply pressing a button on the panel.</p> <p>3D imaging system: Light Source - Camera control unit:</p> <p>All-in-One 2D/3D Processor and Light Source · Both 2D and 3D observation capability. LCD Touch Panel · Intuitive handling and setup. · Presets allow easy preparation and maintenance. · Excellent natural color reproduction with the combination of an enhanced imaging process. · NBI and two modes of IR observation</p> <p>Camera Head:</p> <p>3 CMOS Sensor · Broad coverage of the color gamut and enriched color reproducibility in full HD. Special Light Observation · Select NBI and two modes of IR observation using only one remote button. Small, Compact Design and Lightweight · Offers an easy fit in the hand and good maneuverability. 2x Optical Focus Zoom · Magnified observation without image quality deterioration.</p> <p>Rated voltage 110–240 V AC; within ±10% Rated frequency 50/60 Hz; within ±1 Hz Rated input 400 VA</p> <p>Observation Analog signal output: VBS composite and Y/C; simultaneous outputs possible</p> <p>2D digital signal output 3G-SDI (SMPT E424M), HD-SDI (SMPT E292M), DVI (WUXGA, 1080 pixels, or SXGA can be selected)</p> <p>3D digital signal output 3G-SDI Level B (SMPT E424M), DVI-D (WUXGA or 1080 pixels can be selected, and SIDE BY SIDE or LINE BY LINE can be selected)</p> <p>Record output signal: Recording format of the video signal output to the video recorder can be switched.</p> <p>Video signal Select from "3G-SDI" or "HD-SDI"</p> <p>HD-SDI recording format Select from "Same as monitor output", "Always 2D", and "Always 3D"</p> <p>3G-SDI recording format Select from "Always 3D" and "Same as monitor output"</p> <p>Electronic zoom: 2D - 3 modes (1.0x, 1.2x, 1.5x), 3D 2 - modes (1.0x, 1.2x)</p> <p>Optical-digital observation NBI observation & IR observation</p> <p>Documentation: · Portable memory / · Video recorder / · Video printer / · Image filing system Recording format and number of recorded images in internal memory. TIF: no compression Approx. 120 images. JPEG (1/5): Approx. 1/5 compression Approx. 636 images. JPEG (1/10): Approx. 1/10 compression Approx. 1108 images Illumination: Examination lamp - LED. Cooling: Forced-air cooling. Providing maximum light intensity: Less than 5.64W Automatic Brightness Adjustment. LED drive current control Automatic exposure: 17 steps Brightness mode: Auto / Manual Type of protection against electric shock Class I</p> <p>Insufflator: – High Insufflation Unit Increased Maximum Flow Rate of 45 L per Minute · Display mode provides clear visualization of pressure, flow rate, and volume in real time. Automatic Smoke Evacuation · Helps to provide clear and unobstructed view during laparoscopic procedures.</p> <p>Electro-Surgical unit (Diathermy Controller): Bipolar Electrosurgery System Generator: Bipolar generator that stores and releases extra energy as needed, ensuring vapor pocket formation. Automatically presets specific settings, with customizable dual foot switch for user control during the procedure</p> <p>Laparoscopic Pump (Suction/Irrigation): Suction and irrigation volume of up to 2 l / min The compact design to be used on an OR trolley or a pole mount.</p> <p>Mobile Laparoscopic Workstation: Featured Laparoscopic Workstation with dedicated accessories to accommodate the system Twin-wheeled castors that allow the workstation to be moved into the ideal position in the clinical environment Monitor arms with both swivel and tilt functionality Rigid videolaparoscope: 10mm, 3D, 30°, 0° image rotation. Autoclavable</p> <p>Video Telescope</p> <p>5.4 mm - 30° : Outer Diameter: 5.4 mm Direction of View (DOV): 30° Working Length Max: 315.5 ± 1.5 mm Insertion Portion Width: 5.45 mm</p> <p>5.4 mm - 0° : Outer Diameter: 5.4 mm Direction of View (DOV): 0° Working Length Max: 315.3 ± 0.5 mm Insertion Portion Width: 5.45 mm</p> <p>10 mm - 30° : Outer Diameter: 10 mm Direction of View (DOV): 30° Working Length Max: 317.1 ± 1.5 mm Insertion Portion Width: 10.2 mm</p> <p>10 mm - 0° : Outer Diameter: 10 mm Direction of View (DOV): 0° Working Length Max: 315.9 ± 0.5 mm Insertion Portion Width: 10.2 mm</p> <p>Surgical Video Endoscope (Flexible) 3D, 10 mm Distal End OD: 10,0 (mm) Bending (Up/Down): 100°/100° Field of View: 80° Depth of Field: 18-100 (mm) (normal/wide)</p> <p>Trocar & Cannula Laposcopic - Reusable Size/Dimensions: 10 mm & 5 mm</p>	

Forceps - Laparoscopic	5mm Diameter Laparoscopic Maryland Grasper, 330mm Length, with 4mm Diathermy connection.		
Maryland Grasper, Dissectors	Trocar Pyramidal Tip Flap Valve Surgical Instruments Set 5mm		
Laparoscopic Trocar	Trocar Pyramidal Tip Flap Valve Surgical Instruments Set 10mm		
Fenestrated Graspers, Dissectors	Double-action. 10mm, 45cm, insert, ESU.		
Atraumatic Graspers, Tenaculum	5.0 mm Double Action Atraumatic Grasper Insert, 45 cm		
Hook Scissors	Laparoscopic Hook Scissors 5mm x 330mm		
Straight & Covered Scissors	Straight 5 Mm Stainless Steel Laparoscopic Scissors 5mm Stainless Steel curved scissors Laparoscopic		
2 Uterine manipulators			3
	Soft distal end of tip, Silicone balloon for less traumatic insertion, Saline filled balloon to hold the tip firmly in place. Sacrocolpopexy and sacrocervicopexy tips 140° of articulation at the cervix (90° anteversion and 50° retroversion) Koh-Efficient™ colpotomy device for faster TLHs KOH Cup™ onto cervix with Cervical Sizer to ensure the right Koh-Efficient fit Catheter management system		
3 Braun-Stadler Episiotomy Scissors			10
	Length: 6" (15.0cm) or 8-1/4" (21.0cm) Tip Configuration: Blunt/Blunt Curvature: Angled Material: German Stainless Steel Usage: Reusable		
4 Cord Seizer			10
	Length: 4-1/8" (10.5cm) Tip Configuration: Blunt/Blunt Curvature: Curved Handle: Finger Rings Material: German Stainless Steel Usage: Reusable		
5 B.P Apparatus			5
	Floor stand type Sphygmomanometer two-piece stand column can be adjusted from 105-146cm 5 pieces castors with brakes Measure scope: 0-300mmHg Accuracy: +/-3mmHg Sub-division: 2mmHg Size: 59*59*23cm/CTN		
6 Baby weight Machine			2
	Capacity: 20kg/grad.:100g, CE Approved Unit: kg or kg & lb Product Dim.:54.5x34.5x13.5cm +/-		
7 Vacuum and Suction Machine (Vacuum Assisted Delivery System)			2
	VAD System 1 High Vacuum; Pressure: -90kPa, -675mmHg. Tolerance: +/- 15% 2 HxWxD (rack version): 210 x 305 x 375mm 3 Flow: High Flow 30 L/min (+/- 5 L/m) 4 Power: 100-240 volt 5 Certification: ISO 9001 ISO 13485 CE (93/42/EEC), IIA 6 Reusable collection System 7 Foot Vacuum regulator Accessories: Rigid Suction Cups 1 Malmström Cups (40, 50, 60mm Sizes) - 2 pieces each size 2 Bird Cups (40, 50, 60mm Sizes) - stainless steel - 2 pieces each size 3 Bird Posterior Cups (50mm Size) - stainless steel 4 Soft Suction Cups: 5 Reusable and Single Silc Cups (Medical Grade Silicone): 50mm & 60mm (2 pieces each size) 6 CaesAid Cup for C-sections (Medical Grade Silicone): 60mm Size (2 Pieces) 7 Appgar Timer 8 Holders for tubing and accessories		
8 D & C Set		One Set Contain	6
	Scalpel Handle #3; One piece	1	
	Scalpel Handle #7; One piece	1	
	Scalpel Handle #3L; One piece	1	
	Crile Forceps Str 6 1/4"; Six pieces	6	
	Crile Forceps Cvd 6 1/4"; Six pieces	6	
	Dressing Forceps 8"; One piece	1	
	Tissue Forceps 1 x 2 Teeth 8"; One piece	1	
	TC Crile-Murray NH Serr 6"; One piece	1	
	TC Mayo-Hegar NH Serr 7"; One piece	1	
	Backhaus Towel Clamp 5 1/4"; Six pieces	6	
	Bozeman Forceps Double Curved 10"; One piece	1	
	Foerster Sponge Forceps Cvd Serr 9 1/2"; Two pieces	2	
	Jackson Retractor Small Blade 3" x 1 1/2"; One piece	1	
	Jackson Retractor Medium Blade 3 1/2" x 1 1/2"; One piece	1	
	Auvard Weighted Speculum Medium 2 1/2 lbs.; One piece	1	
	Graves Vaginal Speculum Medium 1 1/4" x 4"; One piece	1	
	Graves Vaginal Speculum Large 1 3/8" x 4 1/2"; One piece	1	
	Pederson Vaginal Speculum Small 1/2" x 3"; One piece	1	
	Kogan Endospeculum w/ Gauge and Screws; One piece	1	
	Goodell Dilator Large 13"; One piece	1	
	Hegar Dilators (Set of 8); One piece	1	
	Sims Sound Plain 12 1/2"; One piece	1	
	Sims Curette Sharp 11" #2; One piece	1	
	Sims Curette Sharp 11" #3; One piece	1	
	Sims Curette Sharp 11" #4; One piece	1	

	Sims Curette Sharp 11" #5; One piece		1
	Kevorkian-Young Endocervical Curette w/ Basket 12"; One piece		1
	Schroeder Tenaculum Forceps 9 1/2"; One piece		1
	Javerts Forceps Serr 9 1/2"; One piece		1
9	M.V.A Kit	Medical grade polypropylene	4
	Kit consists of MTP Syringe, Karman Cannula, lubricating oil Smooth cannula with rounded tip and smooth eyes for atraumatic cannulation Double valve syringe		
10	Sponge holder	Ramplay Sponge Holder 180mm	10
11	Duck Speculum		One Set Contain
		MEDIUM: length of beak ca. 10.0 cm, width ca. 2.5 cm)	5
		LARGE: length of beak ca. 10.5 cm, width ca. 2.7 cm)	5
12	Caesarian Set		One Set Contain
		Towel Clips, Backhaus	10
		Forceps, Obstetric, Wrigly	2
		Forceps, Arter Curved, 150mm	10
		Forceps, Arter Curved, 180mm	2
		Forceps, Dissecting Straight, 1/2 teeth	4
		Forceps, Dissecting Straight, Plain, 180mm	4
		Forceps, Sponge Holding, 240mm	10
		Forceps, Tissue Allis, 4x5 teeth	4
		Forceps, Tissue Allis, littlewood	6
		Handle for Surgical Blade No.4	4
		Needle Holder, Mayo, 180mm	4
		Retractor Doyen	4
		Retractor, Lange baeck	2
		Retractor, Morris, 51mm	
		Scissor Mayo, Curved 180mm	2
		Scissor Mayo, Straight 180mm	2
		Scissor Ligature , Spencer	2
		Instrument Container, Stainless Steel with cover	2
13	Hysterectomy Set	Abdominal	One Set Contain
		Sponge Holding Forceps 10"	1
		Towel Forceps 5"	4
		Instruments Safety Clip	4
		Plain Dissecting Forceps 8"	1
		Toothed Dissecting Forceps 8"	1
		Plain Dissecting Forceps 10"	1
		Toothed Dissecting Forceps 10"	1
		Artery Forceps Cvd. 6"	4
		Artery Forceps Cvd. 8"	4
		Kocher Artery Forceps Str. 6"	4
		Kocher Artery Forceps Str. 8"	4
		Right Angle Gemini Forceps 9"	4
		Allis Tissue Forceps 8"	4
		Green Armytage Forceps	2
		Babcock Tisse Forceps 8"	2
		B.P Handle No.3	1
		B.P Handle No.4	1
		Needle Holder 6"	1
		Needle Holder 8"	1
		Suture Cutting Scissor Heath	1
		Mayo Scissors Str. 8"	1
		Mayo Scissors Cvd. 8"	1
		Vulsellum Forceps 10"	2
		Heaney Hysterectomy Forceps Curved	2
		Myoma Screw	1
		Bozemann Packing Forceps	1
		Yankaur Suction Tube	1
		Weitlaner Retractor 10"	1
		London Hospital Retractor	2
		Doyen Retractor 3"	2
		SS Kidney Tray 10"	1
14	Laparotomy Set		One Set Contain
		Mayo Scissors 6.75" Straight T.C	1
		Mayo Scissors 6.75" Curved T.C	1
		Metzenbaum Scissors 7.00" Curved T.C	1
		Mayo Hegar Needle Holder 6.00" T.C	1
		Yankauer Suction Tube	1
		Scalpel (Knife) Handle # 3 With 100 Surgical Blade # 10	3
		Scalpel (Knife) Handle # 4 With 100 Surgical Blade # 20	3
		Operating Scissors 5.50" Straight Sharp/Blunt	3
		Thumb Dressing Forceps 5.50"	2
		Tissue Forceps 5.50" 1x2 Teeth	2
		Adson Dressing Forceps 4.75" Serrated	3
		Adson Tissue Forceps 4.75" 1x2 Teeth	3
		Russian Tissue Forceps 6"	3
		Dressing Forceps 7"	3
		Tissue Forceps 7.00" 1x2 Teeth	3
		Halsted Mosquito Forceps 5.00" Straight	6
		Halsted Mosquito Forceps 5.00" Curved	6
		Kelly Forceps 5.50" Straight	6
		Kelly Forceps 5.50" Curved	12
		Rochester-Pean Forceps 6.25" Curved	6
		Rochester Pean Forceps 8.00" Curved	3
		Rochester Ochsner Forceps 6.25" Str 1x2 Teeth	4
		Mixter Forceps 9.00"	3
		Backhaus Towel Clamp 5.25"	10
		Foerster Sponge Forceps 9.50" Str Serrated	3
		Pool Suction Tube	1
		U.S Army Retractor Set Of 2 Pcs.	1

	Deaver Retractor 1" X 12"	1	
	Deaver Retractor 2" X 12"	1	
	Richardson Retractor	1	
	Kelly Retractor	1	
	Allis Tissue Forceps 6.00" 4x5 Teeth	2	
	Allis Tissue Forceps 10.00"	2	
	Babcock Tissue Forceps 6.25"	2	
	Babcock Tissue Forceps 9.25"	2	
	Debaquey Tissue Forceps 8"	2	
15	Tubal Ligation Set	Abdominal	One Set Contain 2
		Perforated Instrument Basket with Handles, S/Steel, 406 x 253 x 56mm	1
		Kidney Dish, S/S, 250mm, 10"	2
		Gallipot, S/S, capacity of 4 ozs	1
		Gallipot, S/S, Capacity of 6 ozs	1
		Gallipot, S/S, Capacity of 10 ozs	1
		Forester-Ballenger Sponge Hldg Fcps, Serr Jaws, S/S, 240mm, 9 1/2"	2
		Scalpel Blade Handle, S/S, size 4	2
		Mayo Dissection Scissor, Straight, S/S, 155 mm	1
		Mayo Dissection Scissor, Curved, S/S, 155 mm	1
		Mayo Dissection Scissor, Straight, S/S, 170mm	1
		Std Pattern Dissection Forceps, Serrated Jaws, S/S, 160 mm	2
		Std Tissue Forceps, 1x2 teeth, S/S, 160 mm	1
		Lane Dissection Forceps, 2x3 teeth, S/S, 150mm, 6"	1
		Farabeuf Retractor Set, D/E, 20x16mm/24x16mm	1
		Farabeuf Retractor Set, D/E, 23x16/28x16mm, S/S, 150mm, 6"	6
		Kelly Artery Forceps, Curved, Half Serr Jaws, S/S, 140mm, 5 1/2"	4
		Adson Delicate Artery Forceps, Curved, Half Serr Jaws, 120mm, 7 1/4"	
16	Fallopian Ring Applicator - Laparoscopic		One Set Contain 2
		6mm diameter, 40cm working length for use through an operating scope with a channel of 7mm or larger. Single or dual ring application.	
		6mm diameter, 33cm working length for use through a trocar single or dual ring application.	
		8mm diameter, 33cm working length for use through a trocar single or dual ring application.	
17	Heavy Duty Suction Machine	Reciprocating, oil free pump mechanism.	6
		Heavy duty Mobile Suction Unit with twin jars (Polysulfone / Polycarbonate type) of capacity up to 4 or 5 liter each, Autoclavable.	
		Aspiration rate up to 40-50 litters/minutes or more at 650-900mm.Hg	
		Vacuum continuously adjustable	
		Triple flow safety device	
		Change over valve	
		Suction tubing of silicone with coupling connection for each jar	
		Noise Level 45 dB or less.	
		220V/50Hz.	
		Accessories:	
		10 x bacterial filter	
		Original trolley with lockable wheels	
		Country of Manufacture: USA/Europe/Japan	
		Certification: FDA/CE/MHLW	
18	Laryngoscope	Macintosh type.	4
		Blade set of 4 or 5.	
		Blade Sizes 1, 2, 3, 4 /5.	
		SS/ corrosion free Blades.	
		Dry Battery handle.	
		Blades of stainless steel with integral light carrier.	
		Fibre optic light carrier.	
		Xenon illumination of light source.	
		Complete with batteries and carrying case.	
		Single-piece,	
		stainless steel blade ensures integrity and minimizes corrosion	
		Complete set with four blades and casing and spare bulb (03)	
19	Glucometer		5
		Blood sample size: 1 to 2 microliters	
		Time for result with test strip in the meter: 5 seconds	
		Time for result with test strip initially outside of the meter: 8 seconds	
		Memory: 500 results with date and time	
		Averages: 7, 14, 30 and 90 days	
		Battery: One CR 2032 coin cell battery	
		Battery Life: Approximately 1,000 tests or one year	
		Dimensions: 98 x 47 x 19 mm	
		Weight: 50 g (including battery)	
		Measurement range: 0.6 – 33.3 mmol/L	
		Display: LCD	
		Auto Power Off: 30 or 90 seconds according to operating status	
		Data transfer: Via USB interface with Micro-USB cable	
		Strips 1000	
20	Oxygen concentrator		10
		Flow Rate: 0-8LPM	
		Purity: 93% (±3%)	
		Outlet Pressure: 0.04-0.07MPA	
		Sound Level: ≤43db - ≤50db	
		Power Consumption: ≤550W	
		LCD Display: Switch times, Operating pressure, Present Working Time,	
		Accumulating Time, pre-setting Time from 10mins to 40hours	
		Alarm: Power failure alarm, High & Low-pressure alarm, Temperature alarm	
21	Diathermy		4
		Microprocessor based electrosurgical unit for normal and under water cutting usages.	
		Automatic self-test function.	
		Operation in radio frequency range.	

Controls for cutting, coagulation, spray and blends.
 Monopolar cutting power of 300 watts.
 Bipolar cutting power of 80 watts.
 Mono polar coagulation power of 100 Watts.
 Bipolar coagulation power of 50 Watts.
 Spray coagulation mode.
 Different gradations of blending of cutting and coagulation power.
 Digital display of all controls and set values of cutting and coagulation power.
 Audio and visual alarms.
 220V, 50 Hz.

Accessories Monopolar handle with cord.
 Bipolar forceps with cord.
 Trolley having anti-static lockable wheels.
 Attachment for monopolar coagulation.
 Knife electrode.
 Surgical electrode, ball-shaped.
 Wire loop electrode.
 Needle electrode.
 Ball electrode.
 Bipolar coagulation forceps.
 Reusable silicon patient plate.
 Double paddle foot switch, explosion proof.
 Trolley with lockable antistatic castors.

22 Anaesthesia machine

2

The machine will equip to monitor the vital sign parameters and anesthetic agents during operation.
 3-gases O₂/N₂/AIR.
 Provision of communication port for sharing and transfer of data.
 Unit shall comprise of the following components:
 Electronically control, mixing and monitoring of anesthetic gases (O₂, AIR, and N₂) both by digits as well as virtual tubes.
 Built-in illumination system.
 Non-interchangeable pipeline inlets
 Pipeline & cylinder gauges for O₂, N₂O and AIR
 Central gas/ electronically driven unit.
 Pin index cylinder yokes for Oxygen & N₂O (One each), as backup.
 Gas outlet and O₂ flush control
 1 auxiliary O₂ outlet (preferably electronics).
 Two Lockable castors
 Stainless steel/fiber work surface
 Absorber bag support arm
 Integrated heated breathing system.

Three gas electronic digital flow meters for precise control and monitoring of gases.
 Drawer unit 5-6" high.
 Power outlet with 3 socket outlets to connect the auxiliary equipment.
 CO₂ absorber 800 – 1,500 gm or better with changeable during the surgery.
 Breathing tube (adult and paed).
 Mounts and Y-piece.
 Scavenging system passive / active type.
 Suction system.
 Anaesthesia Ventilator with minimum 15" Color Touch screen Screen.
 The ventilator shall be capable of ventilating Neonates /paediatric patients/Adult Patients)
 The ventilator shall have following features as a minimum requirement:
 Volume Mode
 Manual, spontaneous
 Pressure Mode (PCV)
 Pressure Support (PS)
 Pressure Control (PC)
 Pressure Controlled and pressure support Modes
 Synchronized volume controlled ventilation (SIMV) with PS
 PS with apnea back up
 Breathing Mode Selection (Standby / Volume / Spontaneous and Pressure)
 Built in Oxygen Monitor
 Inverse I:E ratio Capability
 Gas Specific Input Connectors (Air or Oxygen ISO or ANSI Standards)
 Tidal Volume from 5ml to 2000ml.
 Rate or Frequency 4 to 60 bpm
 PEEP 3 to 30 cm of H₂O.
 Inspiratory Pressure Limit
 Pressure and Volume (Spirometry) Loops / Curve.
 Oxygen / Electronically Driven
 Power Supply 220 VAC , 50 Hz
 Battery Backup (90 Minutes or more)
 Low / High FIO₂ Alarm
 Incorrect Rate or Ratio alarm
 Mains Failure alarm
 Low battery alarm.
 Oxygen Sensor: Paramagnetic
 Hypoxic Device.
 The ventilator shall be supplied with complete drive hose and power cable.
 Modular Vital sign monitor.
 Size of minimum 17" touch screen or more for display of vital sign parameters of neonates, infants and adults.
 Measurement of ECG
 NIBP with re-usable single hose cuff for neonates, child and small adults
 SpO₂ (Massimo Technology / Equivalent motion tolerant technology) with re-usable cable and sensors for neonates, infant, adult and small adults sizes (Qty 2 each).

HR
 Temperature with nasal probe
 Respiration
 Four Channel IBP
 Anesthetic Agent monitoring (with monitor or with in the anaesthesia machine)
 EtCO2 main / side stream (Complete with all sensors probes, reusable).
 Provision of communication port for sharing and transfer of data.
 220V, 50 Hz operated.
 Battery backup of at least 60 minutes

23	ECG machine			4
		12 Channel		
		Twelve Channel ECG on at least 5 inches LCD display		
		Automatic Operation		
		Variable gain: 1/2, 1, 2 cm/mV		
		Thermal recorder for printing out Twelve channels simultaneously.		
		Interpretation software.		
		Recording Trace speed: 10, 25 and 50 mm/sec,		
		Muscle artifact and AC (50Hz) interference filters		
		Defibrillator protection		
		Built-in AC operation & battery backup minimum 30mins		
		Paper size: A4/210mm		
		Built-in AC interference, noise filter and baseline drift control. Capability to interface with LAN/WLAN for data transfer		
		Paper Roll 50.		
		Complete with standard accessories, including separate patient cables for Adult, Paediatric & Neonatal use with re-usable electrodes		
		Mobile Cart		

Note:

The Biomedical Equipments shall meet the Certification (FDA/CE/MHLW) where applicable
 Country of Manufacture: Preferably - USA/Europe/Japan

ANNEX-B- TECHNICAL SPECIFICATIONS OF REGIONAL BLOOD CENTRE-QUETTA BALOCHISTAN

DAP- REGIONAL BLOOD CENTRE QUETTA

S.No	Equipment	Specification	QTY
1	Dia Pro A cross gel card (ABO) blood grouping & crass matching	Gel cards must comprise of 8 wells, Gel cards must be original gel based method glass beads shall not be accepted supply of cell panel and quality control shall be maintained (please attach calendar), LISS solution should be provided free of cost, work station and all OEM equipment to use the gel card on manual basis shall be provided by the winning bidder.	1
2	ZEBRA Barcode Printing	Height: 12.75" (224mm) Width: 10.6" (269mm) Depth: 19.50" (495mm) Weight: 36lb (16.33KG) Power supply Auto/detectable: 240VAC,50/60Hz 100V Agency approvals: ICE60950,EN55022 Class B En55024,EN61000-3-2EN61000-3-3 Barcode Modules "X" Dimension -Picked Fence (Non/Rotated) 203 dpi = 4.9mil to 49mil 300dpi=3.3ml to 33ml 600dpi=1.6mil to 16mil Ladder (Rotated) Orientation 203 dpi=4.9mil to 49mil 300dpi=3.9ml to 39ml 600dpi=1.6mil to 16mil Environmental Specifications Thermal Transfer = 5 to 40c Thermal Direct 0 to 40c	2
3	Ultra Plasma Freezer	Temperature Range: -20 to -80 Advance cooling system: High Capacity: Large (500 L to 1000 L) Voltage: 220-240 V 50/60Hz Warranty: 2 to 5 years	1

Note:

The Biomedical Equipments shall met the Certification (FDA/CE/MHLW) where applicable

Country of Manufacture: Preferably - USA/Europe/Japan

ANNEX-B- TECHNICAL SPECIFICATIONS OF MEDICAL EQUIPMENT FOR TRAMA CENTRE-QUETTA BALOCHISTAN
DAP- TRAUMA CENTRE QUETTA

Operation Theatre Equipment					
S/No.	Particular	Department/DELIVERY POINT	Specs	Size	QTY
			RPM	2600/4500	
			Drilling Cap	3/8"	
			Free speed		2600
			Overall Length	216 mm	
			Air inlet	1/4"	
			Air Hose	3/8"	
			Air Consumption	170L/min	
			Net Weight	0.9Kgs	
	Pneumatic Drill Machine				1
2	Maxillofacial Surgery Set	Maxillofacial	standard		4
3	Minor Surgery Set	Mixed	standard		4
			· Efficient plunger pump		
			· Have negative pressure adjustable valve and check valve, be capable of adjusting safe pressure, and selecting arbitrary value in safe pressure range		
			· Pedal switch is controlled by low voltage, safe and convenient		
			· Limit negative pressure value: $\geq 0.09\text{Mpa}$ under standard atmospheric pressure		
			· Air suction rate: $\geq 20\text{L}/\text{min}$ (at the end), $\geq 30\text{L}/\text{min}$ (at the pump) under standard atmospheric pressure		
			· Bottle: 2500ml \times 2 Noise: $\leq 60\text{dB}$		
4	Suction Machines (Heavy Duty)	Mixed			2
			· Portable Cervical Device		
			· This cervical device lifts and hold very softly		
			· the user's head. It is usually used to ease the		
			· pain and muscle tension (neck, shoulders and		
			· back) caused by the osteoarthritis.		
			· It includes:		
			· Harness Foam-Padded with hook to be adjusted.		
			· Pulleys.		
			· Rope traction.		
			· S-Hook		
			· Weight-adjusting Bag (max 9Kg).		
5	Cervical Traction Set	Neuro			2
6	Cervical Traction Tongs	Neuro			2
			· Kilner Scissors 120mm		
			· Mosquito Artery Forceps 125mm Straight		
			· Cawthorne Hook 1.5mm 90 degree		
			· Adson Periosteal Elevator		
			· BP Handle No. 3		
			· BP Handle No. 7		
			· Hudson Conical Burr		
			· Mckenzie Skull Perforator Drill		
			· Jefferson Retractor, Self-Retaining 140mm		
			· Mayo-Hegar Needle Holder 150mm Straight		
			· Hudson Brace		
			· Adson Dissecting Forceps Toothed 120mm		
			· Hudson Perforator 12mm Cutting Diameter (included only in NBT0501-H)		
7	Craniotomy/ Neurosurgery Set	Neuro			2
8	Spinal Surgery Set	Neuro			2
9	K-Wire Cutters (Orthopedic Pliers)	Ortho	Double Action Pin Wire Cutter		4
			Battery operated		
			Battery Capacity: 2100mAh		
			Speed: 0-1200 (r.p.m)		
			Sterilization: 135 Centigrade		
10	Orthopaedic Drill Machines (with Accessory)	Ortho			2
11	Orthopaedic Surgery Set (Basic)	Ortho			4
12		Ortho	· 1 Lister Bandage Scissors 6"		
			· 1 Sponge Holding Forceps 9.5"		
			· 1 Needle Holder 8"		
			· 1 Mayo Scissors Str. 7"		
			· 1 Plain Diss. Forceps 7"		
			· 1 Volkmann Retractor		
			· 1 Waitlaner Self Retaining Retractor		
			· 1 Bristow Bone Elevator		
			· 2 Hohmann Retractor		
			· 1 Liston Bone Cutting Forceps 8"		
			· 1 Bone Nibbler		
			· 1 Bone Hook		
			· 1 Freer Elevator		
			· 1 Bone Mallet		
			· 1 Stille Bone Chisel		
			· 1 Stille Bone Gouge		
			· 1 Stille Bone Osteotome		
			· 1 Self Cantering Bone Holding Forceps		
			· 1 Verbrugge Bone Holding Forceps 10"		
			· 1 Bone Reduction Forceps		
			· 1 Volkmann Bone Scoop		
			· 2 Senn Muller Retractor Sharp/Blunt		
			· 1 Instruments Box Stainless Steel		
	Orthopaedic Surgery Set (General)				5
13	Orthopaedic Surgery Set (Mini)	Ortho			
14		Surgery	· 1 Kidney Tray 10"		
			· 5 Sponge Holding Forceps 9.5"		
			· 10 Towel Forceps 5"		
			· 2 Right-angle Forceps		
			· 1 Plain Dissecting Forceps 6" Fine		
			· 1 Plain Dissecting Forceps 6"		
			· 1 Plain Dissecting Forceps 8"		
			· 1 Toothed Dissecting Forceps 6"		
			· 1 Toothed Dissecting Forceps 8"		
			· 1 Adson Diss. Forceps Plain		
			· 1 Adson Diss. Forceps Toothed		
			· 5 Mosquito Artery Forceps Str. 5"		
			· 5 Mosquito Artery Forceps Cvd. 5"		
			· 5 Artery Forceps Str. 6" Fine		
			· 5 Artery Forceps Cvd. 6" Fine		
			· 5 Artery Forceps Str. 8"		
			· 5 Artery Forceps Cvd. 8"		
			· 2 Allis Tissue Forceps 6"		
			· 2 Babcock Tissue Forceps 7"		
			· 2 Duval Tissue Forceps 8"		
			· 2 Lane Tissue Forceps		
			· 1 Denis Brown Intestinal Forceps		
			· 4 B.P Handle # 3, 4		

		<ul style="list-style-type: none"> - 1 Needle Holder 6" - 1 Needle Holder 8" - 1 Mayo Scissors Str. 7" - 1 Mayo Scissors Cvd. 7" - 1 Metzenbaum Scissors Str. 9" - 1 Metzenbaum Scissors Str. 7" - 1 Metzenbaum Scissors Cvd. 7" - 1 Stitch Scissors - 1 Dressing Scissors Str. B/S - 1 Lister Bandage Scissors - 1 Aneurysm Needle - 4 Probe 8" - 1 Volkman Scoop - 1 Watson Cheyne - 1 MacDonald Elevator - 1 Durham Dissector - 1 Sinus Forceps 7" - 1 Yankuer Suction Tube - 2 Langenbeck Retractor S.L. - 1 Morris Retractor 2" - 1 Balfour Abdominal Retractor - 1 Long Blade Retractor - 1 Travers Retractor - 1 Senn Muller - 1 Single Hook Retractor - 1 Double Hook Retractor - 1 Butterfly Probe - 1 Instrument Box SS 20'X8'X5" 			
	General Surgery Set			5	
15		Thoracic <ul style="list-style-type: none"> - 1 Tuttle Thoracic Thumb Forceps 23cm - 1 Nelson Thoracic Thumb Forceps 6x7 teeth 23cm - 1 Mixture Thoracic Forceps 25cm - 1 Mixture Thoracic Forceps 28cm - 2 Robert Artery Forceps - 2 Hopkins Blacklock - 2 Duval Tissue Forceps - 1 B.P Handle No.4L - 1 Thomson Walker Needle Holder - 1 Metzenbaum Scissors 9" - 1 Nelson Scissors 11" - 1 Semb Pneumectomy Clamp - 1 Price Thomas Rib Raspatory - 1 Morrision Davis Rib Raspatory - 1 Tudor Edwards Spaecula - 1 Semb Periosteal Elevator - 1 Sellar Rib Approximator - 1 Semb Rib Shear - 1 Bethune Rib Shear - 1 Finchitto Rib Spreader - 1 Instruments Box S.5 			
	Thoracotomy Set			2	
16		Vascular <ul style="list-style-type: none"> 1 Operating Scissors 1 Mayo Dissecting Scissors 1 Sklar Edge™ Tungsten Carbide Mayo Dissecting Scissors 1 Mayo Dissecting Scissors 1 Sklar Edge™ Tungsten Carbide Mayo Dissecting Scissors 2 Metzenbaum Scissors 2 Sklar Edge™ Tungsten Carbide Metzenbaum Dissecting Scissors 1 Metzenbaum-Nelson Dissecting Scissors 1 Metzenbaum Dissecting Scissors 1 Sklar Edge™ Tungsten Carbide Metzenbaum Dissecting Scissors 1 Suture Wire Cutting Scissors 1 Sklar Edge™ Tungsten Carbide Wire Cutting Scissors 6 Halsted Mosquito Forceps 6 Crile Forceps 6 Coller Haemostatic Forceps 6 Rochester-Pean Forceps 6 Rochester-Ochsner Forceps 2 Rochester-Ochsner Forceps 8 Backhaus Towel Clamp 4 Scalpel Handle #3 2 Scalpel Handle #7 2 Scalpel Handle #3l 6 Foerster Sponge Forceps 4 Mayo-Hegar Needle Holder 4 TC Mayo-Hegar Needle Holder 4 Mayo-Hegar Needle Holder 4 TC Mayo-Hegar Needle Holder 2 Mayo-Hegar Needle Holder 2 TC Mayo-Hegar Needle Holder 2 Dressing Forceps 2 Dressing Forceps 2 Tissue Forceps 1 Tissue Forceps 2 Adson Tissue Forceps 6 Allis Tissue Forceps 2 Allis Tissue Forceps 2 Allis-Adair Forceps 2 Babcock Forceps 4 Mixter Forceps 4 Gemini Clamp 2 Gemini Forceps 1 Poole Suction Tube 1 Poole Suction Tube 2 Yankauer Suction Tube 4 Senn Retractor 1 US Army Retractor 1 Roux Retractor 1 Green Retractor 2 Cushing Nerve and Vein Retractor 2 Richardson Retractor 2 Richardson Retractor 2 Richardson Retractor 2 Deaver Retractor #1 	<ul style="list-style-type: none"> Straight Sharp/Blunt 5-1/2" Straight 6-3/4" Straight 6-3/4" Curved 6-3/4" Curved 6-3/4" Delicate Curved 7" Delicate Curved 7" Curved 8" Curved Delicate 9" Curved 9" Angled Serrated 4-3/4" Serrated Angled 4-3/4" Curved 5" Curved 5-1/2" Curved 6-1/4" Curved 6-1/4" Straight 1x2 Teeth 6-1/4" Straight 1x2 Teeth 7-1/4" 5-1/4" 6-1/4" Serrated 9-1/2" 6" Serrated Tungsten Carbide 6" 7" Serrated Tungsten Carbide 7" 8" Serrated Tungsten Carbide 8" Serrated 5-1/2" Serrated 8" 1x2 Teeth 5-1/2" 1x2 Teeth 8" 1x2 Teeth 4-3/4" 5x6 Teeth 6" 9x10 Teeth 7-1/2" 9x10 Teeth 6-1/2" 6-1/4" Right Angle 7-1/4" Delicate Angled 6-1/4" Delicate Right Angle 8" Straight 30 French With Slip On End Curved 23 French With Slip On End Standard Size Stainless Steel Double End Sharp 6-1/4" Double End (Pack of 2) 8-1/4" Double End (Set of 3) Fenestrated 8-1/2" 9" With Sklar Grip Handle Small 3/4" x 1" Blade - 9-1/2" With Sklar Grip Handle Medium 1" x 1 1/4" Blade, Size 9-1/2" With Sklar Grip Handle Large 1-1/2" x 1-1/2" Blade Size 9-1/2" Without Handle 1" - size 12" 		

		1 Deaver Retractor #3	Without Handle 1-1/2" - size 12"
		1 Deaver Retractor #4	Without Handle 2" - size 12"
		2 Deaver Retractor #5	With Sklar Grip Handle 3" - size 12"
		1 Zalkind Ribbon Retractor	Malleable 1" x 13"
		1 Zalkind Ribbon Retractor	Malleable 1-1/2" x 13"
		1 Zalkind Ribbon Retractor	Malleable 2-1/2" x 13"
		2 Volkman Retractor	Four Prong Blunt 8-1/2"
		4 Weitlaner Retractor	Sharp 3x4 Teeth 6-1/2"
		2 Adson Forceps	Straight Half-Serrated Jaw 7-1/4"
		4 Adson Forceps	Curved Half-Serrated Jaw 7-1/4"
		4 Crafoord Forceps	Curved Serrated 7"
	Vascular Surgery Fine Set		3
17	I.C.U / Ward	Display	
		1 Biphasic transthoracic (external) defibrillator with LCD color display Synchronized output with ECG.	
		2 Energy selection & delivery on control panel and paddles for external defibrillation.	
		3 Energy selection and delivery on control panel for internal defibrillation.	
		4 Charging Indicator	
		5 The energy range should be adjustable for peds and adults up to 200 Joules.	
		6 Charging Time for full energy should be less than 05 sec	
		7 Screen Size of approx. 5 inch coloured.	
		8 Display of HR, ECG through paddles and Lead I,II & III patient cable.	
		9 Built in recorder for printing of full summery on standard 50mm paper.	
		10 Alarms for High and low Heart rate, low battery warning.	
		11 Built-in Rechargeable battery with charger for minimum 50 shocks at max energy.	
		12 Auto tester/self check.	
		13 External Paddles (Adult, Paed, Neonate)	
		14 AED facility with cable.	
		15 Pacing facility	
	Cardiac Defibrillator	16 AC 220V / 50Hz operated.	2
18		6 Standard parameters: ECG, RESP, NIBP, SPO2, 2-TEMP, PR/HR.	
		12.1" high resolution color TFT LCD display. Upto 12 waveforms	
		Real time S-T segment analysis, pace-maker detection.	
		Indication of incorrect manipulation and malfunction analysis.	
		Patient info input management function	
		Multi-lead ECG waveforms display in phase.	
	Patient Monitor	NIBP dual over voltage drift control	10

Note: The Biomedical Equipments shall met the Certification (FDA/CE/MHLW) where applicable
Country of Manufacture: Preferably - USA/Europe/Japan