

**OFFICE OF THE EXECUTIVE DISTRICT OFFICER HEALTH ATTOCK**

No. 759-L-8 EDO (H) Attock Dated 05 /03/2015

To

- |     |                      |    |                        |
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| 4.  | Eastern Medical.     | 20 | Lahore Pickup.         |
| 5.  | Sigma International. | 21 | Apex Enterprises.      |
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| 9.  | Vertex Medical.      | 25 | Ultradant Health Care. |
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Subject:

**TECHNICAL EVALUATION REPORT FOR PURCHASE OF BIO MEDICAL EQUIPMENT/ HOSPITAL FURNITURE/INSTRUMENTS.**

I am directed to refer to the subject cited above and to state that Technical Evaluation Report pertaining to procurement for Purchase of Bio Medical Equipment/ Hospital Furniture/ Instruments has been uploaded on official website of the Punjab Health Department i.e "health.punjab.gov.pk". In case of any grievances, you are requested to submit your representation accordingly upto 24-03-2015 till 12:00 noon. A meeting of Grievance Committee has been scheduled to be held on 24-03-2015 till 03:00 p.m. in the committee room EDO (Health) Office Attock.

Executive District Officer  
Health Attock

No. and Date Even.

**Copy forwarded for information to:**

1. The Secretary Health Government of the Punjab Health Department.
2. The District Coordination Officer Attock.
3. The District Officer Coordination Attock.
4. The Executive District Officer (F&P) Attock
5. The Executive District Officer (Agriculture) Attock.
6. The Deputy District Officer Health Attock.
7. The Manager Director PPRA Lahore.
8. Mr. Abdul Wahab Project Coordinator/Incharge ICT Cell with the request to upload the same on official website of Health Department.
9. Store Keeper of this Office.

Executive District Officer  
Health Attock

**Technical Comparative /Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot #1	Furniture	Qazzafi Surgical	Aero Tech	Apex Enterprises	Tameer International
1.	<b><u>Fiber Glass sitting chairs(set of four chairs)</u></b>	Yes	Yes	Yes	-
	It is mandatory to mention the descriptive technical specifications of office furniture in the offer.				
	Sheesham Wood (Standard Size)				
	Locally Made as per approval of sample				
2.	<b><u>OFFICE TABLE</u></b>	Yes	Yes	Yes	-
	5x3x2 ½				
	Sheeshmvinear board Lockable drawers 2				
	One lockable cabinet Matt finish wood colour				
	Locally Made as per approval of sample				
3.	<b><u>OFFICE CHAIR</u></b>	Yes	Yes	Yes	-
	It is mandatory to mention the descriptive technical specifications of office furniture in the offer.				
	Sheesham Wood (Standard Size)				
	Locally Made as per approval of sample				
4.	<b><u>FOWLER BED</u></b>	Yes	-	Yes	Yes
	Fowler Bed with Foam Mattress With bed side lockers, over bed food table, IV stand and bed head Tickets				
	<b><u>Overall dimension</u></b> 200(L) x90 (W) x55 (H) Cms (Approx)				
	<b><u>Main frame</u></b>				
	Made of 16 SWG Pipe 2 1/2 x 1 1/4 rectangular pipe section welded together at corners. End of pipe if any be covered with special plastic bushes				
	<b><u>Mattress frame</u></b>				
	Should be in 4 parts the 2 <sup>nd</sup> part fixed and 3 moveable parts made of the main				
	frame by means of bolt having a special ABS plastic bushes of 1" x 7/8"				
	<b><u>Section sizes (approx)</u></b>				
	Head raise part 80 x 77 cms				
	Fixed part 80x28 cms				

	Knee bridge part 80 x 55 cms				
	Leg rest part 80x51cms				
	Bedding area covered with 18 SWG M.S sheet = 3" x 1" x 1/2" folded inside welded in bed section giving gap of 1 1/2 approx Head raise Knee bridge and fowler position be made by means of two cranks. The bed should be made of fixed pipe of 2" round 16 SWG having bushes of ABS material.				
	The moving lifting pipe at both places be of 16 SWG 1.1/2 rounded chrome plated pipe across Head part with triangular brackets of 3/8" thick x 1 1/4 x 8" steel plate at ends panel				
	The foot part should have vascular position with a cob mechanism with roller railing for moving of foot part in knee bridge position.				
	A surface bearing must be fixed for friction free movement the handle of the cranks should be retractable and collapsible and be made in one piece of 1/2 steel rod . cranks main screw made of 7/8 x 16" and 12" for knee steel rod with square / ACMI type of threading and locking mechanism for extreme position.				
	Hand and foot parts of the mattress frame have mattress stay steel brackets joined by means of nuts bolts for keeping the mattress in proper place. Head and foot pansies 1 1/4" rounded rectangular pipe 16 SWG bended in round sharp at both end high quality SS20 G) Panels the panels should be welded with the main frame.				
	<b><u>Foundation frame</u></b>				
	Made of 16 SWG 1 1/4 x 2 1/2" triangular pipe welded together at corner with the provision of IV rod SS 5/8 dia ( 36" to 50" ) and foot end should have hooks for urine bag hanging on both sides and N.G bag hook at head end of				
	both sides				
	<b><u>Bumpers</u></b>				
	Four 4" rounded bumpers of black colour made of flexible PVC material at all corners.				
	<b><u>Castors</u></b>				
	5" ball baring rust proof, water proof high quality electrically conductive wheel castor with individual breaks system.				
	<b><u>Side Rails</u></b>				
	Detachable and collapsible made of 1" rounded steel pipe 16 SWG				

	<b><u>Mattress</u></b>				
	Mattress foam 4" thickness first quality having rexene cover of best qualitywith vents				
	<b><u>IV STAND</u></b>				
	Stainless steel hanger with rod to be attached with the bed				
	Locally Made as per approval of sample				
5.	Cabinet Instrument and cupboards, 30"x24"x14" having 3 glass shelves above and cupboard below, 20"x24"x14 with I shelf.	Yes	-	Yes	Yes
6.	Cabinet Instrument, 2 glass shelves glass door and sides, 16"x14"10" with brackets to fix to wall	Yes	-	Yes	Yes
7.	<b><u>EXAMINATION TROLLEY</u></b>	Yes	-	Yes	Yes
	Made in 2 parts A) Stretcher Removable B) Base Trolley				
	Made from 1-1/4" x 1-1/4" square M.S pipe 16 SWG having MS sheet 20 SWG in bedding area with back rest adjustable to 60 degree by means of comb/racket mechanism.				
	Size 85 cm (H) x 60 cm (W) x 195 cm (L)				
	The bedding area covered by 2" first quality foam Rexin cover having side rail collapsible, stretcher should have roller underneath. Stretcher should also have four reflecting bumper. I.V. Rod provision on both sides and urine bag hook.				
	Having 6 inch wheels casters two with brake.				
	Finish All metal parts to be chemically degreased/derusted through phosphate treatment and covered with electro stick polyester powder coating.				
	Locally Made as per approval of sample				
8.	<b><u>Revolving Stool ( Stainless Steel)</u></b>	Yes	Yes	Yes	Yes
	Stool to be manufactured from mild steel with 30 cm dia.				
	Spun seat for height adjustment.				
	Gas spring with lever for height adjustment.				
	To be mounted on four 5 cm antistatic castors.				
	To have antistatic seat pad.				
	Local Made as per export quality				
	Locally Made as per approval of sample				
9.	<b><u>Wheel Chair</u></b>	Yes	-	Yes	Yes

	Frame made of steinless steel tubing, chromoplated. Bicycle tyre wheels, all steel, with additional hand rail for self propelling.				
	Rubber tubeless tyres, with a single handbrake provided for both wheels, front swivel casters, rubber-tyred with heavy duty bearings. Push handles with non-slip rubber/plastic grips to be integral part of the frame.				
	Cassette Aluminum folding foot boards adjustable to two positions. Back size 16" x 16" made of best quality Pak. Made rexine, double fold, padded with ½" thick foam. Colour of rexine black/dark brown. Seat 16" x 16" upholstered on Deodar wood planks ¾" thick with 4", thick superior quality foam. Covered with best quality washable locally made rexine dark brown/black colour foam should be out of any of the following makes:-				
	1. Molty Foam of Master. 2. Supreme Foam of Diamond. 3. Chairman Foam of Mehran. 4. Unifoam of United.				
	The seat shall be embedded in 1" x 1" x 3/16" M.S Angle frame reinforced with 2 cross M.S strips 1" wide 3/16" thick. Seat to be secured to the M.S Angle frame with screws from underneath seat to be protected on the sides by a skirt guard.				
	<u>Specifications</u>				
	a. Seamless Tube M.S 1" dia 18 gauge. b. Wheels cycle type 24" dia.				
	c. Wheel tyres solid tubeless 1" thick neoprene rubber.				
	d. Casters 5" dia with solid neoprene rubber tyres.				
	e. Skirt guard 22 gauge stainless steel. 17" x 4 ½". f. Seat 16" x 16".				
	g. Back 16" x 16". h. Propelling hand rail: 20" dia. ¾" pipe. Chrome plated				
	Locally Made as per approval of sample				
10.	<b><u>Stretcher Trolley</u></b>	Yes	-	Yes	Yes
	Specifications:				
	Made in 2 parts (a) stretcher removable (b) Base trolley				
	Local with 10 years warranty				
	Made in two parts.				
	➤ Stretcher removable				
	➤ Base trolley, made from 1-1/4" x 1-11/4" square M.S Pipe 16 degree by means of mechanism.				

	Size: 86cm (H) x 60cm (W) x 195cm (L)				
	➤ The bedding area covered by 2" ist quality foam Rexene cover.				
	➤ Having side rail collapsible.				
	➤ Stretcher also have four reflecting bumpers.				
	➤ I.V rod provision on both sides and urine bag hooks.				
	➤ Having 6" wheel casters two with brake				
	With utility basket.				
	Finish:				
	All metal parts to be chemically degreased/derusted though treatment and covered with electrostatic powder coating.				
11.	<b>Dispensing table</b>	Yes	-	Yes	Yes
	Best Quality 5x3x3 Frame Steel top Shesham Wood (as per Woodward Standard Sizes)				
12.	<b><u>DELIVERY TABLE</u></b>	Yes	-	Yes	Yes
	Frame epoxy-powder-coated steel				
	Bed base 3-sectional, epoxy-powder-coated Steel				
	Dimensions max. 1939 mm, max. width 910 mm				
	Recommended best quality mattress covered with best quality Rexene:				
	725 x 1100 +370 mm (back and seat section), 725 x 310				
	Matress 80mm thick foam, cover of comfortable and flexible material with 02 Step.				
13.	<b><u>EXAMINATION COUCH</u></b>	Yes	Yes	Yes	Yes
	Made of 1-1/4"x1-1/4" square pipe 16 SWG bended at all corners not welded. Back rest adjustable + 60 & -20 degree by means of lever ratchet mechanism.				
	Bedding area ½" Lassani Wood upholstered with 2" foam Ist quality having density of 32-36 Kg/m3 and good quality Rexene.				
	Size: 24" x 72" x 32".				
	Finish: All metal parts to be chemically degreased / derusted though phosphate treatment and covered with electrostatic polyester powder coating.				
	Locally Made as per approval of sample				
14.	Almirah Steel 6X3X1 ½	Yes	Yes	Yes	Yes

	3 Shelf 02 door central lockable				
15.	Iron Bench 4 Seater	Yes	Yes	Yes	Yes
	Top Sheasham Wood (Standard Sizes)				
16.	<b><u>BED SIDE LOCKER</u></b>	Yes	Yes	Yes	Yes
	Over all size 16" (40 cm)D x 20"(80 cm) W x 32" (80 cm)H from floor including 3" feet made 20 gauge MS sheet and top gauge stainless steel sheet locker size 16" (40 cm) D20" (50 cm) W x 14" (35 cm) H with door having 2 hangers of 3" size and chrome plated handle 4" long sheet of matel door fitted with catches 16" (40 cm) D x 20" W x 4" H with chrome plated similar handle as				
	above draws 20 gauge MS sheet fitted on the rollers. Remaining height between for easy cleaning from front. Finished red oxide under coat and bone white powder coated.				

**Lot#2****Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments****EDO Health Attock**

Lot#2

Item#1

Name OF Item: Adult Cysto Resectoscope &amp; Uretherotome Set

Company Name	<b>Endo-Kare</b>
Models	<b>OES Pro</b>
Manufacturer	Olympus
Country Of Origin	Japan
Specification	Yes
Adult Cysto Resectoscopy & Urethrotome Set	Yes
Telescope : 30 degree Full HD. Autoclave able	Yes
Cystoscopy sheath with luer lock connector of two different size 20fr and 17 Fr.	20 Fr & 19.8 Fr
Telescope Bridge with two instrument channel.	Yes
Flexible grasping forceps. 7Fr	Yes
Biopsy forceps 7Fr	Yes
Optical rigid biopsy forceps.	Yes
Elik evacuator	Yes
Bladder Syringe. 100cc	Yes
<b>Urethrotome :</b>	<b>OES-4000</b>
Telescope 0 Degree	Yes
Urethrotome sheath	Yes
Cold knife round and straight	Yes
Working element for urethrotome.	Yes
Working element set.	Yes
Cutting lope 24fr, 12Nos.	Yes
HF cord 3m Long.(one extra)	Yes
<b>Resctosope.</b>	<b>OES-4000</b>
Working element active.	Yes
Cutting loop angled.	Yes
Coagulation electrode blunt type.	Yes
Unipolar HF cord 3m (one extra)	Yes
Resctosope Sheath.	Yes
Telescope Bridge with one lockable instrument.	Yes
Telescope 30degree.	Yes
	<b>Responsive</b>



**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2

Item#2

Name OF Item: Paeds Cysto Resectoscope & Urethrotome Set

Company Name	<b>Endo-Kare</b>
Models	<b>OES Pro</b>
Manufacturer	Olympus
Country Of Origin	Japan
Specification	Yes
Peads Cysto Resectoscopy & Urethrotome Set	Yes
· Telescope: 30 degree Full HD. Autoclave able 2.1mm or more.	Yes
· Cystoscopy sheath with luer lock connector of two different size Telescope Bridge with two instrument channel.	Yes
· Flexible grasping forceps.	Yes
· Biopsy forceps	Yes
· Optical rigid biopsy forceps.	Yes
· Elik evacuator	Yes
· Bladder Syringe. 100cc	Yes
<b>Urethrotome :</b>	Yes
Telescope 0 Degree	Yes
· Urethrotome sheath	Yes
· Cold knife round and straight	Yes
· Working element for urethrotome.	Yes
· Working element set.	Yes
· Cutting lope. (6 No.)	Yes
· HF cord 3m Long. (one extra)	Yes
<b>Resctosope.</b>	Yes
· Working element active.	Yes
· Cutting loop angled.	Yes
· Coagulation electrode blunt type.	Yes
· Unipolar HF cord 3m (one extra)	Yes

· Resctosope Sheath.	Yes
· Telescope Bridge with one lockable instrument.	Yes
· Telescope 30 degree.	Yes
	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attack**

Lot#2  
Item#3  
Name OF Item: Adult Nephroscope

Company Name	<b>Mediland Pakistan</b>	<b>Endokare</b>
Models	FCN-15X	CYF-5
Manufacturer	Pentax	Olympus
Country Of Origin	Japan	Japan
Specification		
Adult Nephroscope Set	Yes	Yes
<b>Features</b>		
Field of view should be 125° in air 83 ° in water	125° Air, 83° Water	120°
Tip deflection Up 180° Down 130 °	Yes	210°/120°
Insertion tube diameter 4.8 mm	5.1 mm	5.5 mm
Instrument channel diameter 2.2 mm	2.1 mm	2.4 mm
Working length 350 mm	Yes	380 mm
Complete with standard set of accessories	Yes	Yes
Portable with miniature LED light source	BS-LL1	WA91502A
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#2

Item#13

Name OF Item: Stone Punch

Company Name	Endo-Kare
Models	Punch
Manufacturer	Olympus
Country Of Origin	Japan
Specification	
Stone punch working element.	Yes
Punch sheath with central valve including connecting tubes for in and outflow, 25 Fr straight beak with obturator.	Yes
	Responsive

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2

Item#6

Name OF Item: Laparoscopic Surgery Set with all accessories

Company Name	<b>Mediland Pakistan</b>	<b>Endokare</b>
Models	<b>PV470</b>	<b>OTV-S190</b>
Manufacturer	Aesculap B Braun	Olympus
Country Of Origin	Germany	Japan
Specification		Yes
Purpose of Equipment :		Yes
Laparoscopic Tower Latest Version for use in Minimum Invasive Surgery	Yes	Yes
Full HD Camera System with Latest Technology for brilliant image display	Yes	Yes
Full HD 3 Chip Camera / Full HD 1080p (60 f / sec)	<b>CMOS (Major Deviation)</b>	Yes
CCU Camera HEAD COMPATIBILITY 1CCD / 3 CHIP AND FULL HD	<b>PV 472</b>	<b>CH-S190-XZ-E</b>
Camera Resolution 1920 x 1080 Pixel	Yes	Yes
Video Signal Outputs	Yes	Yes
2x DVI-D 1080p (50/60 Hz), 2x HD-SDI	Yes	Yes
Camera Head with Zoom and Focusing Coupler	Yes	Yes
3-4 Buttons on Camera Head with 5-6 Functions	Yes	Yes
Shutter Speed 1/100 - 1/50,000s or better	Yes	Yes
Digital & Optical Zooming Capability (Parfocal Zooming)	Yes	Yes
		Yes
<b>Light Source</b>	<b>OP940</b>	<b>CLL-V1</b>
LED 175 Watts or More	Yes	Yes
Fiber Optic Light Cable	Yes	Yes
Facility to Control with Camera Head	Yes	Yes
Light intensity should be continuously adjustable	Yes	Yes
Xenon Light Source 300 Watt (Optional)	<b>Not Quoted (Major Deviation)</b>	<b>CLV-S190</b>

<b>HIGH FLOW INSUFFLATOR</b>	<b>PG-120</b>	<b>UHI-E</b>
Maximum Gas Flow 20 Litre / min or more	Yes	Yes
Abdominal Pressure Range 3 - 25 mm Hg	Yes	Yes
Central Information Display Available	Yes	Yes
Protection Level acc. to EN 60601-1 BF / Type CF	Yes	Yes
Integrated Gas Pre-heating	Yes	Yes
		Yes
<b>Ultra High Definition Medical Grade Monitor 26" (or more) with Bright LCD / LED</b>	<b>PV959 26"</b>	<b>Radinace G2 HB</b>
Panel Quality Active Matrix TFT	Yes	Yes
Brightness (cd/m <sup>2</sup> ) 800	Yes	Yes
Monitor from same manufacturer (Optional)	Yes	<b>OEV-262H</b>
Resolution Pixel 1920 * 1080 P (Full HD) or better	Yes	Yes
Viewing Angle 178 <sup>0</sup> / 178 <sup>0</sup> ,	Yes	Yes
Aspect Ratio 16:9	Yes	Yes
Video Signal Inputs:	Yes	Yes
2 * DVI (DVI - D & DVI - I),	Yes	Yes
2 * SDI / HD – SDI (BNC),	Yes	Yes
S – Video (DIN – 4 or 2 * BNC), 1*Composite	Yes	Yes
Video Signal Outputs:	Yes	Yes
DVI (DVI – D),	Yes	Yes
SDI / HD – SDI (BNC), 1*Composite	Yes	Yes
	Yes	Yes
<b>TELESCOPE FULL HD 10 mm,0 Degree, Lenght 330 mm, Autoclaveble</b>	<b>PE889A</b>	<b>WA53000A</b>
Trocar Size 5.5 mm, Lenght 110 mm Reusable.	Yes	Yes
Trocar Size 10 mm, Lenght 110 mm Reusable.	Yes	Yes
Metzenbaum scissor, curved left size 5mm length 310mm	Yes	Yes
Maryland fixation and dissecting forceps, curved size 5mm length 310mm	Yes	Yes
Fixation and dissecting forceps size 5mm length 310mm	Yes	Yes
Grasping forceps (2x3) teeth 5mm length 310mm	Yes	Yes
Universal grasper size 5mm length 310mm	Yes	Yes
Reusable Monopolar Cable 4mm Diameter, length 12 Ft.	Yes	Yes
Verses Insuflation Needle diameter 2.1mm Length 120mm, Reusable	Yes	Yes
Ceramic electrode tip L-hook with monopolar handle size 5mm length 310mm	Yes	Yes
Reducing sleeve	Yes	Yes
Ligature Clip Medium Large, 10 mm, 370 mm	Yes	Yes
Suction / Irrigation Cannula	Yes	Yes
Durogrip TC Needle Holder, curved left size 5mm length 310mm	Yes	Yes

The system should contain all the above accessories in Integrated or as separate accessories.	Yes	Yes
Mentioned Equipment should operational with all cable and required standard accessories.	Yes	Yes
Power supply	Yes	Yes
Power input to be 220-240VAC, 50Hz, /440 V	Yes	Yes
Resettable over current breaker shall be fitted for protection	Yes	Yes
Compatible UPS with at least 30 minutes of back up time	Yes	Yes
Documentation / Maintenance Kits	Yes	Yes
User manual in English (Three copies).	Yes	NQ
Service manual (including Maintenance / Schematics & calibration) in English (Three copies).	Yes	NQ
List of important spare parts and accessories with their part number and costing available in stock	Yes	Yes
with the supplier.	Yes	Yes
	<b>Non-Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2

Item#7

Name OF Item: Endoscopic Set (Upper and Lower GIT)

Company Name	<b>Mediland Pakistan</b>	<b>Endo-Kare</b>	<b>Vertex Medical</b>
Models	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Manufacturer	Pentax	Olympus	Fuji Film
Country Of Origin	Japan	Japan	Japan
Specification			
Endoscopic Set (Upper and Lower GI)	Yes	Yes	Yes
1- Video Gastroscope (01)	<b>EG-290KP</b>	<b>GIF 150</b>	<b>EG580RD</b>
Anti-loop connector	NQ	NQ	NQ
Forward water jet system	NQ	NQ	NQ
DSP Technology	NQ	NQ	NQ
Channel Diameter (mm) 2.8	Yes	Yes	3.2 mm better
Insertion Tube Diameter (mm) 9.8	Yes	Yes	Yes
Working Length (mm) 1050	Yes	1030 mm	1100 mm better
Angulations (Up/Down) 210/120	Yes	210 / 90	210 / 90
Angulations (Right/Left) 120/120	Yes	100/100	100/100
Angle of View 140°	Yes	Yes	Yes
Range of observation 5-100mm	Yes	Yes	3-100 mm better
Working length: 1050mm	Yes	1030	1100 mm better
<b>Accessories:</b>			
Biopsy forcep, cleaning brush, venting cap	NQ	Yes	Yes
<b>2- Video Colonoscope (01)</b>	<b>EC380LKP</b>	<b>CF-150</b>	<b>EC-530WL3</b>
Anti-loop connector	NQ	NQ	NQ
Forward water jet system	NQ	NQ	NQ
DSP Technology	NQ	NQ	NQ
Angle of View 140°	Yes	Yes	Yes
Focal Range (mm) 3-100	Yes	Yes	Yes

Angulations (Up/Down) 180°/180°	Yes	Yes	Yes
Angulations (Right/Left) 160°/160°	Yes	Yes	Yes
Insertion Tube Diameter (mm) 13.2	Yes	12.8 mm	12.8 mm
Instrument Channel Diameter (mm) 3.8	Yes	3.7 mm	Yes
Working Length (mm) 1500F /1700L	Yes	1680 mm	1690 mm
Total Length (mm) 1823 (F) / 2023 (L)	Yes	2005 mm	1990 mm
Endoscopic Video Processor	i-5000	CV-170	VP4450
Xenon Light Source 300 Watts or more	300 Watts Xenon	<b>LED (Major Deviation)</b>	XL4450
Minimum 19 Monitor HD	LMD-1951MD	21" HD	21" LED HD Elite HP
Cart (original)	Endo 350 (Original)	Local (Minor Deviation)	Local (Minor Deviation)
	<b>Responsive</b>	<b>Non-Responsive</b>	<b>Responsive</b>



**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2

Item#8

Name OF Item: Equipment for General Surgery Operative Laparoscope

Company Name	<b>Mediland Pakistan</b>	<b>Endo-Kare</b>
Models	<b>PV470</b>	<b>OTV-S190</b>
Manufacturer	Aesculap B Bran	Olympus
Country Of Origin	Germany	Japan
Specification		
Purpose of Equipment :	Yes	Yes
Laparoscopic Tower Latest Version for use in Minimum Invasive Surgery	Yes	Yes
Full HD Camera System with Latest Technology for brilliant image display	Yes	Yes
Full HD 3 Chip Camera / Full HD 1080p (60 f / sec)	<b>CMOS (Major Deviation)</b>	Yes
CCU Camera HEAD COMPATIBILITY 1CCD / 3 CHIP AND FULL HD	<b>PV 472</b>	<b>CH-S190-XZ-E</b>
Camera Resolution 1920 x 1080 Pixel	Yes	Yes
Video Signal Outputs	Yes	Yes
2x DVI-D 1080p (50/60 Hz), 2x HD-SDI	Yes	Yes
Camera Head with Zoom and Focusing Coupler	Yes	Yes
3-4 Buttons on Camera Head with 5-6 Functions	Yes	Yes
Shutter Speed 1/100 - 1/50,000s or better	Yes	Yes
Digital & Optical Zooming Capability (Parfocal Zooming)	Yes	Yes
<b>Light Source</b>	<b>OP940</b>	<b>CLL-V1</b>
LED 175 Watts or More	Yes	Yes
Fiber Optic Light Cable	Yes	Yes
Facility to Control with Camera Head	Yes	Yes
light intensity should be continuously adjustable	Yes	Yes

Xenon Light Source 300 Watt (Optional)	Not Quoted (Major Deviation)	CLV-S190
<b>HIGH FLOW INSUFFLATOR</b>	<b>PG120</b>	<b>UHI-E</b>
Maximum Gas Flow 20 L / min or more	Yes	Yes
Abdominal Pressure Range 3 - 25 mm Hg	Yes	Yes
Central Information Display Available	Yes	Yes
Protection Level acc. to EN 60601-1 BF / Type CF	Yes	Yes
Integrated Gas Pre-heating	Yes	Yes
<b>Ultra High Definition Medical Grade Monitor 26" (or more) with Bright LCD / LED</b>	<b>PV 959 26"</b>	<b>Radiance G2 HB</b>
Should be from same manufacturer	Yes	<b>OEV-262H</b>
Panel Quality Active Matrix TFT	Yes	Yes
Brightness (cd/m <sup>2</sup> ) 800	Yes	Yes
Monitor from same manufacturer (Optional)	Yes	Yes
Resolution Pixel 1920 * 1080 P (Full HD) or better	Yes	Yes
Viewing Angle 178 <sup>0</sup> / 178 <sup>0</sup> ,	Yes	Yes
Aspect Ratio 16:9	Yes	Yes
Video Signal Inputs:	Yes	Yes
2 * DVI (DVI - D & DVI - I),	Yes	Yes
2 * SDI / HD – SDI (BNC),	Yes	Yes
S – Video (DIN – 4 or 2 * BNC), 1*Composite	Yes	Yes
Video Signal Outputs:	Yes	Yes
DVI (DVI – D),	Yes	Yes
SDI / HD – SDI (BNC), 1*Composite	Yes	Yes
TELESCOPE from same Manufacturer (Autoclaveable)	Yes	Yes
CONTAINER for two telescopes	Yes	Yes
Telescope 10MM 0 degree 30-35CM	<b>PE899A</b>	<b>WA53000A</b>
Telescope 10MM 30 degree 33CM	<b>PE909A</b>	<b>WA53000A</b>
Local made Cart with Monitor Arm to accommodate all tower equipment	Yes	Yes
Four Castors, four shelf's and brackets for CO2 cylinder with integrated sockets.	Yes	Yes
Gas Cylinder 2 No	Yes	Yes
Metal Trocar Set Reusable (Trocar with cannula and valve) Autoclaveable: 2 Set each	Yes	Yes
5 – 6mm length 10 – 15cm	Yes	Yes
10 – 11mm length 10 – 15cm	Yes	Yes
TROCAR Reducing Sleeves Guide 5.5mm length 165mm	Yes	Yes
INSTRUMENTS AND CONTAINER (All Instrument Length 33 – 36cm)	Yes	Yes
Reusable and Autoclaveable	Yes	Yes

Container for Camera Head	Yes	Yes
<u>Sterilization Containers</u>	Yes	Yes
Trocars Container	Yes	Yes
Storage Tray: for Two Telescopes and One Light Cable	Yes	Yes
Original container for the scope and light guide cable with sterilization capability and	Yes	Yes
reusable filters	Yes	Yes
VERESS – Insufflation needle diameter 2 – 3 mm length 120 – 180 mm	Yes	Yes
Ceramic / Insulated Electrode Tip, L – hook with Monopolar handle Complete Instrument	Yes	Yes
both outer & inner tube size 5mm length 420mm	Yes	Yes
Reusable Monopolar cautry cable 3 – 6 mm diameter 10 - 15 feet.	Yes	Yes
Suction and Irrigation System	Yes	Yes
METZENBAUM Scissors, serrated, tips curved size 5mm	Yes	Yes
Mini - METZENBAUM Scissor, serrated tips, curved 5mm	Yes	Yes
Maryland Fixation & Dissecting forceps, curved size 5mm	Yes	Yes
Bowl Grasping forceps, 20mm Jaw, size 5mm	Yes	Yes
Dorsey Intestinal Grasping forceps size 5mm	Yes	Yes
Atraumatic fixation & Dissecting forceps size 5mm	Yes	Yes
Babcock Tissue Grasping forceps size 5mm	Yes	Yes
Grasping forceps 2 x 4 Teeth size 5mm	Yes	Yes
Needle Holder, curved size 5mm	Yes	Yes
Knot Pusher size 5mm	Yes	Yes
Fascia Port closure Instrument	Yes	Yes
Clip Applier with capability to be used with available clips	Yes	Yes
The system should contain all the above accessories in Integrated or as separate accessories.	Yes	Yes
Mentioned Equipment should operational with all cable and required standard accessories.	Yes	Yes
Power supply	Yes	Yes
Power input to be 220-240VAC, 50Hz, /440 V	Yes	Yes
Resettable over current breaker shall be fitted for protection	Yes	Yes
Compatible UPS with at least 30 minutes of back up time	Yes	Yes
Documentation / Maintenance Kits	Yes	Yes
User manual in English (Three copies).	Yes	Yes
Service manual (including Maintenance / Schematics & calibration) in English (Three copies).	Yes	NQ (Minor Deviation)
List of important spare parts and accessories with their part number and costing available in stock	Yes	NQ (Minor Deviation)
with the supplier.	Yes	Yes

	<b>Non-Responsive</b>	<b>Responsive</b>
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**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#2  
Item#10  
Name OF Item: Equipment for Gynea Operative Laparoscope

Company Name	<b>Mediland Pakistan</b>	<b>Endokare</b>
Models	<b>PV470</b>	<b>OTV-S190</b>
Manufacturer	Aesculap B Bran	Olympus
Country Of Origin	Germany	Japan
Specification		
<b>Purpose of Equipment :</b>	Yes	Yes
For use in gynecological procedures and Minimum Invasive surgery in Gynae.	Yes	Yes
<b>Laparoscopy tower “Latest Version:-</b>	Yes	Yes
<b>Full HD Camera System with Latest Technology for brilliant image display</b>	Yes	Yes
Full HD 3 Chip Camera / Full HD 1080p (60 f / sec)	<b>CMOS (Major Deviation)</b>	Yes
CCU Camera HEAD COMPATIBILITY 1CCD / 3 CHIP AND FULL HD	<b>PV 472</b>	<b>CH-S190-XZ-E</b>
Camera Resolution 1920 x 1080 Pixel	Yes	Yes
Camera Head with Zoom and Focusing Coupler	Yes	Yes
3-4 Buttons on Camera Head with 5-6 Functions	Yes	Yes
Shutter Speed 1/100 - 1/50,000s or better	Yes	Yes
Digital & Optical Zooming Capability (Parfocal Zooming)	Yes	Yes
<b>Light Source</b>	<b>OP940</b>	<b>CLL-V1</b>
LED 175 Watts or More	Yes	Yes
Fiber Optic Light Cable	Yes	Yes
Facility to Control with Camera Head	Yes	Yes
light intensity should be continuously adjustable	Yes	Yes
Xenon Light Source 300 Watt (Optional)	<b>Not Quoted (Major Deviation)</b>	<b>CLV-S190</b>
<b>HIGH FLOW INSUFFLATOR</b>	<b>PG120</b>	<b>UHI-E</b>
Maximum Gas Flow 20 L / min or more	Yes	Yes

Abdominal Pressure Range 3 - 25 mm Hg	Yes	Yes
Central Information Display Available	Yes	Yes
Protection Level acc. to EN 60601-1 BF / Type CF	Yes	Yes
Integrated Gas Pre-heating	Yes	Yes
<b>Ultra High Definition Medical Grade Monitor 26" (or more) with Bright LCD/LED</b>	<b>PV959 26"</b>	<b>Radiance G2 HB</b>
Panel Quality Active Matrix TFT	Yes	Yes
<b>Monitor from the same manufacturer (Optional)</b>	Yes	<b>OEV-262H</b>
Brightness (cd/m <sup>2</sup> ) 800	Yes	Yes
Resolution Pixel 1920 * 1080 P (Full HD) or better	Yes	Yes
Viewing Angle 178 <sup>0</sup> / 178 <sup>0</sup> ,	Yes	Yes
Aspect Ratio 16:9	Yes	Yes
<b>Video Signal Inputs:</b>	Yes	Yes
2 * DVI (DVI - D & DVI - I),	Yes	Yes
2 * SDI / HD – SDI (BNC),	Yes	Yes
S – Video (DIN – 4 or 2 * BNC), 1*Composite	Yes	Yes
<b>Video Signal Outputs:</b>	Yes	Yes
DVI (DVI – D),	Yes	Yes
SDI / HD – SDI (BNC), 1*Composite	Yes	Yes
<b>TELESCOPE from same Manufacturer (Autoclaveable)</b>	Yes	Yes
CONTAINER for two telescopes	Yes	Yes
Telescope 10MM 0 degree 30-35CM	<b>PE899A</b>	<b>WA53000A</b>
Telescope 10MM 30 degree 33CM	<b>PE909A</b>	<b>WA53000A</b>
<b>Local made Cart with Monitor Arm to accommodate all tower equipment</b>	Yes	Yes
Four Castors, four shelf's and brackets for CO2 cylinder with integrated sockets.	Yes	Yes
Gas Cylinders 2 No	Yes	Yes
<b>Metal Trocar Set Reusable (Trocar with cannula and valve) Autoclaveable:</b>	Yes	Yes
<b>2 Set each</b>	Yes	Yes
5 – 6mm length 10 – 15cm	Yes	Yes
10 – 11mm length 10 – 15cm	Yes	Yes
TROCAR Reducing Sleeves Guide 5.5mm length 165mm	Yes	Yes
<b>INSTRUMENTS AND CONTAINER (All Instrument Length 33 – 36cm) Reusable and Autoclaveable</b>	Yes	Yes
Container for Camera Head	Yes	Yes
<b><u>Sterilization Containers</u></b>	Yes	Yes
Trocars Container	Yes	Yes
<b>Storage Tray:</b> for Two Telescopes and One Light Cable	Yes	Yes

Original container for the scope and light guide cable with sterilization capability and reusable filters	Yes	Yes
VERESS – Insufflation needle diameter 2 – 3 mm length 120 – 180 mm	Yes	Yes
Ceramic / Insulated Electrode Tip, L – hook with Monopolar handle Complete	Yes	Yes
	Yes	Yes
Instrument both outer & inner tube size 5mm length 420mm	Yes	Yes
Reusable Monopolar cautry cable 3 – 6 mm diameter 10 - 15 feet.	Yes	Yes
Suction and Irrigation System	Yes	Yes
METZENBAUM Scissors, serrated, tips curved size 5mm	Yes	Yes
Mini - METZENBAUM Scissor, serrated tips, curved 5mm	Yes	Yes
Bullet Nose Grasper 5mm	Yes	Yes
Maryland Fixation & Dissecting forceps, curved size 5mm	Yes	Yes
Bowl Grasping forceps, 20mm Jaw, size 5mm	Yes	Yes
Dorsey Intestinal Grasping forceps size 5mm	Yes	Yes
Atraumatic fixation & Dissecting forceps size 5mm	Yes	Yes
Babcock Tissue Grasping forceps size 5mm	Yes	Yes
Babcock Tissue Grasping forceps size 10mm	Yes	Yes
Grasping forceps 2 x 4 Teeth size 5mm	Yes	Yes
Needle Holder, curved size 5mm	Yes	Yes
Knot Pusher size 5mm	Yes	Yes
Crocodile forcep 10 mm	Yes	Yes
<b>Fascia Port closure Instrument</b>	Yes	Yes
Clip Applier with capability to be used with available clips	Yes	Yes
The system should contain all the above accessories in Integrated or as separate	Yes	Yes
accessories.	Yes	Yes
Mentioned Equipment should operational with all cable and required standard accessories	Yes	Yes
<b>Instruments oil spray</b>	Yes	Yes
<b>Power supply</b>	Yes	Yes
Power input to be 220-240VAC, 50Hz, /440 V	Yes	Yes
Resettable over current breaker shall be fitted for protection	Yes	Yes
Compatible UPS with at least 30 minutes of back up time	Yes	Yes
<b>Documentation / Maintenance Kits</b>	Yes	Yes
User manual in English (Three copies).	Yes	NQ (Minor Deviation)
Service manual (including Maintenance / Schematics & calibration) in English	Yes	NQ (Minor Deviation)
(Three copies).	Yes	Yes

List of important spare parts and accessories with their part number and costing	Yes	Yes
available in stock with the supplier.	Yes	Yes
	<b>Non-Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2  
Item#14  
Name OF Item: URS+Pneumatic Lithotripsy

Company Name	Endo-Kare
Models	OES Pro
Manufacturer	Olympus
Country Of Origin	Japan
Specification	
URS + PNEUMATIC LITHOTRIPSY	Yes
Urethro Renoscope 8 FR, 6°.	Yes
Length 43cm	Yes
Distal tip 7 FR	6.4 Fr
Instrument sheath 8 FR, one step, 12 FR autoclavable with angled eyepiece, fiber optic light transmission incorporated, 2 lateral irrigation ports and one working channel 5 FR.	Yes
Following accessories are included	NQ
: Insertion aid	NQ
: Instrument port with sealing system and quick release lock	NQ
: Luer lock tube connector	NQ
: seal package of 10	NQ
: Flow control stopcock	NQ
: Wire tray	NQ
· Grasping forceps for stone Fragment double action jaws, 4 FR, rigid, length 60cm	NQ
· Perez castro forceps, long jaws for steinstrabe, rigid double action jaws 4 FR, length 60cm.	NQ
· Swiss Lithoclast.	NQ

· Calcusplit system for pneumatic lithotripsy power supply 100/120/230/240, VAC 50/60 Hz.	NQ
Consisting of calcusplit	NQ
· Main cords	NQ
· One pedal foot switcer, digital two stage.	NQ
· Fabric tube for connecting calcusplit to central compressed air supply length 400cm.	NQ
· Hand piece auto clavable.	NQ
· Sealing ring	NQ
· Hand piece package of 5 spare damping unit auto clavable package of 20.	NQ
· Silicone tube, auto clavable, length 200cm for connecting hand piece to calcusplit	NQ
· Cleaning brush, outer cliameter 2.5mm length 35cm.	NQ
· Instrument oil bottle of 50ml.	NQ
Air compressor 0 – 8 bar, power supply 230 VAC, 50/60 Hz consisting of compressor, fabric reinforced tube for connecting calcusplit and hydromat to compressor calcusplit lithotripsy wire probe diameter 0.8mm.	NQ
	<b>Non-Responsive</b>



**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2

Item#15

Name OF Item: Endovision System

Company Name	<b>Mediland Pakistan</b>	<b>Endo-Kare</b>
Models	<b>PV470</b>	<b>OTV-S190</b>
Manufacturer	Aesculap B Bran	Olympus
Country Of Origin	Germany	Japan
Specification		
ENDOVISION SYSTEM	Yes	Yes
Full HD Camera System with Latest Technology for brilliant Image display	Yes	Yes
· Full HD 3 Chip Camera/ Full HD with 1080p (60 f / sec) or equivalent	Yes	Yes
· Camera Resolution 1920 x 1080 Pixel	Yes	Yes
· <b>Scan Mode</b> Progressive Scan 60 Hz	Yes	Yes
· <b>Modes</b> 5 Presetting, 3 User Settings	Yes	Yes
· <b>Video Signal Outputs</b>	Yes	Yes
· 2x DVI-D 1080p (50/60 Hz), 2x HD-SDI	Yes	Yes
Camera Head with Zoom Coupler	<b>PV472</b>	<b>CH-S190-XZ-E</b>
· 4 Buttons on Camera Head with 5 Functions	Yes	Yes
· Shutter Speed 1/100 - 1/50,000s or better	Yes	Yes
· Digital 2.5 x & Optical Zoom 10-30mm	Yes	Yes
<b>Light Source</b>	<b>OP940</b>	<b>CLL-V1</b>
· LED 175 watts Light Source	Yes	Yes
· Fiber Optic Light Cable	Yes	Yes

· Facility to Control with Camera Head	Yes	Yes
· light intensity should be continuously adjustable	Yes	Yes
<b>Optional:</b>	<b>Not Quoted (Major Deviation)</b>	<b>CLV-S190</b>
· Xenon 300 watt or more	Not Quoted	Yes
· Life span 500 hours on continuous use	Not Quoted	Yes
· Light Guide Cable. 1 pcs.	Not Quoted	Yes
· Color temperature 6000 Kelvin	Not Quoted	Yes
<b>HIGH FLOW INSUFFLATOR</b>	<b>PG120</b>	<b>UHI-E</b>
· Maximum Gas Flow 20 OR More L / min.	Yes	Yes
· Pressure Range 5 - 25 mm Hg	Yes	Yes
· Fully automatic insufflators	Yes	Yes
· Integrated Gas Pre-heating	Yes	Yes
· High pressure tube 1m.	Yes	Yes
· Reusable silicon tube.	Yes	Yes
<b>Ultra High Definition Medical Monitor 26" with Bright LED Backlight</b>	<b>PV959 26"</b>	<b>Radiance G2 HB</b>
· Panel Quality Active Matrix TFT	Yes	Yes
· Brightness (cd/m <sup>2</sup> ) 800	Yes	Yes
· Resolution Pixel 1920 * 1080 (Full HD) or better	Yes	Yes
· Viewing Angle 178 <sup>0</sup> / 178 <sup>0</sup> ,	Yes	Yes
· Aspect Ratio 16:9	Yes	Yes
· <b>Monitor from same manufacturer (Optional)</b>	Yes	<b>OEV-262H</b>
Video Signal Inputs:	Yes	Yes
· 2 * DVI (DVI - D & DVI - I),	Yes	Yes
· 2 * SDI / HD – SDI (BNC),	Yes	Yes
· S – Video (DIN – 4 or 2 * BNC),	Yes	Yes
Video Signal Outputs:	Yes	Yes
· DVI (DVI – D),	Yes	Yes
· SDI / HD – SDI (BNC),	Yes	Yes
Country of Origin : USA, Europe, Japan	Yes	Yes
Local Trolley ( Made locally )	Yes	Yes
	<b>Non-Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#2

Item#17

Name OF Item: Cysto-Urethro-Fibscope

Company Name	<b>Mediland Pakistan</b>	<b>Endo-Kare</b>
Models	<b>FCY-15RBS</b>	<b>CYF-5</b>
Manufacturer	Pentax	Olympus
<b>Country Of Origin</b>	Japan	Japan
<b>Specification</b>		
Cysto-Urethro-Fiberscope	Yes	Yes
<b>Features</b>		
Field of view should be125 ° in air 83 ° in water	Yes	120°
Depth of field should be 3-50mm	Yes	Yes
Tip deflection Up 220 ° Down 120 °	Yes	210°/120°
Insertion tube diameter 4.9mm	Yes	5.5 mm
Instrument channel diameter 2.2 mm	Yes	2.4 mm
Working length 400 mm	Yes	380 mm
Total length 680mm	Yes	Yes
Portable with miniature LED light source	<b>BS-LL1</b>	<b>WA91502A</b>
Complete with standard set of accessories	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#2

Item#18

Name OF Item: Uretero Renoscope (Peadiatric URS)

Company Name	<b>Mediland Pakistan</b>	<b>Endokare</b>
Models	<b>FUR-9RBS</b>	URF-P6
Manufacturer	Pentax	Olympus
Country Of Origin	Japan	Japan
Specification		
Uretero Renoscope (Pediatic URS)	Yes	Yes
Features		
Field of view should be 90 ° in air 64 ° in water	Yes	Yes
Depth of field should be 1-50mm	Yes	2 - 50 mm
Tip deflection Up 180° Down 180 °	Yes	270°/270°
Insertion tube diameter 3.1 mm	Yes	2.65 mm
Instrument channel diameter 1.2 mm	Yes	Yes
Working length 700 mm	Yes	670 mm
Total length 980mm	Yes	1050 mm
Portable with miniature LED light source	<b>BS-LL1</b>	<b>WA91502A</b>
Complete with standard set of accessories	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#2

Item#19

Name OF Item: Diathermy with TURP

Company Name	<b>Endo-Kare</b>	<b>Allmed</b>
Models	<b>ESG-400</b>	<b>maxium</b>
Manufacturer	Olympus	KLS Martin
Country Of Origin	Japan	Germany
Specification		
Diathermy with TURP	Yes	Yes
<b>FEATURES:</b>		
· The energy Platform delivers both enhanced Monopolar & Bipolar energy & vessel sealing all in one unit.	Yes	Yes
· The system can work with integrated OT system for operating room	Yes	Yes
· The Bipolar Resection Activation for bipolar-resection. The application is intended for use in the following procedures in a Saline Environment: Transurethral Resection of the Prostate (TURP), Transurethral Resection of the Bladder (TURB) and Hysteroscopic resection	Yes	Yes
· The system includes independent 02 Monopolar outputs, separate Monopolar foot-switching port, 01 bipolar port Auto-bipolar and 01 vessel sealing ports with foot-switching / hand-switching option.	Yes	Yes
· Safety and diagnostic functionality includes automatic fail safe function, alarms for incomplete seal, holding excessive tissues, and improper jaw position, for patient safety.	Yes	Yes
· Vessel sealing of up to and including 7mm, lymphatic, tissue bundles, and pulmonary vasculature.	Yes	Yes

<b>TECHNICAL SPECIFICATIONS:</b>		
<b>STANDARD MODES:</b>	Yes	Yes
1. Vessel Sealing Mode	Yes	Yes
2. Monopolar cutting (Pure, blend)	Yes	Yes
3. Monopolar coagulation (Fulgurate, Spray)	Yes	Yes
4. Bipolar (Standard, and Macro)	Yes	Yes
<b>OUTPUT POWER CHARACTERISTICS:</b>	Yes	Yes
Monopolar Cutting	Yes	Yes
Pure: 300W	Yes	Yes
Blend: 200W	Yes	Yes
Monopolar Coagulation	Yes	Yes
Fulgurate: 120W	Yes	Yes
Spray: 120W	Yes	Yes
Bipolar	Yes	Yes
Bipolar Standard: 95W	Yes	Yes
Bipolar Macro: 95W	Yes	Yes
<b>SYSTEM COMPONENTS:</b>		
Vessel Sealing Energy Platform or Equivalent	<b>USG-400</b>	<b>Yes</b>
Vessel Sealing Single Paddle Footswitch or Equivalent	Yes	Yes
Monopolar Twin Paddle Footswitch or Equivalent	Yes	Yes
Reusable Monopolar Hand Switching Pencil or equivalent	Yes	Yes
Vessel Sealing Instrument Curved Jaw 5mm for Open Surgery or Equivalent	Yes	Yes
Laparoscopic Curved Jaw Vessel Sealing 5mm with 37cm length or Equivalent	Yes	Yes
Patient Return Electrode Cordless or Equivalent Qty 50	Yes	Yes
Reusable Patient Return Electrode Cord or equivalent	Yes	Yes
Bipolar Footswitch or equivalent	Yes	Yes
Bipolar Cord or equivalent	Yes	Yes
Reusable Bipolar Forceps	Yes	Yes
Laparoscopic Cord or equivalent	Yes	Yes
Bipolar Resection Cord or Equivalent for compatible Resectoscope	Yes	Yes
Bipolar Resection Twin Paddle Footswitch or Equivalent	Yes	Yes
Power Cord	Yes	Yes
User Manual 3 Hard Copies and a soft copy	NQ (Minor Deviation)	Yes
Service Manual 3 Hard Copies and a Soft Copy	NQ (Minor Deviation)	Yes
Original cart for complete system	Yes	Yes
<b>SAFETY STANDARDS:</b>	Yes	Yes
Class I Equipment (IEC 60601-1)	Yes	Yes

Type CF Equipment (IEC 60601-1)/Defibrillator Proof	Yes	Yes
Liquid Spillage (IEC 60601-2-2)	Yes	Yes
Electromagnetic Compatibility (IEC 60601-1-2 and IEC 60601-2-2)	Yes	Yes
<b>NOTE:</b>		
1. Prices of all Major components will be quoted separately along with the total price of the system in the financial offer.	Yes	Yes
2. The competitors MUST have local service facility in Rawalpindi / Islamabad and have to give the same in written.	Yes	Yes
3. Service providers should have the necessary equipment recommended by the manufacturers to carry out preventive maintenance tests as per guidelines provided by the manufacturers.	Yes	Yes
4. Quoted System must be CE Marked (MDD 93/42/EEC) or FDA approved or MHLW (Japan)	Yes	Yes
5. System should be complete with all standard accessories including Reusable Instruments for open and laparoscopic procedures and disposable electrodes compatible with reusable instruments. Any other instrument required for open and laparoscopic procedures not mentioned in the above mentioned list may also be quoted within the Standard Accessories.	Yes	Yes
6. Warranty period should be five years with parts including Accessories i.e. Cables, Leads, Electrodes, Shears, Transducers, Batteries and yearly replacement (or as per recommendations of manufacturer) of preventive maintenance kits etc. except disposables and consumable items.	Yes	Yes
<b>OPTIONAL:</b>		
1. UPS with surge protection of imported quality must be provided with the system to run the complete system for 30 minutes minimum	NQ (Minor Deviation)	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#2

Item#20

Name OF Item: Uroflowmeter Cordless with Chair

Company Name	<b>Mediland Pakistan</b>
Models	<b>U1-1</b>
Manufacturer	Medical Measurment System
Country Of Origin	Netherlands
Specification	
Uroflowmeter Cordless With Chair	Yes
· Wireless Uroflowmeter	Yes
· Wirelessly to the computer.( Latest series with Printer )	Yes
· Unit should be height adjustable on flow stand or micturition chair	Yes
· Investigation should automatically starts when patients begins voiding	Yes
· Wireless data transmission between flow sensor and computer	Yes
· Automatic artifact detection	Yes
· Patient database for secure storage of investigation data	Yes
· Bluetooth communication to PC/Laptop, distance up to 50 mtr	Yes
· Flow sensor powered by battery recharge able or alkaline	Yes
· Capable to connect maximum 7 flow sensors to 1 PC/Laptop at the same time	Yes
Measurement and Analysis	Yes





**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attack**

Lot#2  
Item#26b  
Name OF Item:OT Light (Halogen)

Company Name	Vertex Medical	Sahar International	Mediurge
Models	Merilux X5/X5	LED500DF+LKED200F	CONVELAR 1677
Manufacturer	Merivaara	Dr. Mach	Dixon
Country Of Origin	Finland	Germany	Germany
Specification			
OT Light (With Halogen)	Yes	NO	Yes
It should have halogen lighting technology and	Yes	NO	Yes
§ Homogeneous Light field and Maximum shadow dilution	Yes	Yes	Yes
§ Max. Luminance at a distance of 1 m (in Lux) Main head 160,000/Small head 110,000	Yes	Yes	140,000/140,000
§ Light field diameter: 15 – 30 cm	Yes	Yes	Yes
§ Color temperature in Kelvin (K) 4000-5000 K for each head	Yes	Yes	Yes
§ Color rendering index CRI:94 for each head	Yes	Yes	Yes
§ Light Head Dimension comfortable	Yes	Yes	Yes
§ Power requirements: 220V/50 Hz	Yes	Yes	Yes
Complete with sterilizable handles (02)	Yes	Yes	Yes
	Responsive	Non-Responsive	Non-Responsive

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attack**

Lot#2

Item#25

Name OF Item: OT Table

Company Name	Eastern Medical	Sigma International	Vertex Medical	Allmed
Models	Mat5000 III (501130)	SU02	Practico Manual	Serenada
Manufacturer	Medifa	Famed	Merivaara	Alvo
Country Of Origin	Germany	Poland	Finland	Poland
Specification	Yes	Yes	Yes	Yes
Multipurpose 4-5 Sections Mechanical/ Hydraulic Table	Yes	Yes	Yes	Yes
Split leg section if available should be counted as one section	Yes	Yes	Yes	Yes
Height Adjustment Hydraulic	Yes	Yes	Yes	Yes
Trendlenburg / Reverse Trendlenburg Hydraulic/Gas Spring assisted	Yes	Yes	Yes	Yes
All other movements Gas Spring assisted / Mechanical	Yes	Yes	Yes	Yes
All controls of table movements should be towards head_side	Yes	Yes	Yes	Yes
X-Ray Radio translucent Table Top and should be C-arm and X-ray competible	Yes	Yes	Yes	Yes
X-Ray Cassettes Rails	Yes	Yes	Yes	Yes
Height Adjustment Operating Table (without mattresses) 720 - 1020 mm	750 - 1000 mm (Minor Deviation)	Yes	Yes	Yes
Hydraulic / Gas Spring Trendelenburg / Reverse Trendelenburg +/-25°	Yes	Yes	Yes	Yes
Lateral Tilt (right/left) 20°/ 20°	Yes	Yes	Yes	Yes
Leg Section (up/down) 15°/ 90°,detachable	Yes	Yes	Yes	Yes
Back Section Raise: -30 to 70°	Yes	Yes	Yes	Yes
Patient Weight Capacity (SWL) : 175Kg or more	Yes	Yes	Yes	Yes
Max Lifting Capacity 300 Kg or more	Not Mentioned	Not Mentioned	Not Mentioned	Not Mentioned
<b>Accessories:</b>	Yes	Yes	Yes	Yes
X-Ray Cassette Holder	Yes	Yes	Yes	Yes
Arm Rest Pair	Yes	Yes	Yes	Yes
Knee Crutches	Yes	Yes	Yes	Yes
Built-in Kidney Elevator	Yes	Yes	Yes	Yes

Anesthesia Screen	Yes	Yes	Yes	Yes
Body Strap	Yes	Yes	Yes	Yes
Infusion Pole	Yes	Yes	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#2  
Item#27  
Name OF Item: Equipment for Urology Uroflowmeter

Company Name	<b>Mediland Pakistan</b>
Models	Solar Silver BD
Manufacturer	Medical Measurment System
Country Of Origin	Netherlands
Specification	
Equipment for Urology (Uroflowmeter)	Yes
§ Cystometry	Yes
§ Pressure-Flow study	Yes
§ Nomograms: Siroky, Liverpool, Miskolc	Yes
§ Patient database program	Yes
§ Print report and graph on paper & save report and graph to PDF, JPG, Word, Excel	Yes
Pump infused volume module should be following nature or equivalent.	Yes
• Pump with 4 rollers.	Yes
• Minimum flow: 1 ml/min	Yes
• Maximum flow: 250 ml/min	Yes
4-channel Infused volume module ( Upgradable up to 32 channel)	Yes
• Weighing capacity: 3500 gram	Yes
• Capacity infused volume: 3000 ml	Yes
• Number of channels: 4	Yes
• <b>Flow sensor with batteries( Weight /Modular type )</b>	Yes
• <b>Micturition chair Height adjustable.</b>	Yes
• <b>Height adjustable Flow stand</b>	Yes
• <b>Urine container</b> - Volume: 1000 ml	Yes
• <b>FlowRange: 1-100 ml/s</b>	Yes

• <b>Volume</b> Range: 0 to 2000 ml	Yes
• <b>Wireless connection</b> • Battery type: 4x AA alkaline or NiMH	Yes
Trolley	Yes
• Four 12.5 cm (5”) wheels, 2 with brakes	Yes
• Retractable keyboard and mouse pad	Yes
• PC shelf	Yes
Latest core i3 PC and Laser Jet Printer:	Yes
•Processor: Core i3or latest	Yes
• USB ports •17 inch Color monitor	Yes
USA, Europe & Japan	Yes
Furniture	Yes
• Cabinet section for Uroflowmeter.	Yes
• Patient Examination couch.	Yes
• Chairs for patient waiting area.	Yes
	<b>Responsive</b>

Lot#3

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#3  
Item#2  
Name OF Item:Orthopedic Drill with Accessories

Company Name	Mediland Pakistand
Models	GA672
Manufacturer	Aesculap B Braun
Country Of Origin	Germany
Specification	
Orthopedic Drill with All Accessories	Yes
DRILL with REAMER	Yes
Trigger Hand Piece for forward & reverse option consisting parts: lid , NiMH battery , sterile funnel , K-wire protection sleeve , rinsing adaptor	Yes
Drill Attach. Large Jacobs.	Yes
Reamer Attachment Large	Yes
Drill Attachment Small	Yes
Universal K-Wire Attachment for All Sizes From 0.6mm To 4.0mm.	Yes
Oscillating Saw	Yes
1- Saw head 360° rotatable – for optimalaccess and visibility of the operating site.	Yes
2- Key-less rapid-action saw blade coupling.	Yes
Charger For Batteries: Charging Unit for 04 Batteries charging at same time.	Yes
Battery removal device	Yes
Set F/Motors/Accessory.	Yes
Oscillating Saw Blades 50mml X 25mmw X 0.9mm Cutting Width	NQ
Saw Blade Rapid Action 50/10/0.5/0.8mm	NQ
Disp.Saw Blade Rapid Action 90/19/0.89mm	NQ
Subject to provision of above-mentioned Oscillating Saw & accessories i.e blades etc	Responsive

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attack**

Lot#3

Item#3

Name OF Item:Orthopedic Table

Company Name	Sigma International	Vertex Medical	Eastern Medical
Models	SU-02	Practico Manual+Orhtopedic Extension	Mat5000III (501130)
Manufacturer	Famed	Merivaara Corp	Medifa
Country Of Origin	:Poland	Finland	Germany
Specification	Yes	Yes	Yes
Multipurpose 4-5 Sections Mechanical/ Hydraulic Table	Yes	Yes	Yes
Split leg section if available should be counted as one section	Yes	Yes	Yes
Height Adjustment Hydraulic	Yes	Yes	Yes
Trendlenburg / Reverse Trendlenburg Hydraulic/Gas Spring assisted	Yes	Yes	Yes
All other movements Gas Spring assisted / Mechanical	Yes	Yes	Yes
All controls of table movements should be towards head_side	Yes	Yes	Yes
X-Ray Radio translucent Table Top and should be C-arm and X-ray	Yes	Yes	Yes
<b>Specifications:</b>	Yes	Yes	Yes
Height adjustment operating table (without mattresses) 720 - 1020 mm	Yes	Yes	750 -1000 (Minor Deviation)
Hydraulic / Gas Spring Trendelenburg / Reverse Trendelenburg +/-25°	Yes	Yes	Yes
Lateral tilt (right/left) 20°/ 20°	Yes	Yes	Yes
Leg section (up/down) 15°/ 90°,detachable	Yes	Yes	Yes
Back Section Raise: -30 to 70 °	Yes	Yes	Yes
Patient weight capacity (SWL): 175Kg or more	Yes	Yes	Yes
Max lifting capacity 300 kg or more	Yes	Yes	Yes
<b>Accessories:</b>	Yes	Yes	Yes
X-Ray Cassette Holder	Yes	Yes	Yes
Arm Rest Pair	Yes	Yes	Yes
Knee crutches	Yes	Yes	Yes

Built-in Kidney Elevator	Yes	Yes	Yes
Anesthesia screen	Yes	Yes	Yes
Body strap.	Yes	Yes	Yes
Infusion pole.	Yes	Yes	Yes
Orthopedic traction complete set ( 1 ) and with all other accessories	Yes	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>



Lot No.4

Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments  
EDO Health Attock

Lot#4  
Item#2  
Name OF Item: OT Table

Company Name	Eastern Medical	Sigma International	Vertex Medical	Mediurge
Models	Mat5000 III (501130)	SU02	Practico Manual	Surgery 8500
Manufacturer	Medifa	Famed	Merivaara	Dixon
Country of Origin: USA,Europe,Japan	Germany	Poland	Finland	Germany
Specification				
Multipurpose 4-5 Sections Mechanical/ Hydraulic Table	Yes	Yes	Yes	Yes
Split leg section if available should be counted as one section	Yes	Yes	Yes	Yes
Height Adjustment Hydraulic	Yes	Yes	Yes	Yes
Trendlenburg / Reverse Trendlenburg Hydraulic/Gas Spring assisted	Yes	Yes	Yes	Yes
All other movements Gas Spring assisted / Mechanical	Yes	Yes	Yes	Yes
All controls of table movements should be towards head_side	Yes	Yes	Yes	Yes
X-Ray Radio translucent Table Top and should be C-arm and X-ray complete	Yes	Yes	Yes	Yes
X-Ray cassettes rails	Yes	Yes	Yes	Yes
Height adjustment operating table (without mattresses) 720 - 1020 mm	750-1000 (Minor Deviation)	Yes	Yes	NO (780-1020) Major Deviation
Hydraulic / Gas Spring Trendelenburg / Reverse Trendelenburg +/-25°	Yes	Yes	Yes	(+/-) 22°
Lateral tilt (right/left) 20°/ 20°	Yes	Yes	Yes	18/18°
Leg section (up/down) 15°/ 90°,detachable	Yes	Yes	Yes	Yes
Patient weight capacity (SWL): 175 kg or more	Yes	Yes	Yes	Yes
Max lifting capacity 300 kg or more	Not Mentioned	Not-Mentioned	Not-Mentioned	Yes
Accessories		Yes	Yes	Yes
X-Ray Cassette Holder	Yes	Yes	Yes	Yes
Arm Rest Pair	Yes	Yes	Yes	Yes
Knee crutches	Yes	Yes	Yes	Yes
Built-in Kidney Elevator	Yes	Yes	Yes	Yes
Anesthesia screen	Yes	Yes	Yes	Yes
Body strap	Yes	Yes	Yes	Yes
Infusion pole	Yes	Yes	Yes	Yes
	Responsive	Responsive	Responsive	Non-Responsive

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**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#4

Item#3

Name OF Item:OT Light (Double Doom)

Company Name	Eastern Medical	Vertex Medical	Mediurge	Coral Medical	Radiant Medical
Models	Qe6030	Meriled L5+L3	XLED3+XLED2	S2-S2	4EL/3EL
Manufacturer	Brandon Medical	Merivaara	Steris	Surgiris	Admeco
Country Of Origin: USA, Europe, Japan	UK	Finland	France	France	switzerland
Specification					
OT Light (Double Doom)	Yes	Yes	Yes	Yes	Yes
It should have Latest LED lighting technology Halogen Technology	Yes	Yes	Yes	Yes	Yes
Homogeneous Light field and Maximum shadow dilution	Yes	Yes	Yes	Yes	Yes
Max. Luminance at a distance of 1 m (in Lux) Main head 160,000/Small head 110,000	Yes	Yes	Yes	Yes	Yes
Light field diameter: 15 – 30 cm	Yes	Yes	Yes	Yes	Yes
Color temperature in Kelvin (K) 4000-5000K for each head	Yes	Yes	Yes	Yes	Yes
Color rendering index CRI:94 for each head	Yes	Yes	Yes	Yes	Yes
LED life, (in h) 40,000 for each head	Yes	Yes	Yes	Yes	Yes
Light Head Dimension comfortable	Yes	Yes	Yes	Yes	Yes
Complete with sterilizeable handles(02)	Yes	Yes	Yes	Yes	Yes
Power Requirements: 220V/50Hz	Yes	Yes	Yes	Yes	Yes
	Responsive	Responsive	Responsive	Responsive	Responsive

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#4

Name OF Item: Cardiac Monitor

Company Name	Mediquips	Vertex Medical	Biotech Services	Mediurge	Vital Care
<b>Models</b>	BSM-3763K	Vista 120	Vitalmax 4000	Storm D5	Scalis-12
<b>Manufacturer</b>	Nihon Kohden	Drager Medical	Pacetech INC	Dixon	Heyer Medical
<b>Country Of Origin</b>	Japan	Germany	USA	Germany	Germany
<b>Specification</b>	Yes	Yes	Yes	Yes	Yes
Monitoring of Vital Signs of Pediatric and Adult Patients	Yes	Yes	Yes	Yes	Yes
OPERATING FEATURES and CHARACTERISTICS:	Yes	Yes	Yes	Yes	Yes
Non fade display	Yes	Yes	Yes	Yes	Yes
Screen size: 12" Minimum LCD / TFT Touch Screen Color Display	Yes	Yes	Yes	Yes	Yes
Electro-surgical interference suppression / protection	Yes	Yes	Yes	Yes	Yes
Defibrillator protection	Yes	Yes	Yes	Yes	Yes
Pacemaker Detection	Yes	Yes	Yes	Yes	Yes
Freeze and cascade facility	Yes	Yes	Yes	Yes	Yes
Adult & Pediatric modes of operation, detection and alarms for all parameters	Yes	Yes	Yes	Yes	Yes
Minimum 6 or more waveforms for all required parameters	Yes	Yes	Yes	Yes	Yes
Waveform Trace speed: 6.25, 12.5, 25 and 50 mm/sec	Yes	Yes	Yes	Yes	Yes
Compatible with central monitoring system through wireless / Hardwire	Yes	Yes	Yes	Yes	Yes
Vital Signs Monitor should have the capability to measure 2-IBP and EtCO2 at the same time if IBP & EtCO2 are required	Yes	Yes	Yes	Yes	Yes
Standard Parameters:	Yes	Yes	Yes	Yes	Yes
ECG, NIBP, SpO2, 2-Temp, Respiration, Trends, Arrhythmia Analysis, Recorder	Yes	Yes	Yes	Yes	Yes
STANDARD PARAMETERS:	Yes	Yes	Yes	Yes	Yes
ECG:	Yes	Yes	Yes	Yes	Yes
Differential input protected against defibrillator	Yes	Yes	Yes	Yes	Yes
ECG Cable with 3-5 Leadwires	Yes	Yes	Yes	Yes	Yes
Lead Selection: 6 positions (Lead I, II, III, avf, avr, avl) and V(chest leads)	Yes	Yes	Yes	Yes	Yes
Selectable Adult & Pediatric operation modes	Yes	Yes	Yes	Yes	Yes

Ability to detect Adult & Pediatric Heart rate range, QRS widths and amplitudes	Yes	Yes	Yes	Yes	Yes
Numeric: Heart Rate Range 20-250 bpm	Yes	Yes	Yes	Yes	Yes
Waveform: Real time	Yes	Yes	Yes	Yes	Yes
Lead Off detection: Alarms on lead failure	Yes	Yes	Yes	Yes	Yes
Variable gain: selectable 1/2, 1, 2, cm/mV	Yes	Yes	Yes	Yes	Yes
Heart beat indication: Beep/tone with QRS detection	Yes	Yes	Yes	Yes	Yes
NONINVASIVE BLOOD PRESSURE (NIBP):	Yes	Yes	Yes	Yes	Yes
Method. Oscillometric principle	Yes	Yes	Yes	Yes	Yes
Numeric: Systolic, Diastolic and Mean Pressures	Yes	Yes	Yes	Yes	Yes
Rising Cuff / continuous pressure display	Yes	Yes	Yes	Yes	Yes
Ability to measure Adult & Pediatric B.P. Range	Yes	Yes	Yes	Yes	Yes
Cuffs for Adults & Pediatrics Patients.	Yes	Yes	Yes	Yes	Yes
Cuff Pressure range: 300mmHg	Yes	Yes	Yes	Yes	Yes
Selectable Pediatric & Adult operation modes	Yes	Yes	Yes	Yes	Yes
Selectable Pediatric & Adult initial and maximum cuff pressures and range	Yes	Yes	Yes	Yes	Yes
Selectable Auto inflate Interval settings	Yes	Yes	Yes	Yes	Yes
TEMPERATURE:	Yes	Yes	Yes	Yes	Yes
Numeric. Temperature selectable in 'C / 'F	Yes	Yes	Yes	Yes	Yes
Channels: 2 channels or more	Yes	Yes	Yes	Yes	Yes
Two temperature Channel with probe (external and rectal)	Yes	Yes	Yes	Yes	Yes
Ability to measure Adult & Pediatric temperature range	Yes	Yes	Yes	Yes	Yes
PULSE QXIMETRY:	Yes	Yes	Yes	Yes	Yes
Numeric: % Oxygen saturation	Yes	Yes	Yes	Yes	Yes
Range: 0-100 %	Yes	Yes	Yes	Yes	Yes
Numeric: Pulse rate: 20-250 beat per min.	Yes	Yes	Yes	Yes	Yes
Waveform: Plethysmograph pulse with pulse strength indication	Yes	Yes	Yes	Yes	Yes
Sensor for Pediatrics & Adult Patients	Yes	Yes	Yes	Yes	Yes
RESPIRATION:	Yes	Yes	Yes	Yes	Yes
Impedance method using ECG leads for sensing	Yes	Yes	Yes	Yes	Yes
Respiration rate (RR): 1-150bpm	Yes	Yes	Yes	Yes	Yes
Ability to measure Pediatric & Adult breathing rate range	Yes	Yes	Yes	Yes	Yes
Sweep speed: 6.25, 12.5mm/sec.	Yes	Yes	Yes	Yes	Yes
Settable Apnea Alarm	Yes	Yes	Yes	Yes	Yes
RECORDER:	Yes	Yes	Not Quoted	Yes	Yes
2-3 Channel Recorder for printing of ECG Waveforms	Yes	Yes	Not Quoted	Yes	Yes
ECG Paper Roll (05)	Yes	Yes	Not Quoted	Yes	Yes
ARRITHMIA ANALYSIS:	Yes	Yes	Yes	Yes	Yes
Should have more than 14 Arrhythmia items	Yes	Yes	Yes	Yes	Yes
TRENDS:	Yes	Yes	Yes	Yes	Yes

Trends for at least 48-96 hours with graphical and tabular representation for all parameters	Yes	Yes	Yes	Yes	Yes
<b>ALARMS:</b>	Yes	Yes	Yes	Yes	Yes
Selectable automatic Adult and Pediatric Mode alarm limits	Yes	Yes	Yes	Yes	Yes
High and low (settable) on all parameters	Yes	Yes	Yes	Yes	Yes
Visual and Audible indication of alarms	Yes	Yes	Yes	Yes	Yes
Built-in Rechargeable Battery with back up of at least 2 hours in case of AC power failure for full parameters.	Yes	Yes	Yes	Yes	Yes
<b>Standard Accessories:</b>	Yes	Yes	Yes	Yes	Yes
1. Adult Finger Sensor (Reusable)	Not Quoted	Yes	Yes	Yes	Yes
2. Paediatric Finger Sensor (Reusable)	Not Quoted	Yes	Yes	Yes	Yes
3. NIBP Hose	Yes	Yes	Yes	Yes	Yes
4. NIBP Cuff for Adults Patients (Single Lumen)	Yes	Yes	Yes	Yes	Yes
5. NIBP Cuff for Paeds Patients (Single Lumen)	Yes	Yes	Yes	Yes	Yes
6. ECG Cable with 3-5 Leadwires	Yes	Yes	Yes	Yes	Yes
7. ECG Electrodes 50 for Adults	Yes	Yes	Yes	Yes	Yes
8. ECG Elecrodcs 50 for Paeds	Yes	Yes	Yes	Yes	Yes
9. ECG Jel (02)	Yes	Yes	Yes	Yes	Yes
10. Temperature Probes	Yes	Yes	Yes	Yes	Yes
11. Wall Mount Stand	Yes	Yes	Yes	Yes	Yes
12. Operating Manual (Hard Copy 03 and Soft Copy)	Yes	Yes	Yes	Yes	Yes
13. Service Manual (Hard Copy 03and Soft Copy)	Yes	Yes	Yes	Yes	Yes
<b>NOTE:</b>					
1. Power Requirements: 220V, 50Hz	Yes	Yes	Yes	Yes	Yes
2. Lifetime free software upgrade and software installation in case of software is corrupted.	Yes	Yes	Yes	Yes	Yes
3. Quoted System must be CE Marked (MDD 93/42/EEC) or FDA approved or MHLW (Japan)	Yes	Yes	Yes	Yes	Yes
5. The system must be complete with all parts and accessories including, ECG Cables, SpO2 Sensors, NIBP Hose with Cuff, Temperature Probes, Batteries or any other accessory required for measuring all above selected parameters with disposables and consumable items for Adult & Paediatrics Patients.	Yes	Yes	Yes	Yes	Yes
6. Warranty period should be two years from date of commissioning with parts and accessories including, ECG Cables, SpO2 Sensors, NIBP Hose with Cuff, Temperature Probes, Batteries and Preventive Maintenance Kits as per manufacturer's recommendations except disposable & consumable items.	Yes	Yes	Yes	Yes	Yes
<b>OPTIONAL:</b>	Yes	Yes	Yes	Yes	Yes
<b>INVASIVE BLOOD PRESSURE</b>	Yes	Yes	Yes	Yes	Yes
Two channels	Yes	Yes	Yes	Yes	Yes

Numeric: Systolic, Diastolic and Mean Pressure	Yes	Yes	Yes	Yes	Yes
Waveform: Blood Pressure	Yes	Yes	Yes	Yes	Yes
Variable scale: Selectable	Yes	Yes	Yes	Yes	Yes
Adjustment: Zero adjustment for offset compensation	Yes	Yes	Yes	Yes	Yes
EtCO2 CAPNOGRAPHY	Yes	Yes	Yes	Yes	Yes
Numeric: Selectable mmHg, kPa, % Of CO2; Breath Rate	Yes	Yes	Yes	Yes	Yes
Waveform: CO2 concentration	Yes	Yes	Yes	Yes	Yes
Adjustment: Automatic ambient air pressure compensation	Yes	Yes	Yes	Yes	Yes
<b>Technical Status</b>	<b>Responsive (Subject to provision of Adult &amp; Paeds Reusable Finger Sensor)</b>	<b>Responsive</b>	<b>Non- Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attack**

Lot#4  
Item#5  
Name OF Item: Defibrillator

Company Name	Mediquips	Vertex Medical	Mediurge	Radiant Medical
Models	TEC-8321K	Cardistart	E-Heart	Zoll M Series
Manufacturer	Nihon Kohden	US Defib	US Defib Medical	Zoll Medical
Country Of Origin	Japan	USA	USA	USA
Specification	Yes	Yes	Yes	Yes
Defibrillator with Color Monitor and Recorder: Synchronized Cardio Version	Yes	Yes	Yes	Yes
OPERATING FEATURES AND CHARACTERISTICS:	Yes	Yes	Yes	Yes
Color LCD / TFT display	Yes	Yes	Yes	High Resolution
Biphasic transthoracic defibrillation wave from delivery system	Yes	Yes	Yes	Yes
Defibrillation as per synchronized to ECG with sync indicator	Yes	Yes	Yes	Yes
Energy Charging: Control on front panel & apex paddle	Yes	Yes	Yes	Yes
Audible Indication of charge up to selected energy level	Yes	Yes	Yes	Yes
Selected energy value displayed on monitor	Yes	Yes	Yes	Yes
Charging time: less than 7 sec for max. energy in joules up to 200 Joules.	Yes	Yes	Yes	Yes
Energy Delivery: Control on sternum and Apex paddle	Yes	Yes	Yes	Yes
External pediatric paddle attachment	Yes	Yes	Yes	Yes

Screen view aprox 6 inches or more	Yes	5.5" (Minor Deviation)	Yes	5.6 "
Auto tester / self check.	Yes	Yes	Yes	Yes
AED facility with cable	Yes	Yes	Yes	Yes
<b>PARAMETERS:</b>	Yes	Yes	Yes	Yes
ECG: Unit must be capable of patient monitoring through 3-5 lead ECG cables	Yes	Yes	Yes	Yes
Numeric Heart Rate	Yes	Yes	Yes	Yes
Wave form ECG Trace	Yes	Yes	Yes	Yes
Waveform Trade speed 25mm / sec	Yes	Yes	Yes	Yes
Lead selection paddle and lead, I, II and III through patient cable	Yes	Yes	Yes	Yes
Variable gain: to adjust size of ECG waveform.	Yes	Yes	Yes	Yes
<b>RECORDER:</b>	Yes	Yes	Yes	Yes
Unit must utilize built-in thermal strip 50 to 80 mm chart recorder.	Yes	Yes	Yes	Yes
Strip chart recorder must utilize a 6 second delay.	Yes	Yes	Yes	Yes
Internal handles with adult and pads spoons.	Yes	Yes	Yes	Yes
<b>ACCESSORIES:</b>	Yes	Yes	Yes	Yes
1. Built-in Rechargeable Battery with charger	Yes	Yes	Yes	Yes
2. External Pediatric Paddles	Yes	Yes	Yes	Yes
3. External Adults Paddles	Yes	Yes	Yes	Yes
4. ECG Cable with 3-5 Leadwires	Yes	Yes	Yes	Yes
5. Operating Manual (Hard Copy 03 and Soft Copy)	NQ	Yes	Yes	Yes
6. Service Manual (Hard Copy 03and Soft Copy)	NQ	Yes	Yes	Yes
<b>Technical Status</b>	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#6  
Name OF Item: Ultrasound Machine / Digital Echoradiography Machine

Company Name	Mediquips	Biotech Services
Models	Aplio 300	Maylab Seven
Manufacturer	Toshiba	Esaote
Country Of Origin	Japan	Italy
Specification	Yes	Yes
A complete dedicated digital Echocardiography unit for wide range.	Yes	Yes
of premium performance application of cardiovascular imaging in	Yes	Yes
pediatrics and adult. Receiving / processing channels min.	Yes	Yes
15000-20000. Mobile built in trolley system with built in workstation	Yes	Yes
/ data management system for digital acquisition, storage and	Yes	Yes
review of complete ultrasound studies including static and dynamic	Yes	Yes
clips in DICOM format, read/write zoom. Studies can be reviewed	Yes	Yes
and output to CD / DVD. The machine must have sharp and high	Yes	Yes
quality image reproduction with heavy duty performance. It should	Yes	Yes
have minimum following specification	Yes	Yes
DISPLAY:	Yes	Yes
Display size Min. 15” to 19” Flat/TFT, tiltable and swiveable type with	Yes	Yes
articulating arm.		
OPERATING MODES:	Yes	Yes
B, 2D M-Mode, Power Doppler, HPRF, Spectral Doppler, Color	Yes	Yes
Doppler, Velocity Mode, Pw Doppler, Duplex And Triplex Doppler,	Yes	Yes
CW Doppler Steerable and ECG Gating, TEE imaging , IMT, Stress	Yes	Yes
Echo, Strain rate imaging, Tissue Doppler Imaging,, Contrast	Yes	Yes
Imaging, Anatomical M Mode, Panoramic Imaging,	Yes	Yes
CONTROL PANEL:	Yes	Yes
Alphanumeric keyboard with built-in trackball and 7” touch screen control	Yes	Yes
panel		
Direct access to system functions through dedicated keys.	Yes	Yes
Indicator lights identify activated keys.	Yes	Yes



Audio volume control with bidirectional / stereo speakers and foot switch	Yes	Yes
User selectable image magnification control.	Yes	Yes
Adjustable transmit focusing control.	Yes	Yes
Total and Lateral Gain Compensation controls (6 or more).	Yes	Yes
3 Active Probe connectors + 1 for Doppler probe.	Yes	Yes
CALIPER / MEASUREMENTS:	Yes	Yes
6 to 8 calipers for measurement per screen trace length measurements for:	Yes	Yes
Distance, angle, distance depth from skin line, area, circumferences,	Yes	Yes
compound / volume, slope, time, heart rate and acceleration, Auto	Yes	Yes
Ejection Fraction Measurements.	Yes	Yes
APPLICATION:	Yes	Yes
Cardiac, Peripheral, pediatric, adult cephalic and transesophageal	Yes	Yes
with all required software for measurements.	Yes	Yes
DISPLAY MODES:	Yes	Yes
Live and stored display format: full size and split screen. Review	Yes	Yes
image format: for still and cine, simultaneous capability B+PW, B+	Yes	Yes
CFM +PW, CW, B+ or triplex mode, , B+ color split screen display.	Yes	Yes
2D mode, M-mode, color Doppler imaging, color Doppler imaging,	Yes	Yes
color m-mode, PW / HPRF Doppler, CW Doppler, TEE imaging ,	Yes	Yes
IMT, Stress Echo, tissue Strain imaging, Tissue Doppler Imaging,	Yes	Yes
Anatomical M Mode, Panoramic Imaging, Vascular imaging ,	Yes	Yes
vascular calculations, cardiac measurements and full cardiac imaging.	Yes	Yes
CINE MEMORY	Yes	Yes
Min. Cine Memory for 1000 frames or 250MB min.	Yes	Yes
IMAGE VIEWING DEPTH:	Yes	Yes
34 cm or more	Yes	Yes
FRAME RATE	Yes	Yes
Minimum frame rate 1000 Hz	Yes	Yes
700 frames per second	Yes	Yes
STORAGE DEVICE	Yes	Yes
Built-in CD / DVD and USB Drive	Yes	Yes
SYSTEM DYNAMIC RANGE	Yes	Yes
Dynamic range minimum 200 dB or more	Yes	Yes
COMMUNICATION SOFTWARE	Yes	Yes
	Yes	Yes
System should be upgradable for DICOM 3 communication software for:	Yes	Yes
Image Storage, print, Query / Retrieve, Network Communication.	Yes	Yes

<b>Probes:</b>	Yes	Yes
Should be light weight, capable of multiple centre frequencies on	Yes	Yes
transmit for 2D, color Doppler PW/CW (Steerable) Imaging and to perform Harmonics.	Yes	Yes
<b>PORTS:</b>	Yes	Yes
Video Output, USB / RS 232, Networking	Yes	Yes
<b>POWER REQUIREMENT</b>	Yes	Yes
220-240VAC 50 Hz	Yes	Yes
<b>ACCESSORIES:</b>	Yes	Yes
Thermal Printer 256-Gray scale	Yes	Yes
UPS: 2 KVA (imported)	Yes	Yes
50 High Density / High Glossy thermal paper Rolls	Yes	Yes
Gel: 20 liters	Yes	Yes
<b>STANDARD TRANSDUCERS:</b>	Yes	Yes
1. Multi frequency Linear Probe to cover 7.5-12.0 MHz.	Yes	Yes
2. Multi frequency Convex probe to cover 3.5-5.0 MHz	Yes	Yes
3. Multi frequency Phased array sector probe to cover 2.0 - 3.5 MHz for Adult	Yes	Yes
4. Multi frequency Phased array sector probe to cover 5.0 - 7.5 MHz for Peads	Yes	Yes
<b>OPTIONAL:</b>	Yes	Yes
1. Multi frequency Micro Convex Probe	Yes	Yes
2. TVS Probe Multi Frequency 4.0 to 9.0MHz	Yes	Yes
3. Multi frequency TOE/TEE Probe to cover 4.0-6.0 MHz for Adult.	Yes	Yes
4. Linear Biopsy Probe	Yes	Yes
5. CW Pencil Probe	Yes	Yes
6. Elastography	Yes	Yes
7. 3D / 4D Imaging	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#6b

Name OF Item: Ultrasound Machine

Company Name	<b>Mediquips</b>	<b>Bio Tech</b>
Models	<b>DP20</b>	<b>HS 2200</b>
Manufacturer	Mindray	Honda
Country Of Origin	China	Japan
Specification		
GENERAL ABDOMEN ULTRASOUND MACHINE	Yes	Yes
High Resolution Digital Ultrasound Diagnostic Equipment with Fully Digital Beam Former for Abdominal/Ob/ Gynae, Cardiac, Small Parts, Urology, Vascular, Nerve studies. System having DICOM Compatibility:	Yes	Yes
Main Ultrasound Portable Unit Tilttable 12 <sup>''</sup> LCD/LED Display.	Yes	<b>Not Titable</b>
2.0 to 5.0 MHz Triple Frequency Convex Probe with additional THI Frequencies.	Yes	Yes
System should have Built-in Recharge able Battery	Yes	<b>APC UPS</b>
SPECIFICATION :		
Scan Mode: B, B/B, 4B, B/M and M-Mode	Yes	Yes
B/M Scan : Scanning Methods: Electronic Convex Electronic Linear.	Yes	Yes
B-Mode : Electronic Scan Depth: 30cm or more.	Yes	<b>24 cm</b>
M-Mode : 4-Scroll Speed	Yes	Yes
Focusing : Reception	Yes	Yes
Frame rate: : 200 F/Sec or more	Yes	Yes
Cine memory :more than 1500 frames in B-mode	Yes	<b>255 frames</b>
Gain Adjustment: Gain: STC: 8-Steps or more.	Yes	Yes
Display: Format –B/M Scan: B (Single, Dual, Quad), B/M, M.	Yes	Yes
Zoom Real time and Freeze mode should be available	Yes	Yes
Weight :Unit should be light weight having Weight less than 6KG.	Yes	Yes
Wide range of measurement functions with 8-ch. Calipers,	Yes	Yes

distance area (trace, ellipse) Circumference, fetal growth	Yes	Yes
measurement package with 6-different methods for Ob / Gynae.	Yes	Yes
cardiac methods measurement with report function facility.	Yes	Yes
Built-in Cine Loop. System upgradable to DICOM connectivity should be provided.	Yes	Yes
Data Management System with 300GB or more HDD built in to system to store and retrieves the Images along with Data output through USB.	Yes	Yes
System should have FDA (510k) and be CE marked.	Yes	<b>CE &amp; MHLW</b>
<b>ACCESSORIES:</b>		
B/W Printer	Yes	Yes
UPS / Stabilizer.	Yes	Yes
<b>OPTIONAL:</b>		
Multi frequency Linear Probe	Yes	Yes
	<b>Responsive</b>	<b>Non-Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#7

Name OF Item: Vacuume Extractor

Company Name	Quintex Medical	Eastern Medical	Vertex Medical	Sigma International	Mediurge
Models	F-X50/F	Victoria Versa	Basic	New Hospivac 350	Eurovac H-40
Manufacturer	Fazini	Cheiron	Medela	CA-MI	Hersill
Country Of Origin	Italy	Szech Republic	Switzerland	Italy	Spain
Specification					
1. Reciprocating, oil free pump & piston mechanism.	Yes	Yes	Yes	Yes	Yes
2. Heavy duty Mobile Suction Unit with twin jars of capacity up to 4 or 5 liters each, autoclavable.	<b>2 L (NO)</b>	Yes	Yes	Yes	Yes
3. Aspiration rate up to 30 liters/minutes or more	Yes	Yes	Yes	Yes	Yes
4. Vacuum continuously adjustable	Yes	Yes	Yes	Yes	Yes
5. 10X bacterial filter	Yes	Yes	Yes	Yes	Yes
6. Footswitch	Yes	Yes	Yes	Yes	Yes
7. Complete aspiration set	Yes	Yes	Yes	Yes	Yes
8. Overflow Safety Device	Yes	Yes	Yes	Yes	Yes
9. 220V/50Hz. I Phase	Yes	Yes	Yes	Yes	Yes
10. Trolley with lockable wheels.	Yes	Yes	Yes	Yes	Yes
11. Silicone cups small medium and large	Yes	Yes	Yes	Yes	Yes
	<b>Non-Rsponsive</b>	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#4  
Item#8b  
Name OF Item: Cardiac Bed

Company Name	Mediquips
Models	Qualitas B
Manufacturer	Paramount
Country Of Origin	Japan
Specification	Yes
Cardiac Bed (Imported)	Yes
POSITION;	Yes
HEIGHT ADJUSTMENT : By foot pump (imported) 40-47 cms hydraulically operated.	Yes
HORIZONTAL TILTING : Leg up 30 dg leg down 20dg controlled by Bloc-o-lift gas spring with step less movement with foot operated lever on foot side.	Yes
KNEE BRAKE ADJUSTMENT BY: Gas spring mechanism by hand operated lever on both side.	Yes
BACK REST: By means of gas shock up to 70 dg by hand operated on both sides.	Yes
CASTORS: 5" ball bearing rust proof, water proof, high quality electrically conductive wheel castors with central brake system. Head raise and knee raise by gas shock mechanism to make a fowler position. Vascular position by means of lever or comb mechanism.	Yes
Bedding area is radiotranslucent(Backelite or Melamine material) for doing X-Ray and to apply "C" arm. Base and back rest is designed to accommodate "C" arm in case of emergency. For cardiac catheterization and other procedures so the central area of back rest is free of any metal part for "C" arm radiology.Have cardiac chair position.	Yes
Head and foot bows is detachable in case emergency for doing intubations and CPR.	Yes
DIMENSIONS:	Yes

Bedding area : 200cm x 91 cm Height : 40-75 cms adjustable.	Yes
MAIN FRAME: 1" X2" 16SWG pipe round at all corners having a single unvisible joint.	Yes
BASE FRAME: Frame made of 1-1/2" x 3" M.S pipe 16 SWG "U" shaped.	Yes
FINISH: Polyester powder coating finish after treating with derusting&phosphating chemical.	Yes
SIDE RAIL : Collaspsable in 2 steps made of 1" upper pipe ¾" 16 SWG supporting pipe and base 1-1/4 x ¼" M.S plate S.S 5/8"	Yes
I..V. ROD : 4 prongs revolving height adjustable having I.V ports on the sides of the bed. Four reflecting bumpers.Urine bag holder and N.G bag holder hocks. Basket for urine pot. Basket for bed pan.Patient lifting pole S.S. ¾" on head side with triangular grip.	Yes
MATTRESS: Foam 4" ist quality with rexine cover.	Yes
Country Of Origin USA/Europe/Japan	Indonesia
	<b>Technically Rejected</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#9  
Name OF Item: ICU Ventilator

Company Name	Eastern Medical	Vertex Medical	Vital Care
Models	Evolution 3e (EVL 100500-T)	Savina 300	iTernIS ADV
Manufacturer	Event Medical	Drager Medical	Heyer Medical
Country Of Origin	USA/Ireland	Germany	Germany
Specification			
ICU VENTILATOR			
Microprocessor controlled ICU Ventilator with Positive Pressure Ventilation.	Yes	Yes	Yes

<b>Patient Range:</b>	Yes	Yes	Yes
Adult & Paediatric with Body Weight of (5 - 200) kg	Yes	Yes	Yes
<b>Breath Classifications:</b>	Yes	Yes	Yes
Pressure Control, Volume Control and Pressure Control with Set Volume Breaths or Volume Guarantee	Yes	Yes	Yes
<b>Modes of Ventilation:</b>	Yes	Yes	Yes
Controlled Mandatory Ventilation (CMV)	Yes	Yes	Yes
Assisted Controlled Mandatory Ventilation (ACMV)	Yes	Yes	Yes
Synchronized Intermittent Mandatory Ventilation (SIMV)	Yes	Yes	Yes
Spontaneous Ventilation for Pressure Control & Volume Control Ventilation	Yes	Yes	Yes
Volume Target Pressure Control (VTPC) / Pressure Regulated Volume Control (PRVC) / Pressure Control Volume Guarantee Ventilation or Equivalent	Yes	Yes	Yes
Bi-PAP /Duo-PAP/BPRV (Biphasic Pressure Release Ventilation) or Equivalent	Yes	Yes	Yes
Pressure Support & Pressure Support with Set Volume (with set able flow cycling)	Yes	Yes	Yes
Continuous Positive Airway Pressure (CPAP)	Yes	Yes	Yes
Positive End Expiratory Pressure (PEEP)	Yes	Yes	Yes
Non-Invasive Ventilation for all modes	Yes	Yes	Yes
Apnea Backup Ventilation	Yes	Yes	Yes
<b>Controls with discrete/separate digital displays or gradations for each control:</b>	Yes	Yes	Yes
Tidal Volume 20 - 2000 ml	Yes	Yes	Yes
Respiratory Frequency: 1 - 80 bpm	Yes	Yes	Yes
Inspiratory Pressure 10-80 cm H2O	Yes	Yes	Yes
Adjustable I: E up to an inverse ratio of 4:1	Yes	Yes	Yes
Pressure / Flow Triggered Sensitivity	Yes	Yes	Yes
FiO2 (should be able to operate on single air gas source at 21% oxygen)	Yes	Yes	Yes
Inspiratory Time: 0.1 – 10 Sec	Yes	Yes	Yes
PEEP / CPAP: 1 – 40 cmH2O	Yes	Yes	Yes
Pressure Support: 1- 40 cmH2O	Yes	Yes	Yes
<b>Other Controls:</b>	Yes	Yes	Yes
Automatic Leak Compensation	Yes	Yes	Yes
Tube Resistance Compensation	Yes	Yes	Yes
Breathing Circuit Compliance Compensation	Yes	Yes	Yes
Pause	Yes	Yes	Yes
Sigh	Yes	Yes	Yes
Bias Flow	Yes	Yes	Yes
Manual Inflation	Yes	Yes	Yes
Expiratory Hold	Yes	Yes	Yes
Inspiratory Hold	Yes	Yes	Yes
Suction Disconnect Function	Yes	Yes	Yes
100 % Oxygen for 3 minutes	Yes	Yes	Yes
<b>Monitored Parameters with digital display:</b>	Yes	Yes	Yes



Total Breath Rate	Yes	Yes	Yes
RSBI	Yes	Yes	Yes
FiO2 Dynamic	Yes	Yes	Yes
Real Time Curves, Waveforms and Loops for Flow, Volume & Pressure	Yes	Yes	Yes
Airway Pressure (Peak and Mean)	Yes	Yes	Yes
Tidal Volume (Inspiratory and Expiratory)	Yes	Yes	<b>Monitoring of Inspiratory Tidal Volume not Available (Major Deviation)</b>
Minute Volume (Inspiratory and Expiratory)	Yes	Yes	Yes
Spontaneous Tidal Volume	Yes	Yes	Yes
Spontaneous Minute Volume	Yes	Yes	Yes
Peak Inspiratory Flow	Yes	Yes	Yes
Peak Expiratory Flow	Yes	Yes	Yes
Peak Spontaneous Flow	Yes	Yes	Yes
I: E Ratio	Yes	Yes	Yes
Intrinsic PEEP and PEEPi Volume	Yes	Yes	Yes
Plateau Pressure	Yes	Yes	Yes
Resistance and Compliance	Yes	Yes	Yes
Battery Backup Remaining Time	Yes	Yes	Yes
Patient Effort or Trigger Level Indication	Yes	Yes	Yes
Comprehensive Alarms Package with at least the following alarms:	Yes	Yes	Yes
Apnea and automatic return to back up ventilation with standard settings	Yes	Yes	Yes
High FiO2	Yes	Yes	Yes
Low FiO2	Yes	Yes	Yes
High Respiratory Rate	Yes	Yes	Yes
Low Peak Airway Pressure	Yes	Yes	Yes
High Peak Airway Pressure	Yes	Yes	Yes
Low Baseline Pressure	Yes	Yes	Yes
High Baseline Pressure	Yes	Yes	Yes
Sustained High Baseline Pressure	Yes	Yes	Yes
High Expiratory Minute Volume / Tidal Volume	Yes	Yes	Yes
Low Expiratory Minute Volume / Tidal Volume	Yes	Yes	Yes
Disconnect Threshold	Yes	Yes	Yes
AC Power Failure	Yes	Yes	Yes
Gas Supply Source Failure	Yes	Yes	Yes
Low Gas Supply	Yes	Yes	Yes
Low Battery Alarm 10 min	Yes	Yes	Yes
No Battery Alarm	Yes	Yes	Yes

Alarm Violations Display or Equivalent	Yes	Yes	Yes
Trends for 24 hours / Event History Log up to 1000 most recent events	Yes	Yes	Yes
<b>System Components:</b>			
1. Ventilator as above	Yes	Yes	Yes
2. TFT/LCD 12" Minimum Touch Screen Colour Monitor	Yes	Yes	Yes
3. Servo Controlled Humidifier (USA/Europe/Japan/New Zealand) with Adult & Paeds Autoclavable Reusable Chamber with Temperature Monitoring	<b>PMH 7000 Plus, Pacific Medco, Japan</b>	<b>MR 850, Fisher &amp; Paykel, New Zealand</b>	<b>PMH 7000 Plus, Pacific Medco, Japan</b>
4. Internal Battery Backup for one hour for Ventilator	Yes	45 Minutes (Minor Deviation)	Yes
5. Reusable Autoclaveable (Silicone Material) Patient Breathing Circuit for Adult Patients 22 mm Bore two each	Yes	Yes	Yes
6. Reusable Autoclaveable (Silicone Material) Patient Breathing Circuit for Paeds Patients 15 mm Bore two each	Yes	Yes	<b>Not Quoted</b>
7. Nebulizer with Reusable Accessories for Adults Patients	Yes	Yes	Yes
8. Nebulizer with Reusable Accessories for Paeds Patients	Yes	Yes	Yes
9. Reusable Non-Invasive Masks for Adults Patients	Yes	Yes	Yes
10. Reusable Non-Invasive Masks for Paeds Patients	Yes	Yes	Yes
11. Test Lung with Restrictor for Adults Patients	Yes	Yes	Yes
12. Test Lung with Restrictor for Paeds Patients	Yes	Yes	Yes
13. Extra Autoclaveable Reusable Exhalation Valve with each unit	Yes	Yes	Yes
14. Ventilator should be upgradeable in future. Lifetime free software upgrade and free software installation in case of software is corrupted is required.	Yes	Yes	<b>Not Quoted</b>
15. Imported Cart for Ventilator	Yes	Yes	Yes
16. Imported Hinged Arm Holder with W-Type Hanger or Equivalent for the Patient Breathing Circuit	Yes	Yes	Yes
17. High Pressure Air & Oxygen Hoses with Compatible Nozzles to connect the Ventilator to the Central Air & Oxygen Supply System. For Ventilator with High Performance Turbine with 8-10 years of life with no limit in operating hours recommended for long term ventilation as per ICU requirements only oxygen hose with compatible nozzle is required.	Yes	Yes	Yes
18. Compatible Air Compressor with Cart (USA/Europe/Japan) with Compatible imported UPS with at least 30 minutes of back up time.	NA	NA	<b>DHR-280</b>

Note: Air Compressor is not required in case of Ventilator having built-in High Performance Turbine with 8-10 years of life with no limit in operating hours recommended for long term ventilation as per ICU requirements. Firm has to submit an undertaking from the Foreign Principal / Manufacturer as a documentary evidence to prove that High Performance Turbine has 8-10 years of life with no limit in operating hours recommended for long term ventilation as per ICU requirements.	NA	NA	Yes
19. Operating Manual (Hard Copy 03 and Soft Copy)	Yes	Yes	Yes
20. Service Manual (Hard Copy 03and Soft Copy)	Yes	Yes	Yes
1. Ventilator should be able to operate on Central Air & Oxygen Supply System / Air Compressor & Central Oxygen Supply System / Central Oxygen Supply System & High Performance Air Turbine with 8-10 years of life with no limit in operating hours recommended for long term ventilation as per ICU requirements.	Yes	Yes	Yes
2. Input Pressure Range to operate the ventilator should be:	Yes	Yes	Yes
a. Minimum Limit of 3 bar or better (less than 3 bars)	Yes	Yes	Yes
b. Maximum Limit up to max of 6 bars or more	Yes	Yes	Yes
3. Power Requirements: 220V, 50Hz	Yes	Yes	Yes
4. Ventilator should be able to operate on Disposable Patient Breathing Circuits readily available in the local market. Ventilator should not be bound to be used on the specific breathing circuits of specific manufacturers.	Yes	Yes	Yes
5. Ventilator should be FDA/CE (MDD)/MHLW approved. Firm has to submit at least one valid certificate out of three.	Yes	Yes	Yes
6. The competitors MUST have local service facility in Rawalpindi / Islamabad and have to give the same in written.	Yes	Yes	Yes
7. Service providers should have the necessary equipment recommended by the manufacturers to carry out preventive maintenance tests as per guidelines provided by the manufacturers.	Yes	Yes	Yes
8. The system must be complete with all Cables, Leads, Flow Sensors, Oxygen Sensors, CO2 Sensors (If CO2 is ordered), Transducers, Breathing Circuits, Batteries or any other accessory required for measuring all above selected parameters with disposables & consumable items to be used for Adult & Paediatrics Patients.	Yes	Yes	Yes
9. Warranty period should be five years from date of commissioning with parts including Accessories i.e. Cables, Leads, Transducers, Batteries, Oxygen Sensors, CO2 Sensors (If CO2 is ordered, Flow Sensors and yearly replacement (or as per recommendations of manufacturer) of preventive maintenance kits etc. except disposables and consumable items.	Yes	Yes	Yes

10. Firm has to quote detail of components of Preventive Maintenance Kit and evidence from the Foreign Principal / Manufacturer should also be provided in shape of brochure / user manual / service manual / undertaking.	Yes	Yes	Yes
<b>OPTIONAL:</b>	Yes	Yes	Yes
Built-in EtCO2 Analyzer	Yes	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>	<b>Non-Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#10  
Name OF Item: Pulse Oximeter

Company Name	Quintex Medical	Biotech Services	Mediurge	Radiant Medical
Models	VT 900S	P-OX 100L	Storm 5000	Pulse sence
Manufacturer	Andromeda	Medlab	Dixon	Nonin Medical
Country Of Origin	USA	Germany	Germany	USA
Specification				
<b>Operating features and characteristics:</b>				
Desk Top Pulse Oximeter	Yes	Yes	<b>Hand Held</b>	Yes
Non-invasive measurement of oxygen saturation and pulse rate	Yes	Yes	Yes	Yes
Display of Oxygen Saturation and Pulse Rate	Yes	Yes	Yes	Yes
LCD / TFT screen aprox 6 inches or more	<b>NO (3.4")</b>	Yes	<b>Size not mentioned</b>	Yes
Pulse Beat	Yes	Yes	Yes	Yes
Pulse Strength Perfusion Indication	Yes	Yes	Yes	Yes
Pulse:	Yes	Yes	Yes	Yes
Numeric: Pulse Rate: 20-250 beat per min.	Yes	30-250	Yes	Yes
SpO2:	Yes	Yes	Yes	Yes
Numeric: % Oxygen saturation: 0 - 100%	Yes	Yes	Yes	Yes
<b>Alarms:</b>	Yes	Yes	Yes	Yes
High and low (selectable) on SpO2 and Pulse Rate	Yes	Yes	Yes	Yes
Visual and Audible indication of alarms	Yes	Yes	Yes	Yes
<b>Trends:</b>	Yes	Yes	Yes	Yes
SpO2 trend curve display for last 48, 72, or 96 hours	Yes	Yes	Yes	Yes
<b>Standard Accessories:</b>	Yes		Yes	Yes

1. Adult Finger Sensor (Reusable)	Yes	Yes	Yes	Yes
2. Paediatric Finger Sensor (Reusable)	Yes	Yes	Yes	Yes
3. Operating Manual (Hard Copy 03 and Soft Copy)	Yes	Yes	Yes	Yes
4. Service Manual (Hard Copy 03and Soft Copy)	Yes	Yes	Yes	Yes
5. Must be CE marked (MDD/ CE Certificate) OR FDA approved OR (MHLW)	Yes	Yes	Yes	Yes
Operating_Requirements:	Yes	Yes	Yes	Yes
AC 220V / 50Hz	Yes	Yes	<b>NO</b>	Yes
Built-in Re-Chargeable Battery with battery back up of 6 hours or more	<b>Back up Time not Mentioned</b>	Yes	Yes	Yes
	<b>Non-Responsive</b>	<b>Responsive</b>	<b>Non-Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#11  
Name OF Item: Infusion Pump

Company Name	<b>Mediurge</b>
Models	Volumat Agilia
Manufacturer	Fresenius Kabi
Country Of Origin	France
Specification	
Infusion Pump (Latest Model)	Yes
Operates on any brand of infusion set.	Yes
Automatic control of infusion rate independent of venous or arterial pressure, solution container height, and solution viscosity. Bolus function manual or automatic. Air bubble detector. Automatic pressure release after occlusion. Automatic switchover to keep-vein-open (KVO) rate of 1.0 ml/hr (or previous rate, whichever is less). Compatible with commonly available Infusion sets. Portable operation from self contained rechargeable battery with 03 hours or more operation time.	Yes
ON/OFF:	Yes
Light indicates main or battery operation	Yes
FLOW SENSOR:	Yes
Detects a “no flow” situation i.e. empty container	Yes
DISPLAY:	Yes
LED/LCD digital display which indicates flow rate, infused volume, volume to be infused, volume balance, infusion time, remaining time, battery capacity, occlusion level, pressure barograph, medication name.	Yes
INFUSION RATE	Yes
0.1 - 999.9 ml/hr in 1 ml increments	Yes
INFUSION TIME	Yes
1 min to 99 hours 59 minutes	Yes

AUTOMATIC RATE CALCULATION	Yes
On total volume + time	Yes
VOLUME LIMIT SELECTION	Yes
From 0.1 - 9999 ml	Yes
Accuracy of above parameters +/- 5%	Yes
KVO RATE	Yes
· 1 – 3.0 ml/hr	Yes
AUDIBLE AND VISUAL ALARMS	Yes
Activated by:	Yes
Empty Container	Yes
Occlusion	Yes
Low Battery	Yes
Open Door	Yes
Air-in-Line	Yes
Internal Malfunction	Yes
End of infusion	Yes
BATTERY:	Yes
Rechargeable maintenance free dry batteries with 3 hours or more operation when fully charged.	Yes
SAFETY FEATURES:	Yes
Door locks while functioning	Yes
<b>ACCESSORIES:</b>	Yes
1. Operating Manual (Hard Copy 03 and Soft Copy)	Yes
2. Service Manual (Hard Copy 03and Soft Copy)	Yes
3. IV Serts (10)	Yes
	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#12  
Name OF Item: Syringe Pump

Company Name	<b>Sigma International</b>	<b>Mediurge</b>
Models	SY 5000	Injectomat Agilia
Manufacturer	Andromeda	Fresenius Kabi Deutschland Germany
Country Of Origin	USA	France
Specification		
SYRINGE PUMP	Yes	Yes
Syringe pump for fluid administration.	Yes	Yes
Flow Rates: 0.1 - 300 ml/hr.	Yes	Yes
Digital display of set parameters.	Yes	Yes
Universal Syringe acceptance capability for disposable, Plastic, Size, 10, 20, 50 ml.	Yes	Yes
Drive Accuracy. ±3%	Yes	Yes
Display of drug name, Infusion rate, infused volume and volume to be infused.	Yes	Yes
Automatic adaptation of controls according to syringe / infusion set.	Yes	Yes
Quick freed/rapid infusion facility.	Yes	Yes
Safety alarm audible and acoustic for occlusion end of infusion, low battery.	Yes	Yes
Rechargeable Battery for minimum 03 hrs operation and mains operated 220V, 50Hz.	Yes	Yes
<b>ACCESSORIES:</b>	Yes	Yes
1. Operating Manual (Hard Copy 03 and Soft Copy)	Yes	Yes
2. Service Manual (Hard Copy 03and Soft Copy)	Yes	Yes
3. IV Serts (10)	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#15

Name OF Item: Dialysis Machine

Company Name	<b>Fresenius Medical</b>	<b>Iqball&amp;Company</b>
Models	4008S	Gambro AK-96
Manufacturer	Fresenius Medical	Gambro
Country Of Origin	Germany	Sweden
Specification		
<b><u>DIALYSIS MACHINE</u></b>		
Double needle system and single needle with single pump	Yes	Yes
Electronic control of Dialysate flow rate and Blood flows.	Yes	Yes
Water Inlet: Pressure should be at least from 0.5 and up to 6 Bar	Yes	Yes
Water Temp. : + 10 to +30 deg.	Yes	Yes
Variable Bicarbonate Acetate Concentration	Yes	Yes
Bicarbonate adjustable bicarbonate proportion with profiling	Yes	Yes
Variable temperature control with profiling	Yes	Yes
Programmable Ultra filtration with profile control or varying rate	Yes	Yes
Ultra filtration with or without diffusion	Yes	Yes
Programmable Heparin Management with profiling and bolus option	Yes	Yes
Automatic priming with LCD/TFT 10" or above display	Yes	Yes
Touch LCD/TFT 10" or above Display for operation, service diagnostic and calibration	Yes	<b>NO</b>
Automatic clean, disinfect and rinsing mechanism.	Yes	Yes
Blood Pump: 50 to 600 ml/min	Yes	Yes
Heparin Pump: 0 to 10.0 cc / hour	Yes	Yes
Selectable Dialysate Flow: 300 to 800 ml//min in 1 ml step with profiling	Yes	Yes
Temperature Control: up to (Adjustable) + 33 to + 40 deg	Yes	Yes
Arterial Pressure Monitor: -300mmHg to _52 mmHg -400 to +400 mm Hg	Yes	Yes
Venous Pressure Monitor:- 52 mmHg to +400 mmHg or above. 20 to 390 mm Hg	Yes	Yes
Ultra filtration Rate Control: Range of UFR 0.0 to 0.0 to 3.0 kg- hour or above balanced ultra filtration control to eliminate patient symptoms that result from poor fluid management.	Yes	Yes



Air bubble Detection: Air bubble detector alarm threshold. Double safety both ultrasonic and optical detections	Yes	Yes
Blood leak Detection: Infrared type	Yes	Yes
Conductivity Control: Acetate and Acid Solutions 12 to 16.5 mEq/L and for Bicarbonate Solutions 20 to 40 mEq/ l. I.O. to specify the liquid / powder (Internal automatic mixing).	Yes	Yes
Built-in Heat disinfect system	Yes	Yes
Built-in Battery backup for at least 20-min	Yes	Yes
Universal tubing set adult / paedes	Yes	Yes
<b>OPTIONALS:</b>		
Dialyzer Inlet Pressure Sensor	Yes	Yes
Single needle treatment.	Yes	Yes
Sodium profiling	Yes	Yes
Online UV Urea clearance monitor Kt/V	Yes	Yes
B.P monitor	Yes	Yes
Biacart Cartridge Holder	Yes	Yes
RO Water Purification System	Yes	Yes
Locally Made	Yes	Yes
220 VAC, 50 Hz, 10 Amp.	Yes	Yes
Meets the highest industry standard (AAMI) for pure water of AAMI or greater of quality for Water to Dialysis Machines and Renal Patients for improvement in quality of life with highest innovation.	Yes	Yes
Configuration	Yes	Yes
RO Water Purification System to operate 10-12 Dialysis Machines	Yes	Yes
Direct feed or through tank and re pressurizing SS Pump & UV sterilizer to dialysis machines	Yes	Yes
Mounted on SS305 SKID (corrosion proof)	Yes	Yes
RO internal Plumbing Stainless Steel 316L (Dead Space Free ) of Pharmaceutical Grade	Yes	Yes
Product and Reject Flow Meters	Yes	Yes
Feed and Product ONLINE TDS/ Conductivity Meters	Yes	Yes
Redundant Operation RO Motors	Yes	Yes
Dead Space Free Membrane Housing	Yes	Yes
Manual Operation in case Electrical Control Panel Failure	Yes	Yes
RO System Includes Water Pre Treatment;	Yes	Yes
Screen Filter for Mud/Sediments qty 1	Yes	Yes
Cartridge Filter Size 20" qty 1	Yes	Yes
Feed Booster Pump 220VAC,1HP qty 1	Yes	Yes
Automatic Sand Filter >10"X54" qty 1	Yes	Yes
ACF Chlorine (KDF) Filtration >10"X54" qty 1	Yes	Yes
Automatic Water Softener >10"X54" qty 1	Yes	Yes

Storage Tanks 200 Gallons	qty 2	Yes	Yes
UV Sterilizer 12 LPM	qty 1	Yes	Yes
SS Re Pressurizing Pump 220 VAC, 1HP	qty 1	Yes	Yes
		<b>Responsive</b>	<b>Non-Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#16  
Name OF Item: Platelet Separator

Company Name	<b>Sigma International</b>
Models	Novomatic
Manufacturer	LMB
Country Of Origin	Germany
Specification	
PLATELETS SEPARATOR	Yes
Microprocessor based unit with digital display	Yes
Unit to be used for the separation of Red cells, Plasma, and platelet separation.	Yes
High sensitive sensor with atleast 6 sensors or more sensors for different types of plasma, blood components and tube material	Yes
Automatically motor driven movement	Yes
Automatically adjustable sealing heads for bag system	Yes
Data transfer facility through LAN	Yes
System should have the possibility to store data with program storage facility	Yes
Touch screen Display	Yes
Flow regulation control system	Yes
Possibility of separation of plasma and transfer of additive solution	Yes
<b>Optional:</b>	Yes
Automatic pressing of air out of the plasma bag	Yes
Possibility of barcode reader attachment	Yes
	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#18

Name OF Item: Blood CP Machine/Heamatology Analyzer 18 Parameters

Company Name	<b>Seico Scintific</b>	<b>Sigma International</b>
Models	Abacus 380	Convergys X3
Manufacturer	Daitron	Convergent
Country Of Origin	Germany	Germany
Specification		
BLOOD CP MACHINE / HAEMATOLOGY ANALYZER 18 PARAMETERS (Latest Model)	Yes	Yes
18 parameters, including 3-part WBC differential	Yes	Yes
System should be able to stored and display results with histograms	Yes	Yes
Integrated quality check program with at least 5 or more levels and Levey-Jennings charts	Yes	Yes
Touch Screen Display	Yes	Yes
Internal database, USB ports	Yes	Yes
Fully automated sample-handling, measurement, clog-prevention open tube system 25 µl of whole blood Sample volume	Yes	Yes
Minimum. 10 000 records including histograms DATA storage capacity	Yes	Yes
RS232 or USB	Yes	Yes
Built in printer	External Printer	Yes
60 or more Tests / Hour	Yes	Yes
System should have built in sample range	Yes	Yes
<b>Optional</b>	Yes	Yes
PS/2 or USB keyboard	Yes	Yes
To be supplied with:	Yes	Yes
Operating Manual (Hard Copy 03 and Soft Copy)	NQ	Yes
Service Manual (Hard Copy 03and Soft Copy)	NQ	Yes
<b>POWER REQUIREMENT:</b>	Yes	Yes
Single phase with line voltage of 220V, 50 Hz	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#19  
Name OF Item: Phacemulsification Machine

Company Name	<b>Radiant Medical</b>
Models	Soverign Compact
Manufacturer	AMO
Country Of Origin	USA
Specification	Yes
Phacoemulsification System	Yes
(Latest Model)	Yes
Consisting of: -	Yes
Main Console with foot pedal featuring	Yes
Irrigation / Aspiration	Yes
Phacoemulsification	Yes
Anterior Viterctomy	Yes
Bipolar Coagulation with Accessorie: -	Yes
Collection cassette	Yes
Tubing set	Yes
Test chamber	Yes
Luer adaptor for 1/A Handpiece	Yes
Phaco Keratome, 3mm wide	Yes
Vitrectomy Probe with tubing set	Yes
Phaco needle 30 level round	Yes
Ultrasonic Handpiece needle wrench	Yes
Metal irrigation sleeves	Yes
Bipolar cable	Yes
Bipolar forceps complete as above	Yes
Optional Accessories: -	Yes
1/A Phaco pack consisting of:	Yes
1/A Collection cassette	Yes

1/A Tubing set	Yes
1/A Test Chamber	Yes
Anterior Vitrectomy pack with	Yes
Intergrated irrigation sleeve consisting of	Yes
Vitrectomy probe with tubing set	Yes
Irrigation sleeves	Yes
	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#20  
Name OF Item: Blood Gas Analyzer

Company Name	<b>Sigma International</b>
Models	Convergys Liquical
Manufacturer	Convergent
Country Of Origin: USA, Europe, Japan	Germany
Specification	Yes
Semi-automatic system For the measurement of pCO2, pO2, pH	Yes
Sample Type: whole Blood, Serum or Plasma	Yes
Sample volume: ≤ 190 µl	Yes
Automatic two-point calibration with possibility of manual calibration.	Yes
output at least 60 test per hour	Yes
Digital big LCD display	Yes
Built in printer	Yes
System database should have large memory to store 1000 or more results	Yes
	<b>Responsive</b>



**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#21b

Name OF Item: Suction Machine Heavy Duty

Company Name	Quintex Medical	Vertex Medical	Sigma International	Vital Care
Models	F-100/F4	Dominant Flex	New Hospivac 350	New Hospivac 350
Manufacturer	Fazini srl	Medela	CA-MI	CA-MI
Country Of Origin	Italy	Switzerland	Italy	Italy
Specification	Yes			
Suction Machine General Use	Yes	Yes		
Reciprocating, oil free pump & piston mechanism.	Yes	Yes	Yes	Yes
Heavy duty Mobile Suction Unit with twin jars of capacity up to 4 or 5 liters each, autoclavable.	Yes	Yes	Yes	Yes
Aspiration rate up to 50 or more liters /minutes. Vacuum continuously adjustable	Yes	Yes	Yes	Yes
10X bacterial filter	Yes	Yes	Yes	Yes
Over Flow Safety Device.	Yes	Yes	Yes	Yes
Footswitch	Yes	Yes	Yes	Yes
Complete aspiration set	Yes	Yes	Yes	Yes
220V/50Hz. I Phase	Yes	Yes	Yes	Yes
Trolley with lockable wheels.(local)	Yes	Yes	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#22  
Name OF Item: X-Ray Image Intesifier (C-Arm)

Company Name	Mediquips	Eastern Medical	Radiant Medical
Models	Surginix SXT-2000/E1	Evo R 9" - DS 1000	Select Line
Manufacturer	Toshiba	Apelem	Simad
Country Of Origin: USA,Europe,Japan	Korea	France	Italy
Specification	Yes	Yes	Yes
X-Ray Image Intensifier (C-Arm)	Yes	Yes	Yes
Description of Function	Yes	Yes	Yes
The C-arm needs to be capable of performing fluoroscopy / radiography during procedures on the body for all patient sizes.	Yes	Yes	Yes
Operational Requirements	Yes	Yes	Yes
Should be a mobile unit including C-Arm and image processing/viewing system with large wheels for easy transportation and with easy maneuverability.	Yes	Yes	Yes
Technical Specifications	Yes	Yes	Yes
C-Arm Mechanical:	Yes	Yes	Yes
1. The system shall be equipped with cable pushers on the C-Arm wheels so that cables lying on the floor will not limit the C-Arm movements.	Yes	Yes	Yes
2. The C-Arm shall have a minimum distance of 75 cm between the source & image receptor to facilitate larger imaging space and clearance around the patient/table.	Yes	Yes	Yes
3. The system shall allow interchanging the positions of x-ray tube and imaging system	Yes	Yes	Yes
4. The C-Arm shall be able to rotate ±180° to allow the imaging chain to accomplish angled projections.	Yes	Yes	Yes
5. The system shall have vertical C-Arm travel capability (preferably 16" or higher) to adjust the imaging chain height.	Yes	Yes	Yes
3.2 Movements:	Yes	Yes	Yes



Orbit Rotation motor driven or manual, Multiple Angulations, with provision to take orthogonal views of the application from multiple angulations, Horizontal Travel, Swivel travel, Free Space, Electromagnetic brakes for precise positioning of the arms	Yes	Yes	Yes
3.3 X-Ray Tube:	Yes	Yes	Yes
o The x-ray tube shall be preferably rotating anode type.	Yes	Yes	Yes
o Dual focal spots of sizes 0.3 / 0.6 mm for Fluoroscopy /Radiography	Yes	Yes	Yes
o Anode thermal heat storage capacity up to 200 KHU	Yes	Yes	Yes
o X-Ray Generator:	Yes	Yes	Yes
§ Microprocessor controlled.	Yes	Yes	Yes
§ The generator shall be 15 KHz or higher frequency or DC converter type.	Yes	Yes	Yes
§ The power load shall be of minimum 2-5 KW and KVp Range: 40 – 120KV, Radiographic Current: 20 mA or higher, Fluoroscopic Current: 0.5 – 10 mA.	Yes	Yes	Yes
o The mAs range in radiographic mode shall be of minimum 120 mAs.	Yes	Yes	Yes
o Motorized Collimator system: Shutters - Iris Diaphragms	Yes	Yes	Yes
o DAP display feature to be provided Laser localizer beam Cine +LIH	Yes	Yes	Yes
Image Intensifier System:	Yes	Yes	Yes
o Should be DICOM ready , Image intensifier based panel for x Ray Imaging	Yes	Yes	Yes
o The image intensifier shall be at least 9 inch to have wide coverage. CCD CAMERA	Yes	Yes	Yes
o Resolution Active pixel 1024 × 1024 , c minimum 10 bits ,25frames /s	Yes	Yes	Yes
o Contrast resolution 1024 grey level	Yes	Yes	Yes
o The image intensifier shall be equipped with a grid with 8:1 ratio .or better	Yes	Yes	Yes
o The system shall be equipped with a high resolution of minimum 1k x 1k imaging chain.	Yes	Yes	Yes
o Image display shall be minimum 17” high resolution TFT black &white monitor medical grade. TFT resolution 1280x1024, 2 monitor. Radiographic Film Cassette Holder :detachable	Yes	Yes	Yes

o System must be supplied with minimum 10” x 12” film cassette holder with screen & grid.	Yes	Yes	Yes
o System Configuration, Accessories, spares and consumables	Yes	Yes	Yes
o Radiographic Apron with belt and thyroid collar, front and back protection (wrap-around), non-lead material, 0.5mm Pb equivalent. Qty 03 Vinyl lead gloves Qty 03 pairs Goggles with lead glass Qty 03 , Radiographic Apron and gloves rack for the above ,DICOM ready	Yes	Yes	Yes
	<b>Non-Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#23  
Name OF Item: ECG Machine

Company Name	Mediquips	Biotech Services	Quintex Medical	Radiant Medical	Vital Care
Models	1250K	Cardico 306	ECG300A	FX-7102	KES-601T
Manufacturer	Nihon Kohden	Suzken Co	Fazini	Fukuda Denshi	Kalamed
Country Of Origin: USA,Europe,Japan	Japan	Japan	Italy	Japan	Germany
Specification	Yes	Yes	Yes	Yes	Yes
ECG MACHINE MULTI-CHANNEL	Yes	Yes	Yes	Yes	Yes
(Latest Model)	Yes	Yes	Yes	Yes	Yes
Three channel ECG machine for 12 lead ECG recording	Yes	Yes	Yes	Yes	Yes
OPERATING FEATURES and CHARACTERISTICS:	Yes	Yes	Yes	Yes	Yes
Automatic Operation	Yes	Yes	Yes	Yes	Yes
Thermal print head	Yes	Yes	Yes	Yes	Yes

Display size 5" LCD/TFT	Yes	Yes	<b>NO (3.8")</b>	Yes	Yes
Standard 3 channels with ECG paper in roll, chart magazine or Z- fold form	Yes	Yes	Yes	Yes	Yes
Recording Trace speed: 12.5 and 50 mm/sec	Yes	Yes	Yes	Yes	Yes
Complete digital filter, avoid baseline drift, AC, EMG interference, filter range from till 150Hz	Yes	Yes	Yes	Yes	Yes
Defibrillator protection	Yes	Yes	Yes	Yes	Yes
Possibility of data transfer to data management system	Yes	Yes	Yes	Yes	Yes
PARAMETERS:	Yes	Yes	Yes	Yes	Yes
Rhythm lead:Selectable among standard 12 leads	Yes	Yes	Yes	Yes	Yes
Waveform: 12 lead ECG Trace	Yes	Yes	Yes	Yes	Yes
Lead Selection Lead I, II, & III, aVR, aVL & aVF, V1, V2, V3, V4, V5 & V6	Yes	Yes	Yes	Yes	Yes
Variable gain: 2.5,5,10 or 20mm/mV	Yes	Yes	Yes	Yes	Yes
OTHER FEATURES:	Yes	Yes	Yes	Yes	Yes
Automatic ECG interpretation, analysis and reporting	Yes	Yes	Yes	Yes	Yes
12 lead simultaneous ECG acquisition	Yes	Yes	Yes	Yes	Yes
OPERATING REQUIREMENTS:	Yes	Yes	Yes	Yes	Yes
AC 220V / 50Hz	Yes	Yes	Yes	Yes	Yes
Built in battery and charger for at-least 60 min operation	Yes	Yes	Yes	Yes	Yes
<b>ACCESSORIES:</b>	Yes	Yes	Yes	Yes	Yes
1. ECG Patient Cable	Yes	Yes	Yes	Yes	Yes
2. Reusable Adult Electrodes (2 sets)	Yes	Yes	Yes	Yes	Yes
3. Reusable Paeds Electrodes (2 sets)	Yes	Yes	Yes	Yes	Yes
4. ECG Paper Rolls 10 ( <b>Note:</b> Paper should be easily available from the market)	Yes	Yes	<b>Only 1 Quoted</b>	Yes	Yes
5. Cart (Local with imported wheels having two lockable)	Yes	Yes	Yes	Yes	Yes
6. Operating Manual (Hard Copy 03 and Soft Copy)	Yes	Yes	Yes	Yes	Yes
Service Manual (Hard Copy 03and Soft Copy)	Yes	Yes	Yes	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>	<b>Non-Responsive</b>	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#24a

Name OF Item:Mobile OT Light iwith Stand Mounting with Battery Backup

Company Name	Eastern Medical	Radiant Medical	Sahar Internationa
Models	AMAX30FMEL	3EL-F	LED200fW
Manufacturer	Brandon Medical	Admeco	Dr. Mach
Country Of Origin	UK	Switzerland	Germany
Specification			Yes
Mobile OT Light with Stand Mounting with Battery Backup	Yes	Yes	Yes
Fitted with a sterilizeable light handle for sterile operation	Yes	Yes	Yes
Battery Backup time: minimum 1 hour	Yes	Yes	Yes
Color temperature 4,000-5,000 K or Better	Yes	Yes	Yes
Luminance at a distance of 1.0 m 120,000 LUX minimum	Yes	Yes	Yes
Light field diameter 150-250 mm or equal	Yes	Yes	Yes
Color rendering index (CRI) 94 or better	Yes	Yes	Yes
Average LED life > 40,000 h or Better	Yes	Yes	Yes
	Responsive	Responsive	Responsive

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#24b  
Name OF Item:Mobile3 OT Light with Stand Mounting with Battery Backup

Company Name	Sahar Internationa	Radiant Medical
Models	LED200fW	3EL-F
Manufacturer	Dr. Mach	Admeco
Country Of Origin	Germany	Switzerland
Specification	Yes	Yes
Mobile OT Light with Stand Mounting with Battery Backup	Yes	Yes
Fitted with a sterilize able light handle for sterile operation	Yes	Yes
Battery Backup time: minimum 1 hour	Yes	Yes
Color temperature 4,000-5,000 K or Better	Yes	Yes
Luminance at a distance of 1.0 m 120,000 LUX minimum	Yes	Yes
Light field diameter 150-250 mm or equal	Yes	Yes
Color rendering index (CRI) 94 or better	Yes	Yes
	Responsive	Responsive

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#25

Name OF Item: Fully Automatic Chemistry Analyzer

Company Name	<b>Sigma International</b>	<b>Seico Scientific</b>
Models	Fully	Pictus 200
Manufacturer	BIO Chemical System Intl	Diatron
Country Of Origin	Italy	Hungrey
Specification	Yes	Yes
SEMI-AUTOMATED CHEMISTRY ANALYZER (Latest Model)	Yes	Yes
Operating mode: Absorbance, End-Point, Fixed Time, Kinetic, Multistandard.	Yes	Yes
Throughput: 90-100 tests/hour	140 test / hr	200 test / hr
Light source Halogen lamp 12V 20W	Yes	Yes
Spectral Range 320-690 nm	Yes	Yes
Filter Wavelength 340, 405, 492, 505, 546, 578, 630 nm, one free position	Yes	Yes
Measuring Range From –0.200 to 2.500 O.D. Flow Cell 18 µl	Yes	(-0.1 to 3.6A)
Incubation temperature 37°C ± 0.2°C	Yes	Yes
Minimum Reading volume 350 µl	Yes	Yes
Sample number 50 positions or more for samples, calibrators and controls/tray	54 Positions	48 positions
Sample volume 2-200µl	Yes	2-100 uL
Pre and post dilution ration: 1:2 – 1:20	Yes	Yes
Reagent tray of 20 bottles,	Yes	Yes
Separate bottle for diluents	Yes	Yes
Alarm for Pre-heated Reagent warming	Yes	Yes
Number of wells 144 wells (12 wells x 12 strips) with volume of 1 ml.	Yes	Yes
Well temperature 37 °C; ± 2 °C	Yes	Yes
Diluter syringe 1000 µl, 1 µl steps	Yes	Yes
<b>Accessories:</b>		
Built-in Computer will all accessories 12" TFT, Built-in printer, 120 mm Output RS232	Yes	Yes
<b>To be supplied with:</b>		
Operating Manual (Hard Copy 03 and Soft Copy)	Yes	NQ
Service Manual (Hard Copy 03and Soft Copy)	Yes	NQ

<b>POWER REQUIREMENT:</b>		
Single phase with line voltage of 220V, 50 Hz	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4  
Item#26  
Name OF Item: X-Ray Machine 500mA

Company Name	Mediquips	Radiant Medical	Eastern Medical	Mediurge
Models	Radrex MRAD-A50S	Moviplan	Camargue	Protec
Manufacturer	Toshiba	Villa	Apelem	PRS 500 FS
Country Of Origin: USA,Europe,Japan	Japan	Italy	France	Germany
Specification				
X-Ray Machine 500 mA	Yes	Yes	Yes	Yes
Microprocessor based, high frequency at least 40 KHz & 50 KW X-Ray Generator	Yes	Yes	Yes	Yes
500 mA at 100 KV.	Yes	Yes	Yes	Yes
KV increase digitally	Yes	Yes	Yes	Yes
Anatomical programmed radiography	Yes	Yes	Yes	Yes
Digital display for all set parameters	Yes	Yes	Yes	Yes
Rotating anode X-Ray Tube, with dual focus 0.6 & 1/1.5 mm.	Yes	Yes	Yes	Yes
Anode heat storage capacity of at least 300 KHU or more	Yes	Yes	Yes	Yes
Electronic timer with exposure time of 1m Sec	Yes	Yes	Yes	Yes
System with AEC facility	Yes	Yes	Yes	Yes
Floor mounted tube stand	Yes	Yes	Yes	Yes
Capable of lateral radiography	Yes	Yes	Yes	Yes
Electromagnetic / mechanical breaks	Yes	Yes	Yes	Yes
4 way floating table with moving Bucky	Yes	Yes	Yes	Yes
Chest stand with Bucky	Yes	Yes	Yes	Yes
Complete with grid 10:1 ratio	Yes	Yes	Yes	Yes
Automatic overload protection device and automatic line compensation	Yes	Yes	Yes	Yes
Generator to be connected to 440 V	Yes	Yes	Yes	Yes
X-Ray cassettes set of three for each size with intensifying Screen (02)	Yes	Yes	Yes	Yes
Operating Manual (Hard Copy 03 and Soft Copy)	Yes	Yes	Yes	Yes
Service Manual (Hard Copy 03and Soft Copy)	Yes	Yes	Yes	Yes
POWER REQUIREMENT:	Yes	Yes	Yes	Yes

Three phase with line voltage of 380V, 50 Hz	Yes	Yes	Yes	Yes
Provision and fixing of cabling, DB, earthing and compatible transformer (if required) will be responsibility of the firm.	Yes	Yes	Not Quoted	Yes
Renovation of X-Ray Room and Control Room, flooring, false ceiling, heating, cooling and lead lining will be responsibility of the firm.	Yes	Yes	Yes	Yes
	Responsive	Responsive	Non-Responsive	Responsive

Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments

EDO Health Attock

Lot#4  
Item#29  
Name OF Item: Computerized Radiography System

Company Name
Models
Manufacturer
Country Of Origin: USA,Europe,Japan
One Digitizer/ Reader Unit, Multiple Plates Type System
Should be capable to read X-Ray exposed Rigid Imaging Plates (IP) of all Standard sizes in inches/cm.
The productivity of reading / digitizing should be minimum 70 IPs/Hr.
Reading function 90 µm / 50 µm
Should support resolution 10 pixels / mm or more.
One Radiographer Console with users software's: (Unit)
CR console with LCD
Should be capable to enter & edit Patient ID.
Should support Image Preview & Quality Assurance.
Should have temporary storage capacity of up to 2,000 or more images.
Should comply with DICOM Conformance 3.0 and have standard functions for future connectivity with PACS or other DICOM Modalities inclusive of Print, Storage, etc.
Dry Laser Printers, floor mounted with high throughput providing 3 size online
DICOM 3.0 Compliant Grayscale Dry format printers.
Should have minimum productivity of 150 films/ hour
Printer should have feed plates of size 14 x 17 , 8 x10, 10 x 12, 11 x 14



Minimum resolution should be 10 pixels/mm and 12-bit gradation.

Matrix size should have 90 µm / 50 µm

Rigid Imaging Plates (IP) and Cassettes

**Accessories:**

1. Ten 14 x 17 inch (Set of IPs & Cassettes).
2. Ten 10 x 12 inch (Set of IPs & Cassettes)
3. Ten 8 x 10 inch (Set of IPs & Cassettes)
4. Ten 11 x 14 inch (Set of IPs & Cassettes)
5. DICOM capability
6. DICOM 3 capability for Send, Receive, Archive, Retrieve and Print.
7. Online UPS 10 KVA with 15 minutes back up time.
8. One black & white professional grade laser printer with print speed of 10PPM or more with high DPI.
9. Operating Manual (Hard Copy 03 and Soft Copy)
10. Service Manual (Hard Copy 03 and Soft Copy)

**POWER REQUIREMENT:**

Single phase with line voltage of 220V, 50 Hz

**NOTE:**

*The system must be complete with all Cables & Leads or any other accessory required for measuring all above selected parameters with disposables & consumable items for Adult & Paediatrics Patients. Warranty period should be (If applicable) and Accessories i.e Tube Head, Cables, Transducers, Batteries etc. except disposables and consumable items.*

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#4

Item#32

Name OF Item: Echoradiography Machine

Company Name	<b>Mediquips</b>	<b>Biotech Services</b>
Models	Aplio 300	Maylab Seven
Manufacturer	Toshiba	Esaote
Country Of Origin	Japan	Italy
<b>Specification</b>	Yes	Yes
A complete dedicated digital Echocardiography unit for wide range.	Yes	Yes
of premium performance application of cardiovascular imaging in	Yes	Yes
pediatrics and adult. Receiving / processing channels min.	Yes	Yes
15000-20000. Mobile built in trolley system with built in workstation	Yes	Yes
/ data management system for digital acquisition, storage and	Yes	Yes
review of complete ultrasound studies including static and dynamic	Yes	Yes
clips in DICOM format, read/write zoom. Studies can be reviewed	Yes	Yes
and output to CD / DVD. The machine must have sharp and high	Yes	Yes
quality image reproduction with heavy duty performance. It should	Yes	Yes
have minimum following specification	Yes	Yes
DISPLAY:	Yes	Yes
Display size Min. 15" to 19" Flat/TFT, tiltable and swiveable type with articulating arm.	Yes	Yes
OPERATING MODES:	Yes	Yes
B, 2D M-Mode, Power Doppler, HPRF, Spectral Doppler, Color	Yes	Yes
Doppler, Velocity Mode, Pw Doppler, Duplex And Triplex Doppler,	Yes	Yes
CW Doppler Steerable and ECG Gating, TEE imaging , IMT, Stress	Yes	Yes
Echo, Strain rate imaging, Tissue Doppler Imaging,, Contrast	Yes	Yes
Imaging, Anatomical M Mode, Panoramic Imaging,	Yes	Yes
CONTROL PANEL:	Yes	Yes
Alphanumeric keyboard with built-in trackball and 7" touch screen control panel	Yes	Yes
Direct access to system functions through dedicated keys.	Yes	Yes
Indicator lights identify activated keys.	Yes	Yes
Audio volume control with bidirectional / stereo speakers and foot switch	Yes	Yes

User selectable image magnification control.	Yes	Yes
Adjustable transmit focusing control.	Yes	Yes
Total and Lateral Gain Compensation controls (6 or more).	Yes	Yes
3 Active Probe connectors + 1 for Doppler probe.	Yes	Yes
CALIPER / MEASUREMENTS:	Yes	Yes
6 to 8 calipers for measurement per screen trace length measurements for:	Yes	Yes
Distance, angle, distance depth from skin line, area, circumferences,	Yes	Yes
compound / volume, slope, time, heart rate and acceleration, Auto	Yes	Yes
Ejection Fraction Measurements.	Yes	Yes
APPLICATION:	Yes	Yes
Cardiac, Peripheral, pediatric, adult cephalic and transesophageal	Yes	Yes
with all required software for measurements.	Yes	Yes
DISPLAY MODES:	Yes	Yes
Live and stored display format: full size and split screen. Review	Yes	Yes
image format: for still and cine, simultaneous capability B+PW, B+	Yes	Yes
CFM +PW, CW, B+ or triplex mode, , B+ color split screen display.	Yes	Yes
2D mode, M-mode, color Doppler imaging, color Doppler imaging,	Yes	Yes
color m-mode, PW / HPRF Doppler, CW Doppler, TEE imaging ,	Yes	Yes
IMT, Stress Echo, tissue Strain imaging, Tissue Doppler Imaging,	Yes	Yes
Anatomical M Mode, Panoramic Imaging, Vascular imaging ,	Yes	Yes
vascular calculations, cardiac measurements and full cardiac imaging.	Yes	Yes
CINE MEMORY	Yes	Yes
Min. Cine Memory for 1000 frames or 250MB min.	Yes	Yes
IMAGE VIEWING DEPTH:	Yes	Yes
30 cm or more	Yes	Yes
FRAME RATE	Yes	Yes
Minimum frame rate 1000 Hz	Yes	Yes
700 frames per second	Yes	Yes
STORAGE DEVICE	Yes	Yes
Built-in CD / DVD and USB Drive	Yes	Yes
SYSTEM DYNAMIC RANGE	Yes	Yes
Dynamic range minimum 200 dB or more	Yes	Yes
COMMUNICATION SOFTWARE	Yes	Yes
	Yes	Yes
System should be upgradable for DICOM 3 communication software for:	Yes	Yes
Image Storage, print, Query / Retrieve, Network Communication.	Yes	Yes
<b>Probes:</b>	Yes	Yes
Should be light weight, capable of multiple centre frequencies on	Yes	Yes

transmit for 2D, color Doppler PW/CW (Steerable) Imaging and to perform Harmonics.	Yes	Yes
<b>PORTS:</b>	Yes	Yes
Video Output, USB / RS 232, Networking	Yes	Yes
POWER REQUIREMENT	Yes	Yes
220-240VAC 50 Hz	Yes	Yes
<b>ACCESSORIES:</b>	Yes	Yes
Thermal Printer 256-Gray scale	Yes	Yes
UPS: 2 KVA (imported)	Yes	Yes
50 High Density / High Glossy thermal paper Rolls	Yes	Yes
Gel: 20 liters	Yes	Yes
<b>STANDARD TRANSDUCERS:</b>	Yes	Yes
1. Multi frequency Linear Probe to cover 7.5-12.0 MHz.	Yes	Yes
2. Multi frequency Phased array sector probe to cover 2.0 - 3.5 MHz for Adult	Yes	Yes
3. Multi frequency Phased array sector probe to cover 5.0 - 7.5 MHz for Peads	Yes	Yes
4. CW Pencil Probe	Yes	Yes
<b>OPTIONAL:</b>	Yes	Yes
1. Multi frequency Micro Convex Probe	Yes	Yes
2. TVS Probe Multi Frequency 4.0 to 9.0MHz	Yes	Yes
3. Multi frequency TOE/TEE Probe to cover 4.0-6.0 MHz for Adult.	Yes	Yes
4. Linear Biopsy Probe	Yes	Yes
5. CW Pencil Probe	Yes	Yes
6. Elastography	Yes	Yes
7. 3D / 4D Imaging	Yes	Yes
	<b>Responsive</b>	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#4  
Item#28  
Name OF Item:Dental Unit

Company Name	Sigma International
Models	Diplomat
Manufacturer	DE20+AdeptDA110A
Country Of Origin	Italy
Specification	Yes
Dental Unit	Yes
Dental unit complete with following configuration;	Yes
Patient Chair:	Yes
A sturdy deluxe and luxurious type With motorised / hydraulic chair movement chair with solid state computerized, control system	Yes
1up, down, back and forward movements.	Yes
3 programmable chair positions i.e 1 back position program for spitting Synohronized seat tilting with the back.Roll out arm rest, articulating head rest, headrest cushion can accommodate children also.ast memory position, the chair should return to the previous treatment position.Chair movement should be controllable by dentist and assistant touch panels, as well as the multifunctional foot control.All utilities should be integrated into the chair base.One main switch to control air, water and power.Chair-instrument lock enables safe operation; the chair is locked while an instrument is working.With safety system, backrest and seat movement can be stopped once it meets obstacle.	Yes
Dentist Element: Hanging hosesHeight of dentist element should be adjustable.Handpiece holdersControl panel can be used for operating functions i.e. chair movement, preset and programmable positions.Cup filler, bowl rinsing, operating light on/off and intensity adjustment & X-ray Viewer	Yes

Accessories:	Yes
1 three way syringe.	Yes
3 fiber optic hand piece hoses for air turbine or air motor.	Yes
5th position for scaler	Yes
1 air pressure gauge.	Yes
1 silicon mat (sterilizable)	Yes
Large Size Tray, Waste receptacle, contton holders etc	Yes
Assistant Element:	Yes
With an angle adjustable support arm.	Yes
With suction filter system for easy cleaning	Yes
Full-functional touch panel mounted on the assistant element for four hand operation.	Yes
Accessories:	Yes
1 High speed air turbine (Push type)	Yes
1 slow speed air motor with straight & contra angle attachments (Push type)	Yes
1 built in Electric scalar (Peizo Type) with three tips at 28-32 KHz frequency	Yes
1 Air Compressor oil free minimum tank capacity 20-25 liter. F. A. D 150 liters/min at 5-8 bar	Yes
1 three way syringe.	Yes
1 HVE (High Volume Evacuation)	Yes
1 Saliva ejector	Yes
Water Unit:	Yes
Fresh water bottle	Yes
A switch to choose city water or fresh water bottle	Yes
Programmable cup filler and bowl rinsing systems.	Yes
Motorized system and air water separator	Yes
Operating Light (LED Type):	Yes
Brightness is 25000 Lux or more	Yes
Light on/off and intensity can be controlled	Yes
Dental Working Stools Hydraulic 2 Nos	Yes
Mobile on 5 castors	Yes
Height of seat and backrest is adjustable.	Yes
Backrest angel is adjustable and lockable.	Yes
Operating Manual (Hard Copy 03 and Soft Copy)	Yes
Service Manual (Hard Copy 03and Soft Copy)	Yes
	<b>Responsive</b>

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

Lot#4  
Item#27  
Name OF Item:Dental X-Ray

Company Name	<b>Radiant Medical</b>
Models	Endos ACP
Manufacturer	Villa
Country Of Origin	Italy
Three kinds of kv adjustments.	Yes
Satisfy different of the requirements	Yes
Long distance no line and direction remote	Yes
<b>Technical data:</b>	Yes
Electric condition: AC220V & +/-10% , 50Hz	Yes
X-Ray tube voltage and current: 60KV~0.5mA	Yes
65KV~0.85mA	Yes
70KV~1.10MA	Yes
Setting time Range: 0.01-2.00S	Yes
Radiation leakage: =0.002mgh/h	Yes
(Standard stipulated is 0.25mgh/h)	Yes
Total filtration value: 1.5mmAL	Yes
The focal distance: 200mm	Yes
FDA/CE Marked/MHLW	Yes
<b>Country of Origin: USA/ Europe/Japan</b>	Yes
	<b>Responsive</b>

Lot#5

**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**  
**EDO Health Attock**

Lot#5

Items No.	Name of Items	Aero Tech	Tameer International
1	CC TV Cameras 21 inch LCD Display Any DVR/NVR system shall have the ability to transcode video to at least one of the following: mpeg4, mpeg2, H.264, or H.263. Systems should have the ability to record at a minimum of 15 frames per second at a minimum resolution of 640x480 pixels. With complete installation and accessories. Standard UPS to support system	Yes	Yes
2	Computer With Accessories Computers with accessories HP/Dell Desktop or equivalent Corei3-540 3.06GHz, 2GB DDR3 320GB HDD, Super Drive Keyboard, Mouse ATX tower Casing with Front USB 18.5" LCD Monitor Pre-Installed windows7 & Office 2007 "Non-Licensed"	Yes	Yes
3	Air Conditioner for eye OT 2.5 ton	Yes	-
4	Air Conditioner for OT, CCU, Burn Unit, HDU (2 ton)	Yes	Yes
107	B.P Operates	Yes	-



**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments**

**EDO Health Attock**

**Lot No.5**

**GENERAL ITEMS**

Items No.	Name of Items	Orient Medical	Qazzafi Surgical	Tameer International
8	Developing Tank Standard double 28x17 size	Yes	-	-
9	Chest X Ray Stand Approve to sample	Yes	-	-
12	Instruments Trolley Stainless Steel Approve to sample	Yes	Yes	Yes
13	Sterilizing Drum different sizes	Yes	Yes	Yes
14	Sterilizer (Local/Imported) (Autoclave)	Yes	Yes	Yes
15	Box Sterilizer	Yes	-	Yes
18	Forceps Magill's Endotracheal Catheters introducing for	Yes	Yes	Yes
19	Forceps Tongue	Yes	yes	Yes
20	Mouth Gag. Deyen's with cam grip rach two sizes. (children's and adults)	Yes	Yes	Yes
21	Needles spinal Howard, Jones 3-1" Length SWG 22	-	Yes	Yes
22	Needles spinal Howard, Jones 1/2" Length SWG 22	-	Yes	Yes
23	Cylinder Oxygen 48 CFT with trolley	-	Yes	
24	Cylinder Oxygen Adjustable Vavle for	-	Yes	
25	Amboo Bag Adult/ Infant	Yes	Yes	Yes

26	Tissue Allis Box Joint.3x4 teeth 6"	Yes	Yes	Yes
27	Tissue Allis Box Joint.8x7 teeth 7"	Yes	Yes	Yes
28	Knife Amputation (lister's) 7" blade solid forged	Yes	Yes	Yes
29	Knife Handle B.P Type No.4	Yes	Yes	Yes
30	Knife Handle B.P Type No.3	Yes	Yes	Yes
31	Knife Type B.P Blade for size 9,11,12,15,17,18 packets of 6	-	Yes	Yes
32	Needle Holder , Bozeman's 8-1/4	Yes		Yes
33	Needle Holder mayo 5-1/2	Yes		Yes
34	Needle Suture, Cutting, Straight, 3 sizes Small, Medium and Large (each Size)	-	Yes	Yes
35	Probe Silver 6" 8" 12"	Yes	Yes	Yes
36	Reactor Wound, double Ended, Parkers Blade 5/8" Size 5" long	Yes	Yes	Yes
37	Reactor Abdomen, Morris, 2" Deep 2" Blade	Yes	Yes	Yes
38	Scissors Dressing Straight, Both Points Blunt 5 ¼"	Yes	Yes	Yes
39	Scissors Dressing Straight, One Point Sharp 5 ½"	Yes	Yes	Yes
40	Scissors Dressing Straight, Curved on flat, Blunt Pointed 5"	Yes	Yes	Yes
41	Scissors Dressing Straight, Curved Strong 7"	Yes	Yes	Yes
42	Scissors Bandage, Fister, 6"	Yes	Yes	Yes
45	Tourniquet, Rubber, with Finger Grip Max Page	-	Yes	Yes
46	Trocar Ascites, With Cannula Size 9.12	Yes	-	Yes
47	Trocar Abdominal With Cannula Curved Size 6"		-	Yes
48	Duodenal Tube, Ryle's i. 31" Long Rubber/Nylon ii. 42 Long Rubber/Nylon	-	-	Yes

49	Tube Stomach Siphon, with Gage I.R. i. 30 “ Long for Children ii. 60” Long for Children	-	-	Yes
50	Tube Rectal (Flatus I.R i. Size 16 Charriors Guage ii. Size 22 Charriors Gauge	-	-	Yes
51	Short Protoscope Kelly’s 5” Long 7.8” Daimeter	Yes	-	Yes
52	Syringes Hemorrhoids, Injection for with two straight and one Angled Needle in case.	-	-	Yes
53	Catheter Metal, Cannula Type, Curved Bladder Irrigation for 4 size	-	-	Yes
54	Catheter Female metal 12 F.R	Yes	-	Yes
55	Catheter Foleys Balloon Retaining 2 Way with 30 cc bag, sterilizable, size 16.20, 24.28 assorted	-	-	Yes
56	Catheter Foley’s Introducer for	-	-	Yes
57	Forceps Bone Cutting Straight 7”	Yes	-	Yes
58	Forceps Bone Cutting curved flat 9”	Yes	-	Yes
59	Forceps Bone Cutting angled to right 9”	Yes	-	Yes
60	Saw amputation, Bather’s with set of 3” Blade	Yes	-	Yes
61	Knife Plaster outing of	Yes	-	Yes
62	Plaster Shear, Loren’s with shoe to blade 15”	Yes	-	Yes
63	Crutches Adjustable		-	Yes
64	Tourniquet, Rubber, with Finger Grip Max Page	-	-	Yes
65	Trocar Ascites, With Cannula Size 9.12	Yes	-	Yes
66	Trocar Abdominal With Cannula Curved Size 6”	Yes	-	Yes
67	Duodenal Tube, Ryle’s iii. 31” Long Rubber/Nylon iv. 42 Long Rubber/Nylon	-	-	Yes

68	Tube Stomach Siphon, with Gage I.R. iii. 30 " Long for Children iv. 60" Long for Children	-	-	Yes
69	Tube Rectal (Flatus I.R iii. Size 16 Charriors Guage iv. Size 22 Charriors Gauge	-	-	Yes
70	Short Protoscope Kelly's 5" Long 7.8" Daimeter	Yes	-	Yes
71	Syringes Hemorrhoids, Injection for with two straight and one Angled Needle in case.	-	-	Yes
72	Catheter Metal, Cannula Type, Curved Bladder Irrigation for 4 size	-	-	Yes
73	Catheter Female metal 12 F.R	Yes	-	Yes
74	Catheter Foleys Balloon Retaining 2 Way with 30 cc bag, sterilizable, size 16.20, 24.28 assorted	-	-	Yes
75	Catheter Foley's Introducer for	-	-	Yes
76	Forceps Bone Cutting Straight 7"	Yes	-	Yes
77	Forceps Bone Cutting curved flat 9"	Yes	-	Yes
78	Forceps Bone Cutting angled to right 9"	Yes	-	Yes
79	Saw amputation, Bather's with set of 3" Blade		-	Yes
80	Knife Plaster outing of	Yes	-	Yes
81	Plaster Shear, Loren's with shoe to blade 15"	Yes	-	Yes
82	Crutches Adjustable	Yes	-	Yes
83	Splint Thomas Leg	-	-	Yes
84	Splint Gooch's Wooden Roll 36"x18"	-	-	Yes
85	Sterlizer Dressing, High Pressure Vertical Type to operate at 20 Lbs: stream pressure and vacuum. Size 15" diameter, 2.4" deep electrically heated/Gas Heated	Yes	-	Yes

86	Drum i. Large.....4 ii. Medium.....2	Yes	-	Yes
87	Drum Sterilizer Stand, for two large sizes drums pedal operated		-	Yes
88	Drum Sterilizer Stand, for two medium sizes drums pedal operated	Yes	-	Yes
89	Lamps examination on stand	Yes	-	Yes
90	Lamp Petromex.....2	-	-	Yes
91	Female Metal Catheter, F-201, F203, F204.F28	Yes	-	Yes
92	Singley's Vaginal Dressing Forceps F22 F3	Yes	-	Yes
93	Anvards Weighted Vaginal Speculum F26, F5	Yes	-	Yes
94	Sims Duckbill Specula single ended F41,F7	Yes	-	Yes
95	Cusco' Vaginal Speculum F50, F8		-	Yes
96	Sim's Uterine Curettes Sharp 3 size F73 , F10	Yes	-	Yes
97	Flushing Curettes with blunt edge 3 size F75, F10	Yes	-	Yes
98	Bonneys Uterine polypus Forceps, F84, F11	Yes	-	Yes
99	Foetal Stethoscope	Yes	-	Yes
100	Martin Pelvimeter External F158 , F23	Yes	-	Yes
101	Anderson's Obstetric External F172, F25	Yes	-	Yes
102	Uterine Scissors Straight with Blunt Point F-188, F27	Yes	-	Yes
103	Uterine Scissors Curved F189, F27	Yes	-	Yes
104	Epiziotomy Scissors F193, F27	Yes	-	Yes
105	Ovun Forceps of F199,F198,F28		-	Yes
106	Lithotomy Farequs Set Complete	Yes	-	Yes
107	B.P Operates	Yes	-	Yes
108	Dropper Pettles	-	-	Yes
109	Kidney Trays S.S	Yes	-	Yes
110	Cheatle Forceps	Yes	-	Yes
111	Rectangle Trays S.S different sizes	Yes	-	Yes
112	Bowls S.S with cover medium size		-	Yes
113	Forceps Plain 6"	-	-	Yes
114	Bowls S.S with cover small size	Yes	-	Yes

115	Forceps Toothed 6"	Yes	-	Yes
116	Artery Forceps Mosquito Straight	Yes	-	Yes
117	Artery Forceps Curved	Yes	Yes	Yes
118	Needle Holder Eye	Yes	Yes	Yes
119	Chalezion Forceps (3 Different sizes) (Mid. Size)	Yes	Yes	Yes
120	Chalezion Scop (3 Size)	Yes	Yes	Yes
121	Epilation (Chilla) Forceps Round Jaw	Yes	Yes	Yes
122	Lachrymal Probes (Assorted)	Yes	Yes	Yes
123	Tongue Depressors	Yes	Yes	Yes
124	Tongue Depressors	-	Yes	Yes
125	Nasal Specula	Yes	Yes	Yes
126	Aural Specula	Yes	Yes	Yes
127	Pest Rhinoscopy Mirrors	-	Yes	Yes
128	Layngeal Mirrors	Yes	Yes	Yes
129	Nasal Dressing Forceps	Yes	Yes	Yes
130	Aural Dressing Forceps	Yes	Yes	Yes
131	Dressing Scissors Straight With Both edge blunt 6"	Yes	Yes	Yes
132	Dressing Scissors with Two Sharp	Yes	Yes	Yes
133	Ramsay's Disecting Forceps	Yes	Yes	Yes
134	Squire Trays 18 X 12 (Stainless Steel)	Yes	Yes	Yes
135	Spencer Wells Artery Forceps Box Joint 7	Yes	Yes	Yes
136	Sponge holding Forceps with serrated Jaws Straight box joint 7	Yes	Yes	Yes
137	Mayos Needles holder with box joint 6-1/2	Yes	Yes	Yes
138	Buckets for slide lines etc	-	-	Yes

139	Forceps extraction I) Upper anterior Marting Type II) Upper Bicuspid III) Upper Molars IV) Upper Roots, Read V) Upper Wisdom VI) Lower insisers Caniners & Bicuspid	Yes	-	Yes
140	Vertical stand (for cassette) for chest radiography	Yes	-	Yes
141	Gridded Cassette I) 08 X 10 II) 10X 12 III) 12 X 15	-	-	Yes
142	Cassettes with intensifying screen sizes I) 08 X 10 II) 10X 12 III) 12 X 15	Yes	-	Yes
143	Film Marking set 1 to 10	Yes	-	Yes
144	Film Marking set A to Z		-	Yes
145	Hangers for Miniature size I) 14 X 17 II) 12X 15 III) 10 X 12	Yes	-	Yes
146	Dark Room safe light	Yes	-	Yes
147	immersion heater	-	-	Yes
148	film holding clips	-	-	Yes
149	film comer cutter	-	-	Yes
150	Radiation Protective Apron (Lead Rubber)	Yes	-	Yes
151	Do Gloves Do	Yes	-	Yes
152	Adoption Goggles	Yes	-	Yes
153	Radiation Badges for Warders, in X-Ray Deptt	-	-	Yes
154	X-Ray Film illuminator (single) including requirement for other section of the hospital	Yes	Yes	Yes

155	Sterilizer Electric	Yes	Yes	Yes
156	Needles Stand Puncture	-	-	Yes
157	Stands curtain screw	Yes	-	Yes
158	Spray Pumps for insecticides	-	-	Yes
159	Post mortem table & set (without set)	Yes	Yes	Yes
160	Balance lab. With weights	-	-	Yes
161	Comparator, HP with test papers	-	-	-
162	Bucket G14 Gallons	-	Yes	Yes
163	IV Stand Standard size, mobile and chromed	Yes	Yes	Yes
164	Baby Carts Standard size with mattress, powdered coated and casters	Yes	Yes	Yes
165	Allis Forceps	Yes	Yes	Yes
166	Kocher Forceps	Yes	Yes	Yes
167	Self-Retaining Retrach	Yes	Yes	Yes
168	Tooth Forceps		Yes	Yes
169	Plain Forceps	Yes	Yes	Yes
170	Bob Cock	Yes	Yes	Yes



**Technical Scrutiny for the Purchase of Medical Equipment/Hospital Furniture/Instruments****EDO Health Attock****Lot No.6****LINEN ITEMS**

Items No.	Name of Items	Aero Tech	Ashfaq Traders
1.	Blankets Size 60x90 inches Weight should be (2-2.5kg)	Yes	Yes
2.	Bed Sheets  Size 66x108 inches, printed Monogram with Health department  Weight should be 1Kg	Yes	Yes
3.	Draw Sheets Size should be 36x72 inches	Yes	Yes
4.	Pillow Foam Size 16x24 inches	Yes	Yes
5.	Kurtas  Standard size (Medium & Large)	Yes	Yes
6.	Pajamas  Standard size (Medium & Large)	Yes	Yes
7.	Pillow Covers Size 20x30 inches	Yes	Yes
8.	durries 76x72 inches	Yes	Yes
9.	Dusters 29x30 inches		
10.	Overalls Standard size Medium & Large	Yes	Yes
11.	Towels Size 27x54 inches	Yes	Yes

12.	Mattresses Foam 36x78x4 inches	Yes	Yes
13.	Mattresses Cover Size Same as Matress foam	Yes	Yes
14.	Towels Stand Standard size		Yes
15.	Table Cloth (Blazer cloth)	Yes	Yes