

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
1	<p>Dialysis Chair with Weighing Scale (Dialysis Chair)</p> <p>Purpose :For Hemodialysis of Patients</p> <p>Main_Feature: *Motorized Medical Recliner: -</p> <ul style="list-style-type: none"> - Suitable for various medical uses, Dialysis, Blood Donor, etc. - Positions, i). Back Raise, ii). Leg Raise, iii). Flat Position,vi). Foot rest position Adjustment, vii). Armrest Adjustable <p>*Movements: -</p> <ul style="list-style-type: none"> - Back raise0° to 75° degree. - Leg Raise -30° to 0° degree - Zero/Flat position available <p>*Hand Held Controller:</p> <ul style="list-style-type: none"> - Remote controller to perform thebed positions <p>*Basic Movement</p> <ul style="list-style-type: none"> - Reclining (Auto Contour Raise/Lower) - Back Section Raise/Lower - Leg Section Raise/Lower <p>*Emergency Back Lowering Lever</p> <ul style="list-style-type: none"> - Manual Emergency Back Lowering Lever <p>*Comfortable Seat Design: -</p> <ul style="list-style-type: none"> - Total Length: 1,480mm (When flat 1,900 mm) - Total Width: 980mm - Total Height: 1370mm - Seat Width: 550mm - 720mm - Seat Height: 570 mm <p>*Hygiene Seat Cover Surface</p> <ul style="list-style-type: none"> - The seat cover surface is made with a seamless, impermeable material. - To clean soiled seat covers, simply wipe away the contaminating liquid. <p>*Flexible Arm Rest:</p> <ul style="list-style-type: none"> - Adjustable arm rests, - Armrest can be adjusted to move up and down <p>*Foot Rest:</p> <ul style="list-style-type: none"> - Adjustable foot rest <p>*Head Rest Pillow:</p> <ul style="list-style-type: none"> - Fit and comfortable and height adjustable <p>*Silent Actuator:</p> <ul style="list-style-type: none"> - Constantly provides the same speed regardless of user weight with less vibration and silent movement. <p>*Material of Recliner:</p> <ul style="list-style-type: none"> - Mattress Base: Plywood with melamine - Main Frame: Made of Steel, Powder Coating - Arm Rest: Vinyl Leather, Urethane Foam <p>*Castor:</p> <ul style="list-style-type: none"> - 100mm dia with stopper <p>*Additional Accessories</p> <ul style="list-style-type: none"> - Pillow - Foot Rest <p>*Safe Working Load: 200 KG</p> <p>Rating/Capacity of Eqpt: 220-240VAC Type : Floor Top, Wheeled Accessories: To be supplied with complete set of standard accessories Desired Measurements : Nil Any Other Detail : Nil Ground Support Eqpt : Nil Civil Work: Nil Expendables/Starter Kits : Nil Country of Manufacturing : USA, Europe, Japan Warranty : 2 Yrs Likely Delivery Date :</p> <p>Project: FFH SOMH Karachi(Dialysis Unit)</p>	No	2		
	2				

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
2	<p>Dialysis Machine</p> <p>Purpose :For smooth functioning of dialysis unit Main_Feature: * CE Certificate should be attached. *FDA/CE Certificate should be attached. *Manufacturer Authorization letter letter should be attached. *Sub Distributorship is not acceptable *References of Previous installation should be attached. *Eqpt should be newly manufactured and from current production of year *Service manual with Circuit diagram is must without which installation report and payment will not be released. *All required documents need to be attached failing which will automatically declare ineligible for tender *Demonstration of eqpt is mandatory (if required) to end user. ***** *Bicarb/Acetate assembly cottage holder, heaprin pump, dialyser holder, BP Monitor. *Air Bubble detection, blood leak detection. * Double needle system and single needle with single puyp. *Advance Sodium Conductivity making mechanism, as per set target of required conductivity (Machine should have the capability to make assure conductivity as per set target without mannual settings) *Advance Bicarb conductivity as making Mechanism as per set. * Real time monitoring of Bicarb. *Electronic control of flow rates and blood flow. *Water temp acceptance from 10-30 degree celsius. *Ultra Filtration with or without diffusion. *Large Display (15 Inch or better) with touch screen system for operation service and diagnostic. *Automatic clean, heat disinfect and rinsing mechanism. *Blood Pump 40 to 60ml/min heparin pump 0 to 9cc /hr or better, variable Dialysate. *Flow 300 to 800 ml/min or better. *Temprature control upto 35 to 45 degree adjustable or better. *Venious pressure monitor 200 to 500 mmhg or better. *Ultra Filtration rate control range of UFR 0.0 to 4.0 liers /hr or better. *Air bubble detection with detection of blood tubing line and blood. *Built-in heat disinfect system and built-in bty backup system. *Machine should be capable for universal disposable and consumables. *Real time hydraulic flow diagram on large screen. *Quick and easy trouble shooting by real time function of each hydraulic part. *User friendly software for easy maintenance. *All standard accessories as per requirements. *All parameters shall be factory caliborated, Caliboration certiicate with traceability to be provided with the eqpt. * OEM: M/s Toray, Japan & M/s Nikkiso, Japan (Preferred)</p> <p>Rating/Capacity of Eqpt: 220/230 volts AC. Type : Mobile Accessories: *Power Cable. *Monitor Leads (all kind). *Battery. *Dialyser etc. Desired Measurements : Standard as per offered eqpt, should occupy minimum space without compromising functionalities. Any Other Detail : NA Ground Support Eqpt : Servo Controlled Voltage Stabilizer Civil Work: For input RO water supply and output drain connection with the machine to be done by the firm. Expendables/Starter Kits : Starter Kit consumable require qty - 1 Country of Manufacturing : Japan, USA, Westren Europe Warranty : 2 Yrs Likely Delivery Date :</p> <p>Project:</p>	No	2		

Tender No. & Date FF/3651/2022-23/PROJS/CPO 24-NOV-22

Tender Due/Opening Date & Time 20 DEC 22,11:00

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	FFH Rawalpindi(Dialysis Unit)		2		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
3	<p>Dialysis Machine</p> <p>Purpose :To perform dialysis of critically ill patients Main_Feature: * CE Certificate should be attached. *FDA/CE Certificate should be attached. *Manufacturer Authorization letter letter should be attached. *Sub Distributorship is not acceptable *References of Previous installation should be attached. *Eqpt should be newly manufactured and from current production of year *Service manual with Circuit diagram is must without which installation report and payment will not be released. *All required documents need to be attached failing which will automatically declare ineligible for tender *Demonstration of eqpt is mandatory (if required) to end user. ***** *Bicarb/Acetate assembly cottage holder, heparin pump, dialyser holder, BP Monitor. *Air Bubble detection, blood leak detection. * Double needle system and single needle with single puyp. *Advance Sodium Conductivity making mechanism, as per set target of required conductivity (Machine should have the capability to make assure conductivity as per set target without mannual settings) *Advance Bicarb conductivity as making Mechanism as per set. * Real time monitoring of Bicarb. *Electronic control of flow rates and blood flow. *Water temp acceptance from 10-30 degree celsius. *Ultra Filtration with or without diffusion. *Large Display (15 Inch or better) with touch screen system for operation service and diagnostic. *Automatic clean, heat disinfect and rinsing mechanism. *Blood Pump 40 to 60ml/min heparin pump 0 to 9cc /hr or better, variable Dialysate. *Flow 300 to 800 ml/min or better. *Temprature control upto 35 to 45 degree adjustable or better. *Venious pressure monitor 200 to 500 mmhg or better. *Ultra Filtration rate control range of UFR 0.0 to 4.0 liers /hr or better. *Air bubble detection with detection of blood tubing line and blood. *Built-in heat disinfect system and built-in bty backup system. *Machine should be capable for universal disposable and consumables. *Real time hydraulic flow diagram on large screen. *Quick and easy trouble shooting by real time function of each hydraulic part. *User friendly software for easy maintenance. *All standard accessories as per requirements. *All parameters shall be factory caliborated, Caliboration certiicate with traceability to be provided with the eqpt. * OEM: M/s Toray, Japan & M/.s Nikkiso, Japan (Preferred)</p> <p>Rating/Capacity of Eqpt: 220/230 volts AC. Type : Mobile Accessories: *Power Cable. *Monitor Leads (all kind). *Battery. *Dialyser etc. Desired Measurements : Standard as per offered eqpt, should occupy minimum space without compromising functionalities. Any Other Detail : NA Ground Support Eqpt : Servo Controlled Voltage Stabilizer Civil Work: For input RO water supply and output drain connection with the machine to be done by the firm. Expendables/Starter Kits : Starter Kit consumable require qty - 1 Country of Manufacturing : Japan, USA, Westren Europe Warranty : 2 Yrs Likely Delivery Date :</p> <p>Project:</p>	No	2		

Tender No. & Date FF/3651/2022-23/PROJS/CPO 24-NOV-22

Tender Due/Opening Date & Time 20 DEC 22,11:00

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	FFH SOMH Karachi(Dialysis Unit)		2		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
4	<p>Dialysis Machine</p> <p>Purpose :To perform dialysis of critically ill patients Main_Feature: * CE Certificate should be attached. *FDA/CE Certificate should be attached. *Manufacturer Authorization letter letter should be attached. *Sub Distributorship is not acceptable *References of Previous installation should be attached. *Eqpt should be newly manufactured and from current production of year *Service manual with Circuit diagram is must without which installation report and payment will not be released. *All required documents need to be attached failing which will automatically declare ineligible for tender *Demonstration of eqpt is mandatory (if required) to end user. ***** *Bicarb/Acetate assembly cottage holder, heparin pump, dialyser holder, BP Monitor. *Air Bubble detection, blood leak detection. * Double needle system and single needle with single puyp. *Advance Sodium Conductivity making mechanism, as per set target of required conductivity (Machine should have the capability to make assure conductivity as per set target without mannual settings) *Advance Bicarb conductivity as making Mechanism as per set. * Real time monitoring of Bicarb. *Electronic control of flow rates and blood flow. *Water temp acceptance from 10-30 degree celsius. *Ultra Filtration with or without diffusion. *Large Display (15 Inch or better) with touch screen system for operation service and diagnostic. *Automatic clean, heat disinfect and rinsing mechanism. *Blood Pump 40 to 60ml/min heparin pump 0 to 9cc /hr or better, variable Dialysate. *Flow 300 to 800 ml/min or better. *Temprature control upto 35 to 45 degree adjustable or better. *Venious pressure monitor 200 to 500 mmhg or better. *Ultra Filtration rate control range of UFR 0.0 to 4.0 liers /hr or better. *Air bubble detection with detection of blood tubing line and blood. *Built-in heat disinfect system and built-in bty backup system. *Machine should be capable for universal disposable and consumables. *Real time hydraulic flow diagram on large screen. *Quick and easy trouble shooting by real time function of each hydraulic part. *User friendly software for easy maintenance. *All standard accessories as per requirements. *All parameters shall be factory caliborated, Caliboration certiicate with traceability to be provided with the eqpt. * OEM: M/s Toray, Japan & M/.s Nikkiso, Japan (Preferred)</p> <p>Rating/Capacity of Eqpt: 220/230 volts AC. Type : Mobile Accessories: *Power Cable. *Monitor Leads (all kind). *Battery. *Dialyser etc. Desired Measurements : Standard as per offered eqpt, should occupy minimum space without compromising functionalities. Any Other Detail : NA Ground Support Eqpt : Servo Controlled Voltage Stabilizer Civil Work: For input RO water supply and output drain connection with the machine to be done by the firm. Expendables/Starter Kits : Starter Kit consumable require qty - 1 Country of Manufacturing : Japan, USA, Westren Europe Warranty : 2 Yrs Likely Delivery Date :</p> <p>Project:</p>	No	2		

Tender No. & Date FF/3651/2022-23/PROJS/CPO 24-NOV-22

Tender Due/Opening Date & Time 20 DEC 22,11:00

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	FFH BM Rashidabad(Dialysis Unit)		2		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
5	<p>Digital Radiography (DR) System</p> <p>Purpose :Provison of better diagnostic facility Main_Feature: *FDA/CE/MHLW certificate.(Dual Certificate) *New latest model. *X-Ray Generator. -High frequency inverter type microprocessor x-ray generator. -Three phase 50 KW Geberatir or better. -Automatic line compensation. -Overload tube protection. -Radiographic KVp 40 - 150KV or better. -Radiographic mA 10-600mA or more. -Exposure time 1ms - 8s or better. -500 or more anatomical program *X-Ray tube -Maximum tension 150 kVp or better. -Small focus 0.6 mm or better. -Large focus 1.2mm or better. -Anode Heat capacity 300 KHU or more. -Liquid bearing. *X-Ray Table -4 ways floating top table. -Ectromagnetic brakes. -Longitudinal travel of tablatop 900mm or more lateral/transfer travel of lablatop 220mm or more. -Longiludinal travel of bucky 510mm or more. -Moving grid. -Grid ratio 10: 1 or better *Floor mounted tube column stand. *Tube support balancing system with counter weights and electromagenetic brakes. *Rotation of tube - colimator assembly +/- 180 degree. *Vertical travel 400 - 1900mm. *Manual collimator. *Six leaf manual colimator or equivalent. *LED light indicator for alignment with bucky. *Wall chest bucky stand. -Chest bucky stand with cassettes formats maximum upto 43 x 43cm. -Vetical travel 1500mm or better. -Moving grid 10 1 ratio or better. *Flat panel detector (2 nos) (1 for chest stand and 1 for table bucky). *Purpose for general radiography. *Scintillator Csl (Casium Iodide) by direct deposition or Gadolinium-oxy-sulphied or equivalent. *Effective imaging area 430 x 430 mm. *Image matrix size 3072 x 3072 pixels or better. *A/D conversion 14 bits or better. *Pixel pich 150 m or less. *Image acquisition and transfer time 5 sec or less. *DICOM 3.0 Compatible. *Workstation and acquisition software latest. *Image quality control looks with pixel fixing tools. *Flexible configuration including language localization. *Upto three image marks and one comment supported in one view (can be done automatically according to configuration). *Image cropping (can be done authomatically according to configuration) *Compatible UPS for console/workstation. *DR networking should have dicom print/store/tfr svcs/MWM/MPPS. *It should capable to integrate with agfa printer and hospital medix.</p>	No	1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	<p>Rating/Capacity of Eqpt: 500 MA at 100 KVP or better Type : Floor mounted/ceiling mounted. Accessories: *DAP meter for patients radiations doze measurement. *Compression belt. *Agfa or equivalent printer (film signs). *Compatable true on line pure sine wave with 30 minutes backup for console/workstaion. *4xlead aprons *Lead lining if required. For Reporting X-rays *2xDell OptiPlex 7090 Small form factor desktop computer - 10th Gen Intel Core i7-10700-256GB M.2 PCIe NVMe SSD - 16GB DDR4 Ram + 1TB HDD, - Window 10 Pro, English. *2 x Del 24 LED-Backlit LCD Monitor - SE24 19H. *2 x Keyboards, 2 x Mouse, 2 x Power Cables. *Laser Printer Heavy Duty for printing of reports.</p> <p>Desired Measurements : As per manufacturer standard Any Other Detail : 2 year warranty for complete system is req Post warranty svc contract per year (with parts.without parts) should be quoted seperately. Ground Support Eqpt : Compatible circuit breaker/ protection against over/under voltage Civil Work: Responsibility of vendor is requested to please visit dept before installation. Expendables/Starter Kits : Printer: DRYSTAR 5503 Imager Multiple-format handling, with the three most popular media sizes and /or types permanently on-line. The imager is thus capable of delivering CT, MRI, DSA, digital R&F, CR and DR images at high speed onto different DRYSTAR DT2 media. With three input trays. Sizes are mentioned below 8x10", 10 x12", 11x14", 14x14" and 14x17" (Complete Specs are also attached)</p> <p>Country of Manufacturing : USA/Europe/Japan Warranty : 2 years warranty Likely Delivery Date :</p> <p>Project: FFH Sargodha(Radiology Deptt)</p>		1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
6	<p>Digital Radiography (DR) System</p> <p>Purpose :Replacement of X-Ray Machine Multix compact K. Main_Feature: *FDA/CE/MHLW certificate.(Dual Certificate) *New latest model. *X-Ray Generator. -High frequency inverter type microprocessor x-ray generator. -Three phase 50 KW Generator or better. -Automatic line compensation. -Overload tube protection. -Radiographic KVp 40 - 150KV or better. -Radiographic mA 10-600mA or more. -Exposure time 1ms - 8s or better. -500 or more anatomical program *X-Ray tube -Maximum tension 150 kVp or better. -Small focus 0.6 mm or better. -Large focus 1.2mm or better. -Anode Heat capacity 300 KHU or more. -Liquid bearing. *X-Ray Table -4 ways floating top table. -Electromagnetic brakes. -Longitudinal travel of tabletop 900mm or more lateral/transfer travel of tabletop 220mm or more. -Longitudinal travel of bucky 510mm or more. -Moving grid. -Grid ratio 10: 1 or better *Floor mounted tube column stand. *Tube support balancing system with counter weights and electromagnetic brakes. *Rotation of tube - collimator assembly +/- 180 degree. *Vertical travel 400 - 1900mm. *Manual collimator. *Six leaf manual collimator or equivalent. *LED light indicator for alignment with bucky. *Wall chest bucky stand. -Chest bucky stand with cassettes formats maximum upto 43 x 43cm. -Vertical travel 1500mm or better. -Moving grid 10:1 ratio or better. *Flat panel detector (2 nos) (1 for chest stand and 1 for table bucky). *Purpose for general radiography. *Scintillator CsI (Cesium Iodide) by direct deposition or Gadolinium-oxy-sulphide or equivalent. *Effective imaging area 430 x 430 mm. *Image matrix size 3072 x 3072 pixels or better. *A/D conversion 14 bits or better. *Pixel pitch 150 micrometers or less. *Image acquisition and transfer time 5 sec or less. *DICOM 3.0 Compatible. *Workstation and acquisition software latest. *Image quality control tools with pixel fixing tools. *Flexible configuration including language localization. *Upto three image marks and one comment supported in one view (can be done automatically according to configuration). *Image cropping (can be done automatically according to configuration) *Compatible UPS for console/workstation. *DR networking should have dicom print/store/transfer services/MWM/MPPS. *It should be capable to integrate with agfa printer and hospital medix.</p>	No	2		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	<p>Rating/Capacity of Eqpt: 500 MA at 100 KVP or better Type : Floor mounted/ceiling mounted. Accessories: *DAP meter for patients radiations doze measurement. *Compression belt. *Agfa or equivalent printer (film signs). *Compatible true on line pure sine wave with 30 minutes backup for console/workstaion. *4xlead aprons *Lead lining if required. For Reporting X-rays *2xDell OptiPlex 7090 Small form factor desktop computer - 10th Gen Intel Core i7-10700-256GB M.2 PCIe NVMe SSD - 16GB DDR4 Ram + 1TB HDD, - Window 10 Pro, English. *2 x Del 24 LED-Backlit LCD Monitor - SE24 19H. *2 x Keyboards, 2 x Mouse, 2 x Power Cables. *Laser Printer Heavy Duty for printing of reports.</p> <p>Desired Measurements : As per manufacturer standard Any Other Detail : 2 year warranty for complete system is req Post warranty svc contract per year (with parts.without parts) should be quoted seperately. Ground Support Eqpt : Compatible circuit breaker/ protection against over/under voltage Civil Work: Responsibility of vendor is requested to please visit dept before installation. Expendables/Starter Kits : Printer: DRYSTAR 5503 Imager Multiple-format handling, with the three most popular media sizes and /or types permanently on-line. The imager is thus capable of delivering CT, MRI, DSA, digital R&F, CR and DR images at high speed onto different DRYSTAR DT2 media. With three input trays. Sizes are mentioned below 8x10", 10 x12", 11x14", 14x14" and 14x17" (Complete Specs are also attached)</p> <p>Country of Manufacturing : USA/Europe/Japan Warranty : 2 years warranty Likely Delivery Date :</p> <p>Project: FFH Jhelum(Radiology Deptt) 1 FFH Rawalpindi(Radiology Deptt) 1</p>				

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
7	<p>ECHO Machine</p> <p>Purpose :To carry out Echo Scan of Emergency Patients Main_Feature: *New/Latest Model. *CE/FDA approved. *Digital Echocardiography Machine. *Latest Model. *Digital echocardiography having 192 or more physical channels and 5,000,000 processing channels for wide range of peremimum performance application of cardiovascular imaging in pediatrics and adult. The machine must have capability to connect single crystal sector probe. DISPLAY: *Displaysize min 21" OLED Monitor with 4K resolution, till able and swiveble type or better. OPRATION MODES: *B 20M-Mode, power Doppler, HPRF, Spectral Doppler, Color, THID THI TDL Micro CPA/B-Flow HD Color/Dynamic Fow, Duplex and Triplex Doppler PW Doppler, CW Doppler Steerable and ECG Gating. CONTROL PANEL: *Alphanumeric keyboard with bulit -in trackball. *12-inches or more touch control panel screen or better. *Direct access to system function through dedicated keys. *Audio volume control with Bi-Directional/Stereo speakers and foot switch. *User selectable image magnification control. *Adjustable transmit focusing control. *Total and lateral gain compensation control (8 or more). *4-Active transducer connector for transthoracic. CALIPERS/MEASUREMENTS: *Measurements for distance angle stenosis & area circumferences volume skope, time, heart rate and acceleration LV (left ventiricular function) measurements, LA (left atrial volume) measurements, AV (acrctic valve) measurements MV (mtral valve) measurements, PV (pulmonary valve) measurements, PSA measurements, LV MASS measurements Vascykar measurements (CCA, ECA, VA, SA) Auto EF measurements. Auto MT should also be provided. APPLICATION: *Cardiac, Perpheral, Padiatric, Adult Cephalic and Tans esophageal with software for measurements. FRAME RATE: *2000fps or better. CINE MEMORY: *One Memory 900MB or better. SYSTEM SCANNING DEPTH: *Max 45cm or equivalent. IMAGING MODES / TECHNQUES: *Tissue hoarmonic imaging, issue doppler imaging. Echo Machine: *Tissue strain imaging/wall motion tracking alongwith map and graphic display. *Lcal & whole myocardial wall motion parameter curve display. *STRESS ECHO *Exercise and pharmacological stress echo examinations. Datas Acquisition & Review Mode. Stress echo module for storing and reporting stress echo Storage Device. *Built-in CD / DVD Drive, 128-GB SSD & 1TB HOD or better. SYSTEM DYNAMIC RANGE: *Dynamic range minimum 290 dB or better. COMMUNICATION SOFTWARE: *System should conform to DCON communication software for image storage print, Query / Retrieve. Network communication. PORTS: *Video output 4 USB ports. Networking/Ethernet provision for sDesport output for 3D printing. STANDARD TRANSDUCERS: *Multi frequency single crystal sector probe to cover 2.0-6.0MHz for adults or equivalent. *Multi frequency phased array sector probe to cover 3.0-8 OMHz for peads</p>	No	1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit		
				With out GST	With GST if Applicable	
	<p>or equivalent.</p> <p>*Multiplane TEE, Transducer (3-6MHz) for Adult or equivalent.</p> <p>*Multiplane TEE Tranducer (4-7 MHz) for paedts or equivalent.</p> <p>OPTIONAL (Must quote seperately):</p> <p>*18HMz high frequency linear probe for MSK.</p> <p>*Multi frequency linear probe to cover 5.0 - 10.0 MHz for vasculr or equivalent.</p> <p>*Micro TEE transducer (4-7.5 MHz) for Neonates with 5.2mm shaft diameter or equivalent.</p> <p>OERTIFICATION:</p> <p>*FDA, CE & MHLW.</p> <p>*M/s Toshiba, M/s Siemens, M/s GE & M/s Philips or equivalent.</p> <p>Rating/Capacity of Eqpt: 220VAC Type : Mobile Accessories: *Power cable-1. *Echo probe freq. *CD/DVD RW. *UPS with 1 hour backup (Dry batteries). *Digital B/W thermal printer with 10-paper rolls.</p> <p>Desired Measurements : NA Any Other Detail : NA Ground Support Eqpt : True online pure since wave UPS with dry batteries. Civil Work: NA Expendables/Starter Kits : *Gel - 3 Bottles. *Paper Roll - 10. Country of Manufacturing : Europe, Japan & USA Warranty : 2 Years Likely Delivery Date :</p> <p>Project: FFH SOMH Karachi(Emergency)</p>					1

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
8	<p>ECHO Machine</p> <p>Purpose :To diagnose peadiatric patient admitted in pead dept. Main_Feature: *New/Latest Model. *CE/FDA approved. *Digital Echocardiography Machine. *Latest Model. *Digital echocardiography having 192 or more physical channels and 5,000,000 processing channels for wide range of peremimum performance application of cardiovascular imaging in pediatrics and adult. The machine must have capability to connect single crystal sector probe. DISPLAY: *Displaysize min 21" OLED Monitor with 4K resolution, till able and swiveble type or better. OPRATION MODES: *B 20M-Mode, power Doppler, HPRF, Spectral Doppler, Color, THID THI TDL Micro CPA/B-Flow HD Color/Dynamic Fow, Duplex and Triplex Doppler PW Doppler, CW Doppler Steerable and ECG Gating. CONTROL PANEL: *Alphanumeric keyboard with bulit -in trackball. *12-inches or more touch control panel screen or better. *Direct access to system function through dedicated keys. *Audio volume control with Bi-Directional/Stereo speakers and foot switch. *User selectable image magnification control. *Adjustable transmit focusing control. *Total and lateral gain compensation control (8 or more). *4-Active transducer connector for transthoracic. CALIPERS/MEASUREMENTS: *Measurements for distance angle stenosis & area circumferences volume skope, time, heart rate and acceleration LV (left ventiricular function) measurements, LA (left atrial volume) measurements, AV (acrctic valve) measurements MV (mtral valve) measurements, PV (pulmonary valve) measurements, PSA measurements, LV MASS measurements Vascykar measurements (CCA, ECA, VA, SA) Auto EF measurements. Auto MT should also be provided. APPLICATION: *Cardiac, Perpheral, Padiatric, Adult Cephalic and Tans esophageal with software for measurements. FRAME RATE: *2000fps or better. CINE MEMORY: *One Memory 900MB or better. SYSTEM SCANNING DEPTH: *Max 45cm or equivalent. IMAGING MODES / TECHNQUES: *Tissue hoarmonic imaging, issue doppler imaging. Echo Machine: *Tissue strain imaging/wall motion tracking alongwith map and graphic display. *Lcal & whole myocardial wall motion parameter curve display. *STRESS ECHO *Exercise and pharmacological stress echo examinations. Datas Acquisition & Review Mode. Stress echo module for storing and reporting stress echo Storage Device. *Built-in CD / DVD Drive, 128-GB SSD & 1TB HOD or better. SYSTEM DYNAMIC RANGE: *Dynamic range minimum 290 dB or better. COMMUNICATION SOFTWARE: *System should conform to DCON communication software for image storage print, Query / Retrieve. Network communication. PORTS: *Video output 4 USB ports. Networking/Ethernet provision for sDesport output for 3D printing. STANDARD TRANSDUCERS: *Multi frequency single crystal sector probe to cover 2.0-6.0MHz for adults or equivalent. *Multi frequency phased array sector probe to cover 3.0-8 OMHz for peads</p>	No	1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	<p>or equivalent.</p> <p>*Multiplane TEE, Transducer (3-6MHz) for Adult or equivalent.</p> <p>*Multiplane TEE Tranducer (4-7 MHz) for paedts or equivalent.</p> <p>OPTIONAL (Must quote seperately):</p> <p>*18HMz high frequency linear probe for MSK.</p> <p>*Multi frequency linear probe to cover 5.0 - 10.0 MHz for vasculr or equivalent.</p> <p>*Micro TEE transducer (4-7.5 MHz) for Neonates with 5.2mm shaft diameter or equivalent.</p> <p>OERTIFICATION:</p> <p>*FDA, CE & MHLW.</p> <p>*M/s Toshiba, M/s Siemens, M/s GE & M/s Philips or equivalent.</p> <p>Rating/Capacity of Eqpt: 220VAC Type : Mobile Accessories: *Power cable-1. *Echo probe freq. *CD/DVD RW. *UPS with 1 hour backup (Dry batteries). *Digital B/W thermal printer with 10-paper rolls.</p> <p>Desired Measurements : NA Any Other Detail : NA Ground Support Eqpt : True online pure since wave UPS with dry batteries. Civil Work: NA Expendables/Starter Kits : *Gel - 3 Bottles. *Paper Roll - 10. Country of Manufacturing : Europe, Japan & USA Warranty : 2 Years Likely Delivery Date :</p> <p>Project: FFH Rawalpindi(Peads Ward)</p>		1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
9	<p>ECHO Machine</p> <p>Purpose :To use for wide range of premium performance application of cardiovascular imaging in pediatrics and adults. The machine must have capability to connect single crystal sector probe.</p> <p>Main_Feature: *New/Latest Model.</p> <p>*CE/FDA approved.</p> <p>*Digital Echocardiography Machine.</p> <p>*Latest Model.</p> <p>*Digital echocardiography having 192 or more physical channels and 5,000,000 processing channels for wide range of premium performance application of cardiovascular imaging in pediatrics and adult. The machine must have capability to connect single crystal sector probe.</p> <p>DISPLAY:</p> <p>*Display size min 21" OLED Monitor with 4K resolution, tiltable and swivable type or better.</p> <p>OPERATION MODES:</p> <p>*B 20M-Mode, power Doppler, HPRF, Spectral Doppler, Color, THID THID TDL Micro CPA/B-Flow HD Color/Dynamic Flow, Duplex and Triplex Doppler PW Doppler, CW Doppler Steerable and ECG Gating.</p> <p>CONTROL PANEL:</p> <p>*Alphanumeric keyboard with built-in trackball.</p> <p>*12-inches or more touch control panel screen or better.</p> <p>*Direct access to system function through dedicated keys.</p> <p>*Audio volume control with Bi-Directional/Stereo speakers and foot switch.</p> <p>*User selectable image magnification control.</p> <p>*Adjustable transmit focusing control.</p> <p>*Total and lateral gain compensation control (8 or more).</p> <p>*4-Active transducer connector for transthoracic.</p> <p>CALIPERS/MEASUREMENTS:</p> <p>*Measurements for distance angle stenosis & area circumferences volume stroke, time, heart rate and acceleration LV (left ventricular function) measurements, LA (left atrial volume) measurements, AV (aortic valve) measurements MV (mitral valve) measurements, PV (pulmonary valve) measurements, PSA measurements, LV MASS measurements Vascykar measurements (CCA, ECA, VA, SA) Auto EF measurements. Auto MT should also be provided.</p> <p>APPLICATION:</p> <p>*Cardiac, Peripheral, Pediatric, Adult Cephalic and Trans esophageal with software for measurements.</p> <p>FRAME RATE:</p> <p>*2000fps or better.</p> <p>CINE MEMORY:</p> <p>*One Memory 900MB or better.</p> <p>SYSTEM SCANNING DEPTH:</p> <p>*Max 45cm or equivalent.</p> <p>IMAGING MODES / TECHNIQUES:</p> <p>*Tissue harmonic imaging, tissue doppler imaging.</p> <p>Echo Machine:</p> <p>*Tissue strain imaging/wall motion tracking along with map and graphic display.</p> <p>*Local & whole myocardial wall motion parameter curve display.</p> <p>*STRESS ECHO</p> <p>*Exercise and pharmacological stress echo examinations. Data Acquisition & Review Mode. Stress echo module for storing and reporting stress echo Storage Device.</p> <p>*Built-in CD / DVD Drive, 128-GB SSD & 1TB HDD or better.</p> <p>SYSTEM DYNAMIC RANGE:</p> <p>*Dynamic range minimum 290 dB or better.</p> <p>COMMUNICATION SOFTWARE:</p> <p>*System should conform to DICOM communication software for image storage print, Query / Retrieve. Network communication.</p> <p>PORTS:</p> <p>*Video output 4 USB ports. Networking/Ethernet provision for desktop output for 3D printing.</p> <p>STANDARD TRANSDUCERS:</p> <p>*Multi frequency single crystal sector probe to cover 2.0-6.0MHz for adults</p>	No	1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	<p>or equivalent.</p> <p>*Multi frequency phased array sector probe to cover 3.0-8 OMHz for peads or equivalent.</p> <p>*Multiplane TEE, Transducer (3-6MHz) for Adult or equivalent.</p> <p>*Multiplane TEE Tranducer (4-7 MHz) for paedes or equivalent.</p> <p>OPTIONAL (Must quote seperately):</p> <p>*18HMz high frequency linear probe for MSK.</p> <p>*Multi frequency linear probe to cover 5.0 - 10.0 MHz for vasculr or equivalent.</p> <p>*Micro TEE transducer (4-7.5 MHz) for Neonates with 5.2mm shaft diameter or equivalent.</p> <p>OERTIFICATION:</p> <p>*FDA, CE & MHLW.</p> <p>*M/s Toshiba, M/s Siemens, M/s GE & M/s Philips or equivalent.</p> <p>Rating/Capacity of Eqpt: 220VAC Type : Mobile Accessories: *Power cable-1. *Echo probe freq. *CD/DVD RW. *UPS with 1 hour backup (Dry batteries). *Digital B/W thermal printer with 10-paper rolls.</p> <p>Desired Measurements : NA Any Other Detail : NA Ground Support Eqpt : True online pure since wave UPS with dry batteries. Civil Work: NA Expendables/Starter Kits : *Gel - 3 Bottles. *Paper Roll - 10. Country of Manufacturing : Europe, Japan & USA Warranty : 2 Years Likely Delivery Date :</p> <p>Project: FFH Lahore(Cardiology)</p>		1		

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
10	<p>Hemodialysis Machine (SLED)</p> <p>Purpose :For smooth functioning of Dialysis Patient in ICU. Main_Feature: *Sustained Low Efficiency Dialysis. *FDA/CE Certified. *New/Latest Model. *Various dialysis therapies including HD double needle system, HD Single needle system. *Shall able to perform conventional, high efficiency and high flux dialysis. *Shall able to performe Slow low Efficiency Dialysis (SLED). *Monitoring: Color LCD rotatable Touch-Screen minimum 10 inches or more. *Shall equipped with adjustable Arterial Blood Pump segment. *Multiple profiles selection up to six (6) profiles pattern. *Shall have Multiple concentrate dialysis fluid dilution ratio. *Shall perform automated self-test feature. *Audible and visual alarms for conductivity arterial and venous pressure, blood leakage, airbubble, temp and positive pressure are displayed on screen. *Easily manageable for the user with dashboard view which offer with quick and clear overview of the treatment status. *Pre-configuration option from the default setting. *Multiple concentrate dialysate selectable program. *Should have Bicarbonate, sodium and UF profiling. *Ultrafiltration rate range 0-4000 ml/hr. *Blood Pump: Electronic blood pump flow rate 0, 10 to 600 ml/min. *Substitute Pump: Electronic blood pump flow rate 0, 10 to 500 ml/min. *Heparin Pump: 0.1 to 20 ml/h (10 to 30ml Syringes). *Dialysate Temp: +32 to 39 Degree C. *Electronic Dialysis Flow rate: 100 to 800 ml/minute should be variable dialysate flow . *Arterial Pressure Meter: -500 to +500mmHg or better. *Venous Pressure Meter : -500 to +500 mmHg or better. *TMP Pressure Meter: -500 to +500 mmHg or better. *Safety: Should have safety function of Optical Blood Leak, Ultrasound & Optical Air Leak, Blood Lines Leak. *Disinfection: Should have both Chemical and Heat Disinfection and no bounding of any specific chemical. *Powder Bicarbonate: Machine should have powder bicarbonate, Internal automatic mixing module and should be universal cartridge. *Machine should accept in simple Hemodialysis mode universal blood tubing set. *Should have automatic priming, automatic blood return and automatic drainage function . *Shall have first Aid Button. *Should provide the Guidance of error messages. *Machine should have real time hydraulic flow on scren. *Should capable to record the complete operating history. *Backup battery time should be 25 to 30 minutes or better. *Machine should have Kt/V function with graphical display. *NIBP Monitor, Endotoxin Filter should be standard. *Quality Certifications: CE/FDA/MHLW. *Origin: Europe/USA/Japan</p> <p>Rating/Capacity of Eqpt: NA Type : Portable Accessories: With pipes 1 set disposable, Antitoxin Filter disinfection solution, complete viltage stablizer with lead in put, out put drain pipes. Desired Measurements : NA Any Other Detail : NA Ground Support Eqpt : NA Civil Work: To be installed by the manufacture. Expendables/Starter Kits : As mentioned in para 9. Country of Manufacturing : Europe, Japan & USA Warranty : 2 Years Likely Delivery Date :</p> <p>Project:</p>	Nos	1		

Tender No. & Date FF/3651/2022-23/PROJS/CPO 24-NOV-22

Tender Due/Opening Date & Time 20 DEC 22,11:00

Sr#	Item Description/Specification	A/U	Qty Req	Rate per Unit	
				With out GST	With GST if Applicable
	FFH Rawalpindi(ICU)		1		