OFFICE OF THE HOSPITAL DIRECTOR
MEDICAL TEACHING INSTTTUTION (MTI)
MARDAN MEDICAL COMPLEX MARDAN

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PRE-BID MEETING MINUTES

"PROCUREMENT OF MEDICAL EQUIPMENT"

Venue: ***Committee Room, Administration Block MTI-Mardan Medical Complex, Mardan***

Date/Time: ***September 15th 2025 (Monday) 10.00 am***

In pursuance to the advertisement disseminated on EPADS, various newspapers, KP-PPRA and MTI-MMC websites the subject meeting was steered by procurement committee and HODs / end-users of the respective Medical Equipment. Appearance sheets of the participants' procurement committee, end users and representatives of the firms are attached.

Description of the medical equipment is given below:-

S#	Equipment Description	Qty
1	Heart Lung Machine	01
2	Intra-Aortic Balloon Pump	01
3	Hypothermia Machine	01
4	Anesthesia Workstations	06
5	Cardiac Monitors	35
6	Teaching Microscope	01
7	Hysteroscope Instruments Set	01

After recitation and introduction, the meeting commenced with a welcome note from the Chairman Procurement Committee Professor Dr. Muhammad Hussain. At the outset, all participants were briefed about the purpose of the meeting, which was to provide an overview of the bidding process, explain the scope and description of equipment/related services, and clarify relevant queries of the participants. Further, to make this process more transparent and to ensure healthy competition, it was conveyed that the MTI-MMC Mardan invited sealed separate Item wise sealed bids through **E-PADS (E-Pak Acquisition & Disposal System)** under rule 6(2)(b) **"*Single Stage Two Envelope*"** bidding procedures of Khyber Pakhtunkhwa Public Procurement Regulatory Authority (KPPRA) Rules 2014.

The aim of this Pre-bid meeting is to maximize the open competition and queries related the procurement process by the firms will be addressed and the same shall be incorporated in the bidding documents. Pre-bid Meeting minutes shall be uploaded by today i.e on 15-09-2025.

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Professor Dr. Muhammad Hussain announced that any suggestions, comments if not in consistent with the rules & requirements of the institution shall be incorporated in the final bid documents.

Manager Procurement summarized the composition of the Bid Solicitation Documents, and highlighted important sections including the following:

The bidding shall be carried out under single stage two envelop procedure of KP-PPRA Rules 2014 under EPADS system.

Download BSDs:

Visit the EPADS portal using link kp.eprocure.gov.pk and download the Bidding Solicitation Documents (BSDs). Thoroughly study the BSDs to understand all instructions, bid data sheet, general and special terms and conditions of contract, specifications, knock out criteria and required documentation.

Scanning the bid Documents:

i. All required documents should be neatly scanned in PDF format, and both sides of documents if required in case of affidavits or certificates.

ii. Bidders are advised to refrain from uploading unnecessary, redundant, or unsolicited files and documents that are not specifically required in the BSDs.

iii. The final bid pdf. file must be named as applied for **"Equipment Name"**

Uploading / Submission of Bid on EPADS Portal:

i. Upload the complete scanned bid file to the EPADS portal as per the system instructions. The upload must be completed before 02:00 PM on the closing date.

ii. If bidders do not submit their bids via EPADS, their bids submitted through any other means will not be accepted, and the bidder will be considered as non-responsive.

CDR Submission:

Neatly scan the Bid Security and upload it with the bid on EPADS. In case of non-compliance their bid shall be declared as non-responsive.

Submission of Original CDR in hard form:

i. Bid Security should be 2% on the quoted value (in original) on FOR Price in the name of Hospital Director MTI-MMC Mardan.

ii. In a sealed envelope, by hand to the undersigned office on or before 02:00 PM on the closing date.

iii. Label the envelope as: ***"Bid Security Applied for the "Equipment Name"*** submitted by ***"[name of the firm]"***

iv. If a bidder fails to submit the Bid Security in hard form their bid will be considered as non-responsive.

Eligibility Criteria:

It was agreed and decided by the procurement committee that product certification will be relaxed only in the **Teaching Microscope** (multiheaded), and the bidder shall provide at least one certificate from US-FDA, MHLW / JIS or CE being international standard.

Evaluation Criteria:

After thoroughly examining the requests made by the bidders regarding evaluation criteria, procurement committee did not agree to amend the evaluation criteria, following fairness and transparency and it was decided that the same shall remain unchanged.

Specifications: -

Engineer Mr. Farhan as technical member along with end users explained in detailed technical specifications and most of queries were addressed and amended during the pre-bid meeting. However complete amended specifications are given below in Annexures format which shall be considered as final, and all the bidders shall quote their bids in light of the given annexture while quoting their bids.

S #	Equipment Name	Annex
1.	Heart Lung Machine	A
2.	Intra-Aortic Balloon Pump	B
3.	Hypothermia Machine	C
4.	Anesthesia Workstations	D
5.	Cardiac Monitors	E
6.	Teaching Microscope	F
7.	Hysteroscope Instruments Set	G

Other Decisions:

✓ The successful firm shall be liable for any type of work in respect to installation of equipment including safety measures, standard protocol and environmental factors like humidity, temperatures or moisturizers etc.

S #	Heart Lung Machine	Annex-A
1.	• 05 completely modular Pumps on console/MAST with all modular parameters. • 04 large Pumps (02 main pumps and 02 suction pumps). • 01 twin pump / 02 small pumps for cardioplegia. (Mandatory)	

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- Pressure module.
- Temperature module.
- Display and control panel.
- Power supply module.
- Entire system should have a battery backup.
- Level sensor.
- Ultrasonic Bubble detector.
- Flexible Light Lamp/LED.
- Mechanical / Electronic Gas blender.
- Cardioplegia Monitoring Unit.
- System Control Panel.
- Venous occluding clamp.
- Heart Lung machine should have modular system.
- Smooth stainless steel painted metal and aluminum.
- Switch over from main power to battery backup should be automatic and immediate.
- Battery Unit should be built up in console or pump base.
- It should recharge automatically when the system is operating with main power supply.
- Pump-console should have single cable connection from external power supply.
- Provision for a connection to PC.
- 24V operated socket for all pumps to avoid risk.
- Should have hand crank facility as a safety feature with each pump.
- All the Pumps should have facility of pulsatile mode.

System Control Monitor

Should display following components.

- Pulsatile operation display.
- Pressure monitoring display.
- Temperature monitoring display.
- Timer system display.
- Battery voltage display.
- Safety buttons.
- Alarm for shut down for any pump.

Cardioplegia Monitoring Unit

- It should display Volume ratio, timer, temperature, and pressure of full control of independent cardioplegia line.
- Master follower function and pump to stop.

Single Roller Pump

- Console Pumps should have a compact arrangement and a universal connection.
- Monitoring flow rates in LPM & RPM should digitally display on the pump or equivalent.
- Pump should be peristaltic for durability and convenience of handling.
- Roller pump should have a self-diagnostic circuit with provision to detect and display critical alarm conditions.
- Each individual roller pump should be capable of running independently.
- Each Pump should operate on 24 V.
- Roller Pump Range: 0-250 RPM.
- Display of all pump condition on pump.
- Calibrations preset for ¼, 3/8 & ½ tubing.

- Tubing inserts of all standard sizes.
- It should have reverse flow capability.

Pressure Monitor

- Should be capable of monitoring and displaying two Pressures.
- Along with necessary pressure transducers Kit, cables and domes reusable, with accurate digital display and alarm facilities- audio and visual.
- Pole mounts for transducer Kits.

Temperature Monitor

- 04 temperature displays on Control panel for patient monitoring and cardioplegia monitoring with digital display in Celsius.
- Temperature (01) probe for adult oxygenator.
- Temperature (01) probe for peads oxygenator.

Level Sensor

- With alarm settings.
- Should be able to provide both alerts for audible and visual alarms for low blood level.
- Level sensor pads Qty: 100 pcs (Mandatory).

Note:- Each bidder shall quote the 1000 x level sensor (item wise) in foreign currency and the same shall remain the same for a period of 5 years. The same shall also be considered while final decision (Financial evaluation)

Air Bubble Detector

- It should be ultrasonic in nature and have the ability to detect micro bubbles.
- Bar LEDs/graphical or pictorial, sensor fault, override facility.
- Sensor should be compatible with all tubing sizes.

Time Monitor

- Minimum 3 time displays.
- With stop, reset and start function.
- Reboot time not be more than 1.5 mins

Electronic / Mechanical Gas Blender

- Air / Oxygen Mixers.
- Should be available in high flow / low flow.
- Integrated flow meter.
- Water trap assembly.
- 14ft air hose.
- 14ft oxygen hose.

Centrifugal Pump

- Centrifugal pump should be used as a part of heart lung machine and as a stand-alone device as well.
- Console should have triple power supplies: mains, Heart Lung, and batteries.
- Flow and bubble measuring function must be integral part of the Console.
- An adjustable holder allows optimal positioning of the drive unit.
- Emergency drive, a manual drive (hand crank) with speed indicator
- Specialized for ECMO, ECLS
- Separate flow and speed displays.
- Constant flow mode of operation.

	• Suitability for pulsatile operation. • Technologically advanced disposable pump head. • Priming: 60 ml or less. • Flow: 0-8 L/min. • Mains power inlet cable. • Push and turn control knob. **Accessories:** • System should be with all complete accessories. • Integrated flow Sensor. • Electronic venous occluder. • An original copy of complete operating Manual from the manufacturer. **Optional:** (Procuring agency will select according to its requirement) **1. Online / Inline Arterial & Venous Line Monitoring** • LCD display of 6" or better touch screen monitor. **Monitoring of Arterial Line:** • Measurement method for partial pressure of oxygen. • Measurement method for arterial temperature. • Measurement of Hemoglobin or hematocrit. **Monitoring venous line:** • Measurement method for partial pressure of oxygen. • Measurement method for venous temperature. • Measurement of Venous line, Hemoglobin, Hematocrit, SvO_2 **Accessories:** • Venous probe. • Arterial probe. • Venous temperature sensor. • Arterial Temperature sensor. • system should be complete with all accessories. **Accessories:** • It should be complete with all standard accessories • Online UPS with factor of 1.5 X

S #	Intra-Aortic Balloon Pump Annex-B
1.	**Technical Specifications** 1. Complete system with all accessories needed. 2. System should select the best lead and trigger source, set optimal inflation and deflation timing, and still allow the clinician the ability to fine tune deflation timing with in vivo / inside body calibration and internal helium cylinder in case of emergency. 3. Should quickly adapt to rate or rhythm changes in order to optimize augmentation and support during diastole. 4. **Color Display: 12.1" or Better** Color 1024 Horizontal x 768 Vertical Touch screen TFT Liquid Crystal Display (LCD) Detachable for transport, Laptop-like closure for storage and protection. 5. **Preferences Menu:** User should be able to select display sweep speed (25 or 50 mm / sec or better) brightness (auto, low, med, high); balloon waveform (on/off); ECG inflation markers (on/off); inflation markers

display, audio, flashing alarms (on/off); printer preferences, catheter alarms, R-trac, set date and time with lock screen. Helium Tank and battery display on screen.

6. **Operation Modes**: Auto, Semi Auto. Auto made should also have manual adjustment of fine tune of Deflation timing for better coronary artery perfusion.
7. **ECG Trigger**: Threshold dynamically adjusted by system for high sensitivity and selectivity of the R-wave detection; Minimum = 120µV± or 20µV or better at normal gain; 40µV or better at maximum gain.
8. **Pressure Trigger:** Default trigger threshold is automatically adjusted to 3/8 or better of the systolic pulse height; 7 mm Hg minimum or better Manual threshold mode: User adjustable between 7- and 30-mm Hg ±3 mm Hg or better. Automatic Internal Zero / Calibrate Pressure for conventional and fiber optic IAB.
9. **Pacer A Trigger:** Trigger threshold is dynamically adjusted by the system for improved sensitivity and selectivity of R-Wave detection. Minimum threshold is 80 ±20µV.
10. **R Wave Detection Mode/Pacer Blanking:** ECG trigger: 44 mS, Pacer A trigger: 100 mS
11. **Pacer V/A – V Trigger**: In auto mode V Pacer: fixed at rate up to 180 bpm (no demand pacing).
12. **Internal Trigger:** Variable mode: 40-120 bpm or better; Normal mode: 80 ± 1 bpm or better.
13. **Tall T-Wave Rejection**: Rejects all T-Waves where Q-T interval is <350 ms (ECG and Pacer A mode) and the amplitude is <120% of QRS input amplitude or better.
14. **Pacer Rejection:** Rejects all pulses of amplitude ± 2.0 mV to ± 700 mV durations between0.1 mS to 2.0 mS or (ECG and Pacer A mode) No tail (overshoot), 4-100 mS time constant tails ≤2 mV better.
15. ECG

ECG Leads: In Auto Operation Mode: I, II, III, and External in Semi-Auto Mode: I, II, III, AVR, AVL, AVF, V, External (12 leads compatibility)

ESIS: Automatic suppression with internal ECG amplifier.

Lead Fault Detection: Guaranteed Lead fault detection with any active electrode wire becomes open. Should have no lead fault with electrode impedance ≤ 51 K Ohms and with DC offsets ranging from -300 mV to +300 mV.

Auto scaling of waveform amplitude: Accommodates amplitudes up to ± 5mV. (Minimum) without clipping.

Heart Rate Meter. Usable range: 15-214 bpm or better.

Auto scaling: Automatically scaled and displayed Arterial Pressure Waveform display window.

Digital Arterial Pressure Display Pressure scale is annotated with numeric values at the lowest, middle and highest grid lines covering the vertical span of the scaled waveform. Range: 0 to 300 mmHg or better.

Hydraulic arterial pressure zero:

Zero Range: ±120 mmHg minimum (waveform must be non-pulsatile) or

better. Auto Zero Time: <3seconds or more.

Pressure Fill – should measures the catheter and tubing volume, then calculates a targeted fill pressure based on that volume

Fiber Optics inside body calibration

- Fiber-optic signal In vivo or Inside body calibration Detected when sensor is
- connected to receptacle acquisition
- Low-level Fiber-optic Enacted when appropriate cable plugged in
- (Electrically isolated)
- Pressure Output: 0 to +300 mmHg (minimum) or better
- Pressure Range4 mmHg or 4%, whichever is greater
- Accuracy: 100%

16. **Power Supply**

- Mains Voltage: Retractable Power cord with 110-240 VAC ±10%
- Mains Frequency 50/60 Hz ± 3 Hz
- Internal Battery: 15 VDC (nominal), Minimum battery backup time, approx. 3 hrs, @ 90 bpm, or better for provide the better and long-term support to the patient.
- Battery Type: Maintenance free; Lithium Ion.
- Hot Swappable Battery allows for endless battery run time when extra charged batteries are on hand.

17. **Compressor**

- **System scroll Compressor**: Dual head scroll pump with DC motor for the maintain vacuum and pressure in the pneumatic circuit.
- IAB Helium (He+): Medical – grade
- Condensate Removal: Fully automatic condensate removal and disposal continually removes water vapor with each Inflate/deflate cycle. Nafion or Equivalent.
- Pneumatic System: with integrated safety disk and condensate removal module.
- Concealed- No expose to drain or fluid tubing.
- Pneumatic speed. HR 80 = 229 msec or less, HR150=226msec or less.
- Helium Tank – 1x Internal 220 psi / 1.5 Liters - approx. 3 days continuous pumping located inside pump activated when pump off cart. (For transport config.)
- External 2x Helium Tank.

18. **UTS Version:** Unit must be capable of Without cart mobility with integrated cylinder, safety disk, battery back maximum total weight of the system 25kg or less.

19. **Printer**

- Printer Type: Thermal array 50mm chart width or better.
- Printer Menu: On-screen selection of waveforms; strip length, timed print, print on alarm and alarm/trigger log
- Print resolution. 600 dots per 25mm or better.

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	20. Accessories with each unit • Integrated / tethered / attached - Handheld Doppler unit: with 8 MHz non-directional probe (Same manufacturer) • Saline Pole: Height adjustable • Simulator/tester from same manufacture. 01 • Remote Mount: Mounts keypad/monitor on bypass pump. • Storage Case: Holds cables and spare items • Pump Cover: Padded vinyl with pocket • Ext Cable: Monitor extension cable • External Helium Tank -2 • Internal Helium Tank -1 • Balloon Catheter. 02 • complete set of transducers with IBP Cable 1x **Power Requirement: 220VAC**

S #	Hypothermia Machine	Annex-C
1.	**a. Description.** Latest version available on-site Hypo Hyper Thermal system is used for temperature control (Hot & Cold) of patients during cardiac surgery. **Technical Aspects.** 1. Unit should have three independent temperature control separately flow control its own pump for patient, oxygenator and cardioplegia with connectivity to external circuit. **(Mandatory)** 2. Suitable arrangements for disinfecting of internal line and thermostatic system is available. 3. Advance level of technology for less power consuming and no need to special power supply. 4. Built-in automatic temperature control system through thermostatic heating and cooling transfer technology. 5. Color Panel display. 6. Temperature setting range 3°C to 40° or equal. 7. Tank volume capacity 16 liters or equal. 8. Heating capacity 1400w or better. 9. Flow capacity of patient circuit 18 l/min or equal. 10. Initial cooling capacity 2100 kj/h (500 Kcal/h) or better. 11. Built-in cooling system Continuous cooling cap 2800 kj/h (670 Kcal/h) or . 12. Circulating system: Pump 13. Flow capacity (Total) 10-16 liters/min 14. System should be opera table at 220 VAC +10%, 50 Hz 15. System to be usable with all age group i.e. adults, pediatrics and infants **b. Accessories.** • All standard OEM recommended accessories should be provided with the system including following: (a) Reusable heater cooler unit blanket for patient side and Cardioplegia side. 01 set.	

S #	Anesthesia Workstations	Annex-D
1.	1. Mobile type Anesthesia Machine or customized to pendent, Paramagnetic sensor, 15 inches touch screen, for Neonatal, peads and adult. **(Mandatory)**	

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(Note: In case a bidder has different model of Pendent and Mobile type shall quote separately and will be considered). However, the model should comply with the specifications.

2. Anesthesia machine to administer anesthetic agents in precise control and flow manner for adult, Neonate and pediatric patients. **(Mandatory)**
3. Provision of 3-gases O2, N2O and Air.

Provision of communication port for sharing and transfer of data to HIMS or HIS through HL7 protocol.

1. Electronically controlled gas mixing and monitoring of anesthetic gases (O2, AIR, and N2O).
2. Non-interchangeable pipeline inlets.
3. Electronic display of Pipeline & cylinder for O2, N2O and Air.
4. Central gas or electrically driven unit.
5. Cylinders should be remained open even the central supply gas available. (Auto Shifting as per OEM)
6. Built in illumination system.
7. Gas outlet and O2 flush control.
8. 1 auxiliary O2 outlet.
9. Two Lockable castors or central brake.
10. Stainless steel or fiber work surface.
11. Absorber bag supports arm.
12. Three gas virtual flow meters for precise control and monitoring of gases.
13. Drawer unit as per OEM (Only for trolley version machine).
14. Integrated heated breathing system.
15. Scavenging system Passive or Active type.

Integrated or Built in or Mounted suction with accessories to be supplied from same manufacturer which should be compatible with machine.

ANESTHESIA VENTILATOR:

1. Anesthesia Ventilator with minimum 15" or more TFT Touch Screen.
2. The ventilator shall be capable of ventilating Neonates, pediatric and Adult Patients.

Configurable pre-setting of patient category, age, height and weight should be available.

The ventilator shall have following features as a minimum requirement:

1. Volume Pre-set Time Cycled Ventilation or Volume Control
2. Manual or spontaneous.
3. Pressure Controlled Ventilation
4. PC-VG or Auto Flow or PRVC.
5. Synchronized volume controlled ventilation (SIMV) with PV.
6. Synchronized Pressure controlled ventilation (SIMV) with PC.
7. Pressure Support with apnea back up
8. Cardiac bypass mode. **(Mandatory)**
9. Breathing Mode Selection (Standby, Volume, Spontaneous and Pressure)
10. Built in Oxygen Monitoring through Paramagnetic sensor (Non consumable).
11. Inverse I:E ratio Capability
12. Gas Specific Input Connectors (Air or Oxygen ISO or ANSI Standards)
13. Settable Tidal Volume 20-1400 ml or better in VC.

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14. Rate or Frequency 4 to 80 bpm
15. PEEP 3 to 20 cm of H2O.
16. Inspiratory Pressure Limit
17. Fresh gas flow adjustable to 0.5 L/min for minimal and low flow anesthesia **(Better will be special feature).**
18. Loops and curves of pressure, flow and volume.
19. Waveforms for Airway Pressure, Inspiratory and Expiratory flow, volume and CO2.
20. Lung Recruitment Maneuvers should be available. **(Mandatory)**
21. Low flow anesthesia with Volume Exchanger or better **(Mandatory)**
22. Patient Trend data and user log books for 24 hours or more.
23. Power Supply 220 VAC, 50 Hz
24. Built-in Battery Backup (90 Minutes or more)
25. Backup ventilation during gas supply failure.
26. Alarms should be available for all measured parameters as low and high limits.
27. Electronic Hypoxic Device.
28. The ventilator shall be supplied with complete drive hose and power cable.
29. Anesthetic Agent, CO2, O2 and N2O Monitoring (within Anesthesia Machine) along with Gas consumption and uptake data.
30. Monitoring of x MAC or MAC value. (within the anesthesia machine) above will be **special feature**.

Note: Annual maintenance kits (needs to be replaced annually) will be included in the warranty period.

ELECTRONIC VAPORIZER:

1. Electronic Vaporizers for control and monitoring must be **mandatory**
2. Two pre calibrated Vaporizers of Isoflurane and Sevoflurane.
3. Vaporizer should be temperature and flow compensated.

Vaporizer has the ability to indicate below minimum filling level.

MONITORING

1. Vital sign monitor with minimum 15" TFT touch screen.
2. Measurement of ECG 5 or 6 leads.
3. NIBP with re-usable single hose cuff for neonates, Peads and Adults.
4. SpO2 (Masimo/Nelcor Technology or Equivalent motion tolerant technology) with re-usable cable and sensors for neonates, Peads & adult
5. HR.
6. Temperature with skin probe.
7. Respiration.
8. Four Channel IBP.
9. Trend data: 24 hours or more.
10. EtCO2 main or side stream (Complete with all sensors probes, reusable).
11. Provision of communication port for sharing and transfer of data to HIMS or HIS through HL7 protocol.
12. 220V, 50 Hz operated.
13. Built-in or Integrated Battery backup 1.5 hours or more.

Online UPS (if required)

Note:
The bidder shall quote the price of the monitor separately from the main machine. Quoting the monitor price separately is mandatory; failure to do so shall render the bid non-responsive.

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S#	Cardiac Monitors	Annex-E
8	**BEDSIDE MONITOR TO DISPLAY VITAL SIGNS AND OTHER PARAMETERS FOR ADULT AND PAEDS.** **Operating Features and characteristics:** 1. Screen Size At least 15" diagonal (Touch Operated) or better with non-fade LCD / TFT LCD / LED color display or better. 2. Electro-Surgical Interference Suppression / Protection. 3. Defibrillator Protection. 4. Freeze and Cascade Facility. 5. Waveform Ten waveforms or more. 6. Waveform Traces Speed 25 & 50 mm/sec. **Parameters:** 1. ECG 2. Numeric: Heart Rate 3. Real Time and freeze ECG Trace **Non-Invasive Blood Pressure (NIBP):** 1. 11. Method: Oscillometric Principle 2. 12. Numeric: Systolic, Diastolic, and Mean Pressure 3. 13. Selectable auto inflate interval settings 4. 14. Rising Cuff / Continuous Pressure Display, Rise or Fall in Blood Pressure and automatic triggering of NIBP Measurement **Invasive Blood Pressure (IBP):** 1. IBP 02 Channel 2. **Capnograph (Main stream/Side stream $EtCO_2$)** **Temperature:** 17. Numeric: Temperature selectable in °C / °F **Pulse Oximetry:** SpO2 (Masimo Technology) Numeric: 0 – 100% oxygen saturation measuring range Waveform-Plethysmograph Pulse with Pulse Strength Indication **Arrhythmia Analysis:** 20+ Arrhythmia Analysis and ST Analysis along with QT Analysis and it should be available for adults pediatric and neonates. **Respiration:** 1. Breath Rate display and settable apnea alarms 2. Sweep Speed: 6.25, 12.5 mm/sec or better **Other Features:** 1. Trend Data: Graphical / Tabular with at least 48 hours' back-up or better **Alarms:** 1. High & Low (settable) on all parameters 2. Visual and audible indication of alarms **Other Parameters:** 1. Operating Requirement: AC 220 V & 50 Hz 2. Built-in rechargeable battery for fully operational back-up for at least 1 hours **Communication:** 1. Capability to interface with LAN / WLAN for data transfer. 2. Provision of communication port for sharing and transfer of data to HIMS or HIS through HL7 protocol. 3. Remote preview of clinical operations on Android & IOS. (Optional: Mandatory to quote Price for Numeric+ Graphical to preview remote data)	

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	Cardiac Output 1. The Patient Monitor must be capable to Upgrade to invasive & Non-Invasive CO or PICCO. **(Mandatory)** **accessories:** 1. 3 & 6 Lead ECG Cable - Qty:1 each 2. NIBP Cuffs (Adult & Pediatric) - Qty: 1 each 3. SpO2 Probe (Adult & Pediatric) - Qty: 1 each 4. Skin Temperature Sensors - Qty: 1 5. IBP Cables – Qty: 2 6. EtCO2 Kit – Qty: 1 7. High-quality Wall Mounting Stand – Qty: 1 8. Operational & Service Manual - Qty: 1 each Online UPS (if required)

S #	Multi-Head Teaching Microscope Annex-F
1.	**Optical System** Infinity Color-Corrected Optical System with high transmission and flat field across the entire viewing area. Plan Achromat Objectives: - 4X or 5X / 0.10–0.12, FWD ≥ 10 mm - 10X / 0.25, FWD ≥ 4.5 mm - 20X / 0.40–0.45, FWD ≥ 0.46 mm - 40X / 0.65 (Spring-loaded), FWD ≥ 0.45 mm - 100X Oil / 1.25 (Spring-loaded), FWD ≥ 0.13 mm Condenser NA 0.9/1.25 or Universal Turret Condenser with multiple modes (Bright field, Phase, Dark field, Fluorescence, etc.) **Eyepiece & Observation System** 5-Head Multi-Observation System with integrated dimmable LED Pointer - Pointer should offer multiple interchangeable colors (minimum 2 options: red, green, or white) Trinocular main observation tube (30° inclination, 360° rotatable) with three ways light splitting Additional 4 binocular heads with interpapillary adjustments Eyepieces: Wide field 10x (FOV 22 mm or higher), focusable with eyecups **Microscope Stand & Stage** Ergonomically designed stand for transmitted-light applications with: - Coaxial Coarse and Fine Focus (on both sides) - Fine focus resolution with Z-drive offering ≥15 mm lift - Built-in illumination system using long-lifespan white LED with light intensity management (eco-mode preferable) Reckless Mechanical Stage with: - Right-hand drive - Hard-coated anodized surface - Stage travel ≥75x50 mm - Extendable X-axis with friction adjustment - One-hand operated specimen holder

	Illumination Built in transmitted light illumination with White LED Power Unit, 10 -16 W LED stablised 100 ...240V AC / 50.....60Hz. - Light management features like Eco mode, light intensity memory, or snap buttons for consistent imaging preferred **Imaging System (Camera & Interface)** Microscope Camera (Color): - Sensor: CMOS, resolution ≥12 MP (4032x3044 or higher) - HDMI & USB 3.0/2.0 outputs with WiFi compatibility preferred - Live Video: Full HD 1080p at ≥30 fps via HDMI, real-time capture - Built-in control buttons: Image capture, OSD, Reset - File formats: JPG, TIFF for stills; MP4 for video Camera Adapter: - C-mount optical adapter, 0.5x to 0.65x magnification range **Software & Computer System** Imaging Software: - Should support full control of camera functions - Must include features like white balance, exposure, annotation, image compare, and live streaming Compatible Branded Desktop Computer: - Processor: Intel Core i5 or higher - RAM: Minimum 4 GB - Storage: ≥1 TB HDD - Display: 32" LED - Preloaded software and drivers for camera control **Included Accessories** Snap button and USB interfaces White-balance filter Contrast enhancement filters (e.g., blue filter), RGB Color mask. Microscope dust cover

S #	Hysteroscope Instrument Set Annex-G
1.	1 TELESCOPE Dia 2.7-2.9mm,12° direction of view, WL 300 mm 1 TELESCOPE 30° Ø 2.7-2.9MM SL 310MM rigid, TL 370mm, rod lens Sys 1 2 SHEATH FOR HYSTEROSCOPE 16.5FR (Diagnostic & Operative) 1 WL 219mm, round, working channel 5Fr, sheath, distal end beveled, compatible with telescopes Ø 2.7-2.9mm, 12° and 30°, with Luer connection, automatic click connection, reusable ACCESSORIES 1 SCISSORS 1 INSERT WITH SHEATH SAFE / HANDLE FOR SAFE-SYSTEM / 2 GRASPING FORCEPS 1 INSERT WITH SHEATH SAFE / HANDLE FOR SAFE-SYSTEM 3 COAG ELECTRODE MONO 5FR WL 400MM 1

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for cystoscopy, electrode shape: button, PACK=1 PC, reusable
BIPOLAR TUR SET
1 TELESCOPE 30° Ø 4MM SL 310MM rigid, TL 373mm, rod lens system 1
2 OUTER SHEATH RESECTOSCOPE 24.5-26FR 1
SL 191 mm, round, non-rotatable, distal end straight, continuous irrigation, compatible with inner sheath and telescopes Ø 4 mm, 30°, with irrigation stopcock, quick connection, reusable
3 INTERNAL SHEATH RESECTOSCOPE 22-24FR 1
SL 203 mm, round, rotatable, straight distal end, ceramic, continuous irrigation, compatible with outer sheath and telescopes Ø 4 mm, 30°, with irrigation stopcock, quick-lock, reusable
4 VIEWING OBTURATOR RESECTOSCOPE COMPATIBLE WITH SHEATH 1
5 WORKING ELEMENT PASSIVE MONO/BIPO 1
6 WORKING ELEMENT ACTIVE MONO/BIPO 1
7 WORKING INSERT RESECTOSCOPE 1

8 FLUID MANAGER consisting of Hystero pump II, pressure range 15 - 150 mm/Hg, delivery 1
9 rate 150 - 500 ml/min, fluid monitoring module with deficit display, mobile stand with scales and rings
10 Irrigation tubes Reusable 10
11 HF CONNECTION CABLE BIPO L 3M 1
for bipolar resection, 2-pin plug, HF surgery generator 226000X with RFID identification,
reusable
12 CONTAINER (WXHXD) 400X60X200MM 1
Holds: Instruments, for sterilization (steam and low-temperature), storage and transport, with
instrument mat, inner dimensions (wxhxd): 400x57x200mm, outer dimensions (wxhxd):
466x77x266mm
13 CUTTING ELECTRODE MONO 24FR 10
for hysteroscopy, for continuous irrigation sheaths, 24, Fr, loop: round, wire Ø 0.3mm, fork ,
stem, PACK=1 PC, for use in combination with the resectoscope, unsterile, reusable
14 ROLLER ELECTRODE MONO 21/24.5FR 5
for hysteroscopy, for continuous irrigation sheaths, 21/ 24.5, Fr, electrode shape: roller, fork
stem PACK=1 PC, for use in combination with the resectoscope, unsterile, reusable
15 HOOK ELECTRODE MONO/BIPO 21/24.5FR 5
for hysteroscopy, for continuous irrigation sheaths, 21/ 24.5, Fr, electrode shape: hook, fork ,
stem PACK=1 PC, for use in combination with the resectoscope, unsterile, reusable
16 BLADDER SYRINGE 150 ML Ø 54MM Length 248mm, reusable 1
COMPACT HYSTEROSCOPE
1- HYSTEROSCOPE BNDL 1
HYSTEROSCOPE 30° Ø 3.9n-5mm MM WL 217MM / RUBBER CAP CAP

	0.8MM / 2- HANDLE FOR HYSTEROSCOPE 1 compatible with sheath system for diagnostic hysteroscopy, bayonet-cap, reusable 3- GRASPING FORCEPS 1 GRASP. FORCEPS INSERT 5FR WL 340MM / HANDLE WITH OVERLOAD PROTECTION / FORCEPS / 4- GRASPING FORCEPS 1 GRASP. FORCEPS INSERT 10.5FR WL 340MM / HANDLE WITH OVERLOAD PROTECTION 5- PERFORATED BASKET FOR HYSTEROSCOPE 2 1 Holds: Hysteroscope, for machine reprocessing, sterilization (steam and low-temperature), storage and transport, with small part basket, inner dimensions (wxhxd): 451x80x124mm, outer dimensions (wxhxd): 467x90x132mm

Conclusion:

At the end of the meeting, chairman procurement committee once again announced that we expect from the bidders to quote their best and final rates in this competition. These minutes of the meeting shall be uploaded on EPADS portal and on www.mmckp.gov.pk and will be the integral part of the Bid Solicitation Documents.

The meeting ended with a mutual vote of thanks.

END USERS

Dr. Shafiq Alam
Assistant Professor
Cardiology

Dr. Ajab Khan
Assistant Professor
End User

Asst. Prof. Dr. Naila
Assistant Professor

Dr. Salman Malik
Assistant Professor
Incharge OT

Professor Dr. Imad Hameed
End User

OFFICE OF THE HOSPITAL DIRECTOR
MEDICAL TEACHING INSTITUTION (MTI)
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PROCUREMENT COMMITTEE

Prof. Dr. Nazish Farooq
Member

Dr. Zubair Janan
HoD Radiology Deptt
Member

Mr. Muhammad Sheraz
Director Finance
Member

Mr. Muhammad Farhan
Bio Medical Engineer
Member Technical

Muhammad Khalid
Manager Procurement
Secretary

Muhammad Khalid
Manager Procurement
Mardan Medical Complex
(MMC/MTI) Mardan

Dr. Muhammad Hussain
Chairman Procurement Committee

Approved by.

Hospital Director
MTI-MARDAN

Copy to:

1. All the firms who attended / obtained the bid solicitation documents.
2. IT section with request to hoist the same on MMC website.
3. Members Procurement Committee
4. End Users of the respective equipment.
5. Secretary to BoG MTI-Mardan.
6. Record Copy

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MTI-MMC MARDAN

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(ATTENDANCE SHEET)

PRE BID MEETING – PROCUREMENT OF MEDICAL EQUIPMENT THROUGH E-PADS FOR MTI MMC MARDAN

Date & Time: **Monday, September 15, 2025 10:00 AM**

The following bidders / their representatives participated in meeting.

S#	Firm's Name	Representative's Name	WhatsApp No & Applied For:	Signature
1.	Medilord Pakistan	Faisal	0300-0452109 / Anesthesia machine, HLM, Hypothermia, IABP	
2.	Shiraz Trading	M. Luqman	0333-9260702 / Patient Monitor. Anesthesia.	
3.	Feroz Sons Labs	Idrees Ahmed	0333-1821118 / Patient Monitor	
4.	Universal Enterprises	Abdul Haroon Khan	0311-4368339 / HLM, hypothermia	
5.	HOSPICARE SYSTEMS	KASHIF HASHMAT	0332-3741655 Hypothermia / Patient Monitor	
6.	Allmed Solutions	IMRAN	0344-9884648 S.ME	
7.	Friends Traders	Usman	0347-9593009	
8.	" "	Salem	0347-9553420 Mangr	
9.	" "	Shahzaib	0347-9593902 A. Mangr	
10.	Medical Equipment Systems MES	Hassan Khan	0333-4924977 (Monitors)	
11.	EMTS	Osama Qadardan	0312-9354853	
12.	Noor international	Samiullah	0311-3046739	
13.	Medicard	ABID	0345-8034137	
14.	Vertex	ZAKA / Bilal	0323-2525664	
15.	Medop International	Muazzam Javeed	0323-8338531	
16.	Mallay dynamic limited	Muzammil	03354324321	
17.	PKMed	Sohrab	0305-5550160	
18.	Bio Tech services	Adeel Khan.	03018559855	
19.	Minerva Trading Company	Haseeb	0343-2104175	
20.				

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21.	Verizon	Hon-e-Amin	0334-9149941	
22.	Rapid Healthcare	Engr. Khaleeb	0331-9107810 Hysteroscopy, Anesthesia	
23.	Hexpicare System	Kashif Hanif	0332-3741655 Hypothermia	
24.	Raab Scientific Solutions	Hassan Ahmad	0319-8594886	
25.	Advance System	Khurram	0321-4196830	
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(ATTENDANCE SHEET)

PRE BID MEETING – PROCUREMENT OF MEDICAL EQUIPMENT THROUGH E-PADS FOR MTI MMC MARDAN

Date & Time: Monday, September 15, 2025 10:00 AM

The following Members participated in meeting.

COMMITTEE MEMBERS

1. Prof. Dr. Muhammad Hussain -*Surgery Dept.* ***(Chairman)***	
2. Prof. Dr. Nazish Farooq - *Pathology Dept.* ***(Member)***	
3. Dr. Zubair Janan- *Radiology Dept.* ***(Member)***	
4. Prof. Dr. Imad Hameed – ***ENT Dept.***	
5. Prof. Dr. Ajab Khan – ***Chairman Cardiac Surgery Dept.***	
6. Asstt. Prof. Dr. Noor ul Hadi ***(HoD Cardiology)***	
7. Asstt. Prof. Dr. Shafiq Alam ***(Registrar Cardiology)***	
8. Asst. Prof. Dr. Naila ***(HoD Gynae A)***	
9. Dr. Salman Malik **(In-Charge OT)**	
10. Muhammad Sheraz - *Finance Director* ***(Member)***	
11. Mr. Farhan Shahzad – *Bio-Medical Engineer* ***(Member)***	
12. Muhammad Khalid – *Procurement Manager* ***(Member/Secretary)***	
13.	
14	