

**UNIVERSITY OF ENGINEERING & TECHNOLOGY
MARDAN**



TENDER DOCUMENT

Procurement Reference	Supply and Installation of electronics, IT equipment and Store items under ADP Project.
Project	ADP-180248; titled as “ <i>F/S and Provision for upgradation of UET sub campus Mardan to the level of University</i> ”
Procuring Entity	University Of Engineering & Technology, Mardan
Tender Submission Deadline	27-11-2025
Opening of Tender Bids	27-11-2025
Procurement Method	Single-Stage, Single Envelope Procedure
Venue for the meeting	Video Conference Room, Old Academic Block, UET Mardan

**PROCUREMENT OFFICE
UNIVERSITY OF ENGINEERING & TECHNOLOGY, MARDAN**

**UNIVERSITY OF ENGINEERING & TECHNOLOGY,
MARDAN**

Checklist

S#	Description	Yes	No
•	Covering Letter/Application (on the letter head of the firm)		
•	Profile of the Firm		
•	Proof of Active Taxpayer.		
•	Sales Tax Registration		
•	KPPRA Registration		
•	National/Income Tax Certificate		
•	Professional Tax Certificate, if any		
•	Earnest Money @2% of the quoted bid value		
•	Affidavit on Judicial stamp paper attested by Oath Commissioner that, the Service Providing Firm has never been blacklisted by private, Govt., Semi Govt. and Autonomous Body)		
•	Letter of Bid Form as per Annexure-I		
•	Financial Proposal as per Annexure-II		
•	Agreement (For successful bidder only) as per Annexure-III		

Contact Person	
Name & Designation _____	_____ Authorized Signature & Stamp

Note: This checklist duly filled and signed by authorized person, shall be submitted with the covering letter.

GENERAL TERMS & CONDITIONS FOR BIDDING

1. Price shall be quoted for an individual item. Item-wise competition will be made.
2. The University reserves the right to increase or decrease the quantities of items.
3. Single-Stage, One Envelope Procedure will be followed.
4. The validity period of the quotation/tender must be at least six (03) months.
5. Bids/rates shall be quoted as unit prices (inclusive of all applicable taxes etc.) according to the required specifications available in the bidding documents on the prescribed format.
6. Conditional, ambiguous, or alternative bids will not be considered.
7. Arithmetical errors will be rectified as follows:
 - a. If there is a discrepancy between the unit price and the total price (obtained by multiplying unit price and quantity), the unit price shall prevail, and the total will be corrected.
 - b. If there is a discrepancy between words and figures, the amount in words shall prevail. If the supplier does not accept the correction of errors, the bid will be rejected, and the bid security will be forfeited.
8. Copies of the following documents must be attached
 - i. Income Tax Registration
 - ii. KPPRA Registration
 - iii. Sales Tax Registration
 - iv. Non-Blacklisting Certificate
9. The successful bidder will be required to pay Performance Security @ 10% of the contract value in favor of Treasurer, UET Mardan.
10. The bidders shall furnish, as part of his bid, earnest money equal to 2% of total quoted prices with their financial offer in the form of CDR in favor of, **Treasurer, University of Engineering & Technology, Mardan**. The earnest money shall be denoted in Pak rupees and shall be in the form of Call Deposit issued by a Pakistani scheduled Bank. The Earnest Money may be forfeited if a bidder withdraws his bid during the period of his bid validity or using corrupt practices etc.; otherwise, the bid will be considered non-responsive.
11. Interested firms fulfilling the required conditions may submit their sealed offer latest by **November 27,2025, 11:00 AM** in the office of Procurement officer, UET Mardan. The University Procurement Committee will open the bids on the same day at 11:30 AM in the Video Conference room, UET Mardan, in the presence of bidders who wish to attend.
12. Call Deposits shall be verified before preparing comparative statements; if found fake, legal action will be initiated against the firm as per the rules.
13. The firm will be bound to complete the supply within **15 days of issuance of the supply order**; failing which, the call deposit & Performance Guarantee will be forfeited, and the order cancelled/withdrawn.
14. All applicable Government taxes will be deducted from the approved firm's bill as per BOQ/pervailing rules.
15. Suppliers must provide guarantee/warranty for at least one (01) year, covering after-sales service and maintenance.
16. The successful supplier(s) shall be responsible for the replacement of spare parts free of cost during the warranty period.
17. In case of fraudulent practices by the supplier, strict action will be taken, including forfeiture of security and call deposit, along with penalty imposed by the committee.
18. Each page of the bidding documents must be signed and stamped by a person duly authorized by the firm/company/manufacturer.
19. No partial payment will be made against partial supply/delivery till the provision of the satisfactory report by the inspection committee.
20. The contract shall be governed by the laws of Provincial Government of Khyber Pakhtunkhwa as amended from time to time.
21. In case of supply of defective or used items, the firm will be dealt with under Government rules and regulations.
22. Payment shall be released only upon obtaining a satisfactory report from the Technical/Inspection Committee subject to the availability of fund. Rejected items must be replaced within three (03) days at the supplier's own risk and cost.

23. The suppliers shall be responsible for installation, testing, commissioning and training wherever required and demonstration/presentation of the equipment will also be carried out by the supplier at the specified site, at their own cost.
24. Payment will be made upon successful supply, installation, and commissioning of items/equipment upon satisfactory report obtained from the inspection committee.
25. Incomplete or late tenders will not be entertained/accepted.
26. Any other factor deemed relevant by the procuring entity, depending on the nature and complexity of the contract, may also apply, provided it is not inconsistent with applicable rules.

Procurement Office
University of Engineering & Technology Mardan

TECHNICAL SPECIFICATIONS & BILL OF QUANTITIES (BOQ)

S. No	Item Description	Technical Specifications			Qty
1.	Router (Access Points)	Air Engine 5761-11 Access Point or equivalent, with installation and configuration with the existing system			10
2.	Cables and Their Accessories	CAT-6 UDP/STP bundles			5
3.	Network Analyzer	Category	Mandatory (Yes/No)	Requirement	1
		General Requirements	Yes	Provide a centralized platform for security logging, analytics, and reporting.	
			Yes	The system must integrate natively with Fortinet Security Fabric products, including FortiGate firewalls.	
			Yes	Must support multi-tenancy through Administrative Domains (ADOMs) to segment devices and logs.	
			Yes	Must support high-availability (HA) to prevent data loss and ensure system redundancy.	
		Deployment Model	Yes	Specify the deployment model to be provided (e.g., hardware appliance, virtual machine, or cloud service).	
			Conditional	(If VM) State minimum virtual hardware requirements (e.g., 4 vCPU, 16 GB RAM, 500 GB disk space).	
		Performance and Capacity	Yes	Support a minimum daily log volume of [insert GB/day], with capacity for expansion.	
			Yes	Sustain a log ingestion rate of [insert logs/second] for a minimum of 48 hours.	
			Yes	Retain online logs for analytics for [insert number] days and archive logs for [insert number] days.	
			Yes	Manage logs from a maximum of [insert number] devices or VDOMs.	
			Yes	Provide usable storage capacity of at least [insert storage size] TB after RAID configuration.	
		Software and Features	Yes	Include built-in Security Information and Event Management (SIEM) for event correlation and threat intelligence.	
			Yes	Provide Security Orchestration, Automation, and Response (SOAR) capabilities, including preconfigured and customizable playbooks.	
			Yes	Include a generative AI assistant (e.g., FortiAI-Assist) for natural language queries and investigations.	
			Yes	Provide customizable report templates for security and compliance (e.g., PCI, HIPAA).	
			Yes	Enable third-party log ingestion and forwarding to external servers (e.g., syslog, CEF).	
		Integration	Yes	Must provide a REST API for integration with third-party tools.	

			Yes	Must support the ingestion of logs from non-Fortinet, third-party devices.	
		Licensing, Support, and Services	Yes	Provide a detailed breakdown of all licensing costs for the specified deployment model, including license type and quantity.	
			Yes	Include a minimum of three years of 24x7 manufacturer support and firmware updates.	
			Yes	Provide pricing for optional professional services, including installation, configuration, and knowledge transfer.	
4.	Raspberry Pi 3 Kits with Card			<ul style="list-style-type: none"> Processor: Quad-core ARM Cortex-A72 (1.5 GHz or higher) Module: Raspberry Pi Compute Module 4 (or industrial equivalent) Memory (RAM): Minimum 4 GB LPDDR4 Storage: Minimum 16 GB onboard eMMC (soldered, not microSD) plus 32 GB Original Memory cards Operating System Support: Raspberry Pi OS / Linux / Ubuntu Core (industrial supported version) Power Input: Wide range DC 10–30 V (nominal 24 V DC) Power Protection: Reverse polarity, surge, and short-circuit protection Operating Temperature: –20 °C to +60 °C continuous operation Storage Temperature: –40 °C to +85 °C I/O Interfaces: <ul style="list-style-type: none"> 1 × Gigabit Ethernet 2 × USB (at least one USB 3.0) 1 × RS-232 port 1 × RS-485 port 4 × Digital Inputs 4 × Digital Outputs Optional CAN Bus support Expansion Slots: M.2 or microSD slot for data expansion Networking: Ethernet (mandatory), optional Wi-Fi and LTE/4G module support Display Output: HDMI or DSI interface Enclosure: Rugged industrial metal casing, fanless operation Mounting: DIN-rail mountable and panel mount compatible Cooling: Passive heat dissipation (no moving parts) Watchdog Timer: Hardware watchdog for automatic reboot on failure Real-Time Clock (RTC): Integrated with battery backup Certifications: CE, FCC, EMC (IEC 61000-6-2 / 6-4 or equivalent) Ingress Protection: Minimum IP20 (higher IP on request) Dimensions: Compact industrial form factor, suitable for control cabinet installation Long-Term Availability: Minimum 10 years product lifecycle guarantee <input type="checkbox"/> Accessories (if required): Mounting clips, power adapter (24 V DC), and user documentation 	10
5.	Raspberry Pi 3 starter kit			<ul style="list-style-type: none"> Model: Raspberry Pi 3 Model B or B+ (Official or Equivalent) Processor: Quad-core ARM Cortex-A53, 1.2 GHz or higher GPU: Broadcom VideoCore IV Memory (RAM): 1 GB LPDDR2 Storage: 32 GB Class-10 microSD card (pre-loaded with Raspberry Pi OS) Networking: <ul style="list-style-type: none"> 10/100 Mbps Ethernet port 2.4 GHz Wi-Fi 802.11 b/g/n Bluetooth 4.1 + BLE USB Ports: 4 × USB 2.0 HDMI Port: Full-size HDMI (1080p support) 	15

	<ul style="list-style-type: none"> Audio/Video: 3.5 mm A/V jack combo GPIO Pins: 40-pin header compatible with HAT modules Camera Interface: CSI port for camera module Display Interface: DSI port for official display Power Supply: 5 V / 2.5 A micro-USB adapter (with ON/OFF switch) Casing: Industrial-grade ABS enclosure with GPIO access and ventilation Cooling: Passive heat sinks for CPU and LAN chip 																																											
	<p>2. Industrial-Grade Sensor Suite (Compatible via GPIO, I²C, SPI, or UART interfaces)</p> <table> <thead> <tr> <th>Category</th><th>Sensor</th><th>Specification</th></tr> </thead> <tbody> <tr> <td>Temperature & Humidity</td><td>DHT22 (AM2302) or SHT31</td><td>Range: -40 °C to +80 °C; ±2% RH accuracy</td></tr> <tr> <td>Pressure</td><td>BMP280 / BME280</td><td>Range: 300 – 1100 hPa, ±1 hPa accuracy</td></tr> <tr> <td>Proximity / Object Detection</td><td>Industrial IR or Ultrasonic Sensor (HC-SR04)</td><td>Range: 2 cm – 400 cm</td></tr> <tr> <td>Water Level Sensor</td><td>Capacitive / Float-type sensor (IP65)</td><td>Range: 0 – 2 m (adjustable)</td></tr> <tr> <td>Flow Sensor</td><td>Hall-Effect Water Flow Sensor (YF-S201 or equivalent)</td><td>Range: 1 – 30 L/min</td></tr> <tr> <td>Gas Sensors</td><td>MQ Series (MQ-2, MQ-7, MQ-135)</td><td>Detects LPG, CO, CO₂, NH₃, etc.</td></tr> <tr> <td>Light / Luminance</td><td>BH1750 / LDR module</td><td>Range: 1 – 65,000 lx</td></tr> <tr> <td>Motion / Vibration</td><td>PIR sensor (HC-SR501) & SW-420 vibration sensor</td><td>Motion range: 7 m; vibration detection up to ±2 g</td></tr> <tr> <td>Soil Moisture</td><td>Capacitive sensor (3.3 V / 5 V compatible)</td><td>Analog output; corrosion-resistant</td></tr> <tr> <td>Current Sensor</td><td>ACS712 or equivalent</td><td>Range: ±30 A DC/AC current</td></tr> <tr> <td>Voltage Sensor</td><td>0–25 V DC voltage divider module</td><td>0–5 V analog output</td></tr> <tr> <td>Relay Module</td><td>2-channel / 4-channel 5 V relay board</td><td>10 A @ 250 V AC rated</td></tr> <tr> <td>Industrial Interface Converter</td><td>RS-485 to UART converter module</td><td>Supports Modbus RTU / RS-485 devices</td></tr> </tbody> </table>	Category	Sensor	Specification	Temperature & Humidity	DHT22 (AM2302) or SHT31	Range: -40 °C to +80 °C; ±2% RH accuracy	Pressure	BMP280 / BME280	Range: 300 – 1100 hPa, ±1 hPa accuracy	Proximity / Object Detection	Industrial IR or Ultrasonic Sensor (HC-SR04)	Range: 2 cm – 400 cm	Water Level Sensor	Capacitive / Float-type sensor (IP65)	Range: 0 – 2 m (adjustable)	Flow Sensor	Hall-Effect Water Flow Sensor (YF-S201 or equivalent)	Range: 1 – 30 L/min	Gas Sensors	MQ Series (MQ-2, MQ-7, MQ-135)	Detects LPG, CO, CO ₂ , NH ₃ , etc.	Light / Luminance	BH1750 / LDR module	Range: 1 – 65,000 lx	Motion / Vibration	PIR sensor (HC-SR501) & SW-420 vibration sensor	Motion range: 7 m; vibration detection up to ±2 g	Soil Moisture	Capacitive sensor (3.3 V / 5 V compatible)	Analog output; corrosion-resistant	Current Sensor	ACS712 or equivalent	Range: ±30 A DC/AC current	Voltage Sensor	0–25 V DC voltage divider module	0–5 V analog output	Relay Module	2-channel / 4-channel 5 V relay board	10 A @ 250 V AC rated	Industrial Interface Converter	RS-485 to UART converter module	Supports Modbus RTU / RS-485 devices	
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	<p>3. Additional Accessories</p> <ul style="list-style-type: none"> Breadboard (400+ points) and jumper wire set T-Extension GPIO board and ribbon cable Set of LEDs, resistors, push buttons, and potentiometers HDMI cable and micro-USB power cable Official Raspberry Pi camera module (8 MP or higher) 16 × 2 LCD display (I²C enabled) 0.96" OLED display for real-time sensor data USB keyboard and mouse (wired or wireless) MicroSD to USB adapter Quick start and project guide documentation 																																											
	<p>4. Environmental and Electrical Specifications</p> <ul style="list-style-type: none"> Operating Temperature: 0 °C to +50 °C Storage Temperature: -20 °C to +70 °C Humidity: 10 % to 90 % RH (non-condensing) Power Input: 100–240 V AC to 5 V DC adapter included 																																											

6.	<p>Ulti maker Or Equivalent (3D Printer)</p> <p>Print technology: Fused Filament Fabrication (FFF) Build volume (XYZ): 330 × 240 × 300 mm Assembled machine dimensions (W × D × H): 495 × 585 × 780 mm Weight: approx. 29.1 kg Power input: 100-240 VAC, 50-60 Hz Maximum power consumption: 500 W Filament diameter: 2.85 mm Dual-extrusion print head: two nozzles, auto-nozzle lifting, swappable print-cores Nozzle diameter options: 0.25 mm, 0.4 mm, 0.8 mm Nozzle temperature range: 180-280 °C Build plate: heated glass (optionally aluminium) Build plate temperature range: 20-140 °C Build plate leveling: active automatic leveling Layer resolution: With 0.25 mm nozzle: 150-60 µm With 0.4 mm nozzle: 200-20 µm With 0.8 mm nozzle: 600-20 µm XYZ motion resolution: 6.9 µm (X & Y), 2.5 µm (Z) Build speed: < 24 mm³/s Operating ambient temperature: 15-32 °C Supported materials (optimized): PLA, Tough PLA, Nylon, ABS, CPE, CPE+, PC, PP, TPU 95A, PVA, Breakaway (open system supports third-party materials) Connectivity: USB, WiFi, Ethernet (network printing) User interface: Color touchscreen display Certifications & environment: compliant with CE / RoHS etc. Additional features: filament flow sensor, NFC material recognition, swappable print-cores for different materials, dual-extrusion water-soluble support capability</p>	1
7.	<p>Soldering stations</p> <p>Power consumption: 70 W (station) Temperature range: 50 °C to 480 °C (120 °F to 899 °F) Temperature stability: ±1 °C at idle when set between ~200-480 °C Tip-to-ground resistance: <2 Ω Tip-to-ground potential: <2 mV Heating element: Ceramic heater Standard tip: T18-B tip included (chisel/pencil type) Station size: 100 mm (W) × 120 mm (H) × ~120 mm (D) approx. Station weight: ~1.2 kg without cord Iron handle: total length ~217 mm with tip; weight ~46 g (with standard tip) Features: Digital display; preset mode (save up to 5 temps); password lock for settings; excellent thermal recovery.</p>	15
8.	<p>Multimeters</p> <ol style="list-style-type: none"> Power: 4 × 1.5V (AA) batteries LCD Display: 9999 counts (large backlit display with bar graph) Jaw Opening: 55 mm Dimension: 303 mm × 112 mm × 39 mm Color: Red and Grey AC Voltage: <ul style="list-style-type: none"> 15V / 100V / 300V / 600V Accuracy: ±(1.2% + 5) AC Current (True RMS): <ul style="list-style-type: none"> 40A / 100A / 400A / 1000A Accuracy: ±(2% + 5) Active Power (W): <ul style="list-style-type: none"> Range: 0.01 kW ~ 600 kW Accuracy: ±(3% + 5) Apparent Power (VA): <ul style="list-style-type: none"> Range: 0.01 kVA ~ 600 kVA Accuracy: ±(3% + 5) 	3

	<p>10. Reactive Power (VAr):</p> <ul style="list-style-type: none"> ○ Range: 0.01 kVAr ~ 600 kVAr ○ Accuracy: $\pm(4\% + 5)$ <p>11. Power Factor (PF):</p> <ul style="list-style-type: none"> ○ Range: 0.3 ~ 1.0 ○ Accuracy: ± 0.02 <p>12. Phase Angle:</p> <ul style="list-style-type: none"> ○ Range: 0° ~ 360° ○ Accuracy: $\pm 1^\circ$ <p>13. Active Energy (kWh):</p> <ul style="list-style-type: none"> ○ Range: 0.001 kWh ~ 9999 kWh ○ Accuracy: $\pm(3\% + 2)$ <p>14. Resistance:</p> <ul style="list-style-type: none"> ○ 400Ω / $4k\Omega$ / $40k\Omega$ / $400k\Omega$ / $4M\Omega$ / $40M\Omega$ ○ Accuracy: $\pm(1\% + 3)$ <p>15. Temperature:</p> <ul style="list-style-type: none"> ○ -50°C ~ 1300°C ○ Accuracy: $\pm(1\% + 5)$ <p>16. Frequency:</p> <ul style="list-style-type: none"> ○ Range: 10Hz ~ 10MHz ○ Accuracy: $\pm(0.1\% + 3)$ <p>17. Sampling Rate: ≈ 3 times/second</p> <p>18. Data Interface: USB connection to PC for power analysis</p> <p>19. Safety Rating:</p> <ul style="list-style-type: none"> ○ CAT III 600V ○ CAT IV 300V ○ IEC61010 compliant 	
9.	<p>1. Power: 1.5V battery (R03) x 3</p> <p>2. LCD Display: 43mm x 45mm</p> <p>3. Jaw Opening: 42mm</p> <p>4. Dimension: 272mm x 81mm x 43.5mm</p> <p>5. Color: Red and Grey</p> <p>6. Display Count: 6000</p> <p>7. AC voltage: 6V $\pm(1.2\%+3)$ 60V/600V/1000V $\pm(1\%+8)$</p> <p>8. DC voltage: 600mV $\pm(0.8\%+3)$ 6V/60V $\pm(0.5\%+5)$ 600V $\pm(0.5\%+5)$ 1000V $\pm(0.5\%+5)$</p> <p>9. Inrush current: Range: 1000A Accuracy: $\pm(10\%+10)$</p> <p>10. AC current: Range: 1000A Accuracy: $\pm(2\%+5)$</p> <p>11. DC current: Range: 1000A Accuracy: $\pm(2\%+5)$</p> <p>12. LOZ ACV: 600V/1000V $\pm(2\%+5)$</p> <p>13. Resistance: 600Ω $\pm(2\%+5)$ $6K\Omega/60K\Omega/600K\Omega$ $\pm(1\%+3)$ $6M\Omega/60M\Omega$ $\pm(2\%+8)$</p>	12

		<p>14. Capacitance: 60nF $\pm(4\%+25)$ 600nF/6μF/60μF/600μF $\pm(4\%+5)$ 6mF/60mF $\pm(10\%+9)$</p> <p>15. Frequency: Range: 10MHz Accuracy: $\pm(0.1\%+3)$</p>	
10.	Workbench power supply	<p>Outputs Triple output CH1: 0–6 V, 0–5 A CH2: 0–25 V, 0–1 A CH3: 0–25 V, 0–1 A</p> <p>Total power: 80 W Independent / series / parallel output modes</p> <p>Accuracy & Resolution Voltage accuracy: $\pm 0.03\% + \text{few mV}$ Current accuracy: $\pm 0.04\% + \text{few mA}$ Resolution: 1 mV / 0.1 mA</p> <p>Noise & Ripple Voltage ripple: $< 350 \mu\text{V rms} / < 2 \text{ mV p-p}$ Current ripple: $\leq 3 \text{ mA (max)}$</p> <p>Regulation Load & line regulation: $< 0.01\%$</p> <p>Protection & Safety OVP, OCP, OTP protection Remote sense (4-wire)</p> <p>Output On/Off control User Interface & Control 4.3-inch color LCD Numeric keypad + rotary knob Save/recall memory slots Data logging & sequencing List mode programming</p> <p>Connectivity USB LAN / LXI Optional GPIB SCPI programmable for automation</p> <p>Mechanical Bench-top unit Front & rear output terminals Quiet fan cooling</p>	15
11.	Split ACs (DC Inverter) 2.0 Ton	Wall mounted Split Type Air 2.00-ton Conditioner DC Inverter 24000 BTU, Both Function Hot & Cool with all accessories i/c installation, testing, installation etc. Recommended Brand: (Haier, Orient Smart Run model, PEL Air extend model or Equivalent).	19
12.	Split ACs (DC Inverter) 1.5 Ton	Wall mounted Split Type Air 1.50-ton Conditioner DC Inverter 18000 BTU, Both Function Hot & Cool with all accessories i/c installation, testing, installation etc. Recommended Brand: (Haier, Orient Smart Run model, PEL Air extend model or Equivalent).	11
13.	6 KVA UPS System	<p>UPS Rating Rated Power: 6,000 VA (6 kVA) Output Power (Continuous) 6,000 W Input Voltage (Battery) 48 VDC Battery Type Supported Lithium-ion (LiFePO4), Lead Acid (Flooded, AGM, GEL)</p>	01

	<p>Battery Voltage Range 40 V – 60 V DC</p> <p>Output Voltage 220 VAC ± 10%</p> <p>Output Frequency 50 Hz ± 0.5 Hz</p> <p>Waveform Pure sine wave</p> <p>Efficiency ≥ 93% (inverter efficiency)</p> <p>Peak Surge Capacity 20 kW (approx. 2x rated power for startup loads)</p> <p>Battery Charging Current 60 A – 80 A (adjustable)</p> <p>Max Solar Input Power (MPPT) 8 kW -10kW</p> <p>Solar MPPT Voltage Range 80 V – 450 V DC</p> <p>Transfer Time (Mains to Inverter) < 10 ms (fast switching for uninterrupted power)</p> <p>Protection Features Overcharge, over-discharge, over-temperature, short circuit, reverse polarity</p> <p>Communication Ports RS232, RS485, CAN bus, and Wi-Fi (for BMS lithium battery integration)</p> <p>Operating Temperature -10°C to +50°C</p> <p>Humidity Range 5% to 95% (non-condensing)</p> <p>IP Rating IP67</p> <p>Solar Panel (14 Nos.):</p> <p>Tier-1 A grade Bi-Facial double glass N-Type solar PV Modules 585W or above Minimum 144 cells having minimum efficiency of 22.3%, 12 Years of Product Warranty & 30 Years of Linear performance warranty with Flash Test reports, SGS & shipment documents) with roof mounted galvanized stands/structure (as per site requirement) and all related accessories.</p> <p>Lithium Battery:</p> <p>Nominal Voltage 48V</p> <p>Capacity 100Ah (10.24 kWh)</p> <p>Cycle Life ≥6,000 @ 90% DoD</p> <p>Charge Voltage 53.5V</p> <p>Discharge Cut-off Voltage 42V</p> <p>Continuous Discharge Current 100A</p> <p>Peak Discharge Current 100A (15s)</p> <p>Communication RS485, CAN</p> <p>Operating Temp (°C) 0–50 (Charge), -10–50 (Use)</p> <p>BMS Protection Yes (Full Protection)</p> <p>Minimum 05 Years of Product Warranty</p>	
14.	<p>Functions Copy, Print, Scan (Optional Fax)</p> <p>Print / Copy Up to 60 pages per minute (ppm)</p> <p>Speed</p> <p>Print Resolution Up to 1200 × 1200 dpi</p> <p>Processor / 1.3 GHz processor, 4 GB RAM (2 GB Mainframe + 2 GB</p> <p>Memory Smart Operation Panel)</p> <p>Storage 320 GB HDD</p> <p>Paper Input Capacity Standard: 1,200 sheets; Maximum: 4,700 sheets</p> <p>Paper Output Capacity Standard: 500 sheets; Maximum: 3,625 sheets</p> <p>Paper Size A6 – A3, SRA3 supported</p> <p>Paper Weight 52–300 g/m²</p> <p>Duplex Printing Automatic Duplex (Standard)</p> <p>Scan Type Color</p> <p>Document Feeder 220-sheet Single Pass Document Feeder (SPDF)</p> <p>Scan Speed Up to 120 ipm (simplex) / 240 ipm (duplex) at 200× 200 dpi</p> <p>Scan Resolution Up to 600 dpi</p> <p>Connectivity Gigabit Ethernet (10Base-T/100Base-TX/1000Base-T), USB 2.0 Host & Device, Wi-Fi (802.11b/g/n), Bluetooth, NFC, SD card slot</p>	8

		<p>Security Features Data Overwrite Security System (DOSS), HDD Encryption, Secure Print, User Authentication (Windows/LDAP/Kerberos), IP Filtering, IPv6 Support</p> <p>Monthly Duty Cycle Recommended: Up to 50,000 impressions; Maximum: 200,000 impressions</p> <p>Power Supply 220–240 V, 50/60 Hz</p> <p>Power Consumption Max: 1,780 W or less</p> <p>TEC Value 0.72 kWh/week (ENERGY STAR Compliant)</p> <p>Display Panel 10.1" Smart Operation Touch Panel (Android-based)</p> <p>Supported Operating Systems Windows, macOS, Linux, Citrix environments</p> <p>Firmware Updates Always Current Technology (automatic online updates)</p> <p>Finishing Options (Optional) 1,000-sheet finisher, 3,000-sheet finisher, booklet finisher, folding units</p> <p>Toner Yield Approx. 37,000 impressions (per standard yield toner)</p> <p>Warranty Minimum 1-year local warranty with service and parts support</p> <p>Compliance ENERGY STAR®, RoHS, EPEAT Gold</p>	
15.	Multimedia Projector (Portable)	<ul style="list-style-type: none"> • Brightness: 4800 ANSI lumens • Contrast Ratio with SuperEco mode: 22000:1 • Display Color: 1.07 billion Colours • Light Source: Lamp, • Light source life (Nor/SuperEco): 5000/15000 • Lamp Watt: 200W, • Lens: F=2.56-2.68, f=22-24.1 mm • Projection Offset: 100%+/-5% • Throw Ratio: 1.55~1.70, • Image size: 30" - 300", • Throw Distance: 1m-10.98m(100" @3.34m) • Keystone: ±40° (Vertical), • Optical Zoom: 1.1x , • Audible Noise (Eco): 27dB • Resolution Support: VGA (640 x 480) to Full HD (1920 x 1080) • HDTV Compatibility: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p • Video Compatibility: NTSC, PAL, SECAM • Horizontal Frequency: 15K~102KHz • Vertical Scan Rate: 23~120Hz • Computer in (share with component): 2 • Composite: 1, • Audio-in (3.5mm): 1, • HDMI: 1 (Back), • Monitor out: 1, • Audio out (3.5mm): 1, • Speaker: 2W • RS232: 1, • USB type mini-B, • Warranty One Year 	04
16.	Projector Screen (foldable)	<p>Electric Projector Screen - Matt White 120", 4:3 - (8 ft x 6 ft)</p> <p>DIMENSION: 120" inch Diagonal, SIZE: 8 ft (244cm Horizontal) x 6 ft (183 cm Vertical) ASPECT RATIO: 4:3 BORDERS: 4 Black masking borders</p> <p>MATERIAL: Multi layer Matte White fabric with black backing to avoid light penetration fabric, static resistant, fire retardant, mildew resistant</p> <p>INSTALLATION: Plastic end caps with holes / D-ring for wall / ceiling hanging</p> <p>OPERATION: Pre-wired power cord with integrated switch / Remote control</p> <p>CASING: Heavy duty scratch resistant powder coated steel case. CLEANING: Surface can be cleaned with plain water moist cloth</p>	4
17.	Scanner	<p>Daily duty cycle up to 8,000 pages</p> <p>100-Sheet ADF with single-pass two-sided scanning (A4 & Legal-size Page)</p> <p>Scan Speed: Min 50 ppm / 100 ipm</p> <p>Connectivity: USB 3.0, Ethernet, WiFi, WiFi Direct</p>	1
18.	LaserJet Printer (network support)	<p>Functions: Print, Scan, Copy, Fax</p> <p>Print Technology: Monochrome Laser (Black & White)</p> <p>Processor Speed: 500 MHz or higher</p> <p>Print Speed (A4): Up to 33 pages per minute</p> <p>First Page Out (Black): As fast as 6.6 seconds</p> <p>Print Resolution: Up to 1200 × 1200 dpi (black, best)</p> <p>Automatic Duplex Printing: Yes (standard two-sided printing)</p>	1

	<p>Monthly Duty Cycle: Up to 50,000 pages Recommended Monthly Volume: 350 – 2,500 pages Paper Input Capacity: 250-sheet main input tray 1-sheet priority tray Paper Output Capacity: 100 sheets (face-down) ADF Capacity: 50 sheets Supported Media Types: Plain paper, envelopes, labels, card stock, glossy film Supported Media Sizes: A4, A5, A6, B5 (JIS), envelopes (C5, DL, B5) Connectivity Options: Hi-Speed USB 2.0 10/100 Ethernet Dual-band Wi-Fi (2.4 GHz & 5 GHz) Wi-Fi Direct and Mobile Printing (HP Smart App, Apple AirPrint, Mopria) Memory: 512 MB Display: 2.7-inch color touchscreen Supported Operating Systems: Windows, macOS, Linux, Chrome OS Scanner Type: Flatbed and ADF Scan Resolution: Up to 1200 × 1200 dpi (optical) Copy Resolution: Up to 600 × 600 dpi Fax Speed: Up to 33.6 kbps (Super G3) Power Supply: 220–240 V AC, 50/60 Hz Operating Environment: Temperature: 15 °C – 32.5 °C Humidity: 30 – 70 % RH</p>	
19.	<p>Laptops</p> <p>Processor: 14th Generation Intel Core i7 processor or higher Memory: 16 GB DDR4-3200 MHz RAM Storage: 1 TB PCIe Gen4 NVMe TLC M.2 SSD Graphics: Integrated Intel Iris Xe Graphics Operating System: Windows 11 Pro (Licensed) MS Office (Licensed) Display: 15.6-inch diagonal, Full HD (1920 x 1080), IPS, anti-glare display Keyboard: backlit keyboard with numeric keypad Camera: Integrated 720p HD camera Audio: Dual stereo speakers Wireless Connectivity: Intel Wi-Fi 6E AX211 (2x2) and Bluetooth 5.3 Ports: Including USB Type-A, USB Type-C (with Power Delivery and DisplayPort), HDMI, RJ-45, and a headphone/microphone combo jack Security: Features such as a fingerprint reader, Wolf Security for Business, and a TPM 2.0 embedded security chip Dimensions: Starting at 35.94 x 23.39 x 1.99 cm Weight: Starting at 1.79 kg Body: Metallic Warranty: Minimum one-year limited hardware warranty</p>	16
20.	<p>Sound Systems for lecture halls</p> <p>Purpose: Voice-reinforcement + audio playback (teacher mic + media) for a typical classroom (\approx 30-40 students) Power Output: Minimum 250 W RMS (or equivalent coverage for the room size) Speakers: Wall- or ceiling-mounted, distributed to provide even sound coverage; speaker sensitivity \geq 86 dB at 1 m; frequency response at least ~100 Hz-20 kHz Amplifier/Mixer: Integrated or separate unit with volume controls (master and zone), tone controls (bass/treble \pm10dB), input selection/muting Inputs: One wireless teacher microphone (lapel or collar or headset) One handheld wireless student microphone (optional) Auxiliary line input (e.g., for laptop, tablet, phone) Bluetooth connectivity (for media playback) USB input (for direct media playback) Outputs: Line-level output to recording/archival system or assistive-listening system</p>	8

		<p>Wireless Microphones: UHF or IR system, with at least 4-6 hours battery life, quick-charge support</p> <p>Coverage & Sound Level: Sound pressure level (SPL) sufficient to exceed background noise by at least 10-15 dB; for example, achieve 50-60 dB above background at student seating positions</p> <p>Distortion: Total harmonic distortion (THD) <1.5% at rated power</p> <p>Installation: All equipment mounted securely; wiring concealed; speakers placed to minimize reflections and dead zones; amp/mixer in locked cabinet or rack</p> <p>Power: 220-240 V AC, 50/60Hz supply; surge protection; UPS support recommended</p> <p>Control: Master volume knob accessible by teacher and a separate “mute” or “page override” function for school announcements or fire alarm integration</p> <p>Expandability: Ability to link with building paging system and integrate with classroom A/V (projector, interactive board) and assistive listening systems</p> <p>Environment: Suitable for ambient temperature range 0-50 °C, humidity 10-90% non-condensing</p> <p>Documentation & Support: Provide full user manual, microphone charging station, firmware update capability for wireless mics, 1-year minimum warranty</p> <p>Compliance: Meet relevant local safety / EMC standards; units CE or equivalent certified</p> <p>Optional: Provide remote or mobile app control (volume, mute) for teacher convenience</p>	
21.	Fire extinguishers	<p>Extinguisher Type: Dry Chemical Powder (DCP) / ABC Powder</p> <p>Capacity: 10 KG</p> <p>Class A Fires: Effectively extinguishes fires involving common solid combustibles like wood, paper, and cloth.</p> <p>Class B Fires: Suppresses fires from flammable liquids and gases such as petrol, oil, and paint.</p> <p>Class C Fires: Safe for use on energized electrical equipment without conductivity risk.</p> <p>Versatility: Multi-purpose agent capable of tackling the most common types of fires.</p> <p>High Performance: Provides significant extinguishing power and extended discharge for larger hazards.</p> <p>Design: Features a durable steel cylinder, clear pressure gauge for quick readiness checks, and a sturdy hose and nozzle for targeted application</p>	04
22.	First Aid Boxes	<p>Adjustable/Portable Medicine Organizer</p> <p>Water Resistance Level Water Repellent</p> <p>3-Layer Transparent Tray Design</p> <p>High-Quality Material</p> <p>Sealed design to protect against sunlight and moisture.</p>	05
23.	Gas Geyser Instant	<p>Capacity/Flow Rate:</p> <p>10–12 L/min: Can supply hot water to multiple outlets at once, making it suitable for medium to large users.</p> <p>Recommended Brand: (Super Asia, Nas Gas, and Canon or Equivalent)</p>	15
24.	Freezer	<p>Capacity: vertical deep Freezer inverter, (8 cubic feet or above)</p> <p>Recommended Brand: (Dawlance, Haier, PEL, LG or Equivalent).</p>	04
25.	Water Cooler	<p>Cooling capacity: (45Ltr/Hr for 80-160 people)</p> <p>Compressor: heavy-duty compressors, Danfoss or Secop, or Equivalent.</p> <p>Refrigerant: Modern coolers use environmentally friendly, CFC-free refrigerants.</p> <p>Coil and Tank: Pure copper coiling around a food-grade, non-magnetic stainless steel tank ensures efficient heat exchange and water safety.</p> <p>Thermostat: An adjustable thermostat, allows for precise temperature control</p> <p>Fan Motor: A powerful fan motor with a large blade size is important for proper air circulation</p> <p>Recommended Brand: (Iceberg, Caravell and Super Asia or Equivalent).</p>	02

	Table size (steel): Min 900*600*800 mm Recommended Brand: DeWoo, Makita, DeWalt, and Milwaukee, DCA or Equivalent).	
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LETTER OF BID (BID FORM)
(To be submitted with financial bid)

Reference No. _____

To,

The Procurement Officer
University of Engineering & TechnologyMardan

Gentlemen and /or Ladies

Having examined the tender, the receipt of which is hereby duly acknowledged, we the undersigned, offer for the Supply and Installation of electronics, IT equipment and Store items under the ADP project titled as “F/S AND PROVISION FOR UPGRADATION OF UET SUB CAMPUS MARDAN TO THE LEVEL OF UNIVERSITY “as per required specification mentioned in the tender documents for the sum of Rupees both in figure and words{(Rs._____) (_____) total bid amount or such other sums as may be ascertained in accordance with the schedule of Prices attached herewith and made part of this Bid.

We undertake, if our bid is accepted, to the subject tender with standard quality in conformity with the said tender documents.

If our bid is accepted, we undertake to provide a performance security in the form of CDR within the specified time as per contract agreement.

We agree to abide by this Bid for the Bid Validity Period is at least six (06) months and it shall remain binding upon us and may be accepted at any time before the expiration of the that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your issuance of award, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this _____ day of _____ 2025

(Signature)

(In the Capacity)

Duly authorized to sign Bid for and on behalf of _____

Financial Proposal

S.No	Required Item Specification (as per detailed specification/BOQ in the tender documents)	Firm/Supplier Item Specification	Unit Rate (In Rs.) all tax inclusive	Qty	Total Amount (In Rs.) all tax inclusive
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AGREEMENT
(on stamp paper)

**SUPPLY AND INSTALLATION OF ELECTRONICS, IT EQUIPMENT AND STORE
ITEMS UNDER ADP PROJECT, TITLED AS “F/S AND PROVISION FOR
UPGRADATION OF UET SUB CAMPUS MARDAN TO THE LEVEL OF UNIVERSITY”**

1. This Agreement is executed at Mardan on ----- between UET Mardan (hereinafter called the Purchaser) ----- and M/S----- (hereinafter called the firm) on the following terms and conditions:
2. Whereas the UET Mardan decided for the Supply and Installation of electronics, IT equipment and Store items under the ADP project titled as “F/S AND PROVISION FOR UPGRADATION OF UET SUB CAMPUS MARDAN TO THE LEVEL OF UNIVERSITY” to be furnished by the above supplier/firm and as the supplier/firm has agreed to complete the assignment as per terms and conditions, hereinafter approved.
3. Any increase or decrease in the agreed quantity shall be acceptable to the successful bidder as per requirement of the Purchaser at the same agreed rates and terms including freight and other charges.
4. The successful bidder shall complete the assignment, as per specifications given in the tender documents. Any item found substandard or below specification will be rejected and the supplier will replace the items within 03 days without any additional cost.
5. Payment will be made as per Government rules on the satisfactory receipt of complete order and after satisfactory inspection report of all items by the inspection committee, subject to the availability of fund.
6. Performance security @ 10% shall be deposited by the successful bidder within 05 days after signing the agreement which shall be discharged by the Purchaser and returned to the successful bidder/supplier after satisfactory completion of the warranty period (one year).
7. Any violation of the agreement by the supplier will entitle the Purchaser to forfeit the whole security or part of the amount to make up losses to the Procuring Entity.
8. All taxes and duties levied by the government from time to time shall be deducted as per rules.
9. In case of failure in completion of task as per agreed time schedule the Purchaser reserves the right to withdraw/cancel the order and the call deposit & Performance Guarantee will be forfeited.
10. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - I. the Bid Form and the Price Schedule submitted by the Bidder;
 - II. the Schedule of Requirements;
 - III. the Technical Specifications;
 - IV. the General Conditions of Contract;
 - V. the Special Conditions of Contract; and
 - VI. the Procuring agency's Notification of Award.

IN WITNESS thereof, the parties hereto have signed the agreement on the date and year first mentioned above.

FOR THE FIRM	FOR UNIVERSITY OF ENGINEERING & TECHNOLOGY MARDAN
Name	Name
CNIC	Designation
Designation	Signature
Signature	Stamp
Firm's Name with Stamp	Witness
Witness	Witness

Name	_____
CNIC	_____
Address	_____

Name	_____
CNIC	_____
Address	_____