Terms and conditions for the supply of equipment for the Pakistan Academy of Sciences funded project at the Department of Mechatronics University of Engineering and Technology Peshawar

- 1. Separate prices must be quoted for all the equipment in lot 1 and lot 2 along with a complete set of accessories and specifications as mentioned below for lot 1 and lot 2.
- 2. Only the complete Lot will be considered for evaluation.
- 3. Bids of each item shall be evaluated separately and the Department of Mechatronic UET may choose to order any item(s) based on budget availability.
- 4. The Department of Mechatronic UET reserves the right to increase or decrease the quantity of items.
- 5. The validity period of the quotation/tender must be at least 03 Months.
- 6. Bid/Rate may be quoted for the unit price of the items (including all taxes) entirely in Pak Rupees transparently and clearly according to the prescribed specification available in the document for each item
- 7. The rates should be mentioned both in words and figures. Rate with cutting or overwriting will be considered non-responsive.
- 8. No-tender with conditional, ambiguous, and alternative prices will be considered.
- 9. Arithmetical errors will be rectified on the following basis: if there is a discrepancy between the unit price obtained by multiplying the unit price and quantity, the unit price shell prevails, and the total shell is correct. If there is a discrepancy between words and figures, the amount in words will prevail. If the supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited.
- 10. Copies of registration with income tax sales tax KPRA (Where applicable) as well as a professional tax certificate for the correct financial year 2024-25 will be required.
- 11. The suppliers must produce NTN/CNIC with the bill, otherwise, a 2% additional income tax will be deducted from the bill.
- 12. Security @ 10% of the total bill will be deducted from the suppliers at the time of payment, which will be reimbursed upon the completion of the warranty period.
- 13. Interested firms fulfilling the required condition may be sent their quotations along with a 2% call deposit /bank draft in favor of "University of Engineering Technology Piloting and Commercialization of Intelligent Lower Limb Prosthesis" in separate sealed envelopes for each item latest 10:30AM May 9, 2025. Late submissions will not be considered. Tenders will be opened on the same day at 11:00 AM in the presence of bidders or their authorized representatives .i.e., in the *Conference Hall UET Peshawar*.
- 14. A call deposit/banker cheque/pay order equal to 2% of the quoted value must accompany the bid otherwise bid will be considered non-responsive. The call deposit/banker, cheque/pay order shall be in favor of "University of Engineering Technology Piloting and Commercialization of Intelligent Lower Limb Prosthesis". The call deposit amount shall be deposited on the formula as: unity price x quantity required = b x 2%.
- 15. The call deposit will be verified before the comparative statement is prepared, and if it is found to be fake, legal action will be taken against the suppliers as per the law.
- 16. The suppliers shall be bound to the supplier's items within 16 weeks of the receipt of the supply order failing which their call deposit will be forfeited, and the order(s) will be canceled/withdrawn.
- 17. All applicable taxes will be deducted from the approved suppliers' bill as quoted on the invoice.

- 18. In case of fraudulent practice by the supplier, strict action will be taken against the suppliers such as forfeiture of security and call deposit amount and penalty.
- 19. The blacklist suppliers are not eligible to participate in the bidding. The suppliers are bound to provide an undertaken of non-blacklisting from any government department/agency/authority.
- 20. All documents relating to the bid and contract shall be in English language.
- 21. The bidding document should be signed and stamped by a person duly authorized on behalf of the supplier on every page.
- 22. The supplier shall have relevant experience and a proven track record in supplying similar equipment meeting delivery timelines and providing after-sales support.
- 23. The tender shall be in a sealed envelope written thereon quotation for the item name with the department and the name of the supplier with full address and telephone/fax number/email address must be written on the back of the quotation if the envelope is not sealed and marked as above. Department of Mechatronics University of Engineering and Technology Peshawar will not be responsible for misplacement or pre-mature opening of the bid.
- 24. The sealed bid shall be addressed to the Principal Investigator of the project titled "University of Engineering Technology Piloting and Commercialization of Intelligent Lower Limb Prosthesis"
- 25. Purchase Order will be issued Lot wise and payment will be made against the supply of the complete lot. No partial payment(s) will be made against partial supply/delivery.
- 26. In case of a supply of defective or used items, the Supplier will be dealt with as per Government rules and regulations.
- 27. Principal Investigator of the project on obtaining the Departmental Project Committee report and satisfactory report submitted by the end user will release the payment after inspection If any item is rejected by the Departmental Project Committee, the supplier will be bound to replace it within 03 days at his own risk and cost.
- 28. The successful Supplier will have to make an agreement on the judicial stamp paper for the supply of the items according to the Contract.
- 29. The Supplier must provide comprehensive one-year warranties for each item covering all hardware/components, pre-installed software, and on-site support with a 48-hour response time, battery, and chargers' coverage (for laptops) and replacement of the irreparable unit, within 15 business days with a detailed warranty and performance certificate.
- 30. Incomplete and after the due tender will not be accepted.

INSTRUCTIONS TO BIDDERS

- All bidders must ensure the provision of genuine, brand-new equipment.
- Items must be delivered within 16 weeks from the date of issuance of the Purchase Order.
- Bidders should include warranty and support details where applicable.
- Quotations should be submitted, including all taxes, delivery, and installation (if required).
- Delivery Location: Office of the Principal Investigator for the project titled "University of Engineering Technology Piloting and Commercialization of Intelligent Lower Limb Prosthesis", Department of Mechatronics Engineering, UET Peshawar.

Sr. #	Item Name	Qty.
	Lot # 1 – Sensor & Actuators	1
	Magnetorheological Damper	
	Extended Length: 190 mm – 210 mm	
1.	Retracted Length: 150 mm – 160 mm	06
	Stroke Length: 40 mm – 60 mm	
	Shaft Diameter: 10 mm – 12 mm	
	Outer Body Diameter: 40 mm – 45 mm	
	 Damping force: 150 – 2500 N 	
	Input Voltage: 0 – 12 V DC	
	Input Current: 0 – 2A	
	Rotary Encoder	
	Outer Dimensions (max.): 30 mm x 30 mm x 13 mm	
	Working RPM (min): 90 rpm	05
2.	Working torque (min.): 0.5 oz-in.	
	Working Life (min.): 1 million rev.	
	Shaft Dia. (min.): 6 mm	
	Pulses/revolution (min.): 1000 PPR	
	Rotary Encoder	
	Outer Dimensions (max.): 22 mm x 22 mm x 14 mm	
3.	Working RPM (min): 10,000 rpm	05
	Working Life (min.): 100 million rev.	
	Pulses/revolution (min.): 1000 PPR	
	Strain Gauges	
4.	Reputed manufacturers such as Omega Engineering UK or equivalent	
	Carrier: Polyimide	30
	Substrate thickness: 20 microns	
	Cover thickness: 25 microns	
	Solder pads for soldering	
	Nominal resistance: 350 ohms	
	Grid size: 4.50 mm x 3.20 mm	
5.	Bluetooth enabled fingertip pulse oximeter	
	• SpO ₂ Measurement	
	Pulse Rate Measurement	07
	Alarm function for low oxygen saturation	
	Data transmission via Bluetooth upto5 meters.	
	Lot # 2 - Gait Analysis System	1
1.	High Speed Cameras with tripod stands	
	Resolution: 1080 @ 60 fps	04
	Autofocus, autoexposure and auto white-balance Autofocus, autoexposure and auto white-balance	
	USB-C3.0 Compatible	
	Min. 8 MP lens Title 6 in 200	
	• Field of view: 90°	
	Compatible with the gait analysis software module	
2.	Software module	
	Marker based biomechanical software for 2D analysis of Walking Gait.	1
	Measurement of joint angles & other data from sports specific	License
	activities like jump, squat, etc.	
	 Analyze the anterior, posterior, left & right lateral views of the 	1

	 subject. Walking gait analysis: Rear foot eversion/inversion, lateral pelvic drop, Knee flexion/extension, hip flexion/extension, ankle plantar flexion/dorsiflexion, knee ab/adduction, stance phase % –swing phase %, single support-double support time, cadence, step length, walking speed, stride length etc. All data to be measured for both left and right extremities Generate organized reports with Data represented in tabular & photographic form Inbuilt reference ranges for every parameter measured Automatic documentation of all observations and abnormal biomechanics in form of notes. Option to export all data to excel sheets Inbuilt comparison feature that generates Pre-Post comparison reports to monitor changes in patient's gait and other biomechanical assessments. Inbuilt database feature for storing analysis data Designated marker placement guide for Walking gait analysis indicating locations where markers need to be placed on the body. Software should use Al (Artificial intelligence) models to aid in marker digitization. Virtual training & Technical support for System operation should be provided. License validity along with all updates and bug fixes for a minimum 	
	period of 5 years.	
3.	Laptops for data capturing and processing Intel Core i7, 13 th Gen or higher General Genera	02
4.	 Treadmill for gait analysis in controlled environment at variable speed Motorized: 2.5 HP continues duty motor Multi Speed Ranges: 1 – 10 km/hr. Auto inclination: 0% - 10% Min. 150 lbs. weight bearing capacity LED with built-in programs Pre-installed hand pulse sensor 	01

DELIVERY REQUIREMENTS

- Delivery Period: Within 16 weeks from the date of Purchase Order.
- Delivery Location: Delivery Location: Office of the Principal Investigator for the project titled "University of Engineering Technology Piloting and Commercialization of Intelligent Lower Limb Prosthesis", Department of Mechatronics Engineering, UET Peshawar.
- Installation (required): Included in the bid price.
- All equipment must be delivered in original manufacturer packaging, sealed, and include all manuals, cables, and accessories.

TERMS & CONDITIONS

- 1. Warranty: All items must carry standard manufacturer warranties as specified above.
- 2. Technical Compliance: The bidder must submit datasheets and compliance certificates with the bid.
- 3. After-Sales Support: Minimum 1-year technical support for troubleshooting and maintenance.
- 4. Payment Terms: Payment will be released after a satisfactory report. e.g., 90% on delivery, 10% after inspection and acceptance.
- 5. Evaluation Criteria: Fulfil technical specification and Lowest evaluated bid (price + compliance).
- 6. Penalties: Late delivery penalties as per institutional procurement rules.