मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान भोपाल Maulana Azad National Institute of Technology Bhopal (भारत सरकार, शिक्षा मंत्रालय के अधीन राष्ट्रीय महत्व का संस्थान)

(An Institution of National Importance under MoE, Govt. of India)



निविदा आमंत्रण सूचना		
NOTICE INVITING QUOTATION		
सामग्री / वस्तु का नाम Name of Goods/Items	Motor Driver, ESP 32 Wroom, Flex Sensor. Nano Development Kit, Soft Pressure Sensor, Thermal Camera, EMC Camera, Stablize 5 Link Manipulator, Wit Motion Sensor	

Website	www.manit.ac.in	Fax No:	0755-2670562
Email Address:	info@manit.ac.in	Telephone No:	0755-4051000, 0755-4052000

मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान, भोपाल				
Maulana .	Azad National Insti	tute of Technology Bhopal		
(भारत सरका	र, शिक्षा मंत्रालय के उ	अधीन राष्ट्रीय महत्व का संस्थान)		
(An Institution	of National Importa	ance under MoE, Govt. of India)		
No. MANIT/CSE/2025		दिनांक / Date:16/09/2025		
	निविदा आमं	61		
N	NOTICE INVITIN	G QUOTATION		
	I			
सामग्री / वस्तु का नाम	-	P 32 Wroom, Flex Sensor. Nano		
Name of Goods/Items	_	Soft Pressure Sensor, Thermal Camera,		
		blize 5 Link Manipulator, Wit Motion		
	Sensor			
उपरोक्त सामग्री / वस्तु की आपूर्ति के लिए निविदाएँ आमंत्रित की जाती हैं। इच्छुक				
निर्माता / अधिकृत भागीदार / एंजेन्सियाँ, अपनी बोली अंकित करें। निविदा दस्तावेज़ विधिवत				
रूप से भरकर विभागाध्यक्ष-	– कंप्यूटर विज्ञानं एवं अि	भेयांत्रिकी विभाग में जमा की जा सकती है।		
। सम्पर्ण निविदा मय दस्तावे	ज प्रस्तत करने की ३	iतिम तिथि 01/10/2025 अपरान्ह 12.00 बजे		
तक है। संस्थान निदेशक, बिना कोई कारण बताए किसी या संपूर्ण निविदा को पूर्ण या आंशिक				
रूप से स्वीकार या अस्वीकार करने का अधिकार सुरक्षित है।				
रत रा रवाकार वा जरवाक				
		कुलसचिव		

Quotations are invited for Supply of above-mentioned Goods/Items in the Institute. Interested Manufacturers/Authorized Partner/Agencies may quote their price. The quotation duly completed be submitted to the Head of Department Computer Science & Engineering of the Institute.

Last date of submission of complete quotation document is 01/10/2025 up to 12.00 hours. The Director of the Institute reserves the right to accept or reject any or the entire quotation in full or in part without assigning any reason whatsoever.

Registrar

	अनुक्रमणिका / INDEX	
क्रमांक	विवरण /	पृष्ठ क्रमांक
S No	Description	Page No.
1	निविदा आमंत्रण सूचना	
	Notice Inviting Quotations	
2	एक नजर में महत्वपर्णू जानकारियाँ	
	Important Information at a Glance	
3	बोलीदाता के लिए निर्देश	
	Instructions to Bidders	
4	संलग्नक –। वस्तु की मात्रा एवं विवरण	
	ANNEXURE-I Bill of Quantity and Specifications	
5	संलग्नक – ।। मूल्य बोली का प्रारूप	
	ANNEXURE-II Price Bid Form	

	, , , , , , ,				
मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान, भोपाल					
Maulana Azad National Institute of Technology Bhopal					
एक नजर में मह	त्वपर्णू जानकारि	रेयॉ			
IMPORTANT INFORM	IATION AT	A GLANCE			
सामग्री / वस्तु का संक्षिप्त विवरण	संख्या	टिप्पणी			
Brief Description of Goods/Items	Quantity	Remarks			
Motor Driver, ESP 32 Wroom, Flex	As per BoQ	संलग्नक—। पर विस्तृत विवरण			
Sensor. Nano Development Kit, Soft		Detailed Specification at Annexure-I			
Pressure Sensor, Thermal Camera, EMC		at Annexure-1			
Camera, Stablize 5 Link Manipulator,					
Wit Motion Sensor					
निविदा की अनुमानित लागत	Rs. 4,35,00	0.00			
Estimated cost of Quotation					
आपूर्ति एवं स्थापना का सीीन	Department	of Computer Science &			
Location of Supplies & Installation	Engineering	_ 5			
	at Institute				
निविदा दस्तावेज की उपलब्धता	www.manit	.ac.in			
Availability of Quotation Document <u>www.eprocure.gov.in/epublish/app</u>		ure.gov.in/epublish/app			
निविदा जमा करने के अंतिम दिनांक एवं समय	01/10/2025	up to 12:00 hours			
Last Date & Time of Submission of		•			
Quotation					
निविदा खुलने की दिनांक एवं समय	01/10/2025	at 15:00 hours			
Date & Time of Opening of quotation					
निविदा वैधता की अवधि	60 days fro	m the date of opening of the			
Quotation Validity period	Technical B	1 0			
वितरण / आपूर्ति की अवधि	04 to 06 we	eks from the date of issue of			
Delivery/ Supply period	Supply Orde	er			
गस्ति खंड					
Penalty Clause	0.5% of the	value of the order per week			
वारंटी अवधि	1 year (s)	from the date of successful			
Warranty Period		ipment/ item			
बोली सुरक्षा / बयाना राशि	NIL				
Bid Security/ EMD					
नि पादन सुरक्षा राशि	NIL				
Performance Security Amount					

	बोलीदाता के लिये निर्देश / अनुदेश / INSTRUCTIONS TO BIDDERS					
1	Scope of Supplies & Work:					
	a	Bidders are encouraged to inspect and assess the site and its surroundings before submitting their bids, ensuring they fully understand the nature of the ground and sub-soil (to the extent practicable), the site's layout, access routes, and any accommodation requirements. In addition, bidders should gather all necessary information regarding risks, contingencies, and other factors that may impact their bids. It will be assumed that bidders have complete knowledge of the site, whether they choose to inspect it or not, and no additional charges will be permitted based on any misunderstandings or lack of information.				
	В	It will be imperative on each bidder to fully acquaint himself with the site conditions and factors which would have any effect on the performance of the contract and / or the cost.				
	С	The Goods/ Items shall be supplied as per the Bill of Quantity and Specifications mentioned in ANNEXURE-I. However higher specification of equipment may be considered subject to their cost economics competitiveness.				
	D	Bidder should supply illustrated leaflet giving technical details of Goods/ Item and attach the same with the quotation to facilitate evaluation.				
	Е	Bidder should quote the price of only one best & appropriate model of Goods/Item available with them.				
	F	Purchase Preference will be given to "Make in India products" as defined in Purchase Preference with Local Content (PP-LC) Policy.				
	G	Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs).				
	Н	Start-ups as recognized by Department for Promotion of Industry and Internal Trade (DPIIT), claiming EMD exemption and relaxation in turnover as prescribed in the certificate / Start Up scheme of DPIIT.				
	I	Where ISI certification marked goods are available in the market, procurement should generally be limited to goods with those or equivalent marking only. The warranty/AMC required must be specified.				
	J	After the supply of Goods/ Items & Accessories as mentioned in the ANNEXURE-I , the bidder has to execute its installation at the designated location(s). No extra cost shall be paid for this reason.				
2	Delive	ry of Supplies & Installation:				
	a	The purchaser is interested in complete delivery of Goods/items along with Installation, Testing and Commissioning by bidder within stipulated time limit.				
	В	The material shall be inspected on receipt at site and the bidder shall be responsible for any damage during the transit of Goods/Items.				
3	Warra	nty & After Sales Services:				
	a	The bidder shall offer on-site comprehensive warranty of equipments as mentioned at IMPORTANT INFORMATION AT GLANCE sheet at the designated location & shall cover each and every part of the equipments including parts having limited life etc. The purchaser is not liable to pay any extra charges on any account during the warranty period.				
	В	The bidder shall ensure to render after sales services during the warranty period to the satisfaction of purchaser.				

	С	The performance security as mentioned at IMPORTANT INFORMATION AT
		GLANCE sheet is required in favour of Institute for the warrantee period plus sixty
		days extra.
4	Eligibi	lity Criteria:
	a	Bidder should have registered with appropriate Authority and have GST Number.
5	Price E	
	a	The Prices should be quoted in Indian Rupees only.
	В	Bidder shall take into account all costs including unloading at the location of
		purchaser, cartage etc. for giving delivery of material at site(s) before quoting the
		rates. In this regard no claim whatsoever shall be entertained.
	С	The bidders are advised not to indicate any separate discount. Discount, if any,
		should be merged with the quoted unit prices.
	D	The price quoted in the price bid shall be firm but subject to change in rate of
		applicable taxes if any.
	Е	The Bidder should avoid the use of vague term such as "Extra as applicable".
		Such offers shall be treated as non-responsive.
6	Bid Su	bmission:
	a	The quotation must be placed in a properly sealed envelope super-scribed
		"Quotation for the Supply of Equipment." With quotation inquiry number and
		its due date addressed to The Director, Maulana Azad National Institute of
		Technology- Bhopal- 462003 and must reach the office of The HoD- Department
		Computer Science & Engineering, Maulana Azad National Institute of Technology,
		Bhopal 462003 on or before as mentioned at IMPORTANT INFORMATION AT
	ь	GLANCE sheet. The sealed Envelope should be consisting of followings: Copy of Certificate of Registration of firm.
	C	BOQ Annexure-I and Price Bid Annexure-II duly filled and signed.
7		tion of Bids:
/		stitute shall evaluate all the items together or separately depending upon the nature
		is of circumstance and compare the quotations determined to be substantially
		sive i.e. which
	•	are properly signed;
	b b	Confirm to the eligibility criteria of the vendor; and
		Confirm to the engionity criteria of the vendor; and Confirm to the terms & conditions, and technical specifications.
	c	Continuito the terms & conditions, and technical specifications.

NNEXURE-I मौलाना आज़ाद रा ट्रीय प्रौद्योगिकी संस्थान, भोपाल Maulana Azad National Institute of Technology Bhopal

सामग्री की मात्रा एवं विवरण BILL OF QUANTITY AND SPECIFICATION

	BILL OF QUARTITY AND STEEL TEATION				
SN	Name of Product/ Items Quantity Remarks		Remarks		
1	Motor Driver (As per Annexure-1)	04			
2	ESP 32 Wroom (As per Annexure-1)	06			
3	Flex Sensor (As per Annexure-1)	04			
4	Nano Development Kit (As per Annexure-1) 02				
5	Soft Pressure Sensor (As per Annexure-1) 10				
6	Thermal Camera (As per Annexure-1)	01			
7	EMG Camera (As per Annexure-1)	02			
8	Stablize 5 Link Manipulator (As per Annexure-1) 01				
9	Wit Motion Sensor (As per Annexure-1) 06				
1 ID D	. /5				

NB: Drawing/ Design is enclosed herewith.

	ANNEXURE- II
BID PRI	ICE FORMAT
To,	
The Director	

MAN	NIT- Bhopal- 462 003						
Sub:	Enquiry Document	dated 00/00/20)24.				
SN	Product Description with make & Model	Unit price	Qty	Qty Price	GST	Total Price	
1	2	3	4	5	6	7(5+6)	
1	Motor Driver		04				
2	ESP 32 Wroom		06				
3	Flex Sensor		04				
4	Nano Development Kit		02				
3 4 5 6	Soft Pressure Sensor		10				
6	Thermal Camera		01				
7	EMG Camera		02				
8	Stablize 5 Link		01				
	Manipulator						
9	Wit Motion Sensor		06				
				Total off	ered Price		
Total	(In Words):				1		
Deliv	ery Period required:						
The 1	followings things are confi	rmed and unde	ertaken b	y us that:			
a	The price quoted above	are inclusive of	of statuto:	ry Levies & T	Caxes, Dutie	s, Transportatio	n
	and other charges (Insurance, Loading/ unstallation etc.) at site.			oading, Packi	ng & Forv	warding charge	s,
В	Taxes are subject to char						
С	We agree with the terms and conditions specified in "Instructions to Bidders" and is selected, the execution of supplies would be made as per bill of Quantity & Specification.						
				•		•	
Date:				Siş	_	authorized Bidd oper rubber stan	
		Name:			I	•	
		Designation:					
		Mobile No:					

Annexure-1

Technical Specifications

S.no	Name of Item	Technical Specification	Compliance (Yes/No)
1	Motor Driver	 Voltage Range: 5V–46V 	
		 Current: Up to 2A per channel 	
		No. of Channels: 2	

		 Interface: TTL logic level Use: Controls DC motors, stepper motors
2	ESP 32 Wroom	 Processor: Dual-core Tensilica LX6, 240 MHz Flash: 4 MB Wi-Fi & Bluetooth: 802.11 b/g/n, Bluetooth v4.2 GPIO Pins: 34 Operating Voltage: 3.3V Use: IoT, wireless applications
3	Flex Sensor	 Resistance Range: ~10kΩ (flat) to ~30–40kΩ (fully bent) Length: 2.2 inches Bend Angle: Up to 180° Use: Motion sensing in gloves, robotics
4	Nano Development Kit	 CPU: Quad-core ARM Cortex-A57 GPU: 128-core Maxwell RAM: 4GB LPDDR4 Storage: microSD slot I/O: GPIO, I2C, CSI, USB 3.0 Use: AI, deep learning, CV
5	Soft Pressure Sensor	 Sensing Area: Varies (e.g., 0.5–1 inch) Force Range: 100g to 10kg Resistance Range: ~10kΩ–1MΩ (inversely proportional to pressure) Use: Wearables, haptics, robotics
6	Thermal Camera	 Resolution: 80x60 or 160x120 (Lepton 3.5) Frame Rate: <9 Hz (for Lepton) Spectral Range: 8–14 μm Interface: SPI, I2C Use: Human detection, thermal mapping
7	EMG Camera	 Input Voltage: +3V to +5V Signal Range: 0-Vcc Bandwidth: ~10-500 Hz Output: Analog envelope of EMG Use: Muscle activity detection, prosthetics
8	Stablize 5 Link Manipulator	 DOF: 5 Degrees of Freedom Material: Aluminum/Carbon Fiber Actuation: Servo/DC motors with

		encoders • Payload: ~0.5–1 kg • Use: Manipulation tasks
9	Wit Motion Sensor	IMU: 9-axis (Gyroscope +