

JAMIA MILLIA ISLAMIA Jamia Nagar, New Delhi-110025 Ph: 011-26982759 Notice Inviting Quotations

Tender No. NIT/MED/MVL-1/JMI/2017

Sealed quotations are invited from reputed companies/authorised distributors/dealers for the supply of scientific equipment/instrument for the Mechanical Vibrations Lab of Department of Mechanical Engineering. Bid document with other terms & conditions can be downloaded from JMI Website: www.jmi.ac.in and be submitted with bid fee and notified EMD as per following:

The interested bidders are required to submit their bids in two parts:

- Technical bid with tender fee and EMD should be sealed in separate envelopes duly super-scribed "Technical Bid"-Tender No. NIT/MED/MVL-1/JMI/2017
- Financial Bid should be sealed in separate envelopes duly super-scribed "Financial Bid"-Tender No. NIT/MED/MVL-1/JMI/2017

Bid fee-DD (non- refundable)	Activity	Estimated Cost	Date & Time	Venue for Submission & opening of Bids
Rs. 500/-	Last Date for submission of Tender	Rs. 2,82,000/-	13/09/2017 3.00pm	Office of the Head, Department of Mechanical Engineering
	Opening of Financial Bid	Shall be intimated to	the technically qualified	d supplier by Email/Phone

Note: The Bidders shall have deposit separate bids (envelopes) for each item and clearly mentioning the article on the envelope.

Both Technical and Financial Bids sealed envelopes/covers are to be put in a bidder cover/envelope which should also be sealed and duly super-scribed the Tender No. *NIT/MED/MVL-1/JMI/2017*, *due date for submission of tender and address to* "The Head, Department of Mechanical Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi-110025"

Eligibility Criteria:

- 1. The Bidder should be a reputed and an authorized firm/supplier having after sales service agreement with the OEM (Proof for the same to be enclosed alongwith address, phone nos. & E-mail etc. of the Service Centre).
- 2. If ISO certified Company, enclose documentary proof.
- 3. The bidder should have experience of more than five years in execution and maintenance of equipments quoted (A certificate of establishment to be provided).
- The bid document complete in all respect should reach the Head, Department. Of Mechanical Engineering, Jamia Millia Islamia, Jamia Nagar, New Delhi-110025 on or before 13/09/2017.

No bids after the last date shall be entertained.

Sequence of documents to be provided/enclosed in each copy of the bid documents:

- 1. Forwarding letter duly signed by the Authorized person.
- 2. Balance sheet with auditor's report for the years 2014-15 & 2015-16.
- 3. Latest Income Tax Return Certificates.
- 4. Central Sales Tax/VAT.
- 5. Proof of the authorized agent/distributors/supplier.
- 6. Sole Proprietary/sole manufacturer certificate for proprietary item.
- 7. List of Similar equipments supplied by the firm with addresses and phone numbers of customers with satisfactory completion certificate/satisfactory working certificates.
- 8. Name and address of registered office, Head Office and Regional office of the company with name and phone numbers of key persons.
- 9. Format of Schedule of Requirements at Annexure-I
- 10. Self-declaration at Annexure-II
- 11. Format for Supplier/Distributor information at Annexure-III
- 12. Contract Form at Annexure-IV
- 13. Financial Bid at Annexure-V
- 14. Acceptance of all clauses of bids specification duly signed page-wise.

(Prof. J. A. Usmani)

Head, Department of Mechanical Engg.

Date: 06/09/2017

Conditions of Contract

Terms & Conditions:

- The bidder shall be required to deposit 2% Earnest Money of estimated value of goods to be procured through Bank Draft/Fixed Deposit Receipt/Bank Guarantee drawn in favour of 'The Registrar, Jamia Millia Islamia.' No bid shall be accepted without the Earnest Money and Bid Fee. The JMI shall forfeit EMD, if the successful bidder fails to furnish the required Bank Guarantee.
- 2. The successful supplier will submit a Bank Guarantee equivalent to 5% of the total value of purchase order at the time of installation which would remain valid for a period of 60 days beyond the date of completion of all obligations of the supplier including warranty obligation. EMD will be released to successful bidder after submission of Bank Guarantee. JMI shall forfeit Bank Guarantee in the event of a breach of contract by the successful supplier.
- 3. Bids would be rejected for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question.
- 4. The bids received after the deadline for submission of bids prescribed by the JMI will be rejected and such bids shall be marked as late and not considered for further evaluation.
- 5. The JMI may, at its discretion, extend the deadline for submission of bids by amending the bid documents in accordance with clause relating to Amendment of Bidding documents in which case all rights and obligations of the JMI and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 6. The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialled by the person or persons signing the bid. Further, <u>over-writings on documents</u>, if any should be supported by signatures.
- 7. The bidders may submit their duly sealed Bid by post or by hand at the address specified in the Notice Inviting Quotation not later than the time and date specified therein. In the event of the specified date for the submission of bid being declared a holiday for the JMI, the bid will be received up to the appointed time on the next working day.
- 8. Issuance of bid documents should not automatically be construed that the bidder is considered qualified. The JMI Authority has the right to reject any bids on technical grounds without assigning any reason.
- 9. Jamia Millia Islamia shall not be responsible for any delay, loss or non-receipt of bid documents sent by post.

- 10. Prices shall be quoted in Indian Rupees for offers received for supply within India and in US dollars as per the Financial Bid format in case of offers received for supply from foreign countries. The prices quoted should be CIF or FOR, JMI destination.
- 11. The JMI may decide to open a letter of Credit or Wire Transfer in cases where it so decides. Any variation in price from the importer and manufacturer be indicated well in advance.
- 12. The imported equipments should be quoted by the authorized supplier/dealer. In this case, commitment of after sales service with the period applicable should be clearly mentioned.
- 13. Payment shall be made after delivery, successful installation, commissioning & submission of Bank Guarantee.
- 14. All taxes, if applicable, should be quoted separately, otherwise it would be presumed that the quoted prices are inclusive of taxes (please see Financial Bid format).
- 15. Prices quoted should be FOB/FOR, JMI, New Delhi inclusive of all charges required to make the equipment functional to the satisfaction of JMI, otherwise it would be presumed that the quoted prices are inclusive of all charges, if applicable.
- 16. In case price for imported goods are quoted in FOR, the JMI will provided customs duty exemption certificate, if the import is made in the name of JMI and the supplier should submit original Bill of Entry in the name of the Registrar, JMI.
- 17. Delivery should be within specified days mentioned in Purchase Order. If the equipment/instruments are not delivered within the stipulated time, the supplier shall be liable to pay a penalty of 1% of the total order value for each delay of 10 days or part thereof and the amount will be deducted from the payment on account of purchase.
- 18. The suppliers will undertake warranty of equipment/instruments from the date of installation and shall have to mention clearly the period of warranty in financial bid.
- 19. The quotations must be valid for 180 days (six months) from the date of opening of the financial bids. No change in prices and change in terms and conditions will be permitted.
- 20. All quoted items may carry brochure/catalogue/Pamphlets/Technical Literature and related documents.
- 21. The supplier further warrants that the goods shall be free from defects arising from any act or omission of the supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.
- 22. Installation, testing, commissioning of the equipments should have to be carried out by Technical experts of the company/supplier up to the satisfaction of user department of JMI.

- 23. Free training shall be imparted to faculty/technical staff for operation, maintenance and troubleshooting at the user department of JMI.
- 24. The bidder may submit the proprietary certificate for the item(s), if applicable.
- 25. In a bid, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same bid.
- 26. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same bid for the same product.
- 27. Jamia Millia Islamia reserves the right to purchase varying quantity of material, less or more.
- 28. In the process of evaluation, comparison of bids, Jamia Millia Islamia reserves the right to reject any or all bids.
- 29. In case replacement of a part becomes necessary during warranty period, the parts of the same make and same or better configurations as were originally there in the equipments shall be used. The supplier/vendor shall maintain details of the replacements and repairs carried out, if any, in any equipment/instrument in a separate document and produce the details as and when required by the user department of JMI. The cost of the parts will be borne by the supplier.
- 30. In case of complaint regarding repairing/replacement of equipment/instrument within the warranty period, the supplier will provide repair/replacement immediately. In case of non-compliance or delayed compliance, supplier will be penalized with an amount mutually agreed upon and it would be deducted from the Bank Guarantee.
- 31. The technical specification wherever given in the items' specification format is basic. The equipments/instruments may also be evaluated as per additional provisions and facilities.
- 32. All corrigenda will only be notified on the JMI website.
- 33. The Vice-Chancellor, JMI shall be the final Authority for settlement of any dispute and his interpretation of any Clause/term/condition(s) of this document shall be final and binding and the jurisdiction for Court of Law shall be Delhi/New Delhi.

Authorize Signature of the firm: Name: Designation:

FORMAT OF SCHEDULE OF REQUIREMENTS (All Columns to be filled by the supplier)

SI.	Name Equipment/Instrument	Unit	Qty.	Delivery Schedule	EMD Rupees	in
SI. No.	Name Equipment/Instrument	Unit	Qty.	Delivery in weeks at the user department, JMI	EMD Rupees	in

Authorised Signatory:
Name:
Designation:
Name of the firm:

Seal:

ANNEXURE-II

Self-Declaration to be given by the bidder

Bid's Reference No. & Date:		
Bidder's Name & Address		
Person to be contacted:		
Designation:		
Telephone No.:	Fax No.:	Email:
The Registrar, Jamia Millia Islamia, Jamia Nagar, New Delhi-110025.		
•	all bidding docum	nd examined in detail the Terms and nent in regard to the supply of ept the same.
Government/Undertaking.	t higher than the	Government/Undertaking. rates quoted for same item to any and prepared so as to prevent any
		For and on behalf of the firm (Firms Name & Address)
		(Signature of Authorized Signatory)
		Name:
		Designation
		Phone No.:
		Seal:
Date:		
Place:		

ANNEXURE-III

FORMAT FOR OTHER INFORMATION

(To be filled in by the bidder)

Cost of Bid: Rs.500/		
Cash receipt/Bank Draft No		
Date:		
1. Name of the firm:		
2. Address:		
3. Telephone/Mobile No		
4. Fax Number:		
5. Email:		
6. TIN/VAT/CST No.:		
7. Firm Registration No.:		
8. PAN :(attach photocopy)		
 Earnest Money (Bids Security). 2% of the estimated value of the goods to be provided. 		
	a) Bank Draft/	Pay Order No .
	b) Date .	
	c) For Rs .	
	d) Drawn On	
		(Signature of the authorised person)
		Name of contact person
		Name of Firm
		Contact No.
		Seal
Place		
Date		

ANNEXURE-IV

CONTRACT FORM (to be filled by the successful bidder)

THIS AGREEMENT made theday of
Registrar, Jamia Millia Islamia, New Delhi (hereinafter called "the Purchaser") of the one part and
(Name of Supplier) of (City and Country of Supplier) (hereinafter
called "the Supplier") of the other part :
WHEREAS the Purchaser is desirous that certain equipment/instrument and after sales services
viz., (Brief Description of equipment/instrument and after sales services)
and has accepted a bid by the Supplier for the supply of those equipment/instrument and after
sales services for the sum of (Contract Price in Words and Figures)
(hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of

Contract referred to.

- 2. In consideration of the payments to be made by the JMI to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the JMI to provide the equipment/ instrument and after sales services and to remedy defects therein in conformity with the provisions of the Contract in all respects.
- 3. The JMI hereby covenants to pay the Supplier in consideration of the supply of the equipment/instrument and after sales services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Brief particulars of the equipment/instrument and after sales services which shall be supplied/provided by the Supplier are as under:

SL. NO.	BRIEF DESCRIPTION OF EQUIPMENT/ INSTRUMENT AND AFTER SALES SERVICES	QUANTITY TO BE SUPPLIED	UNIT PRICE	TOTAL PRICE	DELIVERY TERMS

TOTA	AL VALUE:			
DELI\	VERY SCHEDULE:			
			TURE OF PRISED SIGN	ATORY
		Nan	ne:	
		Des	ignation:	
		Nan	ne of the firm:	
		Sea	ıl:	
REGI	STAR, JMI			
NAME				

PLACE

SEAL

ANNEXURE-V

FINANCIAL BID

Equipments & Specifications	Qty.	Rate
Sales tax & other taxes, if any		
Excise duty, if any		
Customs duty, if any		
Packaging & forwarding charges, if any		
For Octroi, if applicable, necessary certificate will be issued		
Training cost, if any		
Installation and commissioning cost, if any		
Any other charges, if any		
Grand Total (in figures & words)		
	Sales tax & other taxes, if any Excise duty, if any Customs duty, if any Packaging & forwarding charges, if any For Octroi, if applicable, necessary certificate will be issued Training cost, if any Installation and commissioning cost, if any Any other charges, if any	Sales tax & other taxes, if any Excise duty, if any Customs duty, if any Packaging & forwarding charges, if any For Octroi, if applicable, necessary certificate will be issued Training cost, if any Installation and commissioning cost, if any Any other charges, if any

(Signature of the authorized person)

Name of Contact Person

Name of Firm

Contact No.

Seal

ANNEXURE-V

TECHNICAL BID

Tender no. NIT/MED/MVL-1/JMI/2017

S.No.	Equipments & Specifications	Qty.	Agreed to Supply Confirm with Yes or No
1.	Experimental test set-up: Modal Analysis of mechanical system		
	 1(a) Sound and vibration DAQ module 2-channel analog input module with min. sampling rate of 102.4 kS/s, 24-bit resolution, and ±5 V input range BNC connectivity <10 μVrms noise Smart TEDS sensor compatibility Software-selectable IEPE signal conditioning Software-selectable AC/DC coupling 1(b) Miniature type IEPE accelerometer with mounting adhesives PCB Miniature IEPE Accelerometer Sensitivity: 10mV/g Frequency range: 1-10k Hz Low Noise Coaxial Cable with 10-32 plug to BNC plug 	01	
	 1(c) Force transducer Range full scale: +444/-444 N sensitivity of 110 mV/N Frequency range: 0.001 Hz to 36 kHz 10-32 Coaxial Jack electrical side connector 10-32 Female mounting thread (should be compatible with stringer) 10-32 UNF to BNC cable for DAQ connectivity 	01	

access	Modal Shaker with trunnion base and ory kit (containing set of stingers, chuck, adaptors, spare fuses and trunnion bolts) Output Force: 334 N sine (peak), 125 N random (RMS) Stroke Length, continuous peak-peak: 25.4 mm Operating Frequency Range, nominal: 6.5 kHz, DC Fundamental Resonance frequency > 4 kHz Max. Velocity [sine (peak)/random (RMS)]: 1.5/1.5 m/s Max. Acceleration [sine (peak)/random (RMS)]: 44/31 g Attachment facility for inserting stingers	01	
	Lateral stand for mounting		
	ower Amplifier with cabling (matching	01	
Modal	shaker configurations)		
•	Selectable voltage and current modes of		
	operation		
•	Continuous gain adjustment Front panel bar graph for voltage and current		
	monitoring		
	Direct coupled linear output		
	With/without automatic cooling fans		
•	Output:		
	Voltage, Vrms =50,		
	Current, Arms =20		
	Power: 900 W		
	Max. Voltage gain: 36 dB		
	Max. Current gain: 22 dB		
•	Input power (AC)		
	Single phase voltage: 200- 240 V		
1/£\ D	Frequency range: 50/60 Hz	01	
	coximity probe (including Sensor, extension	01	
cables	, connectors, probe drivers) Power Supply:		
	Voltage: -23 to -30VDC		
	Current: < 12mA		
•	Linear Range:		
	2.0mm begins at 0.25mm from probe face		
	(AISI4140)		
	Range is 0.25 - 2.25mm		
•	Sensitivity: 7.87 mV/um		
•	Frequency Response (±3db): 0 - 10.0 KHz Min. Target Size: 15mm in diameter		

	1(g) Pre-polarized microphone and preamplifier	01	
	 Sensitivity: 1 mV/Pa Frequency range: 4 Hz - 70 kHz Cartridge Noise: 35 dB Max Amplitude: 165 dB Temperature: -40 to +120 °C Matched pre- amplifier Co-axial cables and associated connectors Microphone holder 		
	1(h) PCMCIA to USB adapter 68PIN CardBus	01	
2.	Experimental test set-up: Stroboscope	01	
3.	T.K. solver software	01	

(Signature of the authorized person)

Name of Contact Person

Name of Firm Contact No.:

Seal

Table A

S. No.	Name of Equipment	Quantity	Scope of Learning	
1	Experimental test set-up: Modal Analysis of mechanical system	01	Technical Specifications: 1(a) Sound and vibration DAQ module • 2-channel analog input module with min. sampling rate of 102.4 kS/s, 24-bit resolution, and ±5 V input range • BNC connectivity • <10 μVrms noise • Smart TEDS sensor compatibility • Software-selectable IEPE signal conditioning Software-selectable AC/DC coupling 1(b) Miniature type IEPE accelerometer with mounting adhesives • PCB Miniature IEPE Accelerometer • Sensitivity: 10mV/g • Frequency range: 1-10k Hz • Low Noise Coaxial Cable with 10-32 plug to BNC plug 1(c) Force transducer • Range full scale: +444/-444 N • sensitivity of 110 mV/N • Frequency range: 0.001 Hz to 36 kHz • 10-32 Coaxial Jack electrical side connector • 10-32 Female mounting thread (should be compatible with stringer) • 10-32 UNF to BNC cable for DAQ connectivity 1(d) Modal Shaker with trunnion base and accessory kit (containing set of stingers, chuck, collets, adaptors, spare fuses and trunnion bolts)	List of Experiments: General mechanical mobility measurements Experimental modal analysis using SISO, MISO, SIMO and MIMO testing techniques Advanced structural dynamics investigations Structural damage detection Finite element model correlation and validation Precision sound level measurements Hearing preservation and safety Leak detection Sound absorption

	 Output Force: 334 N sine (peak), 125 N random (RMS) Stroke Length, continuous peak-peak: 25.4 mm Operating Frequency Range, nominal: 6.5 kHz, DC Fundamental Resonance frequency > 4 kHz Max. Velocity [sine (peak)/random (RMS)]: 1.5/1.5 m/s Max. Acceleration [sine (peak)/random (RMS)]: 44/31 g Attachment facility for inserting stingers Lateral stand for mounting 1(e) Power Amplifier with cabling (matching Modal shaker configurations) Selectable voltage and current modes of operation Continuous gain adjustment Front panel bar graph for voltage and current monitoring Direct coupled linear output With/without automatic cooling fans Output: Voltage, Vrms =50, Current, Arms =20 Power: 900 W Max. Voltage gain: 36 dB Max. Current gain: 22 dB Input power (AC) Single phase voltage: 200- 240 V Frequency range: 50/60 Hz 1(f) Proximity probe (including Sensor, extension cables, connectors, probe drivers)
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			 Power Supply: Voltage: -23 to -30VDC Current: < 12mA Linear Range: 2.0mm begins at 0.25mm from probe face (AISI4140) Range is 0.25 - 2.25mm Sensitivity: 7.87 mV/um Frequency Response (±3db): 0 - 10.0 KHz Min. Target Size: 15mm in diameter 1(g) Pre-polarized microphone and preamplifier Sensitivity: 1 mV/Pa Frequency range: 4 Hz - 70 kHz Cartridge Noise: 35 dB Max Amplitude: 165 dB Temperature: -40 to +120 °C Matched pre- amplifier Co-axial cables and associated connectors Microphone holder 1(h) PCMCIA to USB adapter 68PIN CardBus 	
2.	Experimental test set-up: Stroboscope	01	 5 digit LCD display Accuarcy approximately ± (0.05% + 1 digit) Preferably Xenon lamp Upto 15000 rpm range 	Non-contact type frequency measurement
3.	T.K. solver software	01	 Standard, for academic - Faculty (Standalone) Latest version Life time perpetual license 	For mathematical modeling and problem solving based on a declarative, rule-based language