



INDIAN MARITIME UNIVERSITY

KOLKATA CAMPUS

P-19 Taratala Road, Kolkata – 700 088

TENDER FOR SUPPLY OF VIBRATION LABORATORY EQUIPMENT

AT IMU KOLKATA CAMPUS (IMU – KC)

Tender No.: IMU-KC/LAB EQP/2017-18/1

VOLUME - I

NOTICE INVITING TENDER



INDIAN MARITIME UNIVERSITY
(A Central University)
Kolkata Campus (KC),
P-19 TARATALA ROAD, KOLKATA, 700 088

Sealed tenders are invited for Supply of Vibration Laboratory Equipment under Two cover system:

Bidders are advised to study the Tender Document (including all Sections, Schedules and Annexure etc) carefully. Submission of Tender shall deem to have been done after careful study and examination of the Tender Document with full understanding of its implications.

The Cost of Tender document is Rs. 1000 payable by way of Demand Draft drawn on any Nationalized/Scheduled Bank in favour of Indian Maritime University, Kolkata Campus Payable at Kolkata, which shall have to be submitted along with the Tender. The tender document can be downloaded from the IMU-KC's web site www.merical.ac.in.

DIRECTOR , IMU-KC

TENDER ABSTRACT

Tender Title	Tender for Supply of Vibration Laboratory Equipment IMU-KC, Taratala, Kolkata
Tender Number	IMU-KC/Lab Eqp/2017-18/1
Pre-Bid Meeting	30.06.2017 1500hrs
Tender Document can be Downloaded from IMU website	From 21.06.2017
Cost of Tender Form	Rs. 1000 in the form of DD in favour of Indian Maritime University, Kolkata Campus payable at Kolkata
Last Date of Submission of Tender	12.07.2017 1430hrs
Technical Bid Opening Date and Time	12.07.2017 1500hrs
EMD Amount	Rs. 90,000/-
Address for Submission of Tender	The Director, Indian Maritime University, Kolkata Campus, P-19, Taratala Road, Kolkata: 700088, West Bengal, India

**INDIAN MARITIME UNIVERSITY
KOLKATA CAMPUS**

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General Rules and Directions for the Guidance of the Bidders

1.1. Introduction & Definitions

The Indian Maritime University is a Central University established by an Act of parliament and headquartered at Chennai. The Kolkata Campus of the Indian Maritime University (hereinafter referred to as the Buyer or IMU-KC) invites sealed tenders for Supply of Vibration Laboratory Equipment at Indian Maritime University, Kolkata Campus located at P-19 Taratala Road defined in the tender documents (hereinafter referred to as the "Supply").

1.2. Eligibility Criteria

The tender is invited in TWO COVER SYSTEM and is open to all Suppliers who fulfill the following eligibility criteria:

1.2.1. Experience – No. of years in the Business:

The Bidder should be in the Business of Providing 'Similar Supply' for a period not less than 5 years i.e. since 2012 – 13.

[Mode of Proof: ESI / PF / Service Tax Registration Certification / Certificate of Incorporation / Registered partnership deed / IT Returns / Copies of the Work order, Agreement and Work Completion certificate for the Completed or ongoing supply – Proof for providing similar supply during 2012-13 or earlier to be enclosed].

1.2.2. Experience – Completion of similar works:

The Bidder should have satisfactorily completed "Similar Supply" involving values as listed below during the last 5 financial years i.e. since 2012-13.

- a) at least 1 Similar Supply with a minimum value of i.e. Rs. 50 Lakh [OR]
- b) at least 2 Similar Supply with a minimum value of Rs. 40 Lakh each [OR]

c) at least 3 Similar Supply with a minimum value of Rs. 30 Lakh each.

[Mode of Proof: Copies of the supply order, Payment advice, Certification from buyer entity].

'Similar Supply' means contract for supply of Lab Equipment of the similar as per the tender with Government / Semi-Government/ Public Sector organizations/ National level educational institutes like IIT, IIM, NIT and Central Universities/ State Universities / Public Limited Companies. / Reputed UGC/ AICTC Recognized private Sector Universities.

1.2.3. Turnover

Should have had annual turnover of at least Rs. 3.00 Crores in each year during the past 3 financial years i.e. 2013-14, 2014-15 & 2015-16.

[Mode of Proof: Annual accounts duly certified by a Chartered Accountant / Income tax Returns].

1.2.4. Possession of Valid PAN & VAT / Excise Registration:

The Supplier should have a valid PAN and possession VAT registration in case of non-manufacturing dealer or possession of Excise registration in case of manufacturer.

[Mode of Proof: Copy of the PAN Card and respective registration certifications / returns to be produced].

1.2.5. OEM Authorisation: The Bidder shall be the reputed Original Equipment Manufacturer (OEM) / their authorized / certified partner or authorized reseller. He shall furnish necessary authorization from the OEM and authorizing him to provide all goods and services support indicated in this tender and confirming that necessary assistance would be provided to him in providing required support during the Warranty Period (Annexure - III).-

[Mode of Proof: OEM Authorisation / Certification, In case of participation by OEM, self-declaration]

1.2.6. Should not have been black listed so far.

[Mode of Proof: self-declaration to this effect]

With regard to the various proof/supporting documents produced by the bidders for establishing that they meet the various eligibility conditions, it shall be IMU-KC's prerogative to decide whether the document produced is valid evidence or not and to call for additional proof, if required.

All the Mode of Proof Documents for meeting eligibility criteria enclosed with the tender are to be duly signed by the authorized signatory. If required, IMU-KC may insist for notarized copy or ask to produce originals to ascertain the veracity of the documents. IMU- KC also reserves the right to ask more proof to corroborate the eligibility declarations.

1.3. General Conditions

1.3.1. The Bid submitted will be evaluated based on the details of technical qualification submitted by the bidder under Cover I in the prescribed formats to ascertain whether the bidders qualify. The Cover II (Price Bid) of only those firms who technically qualify as per the documents in Cover I will be opened.

1.3.2. The duly authorized signatory (ies) of the entity should sign and seal in all the pages of the tender document including the annexure / schedules signifying the acceptance of all the terms and conditions, stated in the various parts of the tender. The person(s) authorized to sign the tender shall also sign in all the pages of the supporting documents with office seal submitted as proof of their eligibility, proof of technical compliance etc. In other words, every page of the bid submitted should have the signature of the duly authorized signatory of the bidder with rubber stamp.

1.3.3. Bidder should furnish all the details in the prescribed Proforma and as per the requirements set out in the tender documents under Cover I. Bids should be complete in all respects and any incomplete tenders will be rejected.

1.4. One Bid per Bidder

The Bidder who submits more than one tender will be disqualified. However bidders can submit two price bids, for both composite equipment and for individual equipment. Permission given for submission of two bids should not be used for submission of two different price bid for same individual equipment, failing which such bids may be rejected at the discretion of IMU – KC.

1.5. IMU Not Responsible for expenditure / efforts on Tendering

The bidders shall bear all costs, efforts or their time associated with the preparation and submission of their tenders and the IMU-KC will in no case be responsible or liable for those costs / efforts / time, regardless of the conduct or outcome of the tendering process or the cancellation, if any, of tender by IMU-KC, due to any reason whatsoever and at any stage of the tender (IMU-KC is not responsible, if there is a cancellation even after price bid opening).

1.6. Presumption of Understanding of Tender contents

It would be presumed that the bidder has read and fully understood the contents of the tender documents.

1.7. Clarification of Tender Documents

A bidder requiring any clarification regarding the tender documents may notify in writing to the address mentioned in the invitation of tenders or E-Mail to dradmin.kolkata@imu.ac.in with a copy to director.kolkata@imu.ac.in IMU-KC will respond to any valid request for clarification, raised during the pre-bid meeting or

received one week prior to the last date for submission of tenders. IMU-KC's decision is final and binding with regard to interpretation of terms used or other tender contents.

1.8. Amendment to Tender Documents

1.8.1. Up to 3 days prior to the last date for submission of tenders, IMU KC may, for any reason, suo motu or in response to a clarification by a prospective bidder or bidder, modify the tender documents by amendments (through addenda / corrigenda etc.)

1.8.2. Any such amendments will only be hosted on the IMU-KC website and no separate intimation of the amendments will be sent to those who had downloaded the document from the web site, prior to such amendments. All the bidders who had downloaded the Bid Document shall verify, whether any such amendments have been issued by IMU-KC, before submitting their bid and shall take cognizance of and include such amendment(s) in their submission. In any case, the amendment(s), if any, shall be binding on the Bidder.

1.9. Preparations and Submission of Tenders

1.9.1. Language of Tender

The tender, and all correspondence and documents, related to the tender, exchanged between the bidder and IMU KC should be in the English language only. If the bidder along with their offer furnish any printed literature written in any other language, such documents should be supplemented with their English translation also. The contents in the English translated version alone shall be taken into consideration.

1.9.2. Documents comprising the Tender

The tender submitted by the Bidder shall comprise the following and should be read in conjunction with any Amendments issued in accordance with Clause 1.8.

1.9.2.1. Cover I (Technical Bid)

- a) Demand Draft towards cost of application
- b) Earnest Money Deposit
- c) Tender Document downloaded from IMU-KC Web site comprising Tender Notification, Abstract, General Rules and Directions for the Guidance of the bidder, General description of Supply and other terms and conditions (Annexure I), including the amendments, corrigenda / addenda issued by IMU – KC which are duly signed by the authorized signatory of the bidder in each page with stamp signifying the acceptance of all the tender conditions / terms / contents.
- d) Duly filled Technical Bid format (Annexure II) and Suppliers OEM Authorisation Form (Annexure III) with all the documents stated in the technical bids and other supporting documents in evidence of the data filled in technical bids and any other documents/enclosures/schedules/annexures etc stated in the tender document.
- e) Bidder Memorandum (Annexure IV) duly signed by the bidder.

The Cover I shall be addressed to "The Director, Indian Maritime University – Kolkata Campus" and should be duly super scribed as "Cover-I-Technical Bid for Supply of Vibration Laboratory Equipment at IMU-KC" and sealed properly. Name and Address of the bidder shall also be written/ printed on the cover.

1.9.2.2. Cover II (Price Bid)

The Cover II shall only contain the Price Bid formats given in Annexure –VI viz.

- a) Form of Tender,
- b) Priced Bill of quantities / Filled in Price Bid format Schedule 4 (Price Bid form for domestic supply) & Schedule 5 (Price Bid form for imports).

All the above should be duly filled in, signed and sealed:

The Cover II shall be addressed to "The Director, Indian Maritime University – Kolkata Campus" and should be duly super scribed as "Cover-II-Price Bid for Supply of Vibration Laboratory Equipment at IMU-KC" and sealed properly. Name and Address of the bidder shall also be written/ printed on the cover.

1.9.2.3. Main Cover

Both the "Cover I" and "Cover II" shall be placed inside the main cover and sealed properly. The main cover should be duly super scribed as "Tender for Supply of Vibration Laboratory Equipment".

1.10. Conditions stipulated by the bidder

The bidder shall note that no alternative or counter or qualifying tender conditions by the bidder will be acceptable to IMU - KC. Tenders containing any qualifying conditions or even bidder's clarifications in any form may be treated as non-responsive and will run the risk of rejection.

1.11. Filling up of Forms, Completeness & Mode of Submission of Tender:

1.11.1. The bidder shall submit all the documents required to be submitted as per Clause 1.9 duly filled in along with their covering letters, data and other information so that the tender is complete in all respects.

1.11.2. The Bill of Quantities and Rates shall be filled in either typed or written in indelible ink and shall be signed by the person or persons duly authorized to sign on behalf of the bidder.

1.11.3. Bids sent by telex, fax, Email etc. (i.e. modes other than by way of speed post/ courier/ dropping in the box provided) shall not be accepted.

1.12. Last date for submission of tender, Extension and Late Tenders

Tenders must reach the Directors office through the aforesaid modes or to be dropped in to the box placed in the Administration section (Ground Floor), IMU – KC, prior to the last date & time for submission, specified in the abstract. IMU KC may, at its sole discretion extend the date and time for submission of tenders. Any updates with regard to such extension or any other communication intended for the bidders / prospective bidders will be made only through IMU-KC’s website stated above. Any tender received after the last date and time for submission of tenders prescribed will be rejected.

1.13. Tender Validity

1.13.1. Tenders shall remain valid for 120 days from the last date for submission of tender.

1.13.2. In exceptional circumstances, prior to the expiry of the original tender validity period, the IMU KC may request the bidder to extend the period of validity for a specified additional period. The request and the response thereof shall be made in writing through E-mail or Post. A bidder agreeing to the request will not be required to nor permitted to modify his tender, but will be required to extend the validity of his tender for the period of extension. In case a bidder is not agreeing to the request of the IMU KC for extension of validity of the tender, then his tender will not be processed further and the portions of his tender which have not been opened will be returned to them unopened as the case may be. The EMD paid by them will also be refunded to them as in the case of other unsuccessful bidders.

1.14. Earnest Money Deposit (EMD)

1.14.1. Each tender should be accompanied by an Earnest Money Deposit (EMD) for the value stated in the Tender Abstract, which shall be in the form of Demand draft from any Nationalized Bank / Scheduled

Bank drawn in favour of "**Indian Maritime University-Kolkata Campus**", Payable at **Kolkata**. No other form/ mode of deposit towards Earnest Money shall be accepted. Tenders not accompanied by the Earnest Money Deposit in the manner prescribed by the IMU-KC will be summarily rejected. However, exemption from EMD may be considered by IMU-KC only upon written request enclosed with the technical bid duly enclosing the relevant and valid exemption certificates from MSME/NSIC. No exemption from payment of EMD is available to any bidder for any other reason whatsoever.

1.14.2. Refund of EMD

The EMD will be refunded to all the unsuccessful bidder(s) within one month from completion of the tender evaluation process. No interest will be allowed on the Earnest Money.. The EMD of the successful bidder will be refunded only after the remittance of Performance Bank Guarantee. Alternatively, the successful bidder shall when his tender is accepted, furnish Performance Bank Guarantee as specified in the clause elsewhere after adjusting the amount deposited by him as earnest money. The earnest money shall retain its character as earnest money deposit, till the successful bidder furnishes the Performance Bank Guarantee in full with or without adjustment of EMD.

1.15.3. Forfeiture of EMD:

Where a person whose tender has been received by IMU-KC intimates that he is withdrawing their tender before the validity period or makes any modification in the terms and conditions of the tender which are not acceptable to the IMU-KC (or) fails to furnish the Performance Bank Guarantee within the prescribed time, the IMU-KC shall without prejudice to IMU-KC's any other right or remedy, be at liberty to forfeit the Earnest Money deposited by such person absolutely.

1.16. Tender Opening, Bidder Participation, Stages of Evaluation (Technical and Price Bid)

- 1.16.1. Technical bids will be opened at the Deputy Registrar's Office in IMU – KC located at the address stated in tender abstract. Any bidder who is willing to observe the tender opening, may, in person or through his authorized representative (max. one on production of authorization letter), be present at the venue and witness the tender opening.
- 1.16.2. The bidder or his authorized representative who are present shall sign a register evidencing their attendance. IMU-KC reserves the right to reschedule the tender opening date (technical / financial bid opening) if the scheduled tender opening day is declared as a holiday for the IMU-KC or due to any other administrative reasons which would be published in IMU-KC website and such rescheduling may not be communicated individually in any other modes.
- 1.16.3. Technical bid (Cover-I) of each bidder shall fulfill the minimum eligibility criteria prescribed in Clause 1.2 and the product offering of the bidder as evidenced in the Annexure II its Schedules (1, 2& 3) and in other places of the bid should comply with the technical specifications of the product as stated in the tender / technical compliance statement to the satisfaction of the IMU-KC.
- 1.16.4. The information furnished by the bidder in Cover - I in the format(s) prescribed as part of the tender document by IMU-KC will form the basis for the techno-commercial evaluation. In exceptional cases, IMU KC reserves the right to obtain any clarifications from any of the bidder. If, in the opinion of the IMU-KC, information and documents supplied in support of the tender do not meet even the single minimum eligibility criteria as per

Annexure II and the any or some of the technical specifications as per clause 2.2 and elsewhere in the tender, as determined by IMU-KC, the tender / product offering will be treated as non-responsive and rejected by the IMU-KC and their Cover II – Price bid shall not be opened for evaluation. The IMU-KC's decision is final and binding, with regard to technical and commercial evaluation. IMU-KC reserves the right to relax the technical specifications, marginally, in exceptional circumstances.

- 1.16.5. After satisfying that all / or some of the bidders have attained the minimum qualifying techno commercial criteria as detailed above, bids of only such techno-commercially qualified bidders i.e. who fulfill all the pre-qualification / eligibility criteria and also comply with the technical specifications, will be considered for further evaluation. A suitable date and time for opening of the Cover II – Price Bids will be fixed and those bidder(s) who are qualified will be intimated through email about the opening of Cover - II – Price Bids or alternatively, the date may be published in IMU-KC website. Other procedures for opening the cover II including the witnessing (by only the technical qualified bidders) the tender opening event, no. of participants etc., will be similar as those for cover-I explained in the earlier para(s).
- 1.16.6. After evaluating the price bids received under Cover II, the bidder who quoted the lowest (L-1) Price will be awarded the work.
- 1.16.6.1. Decision as to whether individual L1 or Group L1 or Total L1 will be taken upon technical bid evaluation, since the equipment are highly technical and interdependent. IMU-KC, as of now prefers Total L1, since there may be composite equipment, which may serve the purpose of all the experiments. If the committee constituted by IMU felt that individual L1 or Group L1 is economically and also technically feasible, then IMU-KC may adopt such evaluation based on individual L1 or Group L1, as the case

may be. The method will be disclosed to the bidders prior to the opening of the Price Bid. If there are some manufacturers or sellers who do not deal with **all** the equipment sought for, they may quote for the product which they manufacture or deal with, however, If IMU decides to go for Consolidated L1, upon technical evaluation, then cover II (price bids) of such bids will not be evaluated and will be returned unopened and EMD will be refunded.

- 1.17. Price bid evaluation will be made based on all-inclusive cost i.e. based on Price inclusive of freight up to delivery at IMU-KC, all applicable taxes & duties, Installation charges, if any, Training cost, if any, AMC for 1st, 2nd and 3rd year immediately after expiry of warranty. However, it would be optional to IMU whether to include or exclude the AMC charges while awarding the contract or decision on such AMC may be taken at the end of warranty period.

Prior to issue of the Order, IMU KC reserves the right to include/modify/exclude specific terms and conditions of Tender, so as to meet contingency situations, which may arise from time to time. Such modifications would be discussed and agreed upon by the successful Bidder taking into consideration the cost, time and other implications. IMU KC also reserves right to change quantities or withdraw some of the items from bill of materials before issuing the order, due to exigencies, if any.

- 1.18. Items against which no rate or price is entered by the bidder will not be paid for and when executed, such items, shall be deemed to have been covered by the other rates and prices in the price bid. Tender price covers supplier's all obligations mentioned in or to be reasonably inferred from the Tender document in respect of the Lab Equipment supply at IMU-KC and includes all kinds of charges and taxes etc and other statutory dues.

1.19. Tie-Break

In case the Price bid of more than one agency is same as L-1, then IMU will be assigning marks to various technical specifications of the product offering of such L-1 bidders and supply will be awarded to the bidder whose technical specifications, is superior among the L-1 bidders. Decision of IMU-KC is final and binding in the determination of superiority or otherwise of the technical specifications.

1.20. IMU KC's right to accept any tender and to reject any or all tenders.

The IMU KC reserves the right to accept or reject any tender / all tenders, and to annul / cancel the tendering process, at any time / stage prior to the award of contract, without thereby incurring any liability to the affected bidder or bidders or without any obligation to inform the affected bidder or bidders of the grounds for the IMU-KC's action.

1.21. Influencing prohibited

Any effort by a bidder to influence the buyer during the processing of tenders or award decision will result in the rejection of his / their bid offered and may also lead to black listing.

1.22. User list:

Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided. (Annexure-II)

1.23. Site Preparation:

Any specific requirements of the site for effective functioning of the equipment offered to be clearly stated in the Technical Bid format (Annexure-II)

1.24. Other Terms and Conditions are enumerated in Annexure –I.

General Description for Supply of Vibration Laboratory Equipment

2.1. Special Conditions of the Tender

2.1.1. Supplier's responsibility for insurance, Safe delivery and all costs and risks

Successful Bidder shall be responsible for the insurance, safe delivery of the goods at IMU – KC. The successful Bidder is responsible for all the costs and risks until the acceptance of equipment by IMU-KC.

2.1.2. Consignee details:

In the event of the placement of the Order, the consignment shall be booked in the name of Indian Maritime University, Kolkata Campus, Kolkata-700088.

2.1.3. No Variation in Prices:

The prices quoted for the goods and services offered, except for any subsequent statutory duties and taxes, shall be firm and not subject to any variation at any stage till the completion of the contract (including warranty and AMC obligations of the supplier) in all respects.

2.1.4. Delivery Time:

The delivery time would commence from the date of communication of purchase order through email by IMU-KC. The bidder is required to deliver and test the complete equipment within 30 days from the date of work order. The time of delivery is essence of this contract and must be clearly stated in the Tender and strictly adhered to.

2.1.5. Delay in Supply& Liquidated Damages:

If there is a delay in supply and If IMU KC is not satisfied with the explanation offered, the successful Bidders Performance Bank Guarantee may be forfeited in full or part to the extent of

Liquidated damages as per next para and / or IMU KC may withhold payment of pending bills in whole or in part. If the Performance Bank Guarantee or any part thereof is forfeited by an order of IMU KC and such order becomes final, the performance bank guarantee shall be invoked in full or in part by IMU-KC. IMU-KC reserves the right to even cancel the order, at any stage, at the cost and risk of the supplier if the delay by the supplier, is inordinate and / or intentional, as determined by IMU-KC.

2.1.6. Liquidated Damages:

If the successful bidder fails to execute the Supply/Works in all respects within the period specified or within such extended period as may be allowed, the successful bidder shall pay a sum equivalent to 0.5% of the value of the total tender price per week (Seven days) or part thereof subject to a maximum limit of 10% of the value of the each of the item tender as liquidated and ascertained damages.

2.1.7. Inspection & Rejection: The supply shall be subject to inspection by IMU KC and IMU KC's decision as to the acceptance of any equipment or rejection of any equipment / goods as not conforming to specification, shall be final and binding on the successful bidder. Such of the equipment / goods, which are rejected, shall be removed by the successful bidder at their own expense and replaced by fresh ones within a reasonable time, as determined by IMU-KC.

2.1.8. It must be clearly understood that the prices quoted in the tender are to include everything required to be done as per the specification and the conditions of tender and supply for the proper execution of supply/works although special mention thereof may have been omitted in the specification. The specifications indicated are for minimum.

2.1.9. The purchaser has the right to change /increase / withdraw the quantities of any items in the tender prior to acceptance by the supplier of the work order issued by IMU-KC. The successful bidder shall agree to supply the additional quantities for the same price and comprehensive warranty in the event the purchaser places a repeat order for some of the items within next six months.

2.1.9.1. The Bidder shall be operating in the field of sales and Service of similar items. He shall have an office with sufficient service engineers trained to provide support services. The Bidder shall also have sufficient spares on hand for providing the uptime as indicated in this tender (Annexure II – Form 4).

2.1.9.2. Methodology:(Annexure II – Form 5)

The Bidder shall furnish a clear methodology in meeting various requirements of this tender with time lines including –

- a) Supply of Vibration Laboratory Equipment with full functionality to measure parameters / list of experiments mentioned in the tender.
- b) Installation
- c) Acceptance Testing
- d) Training
- e) Interface / data transfer to computer with software to facilitate such transfer
- f) Comprehensive Warranty support
- g) Annual Maintenance Contract after warranty period

2.2. Schedule of Minimum Requirement, Technical Specifications& Scope of Supply/Work

2.2.1. Scope of the Tender:

2.2.1.1. Supply of Equipment

The supply shall include complete set of equipment including accessories and spares as described in the subsequent paragraphs of the "Technical Specification" (clause 2.2.3).

2.2.1.2. Installation, Demonstration and User Acceptance Testing:

- i. The supplier is required to do the installation and demonstration of the equipment within 10 days of the arrival of materials at the IMU-KC site of installation; otherwise the penalty clause will be the same as per the supply of materials.
- ii. The successful Bidder shall depute their Service Engineer for demonstration or calibration of the equipment. The Service Engineer shall demonstrate operation of equipment to the satisfaction of IMU-KC. IMU KC may request to demonstrate the functioning of the equipment, after installation, by asking to perform a few experiments and verification of the results either by theoretical or other practical means.
- iii. In case of any mishappening /damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. IMU-KC will not be liable to any type of losses in any form.
- iv. The demonstration proposed to be done by the bidder in proof of correct working of the entire set up both individually and as an integrated system has to be specified in the technical bid format in Annexure. Such demonstration should be acceptable to IMU-KC. If the demonstration proposed by the bidder is not acceptable to IMU-KC, IMU-KC, at its discretion either reject the tender or alternatively ask the bidder to do some other

demonstration, which found by IMU-KC, to be more appropriate.

- v. Inspection and Tests:

The compliance of the equipment with the requirements mentioned in Sl. 2.2.3 – Technical specifications and elsewhere in Tender document should be verifiable with supporting documents like OEM’s manual, Certification from OEM etc. the certificate should be valid.
- vi. The above tests shall demonstrate the satisfactory operation of all sensors as an integrated system covering the full range of facilities of the equipments.
- vii. The acceptance tests for supplied goods shall be carried out at IMU KC by the supplier with the participation of concerned personnel from IMU KC.
- viii. In case of the acceptance tests are not concluded to the satisfaction of IMU KC the supplier shall repair or replace, at the supplier’s cost, the whole or any part of the equipment as may be necessary for conclusion of the acceptance tests to the satisfaction of IMU KC within the reasonable period agreed by IMU KC. Demonstration of performance of the equipment should be done after such repair / replacement for acceptance of IMU-KC.
- ix. IMU KC reserves the right to accept the delivered items with deviations, provided the supplier agrees to rectify the deviations within an acceptable time period. Regarding the acceptance date, decision of IMU KC would be final.
- x. The supplier shall provide necessary consumables till the completion of acceptance testing, without any additional cost.

2.2.1.3. Manuals & Drawings

- a) Two Sets of operation and maintenance instruction manuals for the complete equipment shall be supplied along with the equipment.
- b) Complete technical and functional specifications, operation and maintenance manual for each hardware / cards on the equipment with part numbers and model de-codification documents. (to be supplied in original, photocopy is not acceptable).
- c) Complete engineering details of each system as required for the purpose (experiments and research) the equipments are bought.
- d) Complete system wiring details, input, output, relay contact wiring details as applicable to the scope of supply.
- e) Operation and maintenance manuals for the scope of supply including computers, Data Acquisition Units, interface devices etc. (to be supplied in original, photocopy is not acceptable)
- f) The party shall supply all the software with proper license (including Windows, PC- Motherboard drivers (as applicable to the supplied electronic data acquisition units), Vibration Monitoring system software and any other software as required for all the listed experiments/for the intended purposes.
- g) One set of service agents and depots lists shall be supplied along with the equipment.
- h) In addition to the Manuals given by the Manufacturers, the successful Bidder shall prepare full documentation.

2.2.1.4. General

- a) The equipment in its entirety shall be industry standard suitable to IIT / NIT / Central Universities as determined by IMU – KC.

- b) The equipment is to carry out experiments during regular practical laboratory classes as well as for research. At a minimum the equipment should facilitate planned experiments which are provided at clause 2.2.2 List of Experiments.
- c) All parts and equipment should be brand new and unused. Refurbished items shall not be provided. The bidder shall give a declaration to this effect as per the format acceptable to IMU - KC.
- d) The equipment shall be robust for academic use and shall have to produce results with accuracy, as determined reasonable by IMU-KC. This may be verified by IMU staff by comparing with theoretical calculations.
- e) The required items are mentioned under "BILL OF MATERIALS". Bidders can quote either individually satisfying equipment and / or by one or more comprehensive test equipment satisfying IMU KC requirements.
- f) In case of any ambiguity between "BILL OF MATERIALS" and "LIST OF EXPERIMENTS", supplying equipment to fulfill the requirement of list of experiments as mentioned in clause 2.2.2 will prevail and supersede.
- g) Site Preparation:
The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.

h) Spare Parts:

The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

i. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and

ii. In the event of termination of production of the spare parts:

a) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and

b) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

iii. Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

i) Defective Equipment:

If any of the equipment supplied by the bidder is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Bidder with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if

found before installation and/or during warranty period, shall be replaced within 30 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IMU-KC may consider 'Banning' the supplier and any other remedies, as deemed fit by IMU-KC.

j) Timely intimation of CIF / CIP shipments and Demurrage:

"In case of CIF/CIP shipments, the shipment information shall be provided at least 5 days in advance before landing the shipment along with the documents i.e. invoice, packing list, forwarder Name, address, contact No. in India to save demurrage charges (imposed by Indian Customs). Otherwise these charges will be recovered from the supplier/Indian Agent."

k) Applicable Law:

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.

l) Insurance:

For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. If orders placed on CIF/CIP basis, the insurance should be up to IMU-KC.

m) Packing Instructions:

Each package will be marked on three sides with proper paint/indelible ink, the following:

- i. Item Nomenclature
- ii. Order/Contract No.
- iii. Country of Origin of Goods
- iv. Supplier's Name and Address
- v. Consignee details
- vi. Packing list reference number

2.2.2. List of Experiments

2.2.2.1. Simple Pendulum

- a) Determine oscillation period of pendulum.
- b) Determine centre of gravity on the rod pendulum.
- c) Repeat experiments (a) & (b) with altered length and centre of gravity / inertia of the pendulum.
- d) Study influence of length of the pendulum on the oscillation period.
- e) Determine the mass moment of inertia.
- f) To determine an accurate value for g in the lab and compare it with an empirically calculated value using simple pendulum, compound pendulum and Kater's pendulum.

2.2.2.2. Mass – Spring Systems

- a) Determine the natural frequency of a mass – spring system (single or multi-degree system).
- b) Study the effects of mass and centre of gravity variation (mass distribution) on the natural frequency.

2.2.2.3. Torsional Vibrations

- a) Study angular motion including angular velocity and angular acceleration.
- b) Understand relationship of rotational inertia to angular motion.
- c) Verify the principal of Conservation of Mechanical Energy and angular momentum.

- d) Determine oscillation period as a function of length and diameter of the torsion bar.
- e) Determine the influence of rotational inertia and shape of the torsion bar on the oscillation period.
- f) Decay behavior of torsional vibration.
- g) Determination of the damping of torsional vibration.
- h) Forced torsional vibration, resonance.

2.2.2.4. Forced Vibration with negligible damping

- a) Understand the free oscillations of a mass and spring including beams – simply supported and cantilever.
- b) Understand how energy is shared between potential and kinetic energy.
- c) Understand the effects of damping on oscillatory motion.
- d) Understand how driving forces dominate oscillatory motion.
- e) Natural, Forced and Damped vibrations of a bar – type oscillator.

2.2.2.5. Two degree of freedom torsional vibration

Torsional vibration systems with several weights, two mass torsional vibrator, three mass torsional vibrator.

2.2.2.6. Whirling of Shafts

- a) Determine natural frequency of a rotary oscillator.
- b) Determine influence of mass, stiffness and damping on natural frequency of a rotary oscillator.
- c) Understand the effects of resonance in oscillatory motion, study damped and Undamped resonance.

2.2.3. Technical Specifications

2.2.3.1. Operating environment: Laboratory, +5°C to +40°C, 80% at temperatures < 31°C and linearly interpreted to higher temperatures.

2.2.3.2. Power supply – 250 VAC / 50Hz.

- 2.2.3.3. Items shall be of good quality, non-rusting, durable and be of good workmanship.
- 2.2.3.4. The equipment can be either wall mountable or provided with a vibration free platform.
- 2.2.3.5. The equipment should be capable of being located conveniently in a room of height 3 meters, width of 7 meters and Length of 15 meters.
- 2.2.3.6. The equipment should have a provision for electronic data acquisition units and an interface to desktop computers running Windows or Linux OS. Data connectivity with computer should be through standard ports such as USB or Serial ports.
- 2.2.3.7. The Data Acquisition Units / Software provided should meet the following criteria.

Measure and transmit the requisite values directly to a PC via USB / Serial Ports, where they can be displayed and the results of the experiments analysed graphically using the software included.

- a) Should facilitate real-time traces, data capture, monitoring and display of experiment readings on a computer (PC).
- b) Should facilitate measurement, recording and analysis of frequency responses and shall emulate a digital oscilloscope.
- c) Record data manually or automatically.
- d) Should capture data set by time or by an interval(s) of time.
- e) Log relevant data for printing and later analysis or Exporting the data for use by other software such as Microsoft Excel / Libre OfficeCalc.
- f) Capable of creating and printing charts and data tables.
- g) User friendly GUI.
- h) At least **three (3)** sensor input channels.

- 2.2.4. Bill of Materials (* Refer Schedule 1,2 & 3 to Annexure II – bill of materials for description)
- i. Gravity pendulum and rod pendulum.
 - ii. Free and damped Torsional vibrations.
 - iii. Torsional Vibrations.
 - iv. Free and Forced Vibrations.
 - v. Mass – Spring Systems.
 - vi. Equipment for bending beam vibrations.
 - vii. Whirling of shaft for critical speeds and natural modes of vibrations (Elastic shafts).
 - viii. Trifilar / Bifilar Pendulum.
 - ix. Data acquisition systems for equipments.
 - x. Any other item(s) / spares / accessories not specifically mentioned in the above (sl. i to ix) but required for the fulfilling the corresponding experiments and complete functionality of the equipment listed above (sl. i to ix).

2.2.5. Training and Support

- 2.2.5.1. The supplier shall impart training to IMU KC 2 no. of personnel on operation of the each of the equipment. The training shall be imparted in a phased manner without disrupting the working of the IMU KC.
- 2.2.5.2. The supplier shall make his own arrangements for supplying training material, equipment required for training etc. All training shall be imparted at Kolkata Campus of IMU KC only.
- 2.2.5.3. IMU KC will provide necessary space, infrastructure free of cost for conducting the training.
- 2.2.5.4. The training provided by the supplier shall cover:
- a. Operation of the equipment along with course/reference material for each individual.

- b. Operational level training along with course/reference material for each individual.
- 2.2.5.5. On completion of training, the supplier shall submit an evaluation report on the participants along with course details.
- 2.2.5.6. The supply shall be complete only upon certification to this effect by IMU KC.
- 2.2.5.7. Completion of training is a pre-requisite for acceptance of the equipment.
- 2.2.5.8. All charges pertaining to the training shall be quoted in the price bid separately.
- 2.2.6. Comprehensive Onsite warranty
- 2.2.6.1. Warranty support services: A comprehensive onsite warranty for the supplied equipment shall be provided by the supplier for a minimum of one year from the date of final acceptance of the equipment by IMU KC. The supplier will be notified of any defect or claim arising under this warranty and the warranty support shall be provided at site of IMU-KC.
- 2.2.6.2. If the supplier having been notified fails to remedy the defect within 7 days, IMU KC may proceed to take such remedial action as may be necessary at the supplier's expense. The period that the equipment is out of commission / operation as a result of supplier's failure to remedy the defects notified shall result in extension of the warranty period correspondingly and imposition of penalty (Rs. 5000 per instance which will be adjusted from the performance bank guarantee or any other dues to the supplier).
- 2.2.6.3. All the equipment, accessories and sensors shall have a calibration and maintenance facilities available in India.

2.2.6.4. The characteristics of the electronic sensors & equipment provided should not change by more than 2% under standard laboratory environment, during their regular use within the warranty period. If deviation is noticed, bidder has to replace the components without any financial implication to IMU-KC. In case of non-compliance, the amount of damage as determined by IMU-KC would be adjusted from Performance Bank Guarantee or any other dues payable to the supplier.

2.2.7. Comprehensive Onsite Maintenance during AMC period

The supplier shall provide necessary comprehensive preventive and corrective maintenance on site i.e. by sending the engineer to the IMU KC for attending the maintenance requirements of the supplied equipment. In case of intimation of break-down, the equipment should be restored to normal working condition within a maximum of 7 working days during the period of maintenance. All spares which need replacement during the period of onsite maintenance are to be replaced without any additional cost. Any exception required with regard to the spares to be replaced to be intimated during the pre-bid meeting or by email within 15 days of notification of the tender to the above said email addresses. The conditions specified for warranty may also be applied by IMU – KC during AMC period and vice-versa.

In addition to the onsite maintenance, support should also be available by phone, e-mail to solve the problem as soon as possible during the period of Warranty and Annual Maintenance Contract.

Amount should be quoted separately for comprehensive maintenance for 3 years, which would commence immediately after the expiry of the comprehensive warranty period.

2.2.8. Others

2.2.8.1. Name for Software licence:

Licenses for all the software supplied along with the equipment under the scope of supply shall be in the name of Indian Maritime University. Invoice should be raised in the name of Indian Maritime University.

2.2.8.2. Power Source:

The equipment should normally function under its own power (Rechargeable / dry cell batteries) or external power, fulfilling power source specifications. If rechargeable batteries are used then a battery charger should be supplied meeting the power tolerance requirement.

2.2.8.3. Power Tolerance: The equipment or its battery charger shall operate correctly from a 220 Volts (+/- 15%) and 50 Hz (+/-6%) power supply. It should be capable of withstanding permissible voltage and frequency variations without any damage to the equipment or loss of the information.

2.2.8.4. All equipment, accessories, and items which are useful and necessary shall be deemed to have been included in the scope of work. The installation shall be complete in all details whether such details have been mentioned in the specifications or not.

2.2.8.5. Equipment: New, Unused, Most recent / current with No defect:

The supplier warrants that the equipment supplied under the contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the tender. The bidder further warrants that the equipment supplied under this tender shall have no defect arising from design, materials or workmanship or from any act or omission of the bidder.

2.2.8.6. Data Storage capability:

The equipment should be capable of storing sufficient measured data history in the equipment and should be able to transfer the data stored into a computer. The scope of supply includes all means by way of drivers, software and interface cables and adapters to facilitate such transfer.

2.2.9. Documentation

2.2.9.1. The successful bidder shall provide IMU KC with necessary documents including the following:

- a) Operational and Maintenance Manuals of equipment.
- b) Equipment serial numbers and models.
- c) Test Certificates, Licenses if any.
- d) Acceptance test results and acceptance status.
- e) Training Material.
- f) Full documentation with the software.

2.2.9.2. Hardcopy of the above shall be handed over to nominated personnel of IMU KC. Soft copy of the documents shall also be provided where applicable. Handing over of documents to IMU KC by supplier is a pre-requisite for Acceptance.

2.2.9.3. Manuals for the instruments are to be supplied with respect to operation, maintenance, ordering spares / technical services.

2.2.9.4. Test certificates for all the sensors shall be submitted along with the supplies.

2.2.10. Acceptance/Completion

2.2.10.1. The activity shall be deemed to have been completed with the completion of Supply, Installation & testing of the equipment including training, as determined by IMU-KC.

2.2.10.2. Upon completion of Supply / work and after successful completion of other prerequisites like acceptance testing, Training etc, as prescribed in this document, IMU KC shall receive a written

undertaking from the supplier that the supply / works have been completed and accordingly a certificate of completion would be issued in respect of the supply/works. The warranty period for the supplied system would commence from the date of Acceptance by IMU KC.

2.3. BIDDER'S REPRESENTATIONS AND WARRANTIES

The selected bidder hereby represents warrants and confirms to the IMU-KC that:

- 2.3.1. He has the capability to duly perform its obligations in accordance with the terms of the tender / Agreement and to the satisfaction of the IMU KC, provided, however, that the IMU-KC's judgment in this regard shall be final and binding on the Bidder.
- 2.3.2. The execution of the Agreement for supplying the equipment hereunder by the Bidder to the IMU-KC does not and will not violate, breach any covenants, stipulations or conditions of any Agreement, Deed entered into by the Bidder with any third parties.
- 2.3.3. Bidder shall abide by all laws of the land including, Companies Act, Taxation laws, and all other statutory and other obligations applicable to this contract for supply and IMU-KC will not be responsible non-compliance, if any, by the supplier, in any way what-so-ever.

2.4. BIDDER'S COVENANTS

- 2.4.1. The Goods/ Services to be supplied by the bidder shall be of the quality or sort specified and in every respect equal and answerable to the specifications sent with the tender and shall be subject to the approval of the IMU KC.
- 2.4.2. The Goods/ Services are to be delivered at specified place in IMU KC premises in Kolkata, free of delivery charges as per specified time on Door delivery basis.

- 2.4.3. Delivery of Goods/ Services will not be considered as complete until such goods or materials have been inspected and accepted at the place specified for delivery by IMU KC. The detailed list of components (Equipment and Service) supplied by the bidder and Bill of Materials shall be provided well in advance for facilitating inspection, if any, by IMU KC.
- 2.4.4. Rejected Goods shall be removed by and at the expenses of the bidder within seven days after notice. If not taken away so, the IMU KC may seize the goods or remove the materials on its own and charge the bidder with all expenses incurred on such removal.
- 2.4.5. The tender or any part share or interest in it shall not be transferred directly or indirectly to any person whomsoever without the written consent of IMU KC.
- 2.4.6. The Agreement is non-exclusive and it shall be open to the IMU-KC to procure the items tendered from the market. It shall also be lawful for IMU KC, without giving any notice to the supplier, to purchase in the open market any goods or materials covered by the tender and if such goods or materials are not available to purchase suitable substitute, as to which, the decision of the IMU KC shall be final and binding on the Supplier, in the event of the Supplier;
- a) Having delivered goods or materials not of the contracted quality.
 - b) Having failed to supply goods or materials within the time specified.
 - c) Having refused or being unable to supply goods or materials covered by tender either in whole or in part.
 - d) Any other circumstances which warrants procurement of equipment from market, as per IMU-KC.
- 2.4.7. Any notice to the successful bidder shall be deemed to be sufficiently served, if given or left in writing at his usual or latest

known place of abode or business or sent to the email address specified in the bid submitted.

2.4.8. In these conditions unless there is something in the subject or context inconsistent there with words importing the singular shall include the plural and vice-versa words importing the masculine gender shall include the feminine and the words importing persons shall include bodies corporate/firms etc.

2.4.9. Performance Security:

The supplier shall be required to submit the performance security in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount of 10% of the Purchase Order value within 7 days from the date of receipt of the purchase order/LC and should be kept valid for a period of 60 days beyond the date of completion of warranty period and AMC period if awarded.

Performance Bank Guarantee/ Caution deposit will be refunded / returned only 60 days after successful completion of warranty period. If AMC also awarded, then, Performance Bank Guarantee will be refunded/ returned only after 60 days of successful completion of AMC obligations by the bidder. The refund or return of PBG is subject to the complete fulfilment of the contract obligation by the supplier to the satisfaction of IMU KC and after adjustment of dues to IMU – KC or penalty imposed by IMU – KC.

2.4.10. Force Majeure:

The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or 6 other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

2.5 PAYMENT TERMS

2.5.1 The Supplier shall be paid as per the following terms:

- i. 100% of payment against complete equipment delivery at site, inspection & testing of the equipment after due acceptance by IMU – KC and upon completion of training subject to providing Performance Bank Guarantee to the tune of 10% of the Purchase Order Value.
- ii. The prices quoted should include the base price (inclusive of freight, clearing & forwarding, Insurance coverage till acceptance and delivery at IMU (KC), testing and training along with applicable taxes and duties. The taxes and duties, if any, shall be indicated clearly in the Tender and the same shall be taken into account to arrive at the total price for delivery at IMU, Kolkata Campus at Kolkata. IMU-KC does not bind itself to accept claims for extra payment for items not included in the Tender. Any revision in Statutory levies during the period between placement of Order and successful commissioning of the equipment would be paid by IMU

(KC) on receiving documentary evidence for such revisions against the information furnished in the Tender.

2.5.2 Disbursement of Bills:

With every delivery of goods or materials under this contract, invoices in triplicate shall be sent by the supplier to the IMU KC receiving officer who will retain the original and duplicate copy with him, and return the triplicate copy to the supplier with the actual quantities weights and/or number duly acknowledged thereon after the goods or materials have been inspected and passed as per clause therein before mentioned. The IMU - KC will, after verification of the claim for its correctness, make payment within thirty days after the date of receipt of the claim, complete and correct in all respects, from the supplier. The disbursement will be subject to the delivery, installation, testing, acceptance and training by IMU – KC of all the items ordered.

2.5.3 Setting off of supplier's bills:

IMU-KC shall be entitled to set off the following against and deduct and recover from their bills and any other sums payable by IMU-KC to the supplier at any time:

- i. Tax, levy or any other amount whatsoever which may be required to be deducted by order of any Court/Authority under any law now in force or which may come into force during the currency of this Agreement.
- ii. Any and all amounts which may be or become payable by the Supplier to IMU-KC under this Agreement.

2.6. TERMINATION

2.6.1 In the event of the breach of any of the provisions of contract by the supplier, IMU KC shall have the right to terminate the tender summarily, at any stage.

2.6.2 In the event of IMU KC terminating the contract for breach by the supplier of any of the provisions thereof, the supplier shall be liable for any loss suffered by IMU KC up to the time of the termination of the contract.

2.6.3 In the event of the death, insanity or insolvency of the supplier IMU KC shall have the right to terminate the contract summarily and to purchase in the open market any Goods/ Services covered by the contract. In this case, the supplier shall not be liable for any excess in the price paid, for any such purchases over the tender price.

2.7. Arbitration & Jurisdiction

In the event of disputes, differences, claims and questions arising between the parties hereto arising out of this Agreement or anyway relating hereto or any term, condition or provision herein mentioned or the construction or interpretation thereof or otherwise in relation hereto, the parties shall first endeavour to resolve such differences, disputes, claims or questions by mutual discussion and failing such settlement, the same shall be referred for arbitration by a sole Arbitrator appointed by IMU-KC. Such arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act 1996 or re-enactment thereof for the time being in force and shall be held in Kolkata. In case the Arbitration award is not acceptable to either of the parties, they may approach courts having jurisdiction at Kolkata.

2.8. ADDITIONAL TERMS FOR IMPORTED GOODS

Besides the aforementioned terms the following terms and conditions will be applicable in case imports from foreign countries. With regard to imported goods, if there are conflicts between the terms and conditions mentioned specifically for imports and the

common terms and conditions mentioned elsewhere in the tender, the specific terms and conditions for imports shall prevail:

- i. Rates: Prices quoted must be for destination including freight and insurance charges inclusive of free delivery up to the door of IMU-Kolkata premises, as per details below.
- ii. After Sales Service: In case of imported stores, foreign manufacturing firms should indicate facilities available for after sales service in India without which their offers are liable to be ignored.
- iii. Delivery and Documents:
 - a) Delivery of goods at IMU- KC, will have to be maximum within 60days from the date of issue of the Purchase Order.
 - b) Destination at Kolkata Airport: Kolkata airport/seaport are the closest to IMU – KC, hence destination airport/seaport to be mentioned as Kolkata airport/seaport.
 - c) While transshipment may be allowed, part shipment will not be allowed.
 - d) Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc.and date, description of goods, quantity, name of the consignee, invoice etc.
 - e) The supplier shall mail the following documents to the purchaser with a copy to the insurance company:
 1. 4 Copies of the Supplier invoice showing contract number, goods' description, quantity.
 2. unit price, total amount;
 3. Insurance Certificate if applicable;
 4. Manufacturer's/Supplier's warranty certificate;
 5. Inspection Certificate issued by the nominated inspection agency, if any

6. Supplier's factory inspection report; and
7. Certificate of Origin (if possible by the beneficiary);
8. Two copies of the packing list identifying the contents of each package.
9. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

iv. Payment:

- a) For imported items Payment will be made through irrevocable Letter of Credit (LC). Letter of Credit (LC) will be established in favour of foreign Supplier after the submission of performance security. The letter of credit (LC) will be established on the exchange rates as applicable on the date of establishment. For Imports, LC will be opened for 100% CIF/CIP Kolkata value negotiable through any overseas branch of State Bank of India with unrestricted provision. 70% of the LC amount shall be released on presentation of complete and clear shipping documents and 30% of the LC amount shall be released after the installation and demonstration of the equipment at the Institute site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation and subject to the production of unconditional performance bank guarantee as specified in Clause 2.2.1.4 (g) of tender terms and conditions.

[OR]

- b) 100% Payment Basis: On request by the supplier/s 100% payment by FDD will be made. In this case on receipt of supplier Order Acknowledgement an FDD will be established for total ordered value, thereupon, a Xerox copy of the FDD will be sent to the supplier, which will enable the supplier to send the materials. On satisfactory receipt, installation, testing and

acceptance of the materials and upon completion of training and receipt of Performance Bank Guarantee, the FDD will be released / sent / handed over to the supplier.

Note: Please note FDD/LoC will not be opened unless and until Letter of Acknowledgement in original is received at IMU- KC, directly from the principal (Even in case of firms having subsidiary office in India). The Indian agents are therefore advised to submit quotation after consultation with their respective principals).

- v. Agency Commission: The percentage of ex-works value to be paid to Indian agent in equivalent Indian currency as agency commission as applicable will have to be clearly stated in the quotation. Indian Agency commission (IAC), if any shall be paid after satisfactory installation & commissioning, testing, acceptance of the equipment at the destination and upon completion of training at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration of such agency for restricted items.
- vi. Country of Origin: Country of Origin will have to be stated in the Original Invoice for payment through LoC.
- vii. LoC Amendment: LoC/FDD amendment charges due to mistake on the part of the supplier, if any, will have to be borne by the supplier.
- viii. All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.

Director
IMU-KC

Annexure II

(Technical Bid-Cover 1)

[On the Letter head of the Bidder and to be put in a separate sealed cover]

Tender for "Supply of Vibration Laboratory Equipment" at Indian Maritime University Kolkata Campus at Kolkata.

Ref: IMU-KC's Tender Notification No. IMU-KC/Lab Eqp/2017-18/1 dated: 21.06.2017

From

Name & Address of the Bidder

Ph:

Email:

To

The Director,
Indian Maritime University,
P-19, Taratala Road
Kolkata - 700088.

Dear Sir,

We hereby submit our Technical Bid for "Supply of Vibration Laboratory Equipment" at IMU-KC as detailed below.

1. Experience in the business of providing Similar Supply Since 2012-2013 or earlier:

Sl	Eligibility Criteria details	Bidders Confirmation
1	Whether in the business of Providing Similar Supply Since 2012-2013 or earlier & meet this eligibility criteria (Yes / No)	
a)	Since which Year?:	

b)	Mode of Proofs enclosed:	Page No.
(i)		
(ii)		
(iii)		
(iv)		
(v)**		

** - May add more rows as required

2. A. Similar Supply with minimum value specified in any one of the three set of values (a or b or c) carried out during the last five financial years (2012-13 to 2016-17):

Sl	Eligibility Criteria details	Bidders Confirmation
A	Whether carried out similar supply with minimum value specified in any one of the three set of minimum value of contract (a or b or c) during 2012-2013 to 2016-17& thereby meet this eligibility criteria (Yes / No)	
a)	At least one similar supply with a minimum value of Rs.50 lakhs: (Yes / No)	
b)	At least two Similar Supply with a minimum value of Rs.40 lakhs each (Yes / No)	
c)	At least three Similar Supply with a minimum value of Rs.30 lakhs each (Yes / No)	

2. B. Details of similar supply with minimum value specified in any one of the three set of values (a or b or c) carried out during the last five financial years (2012-13 to 2016-17) [in proof of sl. No. 2-A above):

Sl No	Client-Name Address	Equipment supplied commissioned	Work order ref	Value of supply (Rs. in Lakhs)	Date of commissioning by Bidder	Present Operational Status

** - May add more rows as required

Note: "Similar Supply" means contract for supply of Lab Equipments of the same nature as per the tender with Government / Semi-Government/ Public Sector organisations/ National level educational institute like IIT, IIM, NIT and Universities/ Public Limited Companies.

3. Minimum Annual turnover

(Rs. In Lakh)

Sl	Eligibility Criteria details	Bidders Confirmation	
	Whether the bidder has a minimum Annual turnover of Rs.3 Cr. during each of the last three Financial years (2013-14, 2014-15 and 2015-16) [YES / NO]		
	Year / Proof enclosed	Turnover	Page No.
(i)	2013-14 /		
(ii)	2014-15 /		
(iii)	2015-16 /		

4. INFRASTRUCTURAL FACILITIES FOR SERVICE SUPPORT

Sl No.	Address where Service Centre is situated	Contact Person	Availability of Stores (YES/NO)	Year of Establishment

** - May add more rows as required

5. METHODOLOGY

Item Description	Methodology Adopted along with time plan
a) Supply of Vibration Laboratory Equipment with full functionality to measure parameters / list of experiments mentioned in the tender.	
b) Installation	
c) Acceptance Testing	
d) Training	

e)	Interface / data transfer to computer with software to facilitate such transfer	
f)	Comprehensive Warranty support	
g)	Annual Maintenance Contract after warranty period	

** - May add more rows as required

6. COMPLIANCE STATEMENT

Sl. No	Item Description	Compliance to Specification Yes/No
1	Schedule 1, 2 & 3 to Annexure -II enclosed to be filled-up	

7. Other Eligibility Criteria & Essential requirements and other details :

Sl	Particulars	Bidders Confirmation / Details	Details of Proof enclosed	Page No.
(i)	Whether the Bidder have a valid PAN and VAT or Excise Registration [YES / NO]		Copy of PAN & Registration Certificate enclosed)	
(ii)	Whether the Bidder has been debarred or blacklisted by any Government department / agency so far on account of fraudulent or corrupt practices or inefficient / ineffective performance [YES/NO]		Declaration to this effect	
(iii)	Whether the Bidder has attached EMD for an amount of Rs.90,000 from Nationalized or scheduled bank [YES/NO]		Original DD No. _____ enclosed with technical bid	
(iv)	OEM Authorisation etc. (as per clause 1.2.5)- Annexure -III		Yes / No	
(v)	Other Modes of Proof enclosed			
(vi)	<u>Name, Designation, Address and Telephone No. of Authorized person(s) of Firm / Agency:</u>			

(a)	Type of the Organisation (Sole Proprietorship / Partnership / Pvt Ltd Co / Public Ltd Co. Etc	
(b)	Name of the Authorised Signatory with Designation	
(c)	Address of the Bidders	
(d)	Email Address	
(e)	Contract Numbers	
(f)	Any other Remarks from Bidders:	
(g)	Specific site preparation / site infrastructure required for effective functioning of equipment required (Yes/ No). If yet to be detailed in this column or to be enclosed.	

I am also enclosing bidder memorandum and undertaking duly signed by me /us.

Declaration

I / We certify that all the particulars furnished above are true and correct and based on documentary evidence, and that I /we understand that if any of the above particulars is found to be false or misleading, our bid is liable to be summarily rejected at any stage and my /our firm is liable to be blacklisted / debarred by IMU-KC for at least 3 years, in addition to any other right or remedy available to IMU-KC including forfeiture of EMD, Performance Bank Guarantee etc.

Date:

Signature with Seal of Authorized Signatory

Place:

Schedule 1 to Annexure II - List of Experiments

List of Experiments	Whether the Experiments is possible with bidder's offer (Yes / No)	If Yes, by which Equipment with Sl. No. in the Annexure-1
i. Simple Pendulum		
(a) Determine oscillation period of pendulum		
(b) Determine centre of gravity on the rod pendulum		
(c) Repeat experiments (a) & (b) with altered length and centre of gravity / inertia of the pendulum		
(d) Study influence of length of the pendulum on the oscillation period		
(e) Determine the mass moment of inertia		
(f) To determine an accurate value for g in the lab and compare it with an empirically calculated value using simple pendulum, compound pendulum and Kater's pendulum		
ii. Mass – Spring Systems		
(a) Determine the natural frequency of a mass – spring system (single or multi-degree system)		
(b) Study the effects of mass and center of gravity variation (mass distribution) on the natural frequency		
iii. Torsional Vibrations		
(a) Study angular motion including angular velocity and angular acceleration		
(b) Understand relationship of rotational inertia to angular motion		
(c) Verify the principal of Conservation of Mechanical Energy and angular momentum		
(d) Determine oscillation period as a function of length and diameter of the torsion bar		
(e) Determine the influence of rotational inertia and shape of the torsion bar on the oscillation period		
(f) Decay behavior of torsional vibration		
(g) Determination of the damping of torsional vibration		
(h) Forced torsional vibration, resonance		
iv. Forced Vibration with negligible damping		
(a) Understand the free oscillations of a mass and spring including beams – simply supported and cantilever		
(b) Understand how energy is shared between potential and kinetic energy		
(c) Understand the effects of damping on oscillatory motion		
(d) Understand how driving forces dominate oscillatory motion		
(e) Natural, Forced and Damped vibrations of a bar – type oscillator		
v. Two degree of freedom torsional vibration		
(a) Torsional vibration systems with several weights, two mass torsional vibrator, three mass torsional vibrator		
vi. Whirling of Shafts		
(a) Determine natural frequency of a rotary oscillator		
(b) Determine influence of mass, stiffness and damping on natural frequency of a rotary oscillator		
(c) Understand the effects of resonance in oscillatory motion, study damped and Undamped resonance		

Schedule 2 to Annexure II - Technical & other Specifications

Technical Specifications	Whether the bidders offer complies with Tech. Specifications. (Yes/No)	Remarks
i. Operating environment: Laboratory, +5°C to +40°C, 80% at temperatures < 31°C and linearly interpreted to higher temperatures		
ii. Power supply – 250 VAC / 50Hz		
iii. Items shall be of good quality, non-rusting, durable and be of good workmanship.		
iv. The equipment can be either wall mountable or provided with a vibration free platform.		
v. The equipment should be capable of being located conveniently in a room of height 3 meters, width of 7 meters and Length of 15 meters		
vi. The equipment should have a provision for electronic data acquisition units and an interface to desktop computers running Windows or Linux OS. Data connectivity with computer should be through standard ports such as USB or Serial ports.		
vii. The Data Acquisition Units / Software provided should meet the following criteria.		
(a) Measure and transmit the requisite values directly to a PC via USB / Serial Ports, where they can be displayed and the results of the experiments analysed graphically using the software included.		
(b) Should facilitate real-time traces, data capture, monitoring and display of experiment readings on a computer (PC)		
(c) Should facilitate measurement, recording and analysis of frequency responses and shall emulate a digital oscilloscope		
(d) Record data manually or automatically		
(e) Should capture data set by time or by an interval(s) of time		
(f) Log relevant data for printing and later analysis or Exporting the data for use by other software such as Microsoft Excel / Libre OfficeCalc		
(g) Capable of creating and printing charts and data tables		
(h) User friendly GUI		
At least three (3) sensor input channels		
All other specifications mentioned in the tender(bidders to specify which is not complied in Remarks Col.):		
a)		
b)		

Schedule 3 to Annexure II - Detailed Bill of Materials offered with compliance

Items Quoted for Supply of Vibratory Laboratory Equipment						
SI No.	Item Description	Make & Model	No. of Apparatus	Specifications	Experiments proposed* section - 2	Whether meet the required specifications stated in the tender (yes / No)
				(To be read in conjunction to sections - 2 and 3)		
1	Gravity pendulum and rod pendulum		1	Adjustable length and weight		
2	Free and damped Torsional vibrations		1	3 different diameter torsion bars, two different masses, with dampener		
3	Torsional Vibrations		1	5 different torsional bars, with different diameters,		
4	Free and Forced Vibrations		1	3 different spring stiffness, variable excitation frequency at least 0 – 50 Hz, variable damping – atleast 5 – 15 N.s/m		
5	Mass – Spring Systems		1	Three different masses, three different stiffness, 2 Degree of Freedom		
6	Equipment for bending beam vibrations		1	Cantilever, simply supported beams, three different material beams, three weights		
7	Whirling of shaft for critical speeds and natural modes of vibrations (Elastic shafts)		1	Different shaft diameter, lengths, different bearing clearances, controllable motor speed – range – atleast 0 to 6000 rpm		
8	Trifilar / Bifilar Pendulum		1	Rotary and pendulum oscillation experiments with 3 different masses on pendulums		
9	Data acquisition systems for equipments		1	3 channel at least, should include compatible software. Should comply with 3 VII		
10	Any other item(s) not included in the specification but required for the functionality of the equipment					
a						
b						

SUPPLIER'S AUTHORISATION FORM

To
 Director,
 Indian Maritime University
 Kolkata Campus
 P-19, Taratala Road
 Kolkata-700088
 West Bengal, India

Ref: Tender No. _____

Sir,

WHEREAS _____ who are official producers / authorized Sales and Service dealers, of _____ do hereby authorize _____ located at _____ (to submit a bid and sign Tender with you for resale and support of the following Products supplied by us, for the quantities, specifications and delivery schedule called for by the Schedule of Requirements associated with the above Invitation for Bids:

Product Description	Type

We hereby extend to you a full guarantee and warranty and maintenance support, availability of spares for 5 yrs from the date of submission of the tender, in accordance with the Conditions of Tender along with the standard product warranty, and duly authorize the Bidder to act on our behalf in fulfilling all warranty and support obligations with respect to the above-listed products offered for resale by the Bidder in relation to this Invitation for Bids.

Name _____ in the capacity of _____

Signed

Duly authorized to sign the authorization for and on behalf of _____

Dated on _____ day of _____

Note: This letter of authorization must be on the letterhead of the supplier, must be signed by a person competent and having the power of attorney to bind the supplier, and must be included by the Bidder in its bid.

Annexure IV

BIDDER MEMORANDUM & UNDERTAKING

[to be signed enclosed with technical bid by the bidder.]

1. General Description
Tender for "Supply of Vibration Laboratory Equipment" at Indian Maritime University Kolkata Campus at Kolkata. Tender No. IMU-KC/Lab Eqp/2017-18/1 dated: 21.06.2017.
2. Period of Contract:
Outright supply with one year warranty and Annual Maintenance Contract for subsequent 3 years.
3. Forfeiture of Earnest Money Deposit & Undertakings by the Bidder
Should this tender be accepted in whole or in Part, I / we here agree:
 - a) To terms and abide and fulfil all conditions annexed hereto and all the terms and provisions contained in the all parts of the tender documents so far as applicable and/or in default thereof the EMD paid by me will be forfeited in favour of IMU-KC.
 - b) To execute all the supply and services referred to there in the tender documents upon the terms and conditions contained or referred to therein and carryout such deviations as may be ordered by IMU.
4. This is to certify that I/We before signing this bid have read and fully understood all the terms and conditions and instructions contained therein and undertake to abide by the all the terms and conditions laid down in the tender/bid documents.
5. I/We abide by all the laws and statutory provisions applicable to the contract.

SIGNATURE.....

FOR AND ON BEHALF OF

DATE.....

Annexure V

FORM OF BANK GUARANTEE

Bank Guarantee No: _____ Date: _____ Valid up to _____

To
Indian Maritime University
Kolkata Campus, P-19, Taratala Road
Kolkata - 700 088

Sir,

In consideration of Indian Maritime University, Kolkata Campus, Kolkata _____ a having its Campus at P-19, Taratala Road, Kolkata - 700 088, West Bengal (hereinafter referred to as "IMU (KC)" which expression shall mean and include its successors and assignees and having an Order No. _____ dated _____ for _____ (hereinafter called "The Contract") which expression shall include all the amendments thereto with _____ having its Registered Office at _____ (hereinafter referred to as "The Supplier"), which expression shall unless repugnant to the context or meaning thereof, shall include all its successors, administrators, executors and assignees and IMU (KC), having agreed that the Supplier shall furnish the IMU (KC), Kolkata a Bank Guarantee for of _____ (Rupees _____ only) as per the terms of Tender document No. _____ dated _____ and Order dated _____.

We, _____ registered under the laws of India having its registered / head office at _____, (hereinafter referred to as the Bank) which expression shall unless repugnant to the context of meaning thereof, include all its successors, administrators, executors and permitted assignees do hereby guarantee and undertake to pay immediately on first demand in writing and any/all monies to the extent of Rs. _____ (Rupees _____ only) without any demur, reservation, contest or protest and/or without any reference to the Supplier. Any such demand made by the IMU (KC), on the Bank by serving return notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute pending before any Court, Tribunal, Arbitrators or any other

Authority and/or any other matter or things whatsoever, as liability under these presents being absolute and unequivocal. We agree that Guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by IMU (KC), in writing. This guarantee shall not be determined, discharged or affected by liquidation, winding up, dissolution or insolvency of the Supplier and shall remain valid, binding and operating against the Bank.

The Bank also agrees that IMU (KC), of its option shall be entitled to enforce this Guarantee against the bank as a principal debtor, in the first instance, without proceeding against the Supplier and notwithstanding any security or other guarantee that IMU (KC), Kolkata may have in relation to the Supplier's liabilities.

The Bank, further agrees that IMU (KC), shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Supplier from time to time or to postpone for any time or from time to time exercise of any of the powers vested in IMU (KC), against the said the Supplier and forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Supplier or for any forbearance, act or omission on the part of IMU (KC), or any indulgence by IMU (KC), to the said Supplier or any such matter or thing whatsoever which under the laws relating to the sureties would, but for this provision have effect of so relieving us.

The Bank further agrees that the guarantee herein contained shall remain in full force until _____ and all dues of IMU (KC), Kolkata under or by virtue of this contract have been fully paid and its claim satisfied or discharged or till IMU (KC), discharges the guarantee in writing, whichever is earlier.

This guarantee shall not be discharged by any change in our constitution, in the constitution of IMU (KC), or that of the Supplier.

The Bank confirms that this Guarantee has been issued with observance of the appropriate laws of the country of issue.

The Bank also agrees that this Guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive

jurisdiction of Indian Court of the place from where tenders have been invited.

We further agree that as between us and IMU (KC), for the purpose of this Guarantee any notice given to us by IMU (KC), that the money is payable by the Supplier and any amount claimed in such notice by IMU (KC), shall be conclusive and binding on us notwithstanding any difference between IMU (KC), and the Supplier or any dispute pending before any Court, Tribunal Arbitrator or any other authority. We further agree that this Guarantee shall not be affected by any change in our constitution or that of Supplier. We also undertake not to revoke this Guarantee during its currency.

Notwithstanding anything contained herein above, our liability under this Guarantee is limited to Rs. _____/- (Rupees _____ only) and Guarantee shall remain in force until _____.

We must receive any claim under this Guarantee before the expiry of this Bank Guarantee. If we have received no such claim by the said date, the rights of IMU (KC), under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the IMU (KC), Kolkata's right under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorized officer has set its hand and stamp on this _____ day of _____ 2017 at _____.

Date: _____ Authorized Signatory of the bank
(with Bank Seal)

Place:

Witness No.1

Witness No.2

INDIAN MARITIME UNIVERSITY - KOLKATA CAMPUS
TENDER NO. IMU-KC/Lab Eqp/2017-18/1 dated: 21.06.2017

Tender for
"Supply Of Vibration Laboratory Equipment" at
Indian Maritime University - Kolkata Campus at Kolkata

PRICE BID

VOLUME-II

Annexure VI

Price Bid (Cover II)

FORM OF TENDER

NOTE: This Memorandum forms part of the Tender and this should be duly filled in, signed & sealed and enclosed along with the Tender. Note: This Memorandum forms part of the Tender must be on the letterhead of the supplier, duly filled in, signed & sealed and enclosed along with the Tender.

To
Director,
Indian Maritime University
Kolkata Campus
P-19, Taratala Road
Kolkata-700088
West Bengal, India

Ref: Tender No. IMU-KC/Lab Eqp/2017-18/1

Sir,

WHEREAS _____ who are official producers / authorized Sales and Service dealers, of _____ do hereby authorize _____ located at _____ to submit a bid and sign Tender with you for sale and support of the following Products supplied by us, for the quantities, specifications and delivery schedule called for by the Schedule of Requirements associated with the above Invitation for Bids:

We hereby extend to you a full guarantee and warranty and annual maintenance support, availability of spares for the period covering warranty and annual maintenance contract period from the date of submission of the tender, in accordance with the Conditions of Tender along with the standard product warranty, and duly authorize the Bidder to act on our behalf in fulfilling all warranty, annual maintenance contract and support obligations with respect to the above-listed products offered for resale by the Bidder in relation to this Invitation for Bids.

SIGNATURE.....

FOR AND ON BEHALF OF

DATE

INDIAN MARITIME UNIVERSITY- Kolkata Campus

Priced Bill of Quantities for "Supply Of Vibration Laboratory Equipment" at Indian Maritime University- Kolkata Campus at Kolkata.

PRICE BID

"Supply of Vibration Laboratory Equipment" at Indian Maritime University Kolkata Campus as per the technical specifications and scope of work mentioned in Annexure-I of the tender document complying with all the conditions stipulated in various parts of the tender documents including its annexure and schedules. The rate is inclusive of all taxes, packing, freight up to IMU-KC, Insurance up to IMU-KC, Installation, training, Testing, warranty and annual maintenance obligations etc. the percentage of taxes & duties included in the price shall be clearly indicated. The rates shall be firm and final. Nothing extra shall be paid on any account. In the price bid/financial bid, the vendor should clearly mention the final price breakup i.e. ex-work price/FCA price, FOB price, CIP/CIF price & FOR IMUKC, Kolkata Campus price, as applicable in their bid.

Detailed Price Bid is enclosed as Schedule 4 (Price Bid form for domestic supply) & Schedule 5 (Price Bid form for imports).

Yours faithfully,

Date

Place: Signature with Seal of Authorized Signatory

Schedule 4 to Annexure VI - Price Bid form for domestic supply

Sl. No	Description and Specifications of the items.	Make & Model	Qty	Rate per unit	Excise Duty	CST/VAT	All other taxes etc.	Total Amount inclusive of all taxes & duties	Comprehensive Onsite Maintenance for 1st yr immediately after warranty (Amount)	Comprehensive Onsite Maintenance for 2nd yr immediately after warranty (Amount)	Comprehensive Onsite Maintenance for 3rd yr immediately after warranty (Amount)	Total
1	2		3	4	5	6	7	8=5+6+7	9	10	11	12=8+9+10+11
Supply of Vibration Laboratory Equipment												
1	Gravity pendulum and rod pendulum											
2	Free and damped Torsional vibrations											
3	Torsional Vibrations											
4	Free and Forced Vibrations											
5	Mass – Spring Systems											
6	Equipment for bending beam vibrations											
7	Whirling of shaft for critical speeds and natural modes of vibrations (Elastic shafts)											
8	Trifilar / Bifilar Pendulum											
9	Data acquisition systems for equipments											
10	Accessories											
11	Any other item(s) not mentioned in the specification but is required for ensuring functionality of the equipment.											
a												
b												
c												
Total Amount in Figures												
Total Amount in Words												

Note: wherever the amounts or field in the format is based on percentages, such percentage also to be mentioned within brackets.

Name
Place
Date

Signature

Schedule 5 to Annexure VI - Price Bid form for domestic supply

Sl No.	Description and Specifications of the items.	Make & Model	Curr	QTY	Unit Price	Agency Commission if applicable	Discount (Educational or other discounts)	Ex - Works Price	Packing + Handling + DOC+ Inland freight + FCA charges	FOB / FCA price	Insurance + Freight	Total CIP/CIF Kolkata Air Port	CIP IMU Kolkata Price (Freight and Insurance charge from Kolkata Air Port to IMU Kolkata)	Clearing Charges in India	Installation & commissioning charge if any	Custom duty	Total before AMC charges	Comprehensive Onsite Maintenance for 1st yr immediately after warranty (Amount)	Comprehensive Onsite Maintenance for 2nd yr immediately after warranty (Amount)	Comprehensive Onsite Maintenance for 3rd yr immediately after warranty (Amount)	Grand Total (inclusive of AMC charges.)			
	1	2	3	4	5	6	7	8=5+6+7	9	10=8+9	11	12=10+11	13	14	15	16	17=12+13+14+15	18	19	20	21=17+18+19+20			
1	Gravity pendulum and rod pendulum																							
2	Free and damped Torsional vibrations																							
3	Torsional Vibrations																							
4	Free and Forced Vibrations																							
5	Mass – Spring Systems																							
6	Equipment for bending beam vibrations																							
7	Whirling of shaft for critical speeds and natural modes of vibrations (Elastic shafts)																							
8	Trifilar / Bifilar Pendulum																							
9	Data acquisition systems for equipments																							
10	Any other item(s) not mentioned in the specification but is required for ensuring functionality of the equipment.																							
a																								
b																								
c																								
Total Amount in Figures																								
Total Amount in Words																								

Note:

- (i) Vague terms like "packing, forwarding, transportation etc. extra" without mentioning the specific amount will not be accepted. Such offers shall be treated as incomplete and rejected. Bidders shall indicate their rates in clear/visible figures and shall not alter/overwrite/make cutting in the quotation.
- (ii) Rate of Foreign Exchange shall be the rate prevailing on the date of quotation opening.
- (iii) Wherever the items are quoted in foreign currency, Name of the currency to be clearly specified. Ex USD , Euro etc
- (iv) Wherever the amounts or field in the format is based on percentages , such percentage also to be mentioned within brackets.

Name
Place
Date

Signature