

# TENDER FOR SUPPLY, INSTALLATION AND DEMONSTRATION OF LABORATORY EQUIPMENT (SI Engine – Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open- ECU operation) FOR DEPARTMENT OF MECHANICAL ENGINEERING IN INDIAN INSTITUTE OF TECHNOLOGY DHARWAD

#### NOTICE INVITING TENDER (NIT) / RFP

Tender No.	IITDH/MMD/ME/2019-20/113	
Description	TENDER FOR SUPPLY, INSTALLATION AND DEMONSTRATION OF LABORATORY EQUIPMENT (SI Engine – Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open- ECU operation) FOR DEPARTMENT OF MECHANICAL ENGINEERING IN INDIAN INSTITUTE OF TECHNOLOGY DHARWAD	
Tender Date	29.01.2021	
Tender Category	Goods	
Tender Type	Open Tender	
No. of Covers	2	

#### Covers Information / Submission of Bids

Cover No.	Cover Type	Description	
1	Technical	Schedule of Requirement and Compliances, Bidders Information, Previous Supply Orders etc.	
2	Financial	Financial Bid	

#### Two Bid System: -

The two bid system will be followed for this tender. In this system bidder must submit their offer in separate sealed envelopes as – <u>Technical Bid (Envelope No. A)</u> and <u>Commercial Bid (Envelope No. B)</u>.

Both these sealed covers are to be put in a bigger cover which should also be sealed and duly super-scribed with our Tender No. & Due Date and to be submitted to IIT Dharwad.

<u>Note:</u> The technical offer should not contain any price information. If the price quoted is submitted in technical bid the tender will be rejected by IIT Dharwad.

Initially Technical Bids will be opened and evaluated by the purchase committee. Commercial bids of only Technically qualified bidders will be opened later.

Contract/ Purchase Order will be awarded to the lowest bidder (L-1) identified.

Form of Contract	Buy
Payable to:	The Registrar, IIT Dharwad
Payable at:	Hubli-Dharwad
Bid Validity (Days):	90 Days
Period of Work/Delivery Period (Days)	45 Days
Start date for Submission of queries via email to armm@iitdh.ac.in	29.01.2021



End date for Submission of queries via email to armm@iitdh.ac.in	05.02.2021 till 11:00 AM
Date of rebuttal/reply of queries (to be uploaded on the website) and publishing revised tender (if required)	
Contract Type:	Open Tender
Delivery Location:	IIT Dharwad, Karnataka, India
Pin Code	580011
Bid Submission Start Date & Time	29.01.2021
Bid Submission End Date & Time	19.02.2021 till 10:00 AM
Place of Submission of Bid	The Assistant Registrar (MMD), IIT Dharwad Off Pune Bengaluru Highway, Near High Court, Dharwad, Karnataka- 580011, India
Bid Opening Date & Time	19.02.2021 at 11:00 AM
Bid Opening Place	The Assistant Registrar (MMD), IIT Dharwad Off Pune Bengaluru Highway, Near High Court, Dharwad, Karnataka- 580011, India
Other Terms & Conditions	Warranty as per mentioned in technical specification
Tender Inviting Authority:	The Assistant Registrar (MMD), on behalf of Director, IIT Dharwad Address: Off Pune Bengaluru Highway, Near High Court, Dharwad, Karnataka- 580011, India

Sd/-Assistant Registrar (MMD), IIT Dharwad (For and on behalf of Director, IIT Dharwad)



### Section - I: Invitation of the Bids & Submission Procedure details

- 1. Indian Institute of Technology Dharwad invites sealed tenders (under two bid system) from reputed suppliers/manufacturers OR authorized dealers for supply, installation and demonstration of laboratory equipment (SI Engine Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open- ECU operation) for Department of Mechanical Engineering in Indian Institute of Technology Dharwad as per the Technical Specifications given in the schedule annexed to the tender.
- 2. The bidder should note that the technical specifications mentioned in **Section IV** form the core of the product. The offers must strictly be as per the specifications given. At the same time, it must be kept in mind that mere copying of our specifications in the quotation shall not make the technical bid eligible for consideration. A bid has to be supported with original catalogue of the quoted item duly signed by the principals and the same must be sent along with the technical bid. Non-compliance with above shall be treated as incomplete/ambiguous and the bid may be ignored without giving an opportunity to the bidder for further clarification/negotiation etc.
- 3. In order to specify/modify technical specifications of the equipment and clarify various issues as may arise, a query session (by email) for clarification is provided. Resultant rebuttal/re-publishing of modified RFP (as the case may be) will be published, if required. The bidders are advised to utilise the period given for clarifying any issue pertaining to RFP and to bring out any limitation / suggestion in the RFP. After the period is over, no issue will be addressed and the institute will assume general acceptance of RFP terms and conditions. Prospective bidders have to submit their bids post rebuttal/modification in RFP (as the case maybe).
- 4. Any item not specifically mentioned in the tender document but essential in the opinion of the bidder for successful supply, installation and demonstration of laboratory equipment (SI Engine Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open- ECU operation), should be brought to the notice of the IIT Dharwad within the pre-bid clarification period and before end date of submission of queries. On clearance from our side, the same may be included in the modified RFP (as the case may be). However, the decision as to whether to consider such items or not, rests with the Institute.
- 5. The bidder shall ensure that the bid submitted by him includes all accessories (as per annexures) for full execution of contract. The bidder shall not charge extra for additional items required to meet the operational requirement at the stage of installation and commissioning.
- 6. Quantity requirements of each item as per the specification enclosed at Section IV.

Sl. No.	Particulars of the item(s)	Requirement
(a)	SUPPLY, INSTALLATION AND DEMONSTRATION OF LABORATORY EQUIPMENT (SI Engine – Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open- ECU operation) FOR DEPARTMENT OF MECHANICAL ENGINEERING IN INDIAN INSTITUTE OF TECHNOLOGY DHARWAD	Individual item requirements as per <u>Section IV</u>

7. It may kindly be noted by all the prospective bidders that the <u>tender will be awarded to the</u> lowest successful bidder (L-1) for Grand Total (as per tender subject).



#### Procedure for Bid submission

- 8. Every page, containing the said procedure for submission of bid and other important conditions, are to be signed by the bidder (to be serially numbered & bounded) and to be submitted along with their Technical bids towards their acknowledgement that they have gone through all the contents in these pages and in the Annexure as well and they are agreeing to comply to all of the conditions mentioned there. Non adherence to this may lead to the disqualification of the bid without further notice.
- 9. Two bid system: The offers/bids are to be submitted under a two bid system, namely (i) Technical Bid and (ii) Commercial Bid. The Technical Bid must contain all the details as specified in the Annexures along with the terms and conditions whereas Commercial Bid must indicate the quantity & rate only. There must not be any price element in the technical bid.
- 10. Sealing & marking of bid: The tender should be submitted in a proper manner with index for easy identification i.e.: -

Envelope Number	To be super-scribed as	
A	Technical Bid documents	
В	Commercial Bid / Price Bid / BOQ	

**Envelope** – **A** (duly sealed): should contain the documents as listed under Technical Bid Qualification.

**Envelope** – **B** (duly sealed): should contain the Commercial Bid (strictly as per the format provided).

Both the above envelopes should clearly be marked on top about the type of envelopes (i.e. A or B), details of contents in envelopes and name of agency submitting the bid.

The envelopes (A & B) after sealing must be kept in one bigger envelope and shall be addressed to: The Assistant Registrar (MMD)

IIT Dharwad, Off Pune Bengaluru Highway,

Next to High Court, Dharwad - 580011, Karnataka, KA, INDIA

The bigger envelope must be sealed and must bear the following identification on top: -

- a) Tender for 'SUPPLY, INSTALLATION AND DEMONSTRATION OF LABORATORY EQUIPMENT (SI Engine Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open- ECU operation)'
- b) Tender Number: Date: and
- c) Name and Address of the Bidder.

If the outer envelope is not sealed and not marked as above, the Institute will assume no responsibility for the misplacement or premature opening of Bid.

11. Submission of tender: The tender can be personally dropped in the tender box (kept near the IIT Dharwad building entrance outside MMD Section under supervision of a security guard) on all working days during working hours (except Saturday, Sunday & Holidays) before the date and time as specified in the Tender Notice and up to 10.00 AM on the last date of submission of tender. The tender can also be sent by registered post to The Assistant Registrar (MMD), Indian Institute of Technology Dharwad, Off Pune Bengaluru Highway, Next to High court, Dharwad - 580011, Karnataka, INDIA. Tender shall not be received after expiry of the time as specified in the tender notice. Late bids will not be accepted. However, in case the due date of tender submissions happens to be a holiday or office is closed due to any reason, then the tender submission date will automatically extend to the next working day (end submission time remains same).



#### 12. TECHNICAL BID DOCUMENTS & ELIGIBILITY CRITERIA:

Only those bidders fulfilling the following Eligibility Criteria (supported by documents) are expected to participate in the Tender (all criteria to be mandatorily fulfilled for technical qualification): -

S. No.	Eligibility Criteria	Document required
a	Duly signed & stamped copy of the entire tender document.	The entire tender document to be duly signed & stamped by the bidder on each page.
b	PAN Card and GST certificate	Copy of PAN Card and GST certificate to be provided.
С	Income tax returns (ITRs) for last three consecutive financial years	Copy of Income tax returns for last three consecutive financial years (period from 2017-18, 2018-19 and 2019-20).
d	Proof of establishment of company/business for a period of more than 3 years.	The Bidder must be a reputed supplier/manufacturer/ authorized dealer / authorized distributor/ authorized stockist/ channel partner in the business of supply, installation and demonstration of laboratory equipment (SI Engine – Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open-ECU operation) for a period not less than 3 years (i.e. must be in this business from October 2016 or earlier). The certificate of incorporation or any other relevant certificate to this effect is required to be enclosed.
e	Previous experience & copy of performance certificates along with Purchase Orders	Copy of at-least one performance certificate (along with purchase order) of supply, installation and demonstration of laboratory equipment (SI Engine – Automotive, 4-Stroke, Computerized BS6 Petrol Engine with Open-ECU operation) to any IITs/ NITs/ IISc/ IISERs/ Central Universities/ laboratories of national importance.
f	Proof that the bidder / Manufacturer had not been blacklisted or debarred anywhere in India or abroad by any organization.	A Certificate/Undertaking on the letter head of the Company to the effect that the bidder/ Manufacturer had not been blacklisted or debarred anywhere in India or abroad by any organization.
g	<ul> <li><u>Duly filled and completed Section-IV</u></li> <li>Compliance for commercial terms of tender</li> <li>Compliance for technical specifications of the equipment to be supplied</li> <li>Bidders information &amp; Reasonability of prices</li> </ul>	<ul> <li>The following information on the letter head of the company / bidder:</li> <li>Compliance for commercial terms of tender</li> <li>Compliance for technical specifications of the equipment to be supplied</li> <li>Bidders information &amp; Reasonability of prices</li> </ul>

13. The tenderer must submit all documents required for evaluation of technical bid and sought in the RFP as forming part of technical evaluation with signature and seal of the competent authority of the firm. In the event of non-receipt of any of the documents forming part of Technical Bid, tenderer may be disqualified from the process. No paper relating to the technical bid will be received during the Technical Bid evaluation or afterwards except for cases recommended & decided by the Procurement Committee. Further, any separate correspondence in the matter shall also not be entertained.



- 14. During evaluation of the Technical Bid, the Procurement Committee will scrutinize the documents mentioned above and may forward any or all the documents to the concerned authorities for verification and authentication. In case of any document(s) as submitted by the tenderer is found/reported to be fake, the tenderer will be out of the tendering process and suitable legal action may be initiated against the tenderer.
- 15. Besides, scrutinizing the documents submitted with the Technical Bid, the tenderer may be interviewed by the Committee to assess the eligibility, capability, and suitability of the tenderer. As such, the presence of the tenderer or any authorized representative of the tenderer in the Technical Bid meeting & commercial bid opening or as and when desired by authorities of IIT Dharwad is preferable.
- 16. The above mentioned basic eligibility conditions and additional clauses are broad guidelines for prequalification and the Director, IIT Dharwad hereby reserves the right to relax/ alter/ modify/ add any or all the conditions.

#### 17. <u>Delivery Terms (only DDP mode of shipment acceptable)</u>:

Items should be door delivered at IIT Dharwad, Karnataka, India – 580011.

In case of indigenous supplies, the bidder is requested to specify it clearly in Section-IV of this document. In order to obtain the concessional GST certificate, the bidder must quote in INR only and the delivery term acceptable shall only be door delivery at IIT Dharwad. The supplier should arrange for entire process from origin of equipment to the Stores at IIT Dharwad (including charges for safe packing, Marking & labeling, loading charges, road/air freight, insurance of goods, unloading charges, transport & unloading at buyer destination, installation, commissioning, demonstration and training; within the quoted price).

#### 18. Freight & Insurance:

No freight and insurance charges will be provided and the materials are to be delivered at IIT Dharwad WALMI Campus, IIT Dharwad at the cost and risk of the supplier/Bidder within quoted price as per the delivery terms mentioned in the above paragraphs.

#### 19. Warranty declaration:

- a. The Bidder/supplier must give a comprehensive on-site support and maintenance for a period specified in respect of the subject item (mentioned in Section-IV) from the date of commissioning and acceptance of the items.
- b. Any deviation in the equipment and the specification from the accepted terms and conditions may lead to rejection and non-acceptance of stores. In such case, the bidder/manufacturer is required to supply all the items in the specified form to the satisfaction/ specifications mentioned in the order and demonstrate at their own cost. The payments shall be made only after receiving the materials as per required specification and quality to the satisfaction of the competent authority of IIT Dharwad.

#### 20. Installation & Demonstration:

- a. The supplier is required to carry out the supply, installation, commissioning & demonstration of the subject item at the IIT Dharwad installation site within the delivery period; otherwise the penalty clause will be the same as per the supply of material (refer to the liquidated damages below).
- b. In case of any mishandling/damage to items and supplies during carriage from the origin of items to the installation site, the supplier has to replace it with new items/supplies immediately at his own risk of cost. Supplier will settle his claim with the insurance company as per his convenience. IIT Dharwad will not be liable for any type of losses in any form.



c. It is for the information of all prospective bidders that IIT Dharwad is presently operating from a temporary campus belonging to Water and Land Management Institute (WALMI) and located at National Highway – 4, PB Road, Belur Industrial Area, Anjaneya Nagar, Near High Court Dharwad Bench, Dharwad, Karnataka, India – 580011. The permanent campus of IIT Dharwad shall be located at Chikkamalligewad Village on NH-4, Dharwad, Karnataka, India – 580011. The distance between both the locations shall be approximately 3-4 kms. The bidders are required to quote the final price including a relocation of the entire Equipment set-up (supplied under this tender) from existing temporary campus to new permanent campus. No additional payment will be made on this account and the tentative date of relocation will be intimated officially (probably during the year 2022/23). A certificate to this effect is required to be attached with the technical bid stating that the prices quoted are inclusive of one free location on intimation by authorities at IIT Dharwad.

#### 21. Liquidated Damages:

The equipment should be delivered/dispatched to destination and ready for use not later than the delivery period specified. If the supplier/Bidder fails to deliver any or all the stores or perform the service by the specified date, liquidated damages @0.5% per week or part thereof in respect of the value of the delayed stores will be deducted from the bill subject to a maximum of 10% value. Same terms are applicable for installation, training and demonstration clause mentioned above.

#### 22. Dispute and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to the whole process of this tender shall be settled in the court of competent jurisdiction in the district of Dharwad, Karnataka.

#### 23. Acknowledgement by the Bidder:

It is hereby acknowledged that we have gone through all the schedules as well as the conditions mentioned above and we agree to abide by these.

Date:

Signature of the Bidder along with official seal.

Place:

CANVASSING OR OFFERING AN ADVANTAGE OR ANY OTHER INDUCEMENT BY ANY PERSON WITH A VIEW TO INFLUENCING ACCEPTANCE OF A BID WILL BE AN OFFENSE UNDER LAWS OF INDIA. SUCH ACTION WILL RESULT IN THE REJECTION OF BID, IN ADDITION TO OTHER PUNITIVE MEASURES.

Sd/-

Assistant Registrar (MMD), IIT Dharwad (For and on behalf of Director, IIT Dharwad)



#### **Section II: Instructions to Bidders**

#### 1. Cost of Bidding:

The Bidder shall bear all costs associated with the preparation and submission of its Bid and the Purchaser shall not be held responsible or liable for those costs incurred regardless of the conduct or outcome of the bidding process.

#### 2. Amendments to Tender Document:

- a) At any time prior to the deadline for submission of bids, IIT Dharwad may, for any reason, whether on its own initiative or in response to the clarification sought by a prospective BIDDER may modify the bid document by issuing necessary corrigendum.
- b) All prospective BIDDERs who have downloaded the tender document are requested to visit IIT Dharwad website for any amendments / modifications and make a note of the same, which will be binding on them.

#### 3. Bid Opening Process:

- a) In case of one bid system, technical & financial bid will be opened simultaneously in the presence of representatives of the bidders at IIT Dharwad.
- b) In case of two bid system, The Technical Bid will be opened in the first instance in the presence of Technical Evaluation Committee (TEC)/MMD & representatives of the bidders at IIT Dharwad.
- Financial bids of only those bidders, whose bids are found technically qualified, by the Technical Evaluation Committee, will be opened in the presence of the Technical Evaluation Committee (TEC)/MMD & bidders' representatives subsequently at a later date for further evaluation. Date and Time of financial bid opening shall be intimated to technically qualified bidders only.
- d) One authorized representative of each of the bidder would be permitted to be present at the time of opening of the bids.
- e) The authorized representative of bidders, present at the time of opening of the bids shall be required to sign an attendance register as a proof of having attended the Technical/Commercial bid opening session.

#### 4. Supplementary offer / Modification of Original Bid:

BIDDER desirous to modify their offer/terms may submit their revised / supplementary offer (s) strictly within the Tender Opening Date (TOD) by clearly stating to the extent of updation done to the original offer. The purchaser reserves the right to open the original offer along with the revised offer.

#### 5. Confidentiality:

- a) Information relating to the evaluation of bids, and recommendation of Contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders. On completion of Technical Evaluation by the Committee, Vendors whose offer do not meet with the users Technical Specification will be restricted to participate in commercial bid opening process. Information regarding the criteria for disqualification of the tender would be communicated to the bidder in writing (preferably through email provided in the bid).
- b) Any attempt by a Bidder to influence the Purchaser in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
- c) Notwithstanding, from the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it must be done either through e-mail or in writing.



#### 6. Deviation, Reservations and Omissions:

During the evaluation of Bids, the following definitions apply:

- a) "Deviation" is a departure from the requirement specified in the Tender Documents;
- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Tender Documents; and
- c) "Omission" is the failure to submit part or all of the information or documentation required in the Tender Documents.

#### 7. Correction of Arithmetical Errors:

- a) Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:
  - i. if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- iii. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- b) Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with the same, shall result in the rejection of the Bid.

#### 8. Evaluation of Bid:

- a) Technical bids will be evaluated for suitability as per documentary validation, eligibility criteria and technical specifications laid out in this tender document. The bids found suitable will be recommended by the Procurement committee and after approval of competent authority shall be deemed as technically suitable offers. The technically qualified bidders will be informed accordingly and commercial bids of such offers will be evaluated on a suitable designated time and date. Unopened commercial bids of the other bidders, who are not found technically suitable will be returned.
- b) IIT Dharwad will evaluate technical and commercial acceptable offers on landed Net Price basis.
- c) In case any BIDDER is silent on any clauses mentioned in this tender documents, IIT Dharwad shall construe that the BIDDER had accepted the clauses as per the invitation to tender no further claim will be entertained.
- d) No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.

#### 9. Price Bid (For Indigenous Supplies to be quoted in INR only):

- i. Quoting of Price (s): Price quoted should be in Indian Rupees only and free delivery at IIT Dharwad Campus site.
- ii. PRICE BID must be submitted in enclosed Price Bid Format only (designed for indigenous/local supplies only).
- iii. Prices should include all the taxes including concessional GST @5% and all other duties/levies.
- iv. If the price is not quoted in Price Bid Format provided in the tender document then, IIT Dharwad will reject the bid. The bidders are required to attach their blank price bid format in technical bid documents for this purpose (without indicating the price quoted).
- v. If the bidder wishes to give pricing details, it may be attached in separate sheet. It is requested not to quote optional or multiple items, otherwise your quote may be rejected. The bidders are requested to quote only one option satisfying the tender terms & not multiple options.



#### 10. Corrupt & Fraudulent Practices:

IIT Dharwad requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the terms set forth below are defined as follows:

- a) "Corrupt practice "means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of in kind/value to influence the action of a public official in the procurement process or in contract execution;
- b) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- c) "Collusive practice" means a scheme or arrangement between two or more bidders, designed to establish bid prices at artificial, non- competitive levels; and
- d) "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

IIT Dharwad will reject a proposal 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.

#### 11. Cancellation of Tender:

- a) Notwithstanding anything specified in this tender document, Purchaser/IIT Dharwad in his sole discretion, unconditionally and without assigning any reasons, reserves the rights:
  - i. To accept or reject lowest tender or any other tender or all the tenders.
  - ii. To accept any tender in full or in part.
  - iii. To reject the tender, offer not confirming to the tender terms.
  - iv. To cancel the tender at any stage during the evaluation & before award of work
- b) Offer which deviates from the vital conditions (as illustrated below) of the tender shall be rejected:
  - i. Non-submission of complete offers as mentioned in the tender document,
  - ii. Receipt of offers after due date and time and or by email / fax (unless specified otherwise).
  - iii. Receipt of offers in open condition.
  - iv. Conditional Tenders and Unsigned Tenders will also be rejected.

#### 12. Delivery:

The successful BIDDER should deliver the material as per tender document/purchase order. The successful bidder should also emboss stickers of purchase order number on the material to be delivered at IIT Dharwad.

Sd/-

Assistant Registrar (MMD), IIT Dharwad (For and on behalf of Director, IIT Dharwad)



#### **Section III: Conditions of Contract**

#### 1. Award of Contract:

- a) IIT Dharwad shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid under this tender subject.
- b) If more than one BIDDER happens to quote the same lowest price, IIT Dharwad reserves the right to award the contract to more than one BIDDER or any BIDDER.

#### 2. Prices & Taxes applicable (Customs Duty / IGST / SGST / CGST):

For Indigenous Supplies (bids in INR) - As per Govt. of India Notification No. 47/2017-Integrated Tax (Rate) dt. 14<sup>th</sup> November 2017, Notification No. 45/2017-Central Tax (Rate) dt. 14<sup>th</sup> November 2017 and Notification No. 45/2017-Union Territory Tax (Rate) dt. 14<sup>th</sup> November 2017; IIT Dharwad is eligible to avail concessional GST rates. The applicable rate of IGST shall be 5% in case of Inter-state purchase and shall be the same as 5% (CGST @2.5% & SGST @2.5%) in case of purchases within the state. We shall provide the concessional GST certificate under this notification to enable you to deliver the goods as per the rates specified and to raise an invoice subsequently on this rate only. The supplier shall pay and bear all other liabilities, taxes and duties not specifically agreed by the Purchaser in the contract.

#### **3.** Pre-installation:

Please also mention the pre-installation requirements for the equipment like ambient temperature, humidity, civil work, weather specifications, power specifications, etc. When all items are provided, full performance satisfaction should be demonstrated to IIT Dharwad.

#### **4.** Installation:

- a) BIDDER shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty period and thereafter as mentioned in the contract.
- b) Installation demonstration to be arranged by the supplier within the quoted price and the same is to be done within 15 days of the arrival of the equipment at site or whenever informed by IIT Dharwad.

#### 5. Training and pre-installation checks:

- a) The BIDDER shall also submit training proposal for the operation and maintenance to the personnel of IIT Dharwad on the offered equipment/machinery.
- b) Wherever needed, our technical persons should be trained by the supplier at the project site free of cost. In case the person is to be trained at supplier's site abroad or in India, it should be mentioned in the bid clearly. The supplier should bear all the expenses for any such training or for any pre-installation check to be conducted by officials of IIT Dharwad including 'to & fro' fares and lodging & boarding charges.

#### 6. a) Terms of Payment (For Indigenous Supplies and quotes in INR):

- i. Payment within 30 days from the date of delivery, installation, commissioning, demonstration, training, testing and receipt of Acceptance Certificate of concerned Department / Section / Materials Management Division, IIT Dharwad.
- ii. Payment shall be made by electronic fund transfer or such other mode offered by the Bank.
- iii. IIT Dharwad does not pay advance payment to party. Any request of Advance payment will be summarily rejected.

#### 7. Transfer and Subletting:

The seller shall not sublet, transfer, assign or otherwise part with the acceptance to the tender or any part thereof, either directly or indirectly, without the prior written permission of the Purchaser.



#### 8. Force Majeure:

Force Majeure will be accepted on adequate proof thereof.

#### **9.** Specification and Samples:

The suppliers shall supply the stores in accordance with the specifications/ descriptions of stores given in the acceptance of tender. The Purchaser reserves the rights to alter the description of stores including drawings given in the acceptance of tender. In the event any such alteration result in any implication to the deliver and price, such implication shall be mutually agreed between the Purchaser and supplier. In case certified sample has been issued by the Purchaser and the Specifications / Drawings also exist in the acceptance of tender then the certified sample will govern the supply to the extent of material, workmanship and finished product.

#### 10. Supervision of Erection and Commissioning:

Successful BIDDER shall depute concerned specialist, for supervision of erection & commissioning of the machine to be carried out. The successful BIDDER shall make necessary arrangement at their own expenses for stay, transport and other expenses of their specialist during their stay in Dharwad which also includes imparting free of cost training to IIT Dharwad personnel.

#### 11. Performance Guarantee (GFR 2017 Rule 171):

- i. Performance Guarantee Bond is mandatory.
- ii. Successful tenderer/ bidder should submit performance guarantee on or before 15 days from the date of issue of order acknowledgement. The PBG to be furnished in the form of bank guarantee as per proforma, for an amount covering 3% of the purchase order value.
- iii. The Performance Guarantee should be established in favour of "The Registrar, IIT Dharwad".
- iv. PBG to be established through any of the National Banks/Scheduled bank (whether situated at Dharwad or outstation) with a clause to enforce the same on their local branch or any scheduled bank (other than National bank). Bonds issued by co-operative banks will not be accepted.
- v. Performance Guarantee Bond shall be for the due and faithful performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded or agreed to between the successful tenderer and the purchaser under the terms & conditions of acceptance to the tender.
- vi. The successful tenderer is entirely responsible for due performance of the contract in letter and spirit and all other documents referred to in the acceptance of tenders.
- vii. The PBG shall be kept valid during the period of contract and shall continue to be enforceable for a period (as mentioned in the tender document) or up to warranty period whichever is later from the date of order acknowledge. In case PBG needs extensions up to warranty period then supplier shall initiate extensions to PBG one month prior to expiry of PBG. For successful suppliers, if PBG is not submitted within **15 days** from the date of Order Acknowledgement, then the Purchase Order may be cancelled with forfeiting of EMD.

#### viii. No interest shall be payable by the buyer to the Bidder on PBG.



#### FORMAT FOR BID SECURITY DECLARATION

(To be typed on Firms letterhead)

I/We will not withdraw or modify the bid submitted by me/us during the period of validity or if
awarded the contract and fail to sign the contract or to submit a performance security before the
deadline defined in the tender document

Yours sincerely,

Date:	(Authorised signature & seal of the
bidder)	
Address:	



#### FORMAT FOR PERFORMANCE GUARANTEE BOND

(To be typed on Non-judicial stamp paper of the value of One Hundred Indian National Rupees)

{TO BE ESTABLISHED THROUGH ANY OF THE NATIONALIZED BANKS/SCHEDULED BANKS WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH OR ANY SCHEDULED BANK (OTHER THAN NATIONALIZED BANK). BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED}

To, The Assistant Registrar (MMD) Indian Institute of Technology Dharwad WALMI Campus, Dharwad – 580011

<u>LETTER OF GUARANTEE</u>		
WHEREAS Indian Institute of Technology Dharwad (Buyer) have invited Tenders vide Tender No		
NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology Dharwad on demand and without protest or demur Rs		
This Bank further agrees that the decision of Indian Institute of Technology Dharwad (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.		
We,		
Notwithstanding anything contained herein:  i. Our liability under this Bank Guarantee shall not exceed Rs		
This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at		
Date: Signature and seal of the guarantor: Name of Bank:		
Address:		
Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.		
requested to take appropriate necessary action on or after expiry of bond period.		



### <u>Section IV – Complete Schedule of Requirements and Compliance</u>

This section has following compliance requirements:		
i Compliance for commercial terms and conditions of tender		
ii	Compliance for technical specifications of the equipment to be	
	supplied	
iii	Bidders information & Reasonability of prices	

### i. <u>Table of compliance for commercial terms & conditions of tender (to be filled by bidder)</u>

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S. No.	Terms and Conditions	IIT Dharwad tender requirements	Response by Bidder M/s
1	Nature of supply (to be specified)	Indigenous/Local supply	
2	Price Bid Format ( (Refer point 9 of Section-II)	Section- V	
3	Delivery terms (to be specified)	If Indigenous/Local then Door Delivery (Refer point 17 of Section-I)	
4	Freight & Insurance	Confirm point 18 of Section-I	
5	Comprehensive On-site Warranty (as per technical specifications)	Confirm point 19 of Section-I	
6	Installation & Demo	Confirm point 20 of Section-I	
7	GST Rate (If Local supply in India)	Applicable rate @5% Confirm point 2 of Section-III	
8	Training & Pre-installation checks	Confirm point 5 of Section-III	
9	Terms of Payment	Confirm point 6 of Section-III	
10	PBG	Confirm point 11 of Section-III	
11	Complete tender document copy	Signed & stamped copy required	
12	PAN	Copy of PAN required	
13	GST	Copy of GST certificate required	
14	ITRs (2017-18 to 2019-20)	Last 3 financial years' ITR required	
15	Proof of Business existence	For a period of more than 3 years required	
16	Previous Experience (Refer point 12 of Section-I)	At-least one performance certificate with Purchase Order copy is required	
17	Blacklisting status	Certificate required to confirm the status	
18	Technical compliance for equipment	Please complete the table in point (ii) under Section-IV to establish the technical eligibility	
19	OEM Details	Please attach the OEM details	
20	Bidders Information	Please complete the table in point (iii) under	
21	Reasonability of prices	Section-IV to ascertain all relevant details	



### ii. <u>Table of compliance for technical specifications of the equipment to be supplied (to be filled by bidder)</u>

#### **Technical Specifications**

A single cylinder port fuel injection BS6 automotive petrol engine with open ECU for laboratory experiments coupled with eddy current dynamometer along with appropriate instruments for

- Load and speed measurements
- Volumetric air flow measurement at intake
- Gravimetric fuel flow measurement
- Crank angle encoder
- Manifold and combustion chamber pressure sensors for pressure time history with 1 CA resolution (From Kistler/ AVL/ PCB) including charge amplifier
- Temperature measurements of intake air, exhaust gas and lubricating oil

It should also be provided with necessary instruments for measurement of combustion noise, mass fraction burnt (SOC, 10%, 50%, 90%, EOC), neat and cumulative heat release with crank angle and load measurements.

These signals should be interfaced to computer through high speed data acquisition device (with 200 - 300 kS/s or better). The set up should have stand-alone panel box consisting of air box, twin fuel tank, manometer, fuel measuring unit, transmitters for air and fuel flow measurements, process indicator and Piezo powering unit.

It should be able to operate the engine with programmable Open ECU with live tuning facility for throttle position sensor (TPS), dedicated RPM control, fuel pump, ignition coil, fuel spray nozzle, trigger sensor, closed loop lambda control, Long Term Factor (LTF), various compensations factors like starting, idling, cursing, various air, fuel, lube oil temp sensors etc.

The setup should enable study of engine performance for brake power, indicated power, frictional power, BMEP, IMEP, brake thermal efficiency, indicated thermal efficiency, mechanical efficiency, volumetric efficiency, specific fuel consumption, A/F ratio and heat balance and combustion analysis (Cycle variations up-to 100, cumulative heat release with crank angle, P- $\theta$ , PV analyses among others).



	Whether complied (Yes/No)	Specifications of the quoted product	
Engine Type	Automotive BS VI, single cylinder, four stroke, liquid-cooled, naturally aspirated, variable speed, electric-start arrangement. Engine should have maximum rated power 15 bhp or higher, maximum torque 15 N-m or more, FI Engine, 2-4 Valve, 175 cc or larger, CR 10 or higher, Variable speed up-to 10,000 RPM or more, engine lube oil (coolant temperature control).		
Dynamometer Type:	Type eddy current, water cooled with loading unit. Dynamometer torque at min. 60-70 N-m @ 3500-4000RPM or more. It must be equipped with load cell type weighing mechanism with microcontroller based digital torque indicator.  Dynamometer Operation: Suitable gear ratio (gear box system) can be coupled to engine and dynamometer. It should ensure desired RPM with corrected load for operation		
Propeller shaft:	With universal joints HHSL Balanced, cover mounting.		
Air box :	Corrosion free metal fabricated with fuel flow meter and manometer with zero adjustment span		
Fuel tank capacity:	≥15 lit with glass fuel metering column		
Temperature indicator :	Digital, multi-channel with selector switch		
Calorimeter Type	Pipe in pipe with glass wool insulation		
Temperature sensor and Transmitter:	Type RTD, PT100 and Thermocouple Type K. Type two wire, Input RTD / Thermocouple, Output 4–20 mA, Also, oil temp measurement and control. Temperature Range: 0-1200°Cfor engine Exhaust and 0-100°C for water inlet/outlet		
Digital Speed indicator	Non-contact type speed sensor		
Load sensor	Load cell, type strain gauge, range 0-50 Kg; non-linearity ±0.025 %FS or less		
Cylinder pressure sensor including charge amplifier	Combustion Pressure measurement: Piezo sensor with charge amplifier, Intermittent pressure 1000 bar, Sensor range (±5V Output) 330 bar or more, Sensitivity: ±0.1mV/psi or higher, Non linearity 2% of FS or less, Resonant frequency: 330 kHz or higher with low noise cable.  Make: Kistler/AVL/PCB		
Crank angle Sensor	Heavy duty optical encoder with resolution 1 deg CA with TDC pulse. Suitable powering and pulse converter. Temperature range: -20°C to +70° C, Speed range: 6000 m-1 or more, axial cable.		
Fuel flow transmitter	Suitable fuel transmitter like DP or equivalent measured quantity of fuel should flow to reservoir having immersed type low pressure pump up to 3-5 bar		
Air flow transmitter	Suitable pressure transmitter, Range: 0 to 25 mbar, IP67 standard		



	Specifications	Whether	Specifications		
		complied (Yes/No)	of the quoted product		
Pump	Type Mono block (for providing cooling liquid supply to	( ies/ No)	product		
rump	engine setup)				
Data Acquisition	NI based USB interface with ≥ 200 kS/s				
system	The subsect Coop interface with a second, o				
Dedicated full control	with live tuning and configurable engine data display				
Adjustable ignition cor					
Adjustable injection tii	ning control with lookup table				
Port fuel injection of p	etrol and Multi-fuels				
Closed loop Target Lar	nbda Control				
Manifold Absolute Pre					
Data Acquisition/CAI	N Bus				
PC Based Tuning Softv					
Robust connectivity be					
Injector Driver					
Capability to use with	both saturated and peak-and-hold injectors				
	re with default and custom configuration facility. Capable of				
	combustion plots in online and offline mode. Custom				
	ors and scale should be available. Also, provision of altitude,				
humidity, room tempe					
available. All factors sl					
characteristics. Report generation in word and excel formats. Data export, edit,					
print facility.  All the sensors and equipment must be from reputed manufactures. Set up should					
come with suitable so					
sensors should be <0.					
Entire setup should be					
Warranty on Product:	3 Years comprehensive on-site warranty				
		I	1		

The bidder must submit/satisfy the following documents/conditions with the Technical Bid

- Copy of at-least one performance certificate (along with purchase order) of supplying similar item/s to IITs/ NITs/ IISc/ IISERs/ Central Universities/ laboratories of national importance.
- If required supplier must give demonstration of quoted model to check the technical specifications.
- OEM or Supplier or its authorized service center should have facility of service in India (Supporting document should be provided in technical bid)



### iii. Table for bidder information & reasonability of prices (to be filled by bidder)

### **Bidders Information**

1.	Name of the Bidder	
2.	Address of the Bidder	
3.	PAN No.	
4.	GST No.	
5.	State of GST Registration	
6.	E-mail (for the purpose of official communication)	
7.	Contact Person's Name & Designation	
8.	Mobile No.	
	Bank Details of the Bidder:	
9.	a. Name of the A/c Holder	
	b. Name of the Bank	
	c. Branch name	
	d. Account No.	
	e. IFSC Code	
	f. Any other detail	

(Authorised signature & seal of the bidder)



### **Reasonability of Prices**

(Please quote best minimum prices applicable for premier Educational and Research Institution of National Importance)

### **Previous Supply Orders**

Name of the Firm \_\_\_\_\_

Order placed by (Full address of Purchaser)	Order No. and Date	Quantity	Value of Order	Date of completio n of delivery as per contract	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & that quoted for IIT Dharwad	Has the Equipment been installed satisfactorily (Attach a Certificate from the Purchaser/ Consigner)	Contact Person along with Telephone No., Fax No. and e- mail address.

(Authorised signature & seal of the bidder)



### **Section V - PRICE BID**

#### for Indigenous / Local Supplies (to be quoted only in INR)

Sl. No.	Short Description of Item	Qty.	HSN Code / SAC Code	Amount Quoted* (in INR only)
1.	SUPPLY, INSTALLATION AND DEMONSTRATION OF LABORATORY EQUIPMENT (SI Engine – Automotive, 4- Stroke, Computerized BS6 Petrol Engine with Open- ECU operation)	01 Nos.		(Please quote base price)
2.	Discount offered (if any), on base			
3.	IGST / CGST / SGST @5 (Concessional GST applicable for IIT Dharw			
	GRAND TOTAL BID PRI			

<sup>\*</sup> Please refer clause 17 (Section-II), 9 (Section-III) & 2(Section-III) before quoting the prices.

#### (Authorised signature & seal of the bidder)

Note-1: Price Bid should be submitted in given format only.

Note-2: The quantities mentioned above are subject to upward and downward revision, depending on the

requirement of IIT Dharwad in future.

<sup>\*</sup> In case the bidder intends to provide the break-up of prices quoted, then a separate sheet to be attached.