



भारतीय प्रौद्योगिकी संस्थान इंदौर
Indian Institute of Technology Indore
सिमरोल, खंडवा रोड़ इंदौर – 453552
Simrol, Khandwa Road, Indore- 453552

E-Procurement of Triaxial Testing System with 100
MM Triaxial Cell

Bids to be submitted online
for
(Technical & Financial Bid as per Schedule of requirement)

In-Charge
Material Management Section (MMS)
IIT INDORE



भारतीय प्रौद्योगिकी संस्थान इंदौर
सिमरोल, खंडवा रोड़ इंदौर – 453552

Indian Institute of Technology Indore
Simrol, Khandwa Road, Indore- 453552

Tel.: 0731-2438700/203/949/958

Email: mms@iiti.ac.in

NOTICE INVITING E-TENDER (NIT) FOR EPROCUREMENT

Online e-Tenders are invited by IIT Indore (in Two bid System) from Original Equipment Manufacturers (OEM) their Authorized distributors/ Accredited Indian Agents /sole selling agents for the of following items:

Sl. No.	Description of Stores	NIT No.	EMD (in INR) - Online
1.	Triaxial Testing System with 100 MM Triaxial Cell (refer chapter 6). Qty. 02 nos.	374	₹ 75,000.00 (Rupees Seventy Five Thousand Only) Online EMD Submission: Bidder can submit their EMD online by visiting to the below link: https://www.onlinesbi.com/prelogin/collecthome.html

SUBMISSION OF BIDS ONLINE IN TWO BID <https://eprocure.gov.in/eprocure/app>

Tender No.: 374 as specify above is only for reference, while submitting EMD and for future communication.

Note:

- I. Tender Documents with detail terms & conditions can be downloaded from our website: http://www.iiti.ac.in/tender_mms.php & <https://eprocure.gov.in/eprocure/app>
- II. The prebid report will be uploaded on the website & CPPP and the same will be a part of the tender document.
- III. All the details/document pertaining to the NIT such as tender document, pre-bid report, corrigendum and any further updates will be available only on our website and also at Central Public Procurement Portal.
- IV. Bids/Quotations may be submitted directly by the OEM or their Authorized distributors/Dealers/Resell Agents/Channel Partners with proof of authorization.

IIT Indore shall not be responsible for non-receipt bid due to internet issues or any other reasons. **For any issues related to tender please contact Material Management Section, Tel: +91-731-2438700/203/958/949 Email: mms@iiti.ac.in**

In-charge (MM)
 2
 In-Charge
 Material Management Section (MMS)
 IIT INDORE

ONLINE BIDDING DOCUMENTS FOR PURCHASE OF GOODS**CONTENTS**

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CHAPTER- 1
Schedule of Tendering:

Sl. No.	Event	Date and Time/ Remarks
01	Down loading of Tender document online from CPPP	From 23/09/2019- https://eprocure.gov.in/eprocure/app & http://www.iiti.ac.in/tender_mms.php
02	Submission of Queries for Pre-bid meeting	Upto 03/10/2019(IST) Format for Submission of Queries enclosed as Part VI
03	Pre-bid Meeting	07/10/2019– 2.30PM(IST) Please refer tender Terms at IITI
04	Bid submission start date	10/10/2019
05	Last date & Time of Submission of Bids Online / EMD (Technical and Price Bid)	24/10/2019– 03.00PM(IST) Please refer tender Terms at IITI
06	Opening of Technical Bids Online	25/10/2019- 03.00 PM, (IST) Please refer tender Terms at IITI
07	All the communications with respect to the tender shall be addressed to:	In charge (MM), IIT Indore, Hub building (Sodium) Khandwa Road, Simrol Campus, Indore- 453552 Tel.: 731-2438700/203/958/949
08	Submission of Bid Online	https://eprocure.gov.in/eprocure/app
09	FOR TAKING ASSISTANCE, IF ANY	CPP Portal website: www.eprocure.gov.in CPP Portal Help Desk Toll Free No.:18002337315, 180030702232

CHAPTER- 2

INSTRUCTIONS TO THE TENDERERS

The tender shall be submitted in accordance with these instructions and any tender not confirming to the instructions as under is liable to be rejected. These instructions shall form the part of the tender and the contract.

1. For Online Bid Submission as per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)). The bidders are required to submit copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates.
2. More information useful for submitting the online bids on the CPP Portal is available/obtained at [URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)
3. For Registration: Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
4. Foreign Bidders have to refer "DSC detail's for foreign Bidders" for Digital signature Certificates requirements which comes under Download Tab at <http://eprocure.gov.in/eprocure/app?page=Standard Bidding Documents &service=page> and the remaining part is same as above and below.
5. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any tenderer stipulate any condition of his own, such conditional tender is liable to be rejected.
6. IITI reserves the right to reject any tender/bid wholly or partly without assigning any reason.
7. The Technical Committee constituted by the IITI shall have the right to verify the particulars furnished by the bidder independently.
8. Tenderer shall take into account all costs including installation, commissioning, cartage etc. for giving delivery of material at site i.e. IIT Indore before quoting the rates. In this regard no claim for any extra payment for any reason shall be entertained.
9. The item should be delivered at IIT Indore, Khandwa Road, Simrol, Indore and the supplier shall be responsible for any damage during the transit of goods.
10. All the tender documents & price bid to be uploaded as per this tender are to be digitally signed by the bidder.

11. Interested bonafide and reputed manufacturers/Indian agents (on behalf of their foreign principals) may submit online bids for each of the above equipment alongwith all requisite documents and scanned copy of online EMD submission reference.
12. The Bidder(s) may note that ONLINE BIDS will ONLY be accepted. All the requisite supporting documents mentioned in the bid document should and must be uploaded On-line <http://eprocure.gov.in/eprocure/app> . The Bids sent through FAX, E-mail, by hand and/or by post shall not be accepted/ processed, in any case.
13. The bidders may submit duly filled and completed bidding document ONLINE as per instruction contained in the bidding documents. Incomplete bid shall be rejected. The conditions of tender shall be governed by the details contained in complete bid document.
14. In case, holiday is declared by the Government on the day of opening the bids, the bids will be opened on the next working day at the same time. The IITI reserves the right to accept or reject any or all the tenders.
15. The detailed instruction for online submissions of bid(s) through e-procurement module of Central Public Procurement of NIC, the bidder(s) may visit following link:- [http://eprocure.gov.in/eprocure/app?page=Help For Contractors & service=page](http://eprocure.gov.in/eprocure/app?page=Help%20For%20Contractors&service=page)

CHAPTER - 3**LIST OF DOCUMENT TO BE UPLOADED WITH TECHNICAL BID:**

1. The intending Tenderer, in case of Original Equipment Manufacturers shall upload a self-declaration on their letter-head as PDF file in Cover-I of e-tender, along with the tender documents, confirming that they are regularly manufacturing, supplying, installing, testing & commissioning of the similar equipment.
2. The intending Tenderer, in case of Authorized Distributor/ Authorized Dealer shall possess valid authorized Distributorship /Dealership license from Original Equipment Manufacturers. The tenderer shall enclose the copy of the same as PDF file in Cover-I of the e-tender while submitting the tender.
3. The equipment shall be in compliance with the specifications mentioned in **Chapter 6 I& II** of the tender and shall be of the latest technology, best quality and high standards.
4. Any optional accessories/ tooling, besides the standard equipment recommended for the better performance of the equipment, if offered, be provided with their full technical details including their use and advantage in a separate sheet with the tender documents.
5. PAN Card, GST, Order Copies, Bankers Details, Registration details of the firm/Company etc.

CHAPTER - 4

PREPARATION OF BIDS

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers (e-tender system) in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from the same may lead to rejection of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/ XLS formats. Bid documents may be scanned with 100 dpi with black and white & color option.
4. Bidder should upload the standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) with each bids.
5. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. A standard BoQ format has been provided with the tender document to be filled by all the bidders.
4. Bidders are requested to note that they should necessarily submit their financial bid in the format provided and no other format is acceptable. The bidders are required to download the BOQ file, open it and complete the white colored (unprotected cells with their respective financial quotes and other details (such as the name of the bidder) No other details should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the file name. If the BOQ file found to be modified by the bidder, the bid will be rejected.
5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
6. All the documents being submitted by the bidders would be encrypted to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.
2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 18002337315.

General Instructions to the Bidders

- 1) The tenders will be received online through portal <http://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the documents in pdf format.
- 2) Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link "Information about DSC".
- 3) Tenderer are advised to follow the instructions provided in the "Instructions to the Tenderer" for the e-submission of the bids online through the Central Public Procurement Portal for e-Procurement at <http://eprocure.gov.in/eprocure/app>

Online Bid Form

The bidder shall complete the online bid form and the appropriate price schedule furnished in the online bidding documents in section VII/1, indicating, inter alia for the goods to be supplied, a brief description of the goods, their country of origin, quantity and prices.

Online Bid prices

The Bidder shall indicate on the Price Schedule the unit price and total bid prices of the goods it proposes to supply under the Contract. To this end, the Bidders are allowed the option to submit the online bids for any one or more schedule specified in the "Schedule of Requirement" and to offer discounts for combined schedules. However, Bidders shall quote for the complete requirement of goods and services specified under each schedule on a single responsibility basis, failing which such bids (for the schedule in question) will not be taken into account for evaluation and will not be considered for award.

Prices indicated in the online price schedule shall be entered separately in the following manner.

I. For goods offered from within India:

- a. The price of the goods should be quoted for destination basis, charges towards freight, installation etc. may be mentioned. GST should mentioned as applicable after referring the attached GST Notification.
- b. Any sales or other taxes/duties should be clearly mentioned, which will be payable on the goods in India if the contract is awarded.
- c. Charges for inland transportation, insurance and other local costs incidental to delivery of goods to their final destination should be mentioned. The final destination is specified in the schedule of requirements.
- d. Any element of cost, taxes, duties levies etc. not specifically indicated in the online bid, shall not be paid by the purchaser.

II For goods offered from abroad

- a) The price of goods shall be quoted Ex-Works/ FCA/CIP/FOR as and if specified in the Schedule of Requirements.
- b) Charges for inland transportation, insurance and other local costs incidental to delivery of the goods from the port of entry in India to their final destination, which is specified in the Schedule of Requirement.
- c) The terms FOB, CIF, CIP etc shall be governed by the rules and regulations prescribed in the current edition of INCOTERMS, published by the Chamber of Commerce, Paris.
- d) Prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account, unless otherwise specified in the Schedule of Requirements.

III. Bid currencies

- a. For domestic goods prices shall be quoted in Indian rupees only. Commission for Indian Agent, if payable, shall also be quoted in Indian Rupees only.
- b. For imported goods prices shall be quoted either in Indian rupees or may be quoted in foreign currency (currencies) and the portion of the allied work and services, which are to be undertaken in India (like installation & commissioning of equipment) are to be quoted in Indian currency.

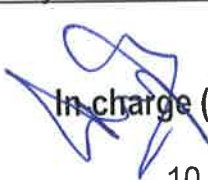
IV. Indian Agent

- a) If a foreign bidder has engaged an agent in India in connection with its online bid it will be required
 - a. to give the following information in the online bid:
 - i) the name and address of the Indian agent with their permanent income tax number.
 - ii) The details of the services the agent will render.
 - b. The agency commission shall be indicated in the space provided for in the price schedule and will be paid to the bidders's agent in Indian rupees

V. Period of validity of Online bids: Online Bids shall remain valid for acceptance for 180 (One Hundred Eighty) days after the date of bid submission.

Proof of EMD submission must be attached to the Techno-Commercial Bid Only and NOT to the Price Bid. Bids received without EMD will be rejected.

Note – Non-compliance of the above may disqualify your offer for consideration.

 In charge (MM)

CHAPTER- 5

GENERAL TERMS AND CONDITIONS

1. **Delivery of Tender:** Please refer above and submit online bid through e-procurement portal.

Bidder: Tenders are invited only from **Original Equipment Manufacturers** OR their **authorized distributors/ dealers**, Vendors are requested to **attach proof** to show that they are the authorized dealers of the brand that they are quoting for the manufacturers of the product.

Quotations of internationally recognized brand from authorized dealers only will be accepted.
Tender Documents will be available on institute website: www.iiti.ac.in .

2. **Bid Security (EMD) : Earnest Money Deposit (EMD / Bid Security (BS) has to be submitted by bidders except those who are registered with**

- ii) **Micro and Small Enterprises (MSEs)**
- iii) **Central Purchase Organization (CPO)**
- iv) **Concerned Ministry / Department.**
- v) **Startups as recognized by Department of Industrial Policy & Promotion (DIPP).**

- In such case, copy of the certificate showing registration with the abovementioned institutions to be uploaded in Cover-I of the e-tender in PDF format.
- The EMD will be returned to the unsuccessful bidders after the orders are placed with the successful bidder.
- The EMD will be forfeited if the bidder fails to accept the order based on his/her offer/bid or fails to supply the items.
- No interest will be payable by the Purchaser on the Earnest Money Deposit. The earnest money of all the unsuccessful tenderers will be returned to them at the earliest. The Earnest Money of successful bidder shall be returned on receipt of Performance Security. If the successful bidder fails to furnish the performance security or fails to supply the item as per Purchase Order (PO) terms and conditions within stipulated period, the earnest money shall be liable to be forfeited by IIT Indore

3. **Period for which the offer will remain opened:**

- (i) Firms tendering should note the period for which it is desired that their offers should remain open for acceptance.
- (ii) Quotations qualified by such vague and indefinite expressions such as "subject to immediate acceptance", "subject to prior sale", etc. will not be considered.

4. **Concession/Exemptions:** IIT-I being an academic institute is entitled for availing Customs Duty exemptions in terms of Notfn. No. 51/96 dated 23.07.1996, Notfn. No. 28/2003- Customs dt. 01/03/2003, Notfn. No.43/2017- Customs dt. 30/06/2017 & notfn. No. 47/2017- Integrated Tax (Rate) dt. 14/11/2017, Notfn. No. 10/2018- Integrated Tax (Rate) dt.25/0/2018 and Notfn. No. 45/2017-Central

Tax (rate) dt. 14/11/2017, Notfn. No. 45/2017-Union Territory Tax (Rate) dt. 25/01/2018 as amended from time to time. Presently this is valid till 31.08.2021 vide Order No. TU/V/RG-CDE(1145)/2016 Dt.28/02/2018 issued from DSIR-Min. of Sc.& Tech; Govt. of India. **Please state clearly that this Certificate is required.**

5. **Opening of Tenders:** Online tender opening as specified in schedule of requirement.
6. **Place of Delivery:** IIT Indore ,SIMROL Campus, Khandwa Road, Indore – 453552
7. **Guarantee/ Warranty:** The equipment should be covered comprehensive on-site warranty against any manufacturing defect for a period of 01 Year from the date of successful installation and acceptance or as per annexure- I. In case any part or whole of the equipment is found to be defective during the guarantee period, then the same will have to be replaced/repaired free of cost at our premises. Warranty certificate should be submitted with the bill(s).
8. **Insurance:** The date of delivery should be strictly adhered to failing which the purchase order is liable to be cancelled. Penalty may be imposed as per P.O. terms & conditions. Goods should be securely, safely and adequately packed & dispatched and delivered at the risk of supplier. In case of damage consignment the same should be replaced without any cost to the Buyer and the supplier can collect the damaged consignment after satisfactory replacement.
9. **Inspection:** Before dispatch the materials, the Vendor will give sufficient advance notice of the date in writing on which the goods will be ready for inspection. The Vendor also shall provide the purchaser all necessary facilities for pre dispatch inspection. If due to any reasons, it is not possible on the part of the purchaser to visit the plant/ site of the Vendor for inspection of the items, the Vendor shall share the detailed schematic diagram, pictures of item and the details as required by the IITI.
10. **Right of Acceptance:** This office does not pledge itself and reserves to itself the right of accepting the whole or any part of the tender or portion of the quantity offered and the firm shall supply the same at the rate quoted. The firm shall be at liberty to tender for the whole or any portion or to state in the tender that the rate quoted shall apply only if the entire quantity is taken from the firm.
11. Items supplied are subject to inspection and acceptance and the supplier should collect/ replace the rejected items at his cost and risk.
12. **Specification and Make:** Quotation should be given for the exact specification and make as shown in the enquiry against Sl. No. of the item. If in the view of the supplier there is any other alternative item which can serve out purpose, quotation may also be given for the same separately. Client list along with the order copy of similar equipment supplied to any IITs / any Govt. Organization including detail of price & all charges must be attached. In the case of items quoted having specifications different than those mentioned in the enclosed Tender format, kindly submit the information and the prices in the same format but on additional Sheet.
13. **Proof of Registration OR OEM Certificate/ Sole Distributorship Certificate MUST be attached.**
14. No correspondence/discussion/visits whatsoever will be entertained on the subject unless specifically called by this office after opening the tenders for technical discussions/ price negotiations. Any violation of this will render the quotations invalid and the firm is liable to be blacklisted.

15. IITI reserves the right to call for techno-commercial/price negotiations. The company should depute competent representative for such discussion/negotiations whenever called for and he shall be competent to take on the spot decisions.
16. **Liquidated Damages:-** As Time is the essence of an order, the date of delivery should be strictly adhered to, otherwise the delivery in full or in part may not be accepted and penalty for late delivery will be imposed @ 0.5% (Half Percent) per week subject to a maximum of 10% of the total value of supply order & beyond 10% subject to approval of IITI. In case of delay in installation and Commissioning, Inspection, Certification etc. also the same rate of penalty shall be leviable.
17. **Force Majeure:** Neither the contractor nor the institute shall be liable to the other, for any delay in or failure of their respective obligations under this control caused by occurrences beyond the control of either party because of fire, floods, acts of God, acts of public enemy, wars, riots, strikes, lockouts, sabotage any law statute or ordinance order actions or regulations of the Government or any compliance there is similar to the above. Either party shall promptly notify the other of his commencement and cessation of such contingency and prove that such is beyond the controls and effects the implementation of this contract adversely.
18. The firm may give any of their commercial term, if required, in their techno-commercial offer only, and price quotation should contain only price.
19. Please inform the IITI in writing whether the owner of the firm or any of their partners/employees has close relations working with IIT Indore. This is for record only.
20. **IITI reserves the right to modify/alter/insertion or deletion on any part of the tender document /NIT to ensure fulfillment of its material & service requirement at any stage.**
21. The instructions about bidding given in this advertisement and the Tender Documents should be read thoroughly before bidding. IIT Indore reserves the right to accept or reject any or all quotations at any stage without assigning any reason whatsoever it may be.
22. **Cancellation:** IIT- Indore reserves the right to accept or reject or cancel any or all enquiries or quotations at any stage without assigning any reason thereof. In case of cancellation of order due to Non-compliance of the Terms and Conditions and Breach of the Contract, No compensation will be paid towards progress of order/procurement.
23. **Governing Law:** The order placed will be contract between the supplier and the buyer and shall be governed by the LAWS of India and under the contract shall be taken by the parties only in Indore, India to competent jurisdiction.
24. For any dispute, the place of jurisdiction shall be Indore, India only.

CHAPTER- 6

TECHNICAL BID

PART-I (Eligibility criteria)

(Bidder should submit compliance matrix along with Technical Bid)

Sl. No.	Criterion	Details	Compliance Yes/No	Deviations/Remarks, if any
01	PDI (Pre dispatch Inspection)	(i) Pre dispatch Inspection ON SITE at Factory at the cost of supplier		
		(ii) If required, Virtual Inspection can be done by the end user		
02	ASS (After sale service)	Repair and maintenance should be by the Site person deployed by the Supplier.		
03	Warranty	ON SITE Comprehensive Warranty for 01 year from the date of commissioning and acceptance		
04	Spare and Accessories	The supplier must have a back to back agreement for uninterrupted supply of Spares and Accessories for a period of 10 years to IIT INDORE to avoid any phase out or obsolete situation of the equipment. By the manufacturer.		
05	Additional Warranty	Beyond Standard warranty the firm should quote for additional Warranty charges separately for 2 nd & 3 rd Year .		
06	Supply to Educational and research Centers	<u>Educational institutes :</u> The clientage report shall include Educational institutes such as CFTIs funded by GOI in last 03 years. <u>Research Institutes:</u> Research labs such as CSIR/ ICAR /ICMS /DRDO/DAE/DOS Institutes.		

The bidder should submit his acceptance against each column as YES/NO and if No, bidder should specify the deviation.

(Signature of the Bidder, with Official Seal)

CHAPTER- 6
TECHNICAL BID
PART –II

Item details and technical specification as mentioned below:

Sl.No	Item Description/ Technical Specification	Qty.	Compliance Yes / No	Deviations, if any						
1.	Triaxial Testing System with 100 MM Triaxial Cell	02 unit	Bidder should submit compliance matrix	To be mentioned a long with the compliance matrix						
A	TRIAXIAL TESTING SYSTEM FOR CD-CU-UU WITH 100 MM TRIAXIAL CELL TRIAXIAL TEST SYSTEM CONFIRMING TO ASTM D2850, D4767, D7181; AASHTO T-297; BS 1377-7, BS 1377-8 THE TRIAXIAL TEST SYSTEM SHOULD PROVIDES AUTOMATED TRIAXIAL COMPRESSION TESTS ON CYLINDRICAL UNDISTURBED AND REMOLDED SOIL SAMPLES. UNCONSOLIDATED UNDRAINED (UU), CONSOLIDATED DRAINED (CD) AND CONSOLIDATED UNDRAINED (CU) COMPRESSION TESTS CAN BE AUTOMATICALLY RUN, CONTROLLED AND REPORTED USING THE APPARATUS. APPRATUS MUST BE CAPABLE TO ESSENTIALLY PERFORM <u>UNCONSOLIDATED UNDRAINED (UU) TEST</u> <u>CONSOLIDATED UNDRAINED (CU) TEST:</u> <u>CONSOLIDATED DRAINED (CD) TEST:</u> PROVISION OF APPROPRIATE ARRANGEMENT WHEREIN, TEST VALUES MUST BE TRANSFERRED TO COMPUTER AND DATA PROCESSING CAN BE MADE WITH TRIAXIAL SOFTWARE ON WINDOWS OPERATING SYSTEM. ALL DATA CAN BE USED ON EXCELPROGRAMS. THE LOAD DATA AND AXIAL DISPLACEMENT DATA MUST BE TRANSFERED AND RECORDED THROUGH CONTROL UNIT TO THE SOFTWARE. THREE PRESSURE DATA (CELL PRESSURE, BACK PRESSURE AND PORE PRESSURE) FROM TRIAXIAL CELL AND VOLUME CHANGE DATA CAN BE TRANSFERED AND RECORDED THROUGH THE RELEVANT COMPATIBLE SOFTWARE AND PC/LAPTOP. <table><tr><th colspan="3">TYPICAL CONFIGURATION OF SYSTEM FOR DIFFERENT TESTS (UU-CU-CD) FOR EACH APPARATUS</th></tr><tr><td>DESCRIPTION</td><td>UU</td><td>UU-CU-CD</td></tr></table>	TYPICAL CONFIGURATION OF SYSTEM FOR DIFFERENT TESTS (UU-CU-CD) FOR EACH APPARATUS			DESCRIPTION	UU	UU-CU-CD			
TYPICAL CONFIGURATION OF SYSTEM FOR DIFFERENT TESTS (UU-CU-CD) FOR EACH APPARATUS										
DESCRIPTION	UU	UU-CU-CD								

	MULTIPLEX UNIVERSAL ELECTROMECHANIC TEST MACHINE*	1	1		
	LOAD CELL 20 K N	1	1		
	TRIAxIAL CELL**	1	1		
	BLOCK WITH ONE CONNECTION LINE FOR TRIAXIAL TEST CELLS,	1	-		
	BLOCK WITH 3 CONNECTION LINES FOR TRIAXIAL TEST CELLS	-	1		
	PRESSURE TRANSDUCER	1	3		
	OIL AND WATER CONSTANT PRESSURE SYSTEM	1	2		
	AUTOMATIC VOLUME CHANGE UNIT	-	1		
	STATIC UNILOGGER 4 CHANNELS	-	1		
	SOFTWARE TO PERFORM UU TRIAXIAL TESTS	1	1		
	SOFTWARE TO PERFORM CU-CD TRIAXIAL TESTS	-	1		
	DE-AIRING WATER TANK, 7 L. AND HOSE	1	1		
	# Key Components of a typical Triaxial Unit are as follows :				
A	MULTIPLEX UNIVERSAL ELECTROMECHANIC TEST MACHINE IT SHOULD BE A SERVO CONTROLLED MULTIPLEX MACHINE SUPPLIED COMPLETE WITH 50 KN LOAD CELL, 25 MM LINEAR POTENTIOMETRIC TRANSDUCER AND TOUCH CONTROL UNIT. THE FRAME CAPACITY IS 50 KN. THIS VERSATILE DIGITAL LOADING FRAME FEATURES A MICROPROCESSOR CONTROLLED DRIVE SYSTEM WITH AN ADVANCED SERVO MOTOR ENABLING THE OPERATOR TO EASILY SET ANY TEST SPEED VIA THE COLOURED TOUCH SCREEN.	01			

	TOUCH SCREEN COMPRISES ADJUSTMENT BUTTONS SUCH AS "START", "INCREASE", "AUTOMATIC", "MANUAL", "DOWN", "UP" AS WELL AS OTHER USER DEFINED TEST PARAMETERS. THE TESTING SPEED CAN BE SET BETWEEN 0.00001 MM/MIN TO 51.0 MM/MIN. THE TEST AUTOMATICALLY STOPS WHEN LOAD AND/OR DISPLACEMENT IS REACHED TO 99% VALUE OF THE SET MEASURING RANGE. LOAD AND DISPLACEMENT VALUES ARE COLLECTED BY CONTROL UNIT AND TRANSFERRED TO PC FOR FURTHER PROCESSING WITH ONE SOFTWARE FOR PERFORMING UU AND OTHER SOFTWARE FOR CU-CD TESTS. <u>TOUCH PRO CONTROL</u> CONTROL UNIT MUST BE DESIGNED TO CONTROL THE MACHINE AND PROCESSING OF DATA FROM LOAD-CELLS, PRESSURE TRANSDUCERS OR DISPLACEMENT TRANSDUCERS WHICH ARE FITTED TO THE MACHINE. ALL THE OPERATIONS OF CONTROL UNIT MAY BE CONTROLLED FROM THE FRONT PANEL CONSISTING OF COLOR RESISTIVE TOUCH SCREEN DISPLAY AND FUNCTION KEYS 4 ANALOGUE CHANNELS ARE PROVIDED FOR LOAD-CELLS, PRESSURE TRANSDUCERS OR DISPLACEMENT TRANSDUCERS. THE DIGITAL GRAPHIC DISPLAY OF EACH CONTROL UNIT SHOULD BE ABLE TO DRAW REALTIME "LOAD VS. TIME", "LOAD VS. DISPLACEMENT" OR "STRESS VS. TIME" GRAPHICS. MAIN FEATURES • CAN MAKE TEST WITH DISPLACEMENT CONTROL • REAL TIME DISPLAY OF TEST GRAPH. • 4 ANALOG CHANNELS FOR LOAD CELL OR PRESSURE SENSORS OR DISPLACEMENT SENSORS • CALIBRATION FUNCTION FOR 4 CHANNELS. • PROGRAMMABLE DIGITAL GAIN ADJUSTMENT FOR LOAD-CELL, PRESSURE TRANSDUCERS, POTENTIOMETRIC SENSORS, VOLTAGE AND CURRENT TRANSMITTERS • CLOSED-LOOP FOR PACE RATE • TOUCH SCREEN • CAN PERFORM MARSHALL , CBR AND UNCONFINED TEST		
B	THE SOFTWARE FOR MUST BE COMPATIBLE WITH DATALOGGER AND CONTROL UNIT.	01	

C	UNIVERSAL TRIAXIAL CELL FOR 100 MM • BASE ADOPTER FOR 100 MM SAMPLES • POROUS TOP CAP FOR 100 MM SAMPLES • NYLON TUBING DRAINAGE OF 100 MM DIA POROUS TOP CAP (FOR CU, CD TEST) • PAIR OF POROUS DISC FOR 100 MM DIA TRIAXIAL TEST SPECIMENS • RUBBER MEMBRANE 100 MM DIA X 235 MM LENGTH (PACK OF 10) • MEMBRANE PLACING TOOL (STRETCHER) FOR 100 MM SAMPLES • RING FOR 100 MM DIA SAMPLES (SET OF 10 PCS) • RING PLACING TOOL FOR 100 MM DIA SAMPLES • FILTER DRAIN FOR 100 MM DIA SAMPLES (PACK OF 50) • FILTER PAPER DISC FOR 100 MM DIA SAMPLES (PACK OF 100) • SPLIT MOULD FOR 100 MM SAMPLES • CUTTER FOR 100 MM SAMPLES • ALUMINUM DOLLY FOR 100 MM SAMPLES	Each 01 nos.		
D	BLOCK WITH THREE CONNECTION LINES FOR TRIAXIAL TEST CELLS USED FOR CONNECTION OF PRESSURE TRANSDUCERS AND DE-AIRING IN THE WATER HOSES. .	03		
E	PRESSURE TRANSDUCER, 2000 KPA AND BLOCK FOR TRIAXIAL CELL THE PRESSURE TRANSDUCER IS USED FOR THE MEASUREMENT OF CELL OR BACK OR PORE PRESSURE OF WATER IN TRIAXIAL TEST SYSTEMS AND ALSO SHOULD BE USED WITH A CONTROL UNIT OR A DATALOGGER THE BLOCK FOR TRIAXIAL TEST CELLS IS USED FOR CONNECTION OF THE PRESSURE TRANSDUCERS AND DE-AIRING IN THE WATER HOSES	03		
F	LOAD CELL 20 KN- TYPE S	01		
G	OIL AND WATER CONSTANT PRESSURE UNIT IS EXTREMELY VERSATILE AND CAN BE USED IN CONJUNCTION WITH A WIDE RANGE OF TEST EQUIPMENT. THE UNIT SHOULD PROVIDE CONTINUOUS VARIABLE PRESSURE UP TO 1700 KPA. PRESSURE IS INCREASED OR DECREASED SIMPLY BY TURNING A CONTROL KNOB. THE UNIT IS USED FOR PROVIDING CELL/BACK PRESSURE IN TRIAXIAL TESTS. THE APPARATUS TO BE SUPPLIED WITHOUT A GAUGE FOR THOSE WHO HAVE SUITABLE PRESSURE MONITORING EQUIPMENT. 220-240V, 50-60HZ, 1PH. THE MACHINE FEATURES A CLEAR HYDRAULIC/WATER INTERFACE RESERVOIR AND UP TO 1 LITER CAPACITY OF WATER IS AVAILABLE UNDER PRESSURE. SUPPLIED COMPLETE WITH 2 LITERS OF NO.46 REGULAR HYDRAULIC OIL.	02		

H	AUTOMATIC VOLUME CHANGE UNIT THE UNIT CONSISTS OF A PISTON CONNECTED TO A 25 MM TRAVEL LINEAR TRANSDUCER WHICH IS SEALED AGAINST A PRECISION MACHINED CALIBRATION CHAMBER SO THAT THE LINEAR MOVEMENT OF THE PISTON IS EXACTLY PROPORTIONAL TO THE VOLUME OF WATER IN THE CALIBRATION CHAMBER. THE APPARATUS CREATES AN ELECTRICAL SIGNAL PROPORTIONAL TO THE VOLUME OF WATER FLOWING THROUGH THE UNIT. BY CONNECTING IT TO THE DATA ACQUISITION SYSTEM THE MEASURED VOLUME CHANGE WILL BE USED BY SOFTWARE DURING THE TEST AND IN FINAL REPORT. <table><tr><td>CAPACITY</td><td>100 CM³</td></tr><tr><td>ACCURACY</td><td>± 0.1 ML</td></tr></table>	CAPACITY	100 CM ³	ACCURACY	± 0.1 ML	01		
CAPACITY	100 CM ³							
ACCURACY	± 0.1 ML							
I	4 CHANNEL DATA ACQUISITION UNIT: THE MAIN CHARACTERISTICS OF DATALOGGER: • 4 CHANNEL TOUCH SCREEN MODEL • HIGH RESOLUTION: 16M POINTS (EFFECTIVE 260.000 POINTS) • LARGE PERMANENT MEMORY • ETHERNET PORT FOR PC CONNECTION • CPU CARD BY MICROPROCESSOR 32 BIT ARM RISK ARCHITECTURE • 10 (SAMPLE/SEC) / CHANNEL • 24 BIT A/D CONVERTOR (260.000 EFFECTIVE DIVISIONS) • DIGITAL GAIN SELECTION, SUITABLE FOR POTENTIOMETRIC TRANSDUCERS • MV/V SENSORS (PRESSURE TRANSDUCERS, LOAD CELLS, LINEAR TRANSDUCERS) 4 MB MEMORY	01						
J	THE DE-AIRING WATER APPARATUS SHOULD BE COMPACT AND SELF-CONTAINED EQUIPMENT WHICH CAN DE-AIR WATER QUICKLY AND EFFICIENTLY DOWN TO LEVELS OF DISSOLVED OXYGEN ACCEPTABLE FOR GEOTECHNICAL TEST METHODS.THE APPARATUS USED IN CONJUNCTION WITH THE DE-AIRING TANK. AIR IS REMOVED FROM THE WATER BY A VACUUM SYSTEM. AIR DRYING UNIT/ WATER TRAP, VACUUM TYPE. SUPPLIED WITH 2 PCS. ½-8MM	01						
K	VACUUM CONTROL AND WATER CONNECTION PANEL WITH REGULATOR	01						
L	SOFTWARE TO PERFORM UU TRIAXIAL TESTS	01						

M	SOFTWARE TO PERFORM CU, CD TRIAXIAL TESTS	01		
1.	Warranty: One Year on-site Comprehensive warranty from the date of installation & acceptance.			
2.	Installation: Firm should install the equipment at IIT Indore within 30 days from the date of delivery free of cost.			
3.	Additional warranty cost to be quoted for 2 nd & 3 rd year.			
4.	Incoterms : Ex-works for (Import) A FORD (Indigenous) B			
5.	DELIVERY: Within 04 weeks from the date of order.			
6.	TRAINING: Firm will impart training to all lab staff and students.			
7.	PREDISPATCH- Firm should arrange the pre dispatch inspection prior to packing & dispatching of the item. Firm should share the entire detail of the equipment with images and schematic diagram before packing.			
8.	AFTER SALES SERVICE: Firm should have their authorized agent in India for providing after sales service.			
9.	AVAILABILITY OF SPARE PARTS: Firm should ensure the availability of spare parts for atleast 10 years.			
10.	SCHEMATIC DIAGRAM: Firm should share the schematic diagram along with the technical bid.			
11.	PRODUCT CATALOGUE: Firm should submit detailed specification and product catalogue.			
12.	PREVIOUS ORDER COPIES: Firm should share the previous order copies issued by any Govt./Autonomous Educational/Research Institute. The list of equipment installed at various institutes with contact details should be shared.			

The bidder should submit his acceptance against each column as YES/NO and if No, bidder should specify the deviation

CONDITIONS FOR TECHNO-COMMERCIAL BIDS

TECHNICAL

1. Give brief description of item/equipment/material with accessories. Items offered should conform to BIS (ISI) specifications or as explicitly stated. In case specifications offered are different, separate comparative technical specifications sheet shall be attached with details

such as SI.NO, specifications offered deviations if any, and remarks. Any product brief, test certificates available may be enclosed.

2. List of spares, if applicable should be attached.
3. Any optional, if offered, be provided with their full technical details including their use and advantage.
4. Bidders disqualified by Technical Evaluation Committee in technical bid will be given one week time to represent the case from the date of uploading the TEC report. Non-representation within stipulated time the tender will be processed further and no representation will be accepted thereafter.

COMMERCIAL

1. Payment will be released through wire transfer/bank RTGS transfer after arrival, testing, inspection, installation of the item(s) and if found satisfactory with regard to quality, quantity and specifications ordered. The payment will be released after statutory deductions. For the payment, the firm has to submit bill(s), challans(s), warranty certificate, bank details/cancelled cheque, installation report, performance bank guarantee (if required) etc. to the In charge (MM), IIT Indore. The 90% payment will be released within 30 days after receiving of the bills as mentioned above and from the date of received, tested/inspected/commissioned and found satisfactory with regard to quality, quantity and specifications ordered and remaining 10% will be released after receipt of performance bank guarantee. In case of import, the payment term may be 100% through Letter of Credit (LC)/Wire Transfer - 80% against dispatch documents and balance 20% after successful delivery & installation.
2. Give details of installation and commissioning except price which will be only in price bid (if applicable).
3. Warranty may be quoted as per the Standard Manufacturer Terms. Price for the additional warranty must invariably be quoted for one year.
4. Delivery desired is within **04 weeks** from the date of releasing the supply order. Specify your delivery period. Items should be delivered only on Working Days (Monday to Friday) during office Hours only i.e. between 10.00am to 04.00pm.
5. In case of delayed supplies, liquidated damages at the rate of **0.5 percent per week** of delay with a maximum of **10 percent** of contract/order value will be levied.
6. The firm has to submit a performance security of 10% of the total order value to be submitted from an Indian Scheduled Bank before release of final payment and after successful installation and commissioning of the equipment in the form bank guarantee valid for 2 months beyond the warranty period. No interest will be payable by the Purchaser on the Performance Security

deposited. In case supplier fails to provide satisfactory after sale service within the warranty period, the Performance Security submitted by the firm is liable to be forfeited. **PBG format.**

7. Delivery: Free delivery at IIT Indore in case of indigenous orders. In case of imported offers standard Inco-terms shall be applicable. The bidders must quote both in EXWORK/FOB/FCA/FOR and CIP/CIF value for deciding the mode of shipment in case of Import.
8. Indicate mode of dispatch. Rail/Road/ Air/ Sea/Multimode.
9. In case equipment offered requires maintenance after the expiry of the warranty, please indicate approximate cost of comprehensive and on call basis maintenance and also availability of local support or otherwise.

Please note clearly that faxed, mailed and opened quotations are liable to be rejected.

Signature of the Tenderer

CHAPTER- 7

PRICE BID

PRICE BID - Schedule of price bid in the form of BOQ format:

1. The below mentioned Financial Proposal/Commercial bid format is provided as BoQ along with this tender document at <https://eprocure.gov.in/eprocure/app>
2. **Bidders are advised to download this BoQ.xls** as it is and quote their offer/rates in the permitted column and upload the same in the commercial bid.
3. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD shall be forfeited.
4. The tender shall remain valid for acceptance for **180 days**, from the date of tender opening.

OTHER CONDITIONS FOR PRICE BIDS

1. No unilateral revision in price will be admissible.
2. INCOTERMS (in case of imported item) should be clearly mentioned on the bid
3. Rates should be quoted in the accounting units (A/U) mentioned in this enquiry. Rates must be quoted clearly on free delivery basis at IIT Indore and total value is also indicated in words.
4. Any optional indicated in techno-commercial bids must be priced separately.
5. In case spares/accessories are applicable, their list and price should be clearly indicated separately.
6. The price must be stated for each item separately. The percentage of reduction, in the unit price should also be quoted, should an order to that extent be placed with you.

Signature of Tenderer

CHAPTER- 8**TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)**

To, _____

Sub: Acceptance of Terms & Conditions of Tender. Tender Reference No: _____

Name of Tender / Work: - _____

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: _____ as per your advertisement, given in the above mentioned website(s).
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organizations too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
6. I / We do hereby declare that we have quoted our firm rates inclusive of taxes if not mentioned extra.
7. I/We agree to hold this offer open until **180 days** and shall be bound to supply/commission/install the equipment and dispatch the same within the specified period.
8. I/We agree to supply and commission/install the equipment and complete the whole of the work and hand over to the purchaser within the stipulated period, after receipt of intimation regarding acceptance of this tender/receipt of supply/service order.
9. **I/We agree that in case if we fail to deliver the goods/complete the work within the specified period, then institute shall be liable to claim liquidated damages from me/us by invoking EMD.**
10. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,**(Signature of the Bidder, with Official Seal)**

CHAPTER- 9**PRE-BID QUERY FORM**

Sl. No	Reference of the Clause No. of the Tender Document	Query/Clarification/ Deviation sought	Clarification/ Response from IITI
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

CHAPTER- 10**PERFORMANCE SECURITY FORMAT**

To,

.....
WHEREAS (name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract no. datedto supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee:

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We further undertake to pay the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the supplier(s)/vendor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the supplier(s)/vendor(s) shall have no claim against us for making such payment.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

Phone No., Fax No. & e-mail id.