Notice Inviting Quotation (E-Procurement mode) कोटेशन को आमंत्रित करने की सूचना (इ-प्रोक्योर्मेंट मोड)

INDIAN INSTITUTE OF TECHNOLOGY DELHI भारतीय प्रौद्योगिकी संस्थान दिल्ली HAUZ KHAS, NEW DELHI-110016 होज ख़ास, नई दिल्ली -110016

Dated/ दिनांक: 14/07/2020

Open Tender Notice No. / खुला प्रस्ताव निविदा सूचना नंबर: IITD/CRF(SP-3063)/2020

Indian Institute of Technology Delhi is in the process of purchasing following item(s) as per details as given as under.

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी दिल्ली निम्नलिखित मदों की खरीद की प्रक्रिया में है।

Details of the item आइटम का विवरण	SUPPLY AND INSTALLATION OF FUME HOODS, ISLAND BENCHES, WALL BENCHES, CHEMICAL STORAGE CABINETS, SOLVENT CABINETS, GAS STORAGE CABINETS ETC
Earnest Money Deposit to be submitted बयाना जमा करने के लिए जमा राशि	NIL
Warranty वारंटी अवधि	3 Years/3 साल
Performance security निष्पादन सुरक्षा	NIL
Delivery Schedule	4 MONTHS (Maximum)

Tender Documents may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/eprocure/app . Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/eprocure/app . The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.

निविदा दस्तावेज केन्द्रीय सार्वजनिक खरीद पोर्टल http://eprocure.gov.in/eprocure/app से डाउनलोड हो सकते हैं ई-प्रोक्योरमेंट में पंजीकृत नहीं होने वाले इच्छुक बोलीदाताओं को वेबसाइट http://eprocure.gov.in/eprocure/app के माध्यम से भाग लेने से पहले पंजीकरण करना चाहिए। पोर्टल नामांकन मुफ्त है बोलीदाताओं को सलाह दी जाती है कि 'ऑनलाइन बोली के लिए निर्देश' पर दिए गए निर्देशों के माध्यम से जाने की सलाह दी जाए।

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website http://eprocure.gov.in/eprocure/app as per the schedule given in the next page.

निविदाकर्ता वेबसाइट पर निविदा दस्तावेज का उपयोग कर सकते हैं (एनआईसी साइट में खोज के लिए, कृपया निविदा खोज विकल्प और 'आईआईटी' टाइप करें। उसके बाद, सभी आईआईटी दिल्ली निविदाओं को देखने के लिए "गो" बटन पर क्लिक करें) उपयुक्त निविदा का चयन करें और उन्हें सभी प्रासंगिक सूचनाओं से भरें और वेबसाइट पर http://eprocure.gov.in/eprocure/app पर पूरा निविदा दस्तावेज ऑनलाइन जमा करें। अगले पृष्ठ में दिए गए कार्यक्रम के अनुसारNo manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the E-procurement portal).

कोई मैन्युअल बोली स्वीकार नहीं की जाएगी। सभी कोटेशन (तकनीकी और वित्तीय दोनों को ई-प्रोक्योरमेंट पोर्टल में जमा करना चाहिए)

SCHEDULE

SCHEDULE		
Name of Organization	Indian Institute of Technology Delhi	
Tender Type (Open/Limited/EOI/Auction/Single/Global)	Open	
Tender Category (Services/Goods/works)	Goods	
Type/Form of Contract (Work/Supply/ Auction/ Service/ Buy/ Empanelment/ Sell)	Supply	
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	Lab Furniture	
Source of Fund (Institute/Project)	Budget Code _PLN12/02F	
Is Multi Currency Allowed	No (INR ONLY)	
Date of Issue/Publishing	14/07/2020 (12:00 Hrs)	
Document Download/Sale Start Date	14/07/2020 (12:00 Hrs)	
Document Download/Sale End Date	11/08/2020 (15:00 Hrs)	
Date for Pre-Bid Conference		
Venue of Pre-Bid Conference		
Last Date and Time for Uploading of Bids	11/08/2020 (15:00 Hrs)	
Date and Time of Opening of Technical Bids	12/08/2020 (15:00 Hrs)	
Tender Fee EMD	RsNIL/- (For Tender Fee) RsNIL/- (For EMD) (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, New Delhi-110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the online quotation/bid. (Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II)	
No. of Covers (1/2/3/4)	02	
Bid Validity days (180/120/90/60/30)	120 days (From last date of opening of tender)	
Address for Communication	M. Ramu Yadav, Department of Chemistry MS-723, Multi-storey building IIT Delhi, Hauz Khas, New Delhi-110 016	
Contact No.	011 2654 1506/7330655324	
Email Address	ramuyadav@chemistry.iitd.ac.in	

Chairman Purchase Committee (Buyer Member)

Instructions for Online Bid Submission/ ऑनलाइन बोली (बिड) के लिए निर्देश:

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (<u>URL:http://eprocure.gov.in/eprocure/app)</u>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

व्यय विभाग के निर्देशों के अनुसार, यह निविदा दस्तावेज केंद्रीय सार्वजनिक प्रापण पोर्टल (यूआरएल: http://eprocure.gov.in/eprocure/app) पर प्रकाशित किया गया है। बोलीदाताओं को मान्य डिजिटल हस्ताक्षर प्रमाण पत्र का उपयोग करते हुए सीपीपी पोर्टल पर इलेक्ट्रॉनिक रूप से अपनी बोलियों की सॉफ्ट प्रतियां जमा करना आवश्यक है। सीपीपी पोर्टल पर पंजीकरण करने के लिए निविदाकर्ताओं की सहायता करने के लिए नीचे दिए गए निर्देशों का मतलब है, सीपीपी पोर्टल पर आवश्यकताओं के अनुसार अपनी बोलियां तैयार करें और अपनी बोलियां ऑनलाइन जमा करें।

More information useful for submitting online bids on the CPP Portal may be obtained at: अधिक जानकारी सीपीपी पोर्टल पर ऑनलाइन बोलियां जमा करने के लिए उपयोगी हो सकती है: http://eprocure.gov.in/eprocure/app

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
 - बोलीदाताओं को "नामांकन के लिए यहां क्लिक करें" लिंक पर क्लिक करके सेंट्रल पब्लिक प्रोक्युरमेंट पोर्टल (यूआरएल: http://eprocure.gov.in/eprocure/app) के ई-प्रोक्योरमेंट मॉड्यूल पर भर्ती करना आवश्यक है। सीपीपी पोर्टल पर नामांकन नि: शुल्क है
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
 - नामांकन प्रक्रिया के भाग के रूप में, बोलीदाताओं को अपने खाते के लिए एक अद्वितीय उपयोगकर्ता नाम चुनना होगा और एक पासवर्ड प्रदान करना होगा।
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
 - बोलीदाताओं को सलाह दी जाती है कि पंजीकरण प्रक्रिया के भाग के रूप में अपना वैध ईमेल पता और मोबाइल नंबर पंजीकृत करें। इन का उपयोग सीपीपी पोर्टल से किसी भी संचार के लिए किया जाएगा।
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
 - नामांकन पर, बोलीदाताओं को सीसीए इंडिया द्वारा मान्यता प्राप्त किसी प्रमाणन प्राधिकरण द्वारा जारी किए गए अपने मान्य डिजिटल हस्ताक्षर प्रमाण पत्र (कक्षा द्वितीय या कक्षा III प्रमाण पत्र के साथ महत्वपूर्ण उपयोग पर हस्ताक्षर करने) की आवश्यकता होगी (जैसे सिफी / टीसीएस / एनकोड / ई-मुद्रा आदि) , उनके प्रोफाइल के साथ
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
 - केवल एक मान्य डीएससी एक बोलीदाता द्वारा पंजीकृत होना चाहिए। कृपया ध्यान दें कि निविदाकर्ता यह सुनिश्चित करने के लिए ज़िम्मेदार हैं कि वे अपने डीएससी को दूसरों को उधार नहीं देते हैं जिससे दुरुपयोग हो सकता है।

6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.

बोलीदाता फिर अपने यूजर आईडी / पासवर्ड और डीएससी / ईटीकेन के पासवर्ड को दर्ज करके सुरक्षित लॉग-इन के माध्यम से साइट पर लॉग ऑन करता है।

SEARCHING FOR TENDER DOCUMENTS/ निविदा दस्तावेजों के लिए खोजना

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
 - सीपीपी पोर्टल में निर्मित विभिन्न खोज विकल्प हैं, ताकि बोलीदाताओं को कई मापदंडों से सक्रिय निविदाएं खोज सकें। इन मापदंडों में निविदा आईडी, संगठन का नाम, स्थान, तिथि, मूल्य आदि शामिल हो सकते हैं। निविदाओं के लिए उन्नत खोज का एक विकल्प भी है, जिसमें बोलीदाता कई नामों को जोड़ सकते हैं जैसे संगठन का नाम, अनुबंध का स्थान, स्थान, सीपीपी पोर्टल पर प्रकाशित निविदा की खोज के लिए तारीख, अन्य कीवर्ड आदि।
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
 - बोलीदाताओं ने एक बार निविदाएं चुनी हैं जिसमें वे रुचि रखते हैं, उसका वे आवश्यक दस्तावेज / निविदा कार्यक्रम डाउनलोड कर सकते हैं। ये निविदाएं 'मेरी निविदाओं' फ़ोल्डर में ले जाई जा सकती हैं। इससे सीपीपी पोर्टल को बोलीदाताओं को एसएमएस / ई– मेल के माध्यम से सूचित किया जा सकता है, यदि निविदा दस्तावेज में कोई शुद्धि जारी कि गई है।
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
 - बोलीदाता को प्रत्येक निविदा को निर्दिष्ट अद्वितीय निविदा आईडी का नोट बनाना चाहिए, अगर वे हेल्पडेस्क से कोई स्पष्टीकरण / सहायता प्राप्त करना चाहते हैं।

PREPARATION OF BIDS / बोली (बिड) की तैयारी

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
 - बोलीदाता को अपनी बोलियां जमा करने से पहले निविदा दस्तावेज पर प्रकाशित किसी भी शुद्धि को ध्यान में रखना चाहिए।
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers 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 these may lead to rejection of the bid.
 - कृपया बोली के भाग के रूप में जमा किए जाने वाले दस्तावेजों को समझने के लिए निविदा विज्ञापन और निविदा दस्तावेज ध्यान से देखें। कृपया उन अंकों की संख्या पर ध्यान दें जिन में बोली दस्तावेज जमा करना है, दस्तावेजों की संख्या जिसमें प्रत्येक दस्तावेज के नाम और सामग्री शामिल हैं, जिन्हें प्रस्तुत करने की आवश्यकता है। इनमें से कोई भी विचलन बोली को अस्वीकार कर सकता है।
- 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 / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
 - बोलीदाता, अग्रिम में, निविदा दस्तावेज / अनुसूची में बताए अनुसार प्रस्तुत करने के लिए बोली दस्तावेज तैयार करना चाहिए और आम तौर पर, वे पीडीएफ / एक्सएलएस / आरएआर / डीडब्ल्यूएफ स्वरूपों में हो सकते हैं। बोली दस्तावेजों को 100 डीपीआई के साथ काले और सफेद विकल्प स्कैन किया जा सकता है।

4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. 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.

मानक दस्तावेजों के एक ही सेट को अपलोड करने के लिए आवश्यक समय और प्रयास से बचने के लिए जो प्रत्येक बोली के भाग के रूप में जमा करने के लिए आवश्यक हैं, ऐसे मानक दस्तावेज अपलोड करने का प्रावधान (जैसे पैन कार्ड कॉपी, वार्षिक रिपोर्ट, लेखा परीक्षक प्रमाण पत्र आदि)) बोलीदाताओं को प्रदान किया गया है। ऐसे दस्तावेजों को अपलोड करने के लिए बोलीकर्ता उनके लिए उपलब्ध "मेरा स्पेस" क्षेत्र का उपयोग कर सकते हैं। बोली जमा करते समय ये दस्तावेज़ सीधे "मेरा स्पेस" क्षेत्र से जमा किए जा सकते हैं, और उन्हें बार-बार अपलोड करने की ज़रूरत नहीं है इससे बोली जमा प्रक्रिया के लिए आवश्यक समय में कमी आएगी।

SUBMISSION OF BIDS/ बोली (बिड) का जमा करना

- 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.
 - बोलीदाता को बोली प्रस्तुति के लिए अच्छी तरह से साइट पर लॉग इन करना चाहिए ताकि वह समय पर बोली अपलोड कर सके या फिर बोली प्रस्तुत करने के समय से पहले। अन्य मुद्दों के कारण किसी भी देरी के लिए बोलीदाता जिम्मेदार होगा।
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
 - बोलीदाता को निविदा दस्तावेज में दर्शाए अनुसार एक-एक करके आवश्यक बोली दस्तावेजों को डिजिटल हस्ताक्षर और अपलोड करना होगा।
- 3) Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD / Tender fees is sought, bidders need to pay the tender fee and EMD separately on-line through RTGS (Refer to Schedule, Page No.2).
 - बोलीदाता को निविदा शुल्क / ईएमडी को भुगतान के लिए "ऑन लाइन" के रूप में भुगतान विकल्प चुनना होगा और उपकरण का विवरण दर्ज करना होगा। जब भी, ईएमडी / निविदा शुल्क की मांग की जाती है, बोलीदाताओं को टेंडर शुल्क और ईएमडी अलग-अलग आरटीजीएस के माध्यम से ऑन लाइन पर भुगतान करने की आवश्यकता होती है (अनुसूची, पेज नं . 2 देखें)।
- 4) A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. 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 name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
 - एक मानक BoQ प्रारूप को सभी बोलीदाताओं द्वारा भरने के लिए निविदा दस्तावेज प्रदान किया गया है। बोलीदाताओं को इस बात का ध्यान रखना चाहिए कि उन्हें आवश्यक प्रारूप में अपनी वित्तीय बोली जमा करनी चाहिए और कोई अन्य प्रारूप स्वीकार्य नहीं है। बोलीकर्ताओं को BoQ फाइल को डाउनलोड करने, इसे खोलने और अपने संबंधित वित्तीय उद्धरण और अन्य विवरण (जैसे बोलीदाता का नाम) के साथ सफेद रंगीन (असुरिक्षित) कोशिकाओं को पूरा करना आवश्यक है। कोई भी अन्य कक्ष नहीं बदला जाना चाहिए। एक बार विवरण पूरा हो जाने पर, बोलीदाता को इसे सहेजना होगा और इसे ऑनलाइन जमा करना होगा, बिना फ़ाइल नाम बदलना। यदि BOQ फ़ाइल को बोलीदाता द्वारा संशोधित किया गया है, तो बोली को खारिज कर दिया जाएगा।
- 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.

सर्वर का समय (जो बोलीदाताओं के डैशबोर्ड पर प्रदर्शित होता है) बोलीदाताओं द्वारा बोलियों को खोलने के लिए समय सीमा को संदर्भित करने के लिए मानक समय के रूप में माना जाएगा। बोलीदाताओं को खोलना आदि। बोलीदाताओं को बोली प्रस्तुत करने के दौरान इस समय का पालन करना चाहिए।

- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
 - बोलीदाताओं द्वारा प्रस्तुत सभी दस्तावेज पीकेआई एन्क्रिप्शन तकनीकों का उपयोग करके एन्क्रिप्ट किया जाएगा जिससे डेटा की गोपनीयता सुनिश्चित हो सके। दर्ज किए गए डेटा को अनिधकृत व्यक्तियों द्वारा बोली खोलने के समय तक नहीं देखा जा सकता है। बोलियों की गोपनीयता को सुरक्षित सॉकेट लेयर 128 बिट एन्क्रिप्शन तकनीक का उपयोग कर रखा जाता है। संवेदनशील क्षेत्रों का डेटा संग्रहण एन्क्रिप्शन किया जाता है।
- 7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
 - अपलोड किए गए निविदा दस्तावेज केवल अधिकृत बोलीदाता द्वारा निविदा खोलने के बाद ही पठनीय हो सकते हैं।
- 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.
 - बोलियों के सफल और समय पर जमा होने पर, पोर्टल एक सफल बोली प्रस्तुत करने का संदेश देगा और एक बोली सारांश बोली संख्या के साथ प्रदर्शित किया जाएगा। और अन्य सभी प्रासंगिक विवरणों के साथ बोली प्रस्तुत करने की तारीख और समय।
- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet. कृपया अनुपालन पत्रक की एक पीडीएफ फाइल में सभी प्रासंगिक दस्तावेजों के स्कैन किए गए पीडीएफ को जोड़ दें।

ASSISTANCE TO BIDDERS / बोलीदाताओं को सहायता

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
 - निविदा दस्तावेज से संबंधित कोई भी प्रश्न और इसमें निहित नियमों और शर्तों को निविदा आमंत्रण प्राधिकरण को निविदा के लिए या निविदा में वर्णित प्रासंगिक संपर्क व्यक्ति से संबोधित किया जाना चाहिए।
- 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 1800 233 7315.
 - ऑनलाइन बोली प्रस्तुत करने या सामान्य में सीपीपी पोर्टल से संबंधित प्रश्नों की प्रक्रिया से संबंधित कोई भी प्रश्न 24x7 सीपीपी पोर्टल हैल्पडेस्क पर निर्देशित किया जा सकता है। हेल्पडेस्क के लिए संपर्क संख्या 1800 233 7315 है

General Instructions to the Bidders / बोलीदाताओं के लिए सामान्य निर्देश

- 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. निवदाएं पोर्टल http://eprocure.gov.in/eprocure/app के माध्यम से ऑनलाइन प्राप्त होंगी तकनीकी बोलियों में, बोलीदाताओं को सभी दस्तावेजों को। पीडीएफ प्रारूप में अपलोड करना होगा।
- 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".

कंपनी के नाम में स्मार्ट कार्ड / ई-टोकन के रूप में मान्य क्लास II / III डिजिटल हस्ताक्षर प्रमाण पत्र (डीएससी) के पंजीकरण के लिए एक शर्त है और https://eprocure.gov.in/eprocure/ के माध्यम से बोली प्रस्तुत करने की गतिविधियों में भाग ले सकते है। डिजिटल हस्ताक्षर प्रमाण पत्र अधिकृत प्रमाणित एजेंसियों से प्राप्त की जा सकती है, जिनमें से जानकारी "डीएससी के बारे में सूचना" लिंक के तहत वेब साइट https://eprocure.gov.in/eprocure/app पर उपलब्ध है।

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 https://eprocure.gov.in/eprocure/app.

निविदाकर्ता को सलाह दी जाती है कि वे निविदाकार को निर्देश दिए गए हों ताकि ई-प्रोक्योरमेंट के लिए सेंट्रल पब्लिक प्रोकॉर्ममेंट पोर्टल के जिए https://eprocure.gov.in/eprocure/app पर ऑनलाइन निविदाएं जमा कर सकें।

Central Research Facility Indian Institute of Technology Hauz Khas, New Delhi-110 016

NOTICE INVITING QUOTATIONS

Subject: SUPPLY AND INSTALLATION OF FUME HOODS, ISLAND BENCHES, WALL BENCHES, CHEMICAL STORAGE CABINETS, SOLVENT CABINETS, GAS STORAGE CABINETS AND OTHER LAB ITEMS.

Invitation for Tender Offers

Indian Institute of Technology Delhi invites online Bids (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for SUPPLY AND INSTALLATION OF FUME HOODS, ISLAND BENCHES, WALL BENCHES, CHEMICAL STORAGE CABINETS, SOLVENT CABINETS, GAS STORAGE CABINETS AND OTHER LAB ITEMS with (warranty period as stated at page #1 of this tender) on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document, which is available on CPP Portal http://eprocure.gov.in/eprocure/app

TECHNICAL SPECIFICATION

S.No.	Description	Unit	Quantity
1.	Wall Bench (WB - 1) Size: L 4800 mm x W 750 mm x H 900 mm	Nos.	1
	General Description:		
	Laboratory furniture must be tested as per SEFA-8M standards in SEFA Approved labs with latest 2016 Guidelines published by SEFA.		
	All modular construction & design must be made of mainly skin passed/zero spangle G.I. (Galvanized Iron) sheet duly coated with at least 50-60-micron Epoxy Powder Coated in panel form and in CKD (Completely Knocked Down) construction. The design should have provision for reconfiguration for change in layout using simple tooling and should provide independent access to the utilities installed, electrical panel & instrumentation panel. It should be removable without removing other panels.		
	All GI sheet components are of superior brand like TATA Steel / Jindal and are fabricated by precision shearing, levelling, and notching, piercing, machines to achieve consolidated dimensions within close tolerances under the strict quality checks and assembled with the aid of fixtures. Exposed welding marks should be polished smooth to improve aesthetic. Corner intersections of vertical and horizontal members should in the same plane with bolted joints and should be suitably aligned.		
	Laboratory Work Stations are available in 2 heights of 900mm (Standing purpose) and 750mm (Sitting purpose) in metallic construction designed to have completely		

flexible modular system. Each module will have independent base frame. Work table should consist of;

a) SEFA-8M standards heavy duty under cabinets & drawers: SEFA-8M standards heavy duty under module, comprising of one drawer - one shutter and adjustable height shelf, all drawers and only shutters. Cabinet shutter will be in double skin construction and shall be provided with heavy duty, knuckle and barrel type SS hinges of German make and positive catch arrangement. Shutter and drawer handles are also provided with recessed designed in Aluminum const. with epoxy powder coating. The under module shall be fabricated out of heavy gauge special grade Galvanized Iron sheet in weldless construction and shall be finished with pure epoxy coating for extra ordinary corrosion resistance.

Detailed specifications and thickness of GI items in each module:

- Cabinet end panels; min. 1.0 mm thick GI Sheet
- Cabinet rear panel and top panel; min. 1.0 mm thick GI sheet
- Cabinet base skid; 1.0 mm thick GI Sheet
- Cabinet drawers; 1.0 mm thick GI Sheet
- Cabinet shutters & drawer front panels; double skin const, min 0.8 mm thick GI sheet
 - Cabinet main frame structure and drawer slide rails, 1.6 mm thick GI Sheet
 - Each cabinet shall have self-standing type base skid plinth in GI const.

- Surface Treatment:

The complete GI material of cabinet is pretreated (degreased, Zinc phosphated) and epoxy powder coated for better corrosion resistance. The thickness of powder coat shall not be less than 50-60 microns, conforming to relevant BIS code, which accordingly passes the test of Salt Spray for 1000 hours and having the scratch hardness of 3 kgs.

- **b) Worktops:** Work top in 18 ± 1 mm thick Black Granite construction
- **d)** Electrical Fittings: Sockets and switches complete with internal wiring. Fittings are mounted on electrical trunk. Electrical Trunking are 1 mm thick GI with epoxy powder coating. Electrical Sockets Legrand make.

The Wall Bench shall include the following:

- Work top in 18 ± 1 mm thick Black Granite construction
- 750 mm wide storage module with one drawer two shutters 5 Nos.
- 500 mm wide storage module with one drawer one shutter 2 Nos.
- Worktop mounted electrical raceway in GI powder coated construction
- 6/16 Amp electrical sockets and 16 Amp one way switch 14 Nos
- Data Socket 2 Nos
- Filler Panel in G.I. Construction 2 Nos

2. ISLAND Bench (IB - 1) Size: L 4550 mm x W 1500 mm x H 900 mm General Description:

Laboratory furniture must be tested as per **SEFA-8M** standards in **SEFA Approved labs** with latest 2016 Guidelines published by SEFA.

All modular construction & design must be made of mainly skin passed/zero spangle G.I. (Galvanized Iron) sheet duly coated with at least 50-60-micron Epoxy Powder Coated in panel form and in CKD (Completely Knocked Down) construction. The design should have provision for reconfiguration for change

Nos.

in layout using simple tooling and should provide independent access to the utilities installed, electrical panel & instrumentation panel. It should be removable without removing other panels.

All GI sheet components are of superior brand like TATA Steel / Jindal and are fabricated by precision shearing, levelling, and notching, piercing, machines to achieve consolidated dimensions within close tolerances under the strict quality checks and assembled with the aid of fixtures. Exposed welding marks should be polished smooth to improve aesthetic. Corner intersections of vertical and horizontal members should in the same plane with bolted joints and should be suitably aligned.

Laboratory Work Stations are available in 2 heights of 900mm (Standing purpose) and 750mm (Sitting purpose) in metallic construction designed to have completely flexible modular system. Each module will have independent base frame. Work table should consist of:

a) SEFA-8M standards heavy duty under cabinets & drawers: SEFA-8M standards heavy duty under module, comprising of one drawer - one shutter and adjustable height shelf, all drawers and only shutters. Cabinet shutter will be in double skin construction and shall be provided with heavy duty, knuckle and barrel type SS hinges of German make and positive catch arrangement. Shutter and drawer handles are also provided with recessed designed in Aluminum const. with epoxy powder coating. The under module shall be fabricated out of heavy gauge special grade Galvanized Iron sheet in weldless construction and shall be finished with pure epoxy coating for extra ordinary corrosion resistance.

Detailed specifications and thickness of GI items in each module:

- Cabinet end panels; min. 1.0 mm thick GI Sheet
- Cabinet rear panel and top panel; min. 1.0 mm thick GI sheet
- Cabinet base skid; 1.0 mm thick GI Sheet
- Cabinet drawers; 1.0 mm thick GI Sheet
- Cabinet shutters & drawer front panels; double skin const, min 0.8 mm thick GI sheet
 - Cabinet main frame structure and drawer slide rails, 1.6 mm thick GI Sheet
 - Each cabinet shall have self-standing type base skid plinth in GI const.

- Surface Treatment:

The complete GI material of cabinet is pretreated (degreased, Zinc phosphated) and epoxy powder coated for better corrosion resistance. The thickness of powder coat shall not be less than 50-60 microns, conforming to relevant BIS code, which accordingly passes the test of Salt Spray for 1000 hours and having the scratch hardness of 3 kgs.

- b) Worktops: Work top in 18 ± 1 mm thick Black Granite construction
- c) Reagent Rack: Worktop mounted reagent rack in single or double tier design. Vertical member and main bracket of the reagent rack are in GI construction and epoxy coated for excellent corrosion resistance. Rack platform are in wire reinforced glass or Phenolic Resin construction. Shelf height are adjustable as per requirement.
- **d)** Electrical Fittings: Sockets and switches complete with internal wiring. Fittings are mounted on electrical trunk. Electrical Trunking are 1 mm thick GI with epoxy powder coating. Electrical Sockets Legrand make.

The Island Bench shall include the following: Work top in 18 ± 1 mm thick Black Granite construction 750 mm wide storage module with one drawer two shutters - 12 Nos Double sided double tier reagent rack with electrical raceway 6/16 Amp electrical sockets and 16 Amp one way switch - 24 Nos Data Socket - 6 Nos Vertical Service Pendent in GI Construction (300x150) - 1 No. Matrix Scaffold Grill in 12mm Dia Epoxy Rod Construction (1500x750) - 6 Nos Filler Panel in G.I. Construction - 2 Nos. 3. Nos. 4 Low Constant Volume (LCV) type Bench Fume Hood (Size: L 1500 x D 915 x H 2300 mm) (For AC Lab) **ASHRAE 110 Test:** All fume hoods should be subjected to ASHRAE 110 test. A certificate to this effect must be submitted along with the Technical quotation. All Fume Hoods must also comply as per EN-14175, SEFA 1 and SEFA 10 testing norms. Certificates to this effect must be submitted along with the Technical quotation. 1. Fume Hood Super Structure Fume hood super structure should consist of Frame structure in at least 1.6 mm thick galvanized iron construction. Inner lining, rear baffles and top baffles in 6mm thick fire retardant proprietary lab grade Phenolic resin construction of any reputed make. - Outer panels of the super structure should be in at least 1.2mm thick high finished GI construction, duly coated with epoxy powder. Front post should be broad enough to mount service fittings and should be in fabricated out of at least 1.2 mm thick high finished GI construction, duly coated with epoxy powder. Air Foil should be in Flip-on type design and should be fabricated out of 1.6 mm thick SS 316 construction. Air foil should be with hard Teflon coating for extra ordinary chemical resistant. Exhaust outlet should be provided with streamlined shaped duct collar in PP construction. The front sash should be in Combination type design, 5 mm thick toughened glass construction with full length sash handle in anodized Al construction duly coated with epoxy powder. Sash movement mechanism should be provided with multi core SS wire having dia. not less than 3.0 mm. The wire pulleys should be provided with ball bearings in SS construction for smooth movement of the sash. Super structure should be provided with LED lights of sufficient capacity for proper illumination within the hood chamber. The light intensity at work top level should be atleast 300 lux.

Fume hood work top in granite construction having thickness not less than

2. Fume Hood Worktop

18mm. The work top shall be provided with raised rails on all 4 sides to prevent spillage and should also be provided with a cup sink in PP construction on rear side corner.

3. Service Valves

All the service valves should be in forged brass construction with spindle in SS construction. Valves should be providing with angular shaped serrated nozzles also in brass construction with epoxy powder coating. The valve knobs should be with color sign as per DIN standard. All the valves should be provided with service pipe connection at least 1.5-meter-long in following construction.

Services Tube Construction

Compressed Air (1 no.) - PU pipe dia. 4 mm id Nitrogen Gas (1 No.) - PU pipe dia. 4 mm id Argon Gas (1 No.) - PU pipe dia. 4 mm id

Argon Gas (1 No.) - PU pipe dia. 4 mm id Vacuum Valve (1 No.) - SS braided Teflon Hose id at least 8.0 mm

Potable Water (1 No.) - Nylon braided PVC Hose (duly insulated in case

of chill water)

LPG (1 No.) - ISI grade Rubber Tubes

All the service valves shall be mounted on left side vertical post.

- **4. Electrical Services** with internal wiring (all in non-FLP const.) Fume hood should be provided with following services along with internal wiring in FRLS flexible wire construction.
- Touch Type Panel for light / Fan On-Off 1 No.
- 16A, 2 Pole MCB Legrand or eq. Make 1 No.
- 5/15A 3-pin Socket with Switch Legrand or eq. Make 4 Nos.
- Air Velocity Monitor with low air alarm, Model AFA/1000 TEL UK Make $-\ 1$ No.
- **5. Fume Hood Under Structure**: Fume Hood should be mounted on Heavy duty frame structure made out of Hot Deep Galvanized, MS hollow pipes of size not less than 80 mm x 40 mm x 2.5 mm thick. duly finished with corrosion resistant specialty coatings.
- 6. FIRE SAFETY SOLVENT CABINET (YELLOW): 90-minute Fire Rated FM approved fire rated manual 2 doors cabinet with poly liners and tray of any approved make. Size: L 595 mm x W 510 mm x H 620 mm (Justrite(USA)/Asecos (Austria)/Labor Security System (Italy)/Duperthal (Germany) make only)
- 7. CORROSION RESISTANT ACID CABINET (BLUE): Acid Cabinet 2 doors for storing Hazardous/corrosive chemicals with chemical resistant liners and PP tray. Size: L 820 mm x W 510 mm x H 620 mm The under cabinet should be provided with 1 No. removable shelves and the cabinet should essentially be SEFA certified
 - Detachable design general purpose cabinets fabricated out of GI sheet
 - Special arrangement for air ventilation inside the cabinet

	 Twin doors in double wall const. Flushed type recessed handle. Heavy duty Knucle-Barrler special design door hinges. 1 No. adjustable shelf. Recessed base frame in heavy duty GI const. FRP Lining inside the chemical storage cabinet PP Tray for chemical storage Twin castors for easy removal of the cabinet. 8. Accessories: Fume hood should also be provided with following accessories a. 200 mm dia. Duct damper in PP const. complete with pre drilled flanges on both sides, manual operation handle and extended spindle, suitable for manual as well as motorized drive. b. Scaffold Grill (1630 x 750mm) in Vertical rod design, fabricated out of 12.0mm dia., Epoxy rods, having 150mm pitch between two rods. 		
	c. Ceiling enclosure panels in GI powder coated construction up to false ceiling height.		
4.	Exhaust Fan (PP35) - 1 fan for 4 Nos. 1500 mm wide Fume Hood Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 2500 to 2600. Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. Drive - 5 HP, 2800 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. 16A, 3Ph MCB for Fan - Legrand or eq. Make. Electrical Panel with necessary internals and VFD for fan.	Nos.	1
5.	Slotted angle rack Size: L 750 x D 450 x H 1830mm Fabricate out of Min. 50x50x2mm GI slotted angle construction duly epoxy powder coated with 5 Nos. adjustable shelves and SS hardware. Overall Dimensions: - W 750mm x Depth 450mm x Height 1830mm (Length can be changed as per client's requirement)	Nos.	1
6.	Ventilated Chemical Storage Cabinet Size: L 1000 x D 450 x H 1830mm General Specifications: The cabinet shall be fabricated out of galvanized iron sheets. Cabinet should be provided with 4 adjustable & 1 fixed shelf comporting 6 compartments. Proper design, stiffening / structural members should be provided for strength and rigidity. Front door of the cabinet shall be in twin door design having air vent provision with metallic frame in galvanized iron construction. Dimension and constructional detail of the cabinet is furnished below. Chemical storage cabinet should be chemical and corrosion resistance.	Nos.	1

	Overall Dimensions: - W – 1000 mm x Depth – 450 mm x Height – 1830 mm No. of Shelves: - 1 fixed & 4 adjustable shelves; forming 6 compartments. Construction Detail: - • Outer Skin: 1.2 mm thk epoxy powder coated GI construction • Inner Skin: 5.0 mm thk PP construction • 4 Doors in Glass/Metal construction • Shelf: - 1.2 mm thick G.I. sheet • Door supporting frames: - 1.6 mm thick G.I. sheet • Door Hinges: - Knuckle Barrel type SS hinges of German make and positive catch • Door Handles: - SS 304 const. • Lock: - With two keys for doors		
	 PP Damper - 100mm Dia. 8 Nos. trays in 3.0 mm PP construction, kept on shelves 		
7.	Spot Extractors Technical Specifications: Size: 1500mm X 75mm MOC: Pipe – PP in Milky White Color Joints – Polypropylene Dome - (Dia 385mm) Polypropylene Inbuilt Damper Bracket: Wall Mounted / Ceiling Mounted Ceiling Mounted Bracket Standard Length: 1ft Long (Extra Long size available on request) MOC for Bracket: Aluminum Powder Coated	Nos.	4
8.	8. Exhaust Fan (PP-25) - 1 fan for 4 No. Spot Extractor & 1 Ventilated Chemical Storage Cabinets Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 500 to 600. Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. Drive - 1 HP, 1400 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. 16A, 3Ph MCB for Fan - Legrand or eq. Make. Electrical Panel with necessary internals and VFD for fan. DOL Starter for Motor.		1
9.	Peg Board with 38 Nos. PP Pegs, Drain Tray & Pipe (Size: L 900 x D 600) Peg Board in Acrylic / Phenolic resin construction with 38 Nos. PP Pegs, Drain Tray & Pipe	Nos.	1
10.	Worktop mounted, double outlet eye wash with SS breaded flexible hose Worktop mounted, hand held type, double outlet Eyewash is Brass construction with Gun Metal Valve and SS Braided Flexible Hose. Eye wash to be made from high quality brass forging Grade as per IS 8737 2007 and	Nos.	1

22.	PP clamp with profile 1/2" & 1/4" od	Nos.	150
21.	1/4" SS 304 TUBING with 0.9 1.2 mm wall thickness and color coded sleeving (Make- Sumotomo or eq.)	Mtrs.	40
20.	sleeving.(Make- Sumotomo or eq.) - (SS-304)	Mtrs.	110
19.	SUPPLY OF MS powder coated Cylinder mounting bracket with chain for holding the 1 cylinder - MS 1/2" SS 304 TUBING with 0.9 - 1.2 mm wall thickness and colour coded	Nos.	
18.	SUPPLY OF "S.S Braided Pigtails of 1mt Length for each cylinder with safety Ropes - (SS-304) SUPPLY OF MS powder coated Cylinder mounting bracket with chain for	Nos.	8
	gauge: 0-14 kg/cm2 Outlet Connection: 1/8" & 1/4" ferrule fitting Inlet Connection: 5/8" BSP Male (RHT/LHT) - (SS-316)		
17.	SUPPLY OF Two stage Cylinder Regulator with fully S.S. body with S.S.316 Diaphragm for Gas Inlet Pressure gauge: 0-280 kg/cm2 Outlet Pressure	Nos.	4
16.	SUPPLY OF Dual stage cylinder manifold moc SS 304 with MS powder coated mounting bracket working pressure 200kg/cm2 with cylinder isolation valve as per fume hood services -(SS-304)	Nos.	4
15.	Flash back arrester SS 304 Body SS 304 /Body brass with Necessary Connector 1/4 " OD BOTH SIZE (Make -GC Druva or eq.) - (SS-304)	Nos.	1
14.	SUPPLY OF Online micron filter 1/4" OD (SS-304)	Nos.	3
13.	FOR ZERO AIR: moisture filter consist of molecular sieve - 13X silica gel, length 11", Activated alumina filter length 11", inlet & outlet machine sealed type stainless steel pressure gauge outlet brass chrome plated pressure gauge regulator with SS diaphragm brass chrome plated on/off valve (IT CONTAINS ON/OFF VALVE, PRESSURE GAUGE, PRESSURE REGULATOR, COLOUR COATED STICKERS & APPROPRIATE END FITTINGS)	Nos.	1
12.	FOR NITROGEN and ARGON:- moisture filter consist of molecular sieve - 13X silica gel, length 11", Activated alumina filter length 11", inlet & outlet machine sealed type stainless steel pressure gauge outlet brass chrome plated pressure gauge regulator with SS diaphragm brass chrome plated on/off valve (IT CONTAINS ON/OFF VALVE, PRESSURE GAUGE, PRESSURE REGULATOR, COLOUR COATED STICKERS & APPROPRIATE END FITTINGS)	Nos.	2
11.	Emergency Safety Shower Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication. Worktop mounted, hand held type, single/double outlet eye wash with SS breaded flexible hose. Minimum Discharge of Water for Eyewash = 32 Ltr/Min @2 Kg/Sq. CM. For shower 250-300 Ltr/Min@2 Kg/Sq. CM. Safety Shower is as per India Standard 10592:1982 and made from high quality SS – 304. Safety Shower is tested in Hydraulic Test at 30 PSI to avoid leakage. Water Static Pressure Max 3 Kg/CM2. Minimum operating pressure required for shower & Eyewash is 2 Kg/CM2 (30 PSI)	Nos.	1
	machining Grade as per IS 319 (I) material to avoid porosity & Leakage. Eye Wash are powder coated with Full Glossy Epoxy Fusion Bond available in Red color. Eye Wash are tested in Hydraulic test at 30 PSI to avoid leakage. Water Static Pressure Max: 4 bar. Minimum operating pressure required to operate Eye Wash is 2Kg/CM2 (30 PSI)		

23.	Source connector for vacuum & water As per actuals - (SS-304)	Nos.	2
24.	63 mm OD HDPE pipe Providing and fixing of UV stabilized & antimicrobial fusion welded multi- layer, HDPE PE 100 PN-6 pipes confirming to IS 4984 complete with necessary slope and HDPE fittings specials like flanges, gaskets, bolts, nuts, washers, elbows, tees, unions, reducers, reducing tees,end caps, reducing sockets, reducing elbows, heat welding,etc (excluding earth excavation). Mode of measurement shall be in running Meters as described below.	Mtrs.	20
25.	20 mm diameter Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes for WATER, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement complete as per direction of Engineer-in-Charge.	Mtrs.	25
26.	CPVC ball valves 20 mm dia	Set	12
27.	Standard fittings like 1/4" ball valve -32, 1/2" ball vave -5,1/2" BSPF X 1/4" OD FH Connector-37, 1/2"x 1/4" x 1/2" od Tee SS30415, 1/2"x 1/2" x 1/2" od Tee SS3045, 1/2"x 1/4" reducer SS3045, Nut Bullnose for GAS24, Check Valve 1/4" -24 nos and nuts, ferrules, union, clamps, hardware etc.	Lot	1
28.	Ball Valve 1/4 " OD - (SS-304)	Nos.	18
29.	Ball Valve 1/2" OD - (SS-304)	Nos.	8
30.	Connector for Fume hood 1/2" BSPF x 1/4" OD - (SS-304)	Nos.	22
31.	Tee 1/2" x 1/4" x 1/2" OD - (SS-304)	Nos.	15
32.	Tee 1/2" x 1/2" x 1/2" OD - (SS-304)	Nos.	5
33.	Reducer 1/2" x 1/4" - (SS-304)	Nos.	5
34.	Nut Bullnose for Gas - (SS-304)	Nos.	12
35.	Check Valve 1/4" NPTM x 1/4" NPTF - (SS-304)	Nos.	4
36.	Union 1/2" OD - (SS-304)	Nos.	9
37.	Union 1/4" OD - (SS-304)	Nos.	5
38.	Hardware - (SS-304)	Set	1
39.	MS Support for GDS & Drainage line work	Set	1
40.	Cylinder Storage Cabinets Gas Cabinets are designed to provide a safe and cost effective means to isolate hazardous gas cylinders from the surrounding work place. The cabinets, which can safely store 2 gas cylinders 1. Constructed of durable, 2 mm galvanized steel with a tough powder-coat paint to provide excellent corrosion resistance. 2. Equipped with explosion-proof windows on the door, making it convenient to observe. 3. Pass holes set on the side ensure well ventilation. 4. Cylinder Holding Brackets for holding cylinder	Nos.	3
41.	Lab Stool Providing & supplying ergonomically designed 375mm diameter Laboratory stools with chrome plated hydraulic height adjuster and chrome plated 450mm	Nos.	10
	diameter rest ring, chrome plated 5 legged base with leatherite seat.		
42.	Ducting: The Ducting will be fabricated out of 3mm thk PPGL Sheets & the same will be externally coated with 3 mm Thk FRP using Isopthalic grade resin (Suitable for	Sq. Mtrs.	80

	Highly Corrosive atmosphere) along with 450Gm/cc Chopped strande mate. All the required Gaskets, Nut Bolts.		
43.	MS Support For Duct & Chimney Stand	Kg.	145
43.		Kg.	145
	 Free Air Displacement: 67 LPM without gas ballast partial: 5x10-4 mbar Ultimate total pressure: 2x10-3 mbar (w/o gas ballast valve) Ultimate total pressure: 7x10-2 mbar (with gas ballast valve) Connection flange: DN16 KF Motor: 370 W Motor with thermal overload protection Large 1150 ml oil capacity to dilute contaminants Weight: <21 KG Dimension: L< 463, W< 157, H<230 Supplied with Directorr™ Premium vacuum oil to resist breakdown at higher RPMs and operating temperatures of direct-drive vacuum pumps; maintaining stable vacuum all the time. Slotted base plate for easy mounting 		
	 Voltage: 220V, 50Hz, 1ph.: Power rating to suit Indian condition CE, UL marked: Ensures product meets global safety regulations IP 44 Protection Pump supplied with following directives to conform safe operation: 2006/42/EC Machinery Directive 2014/30/EU Electromagnetic Compatibility Directive 2012/19/EU Electrical and electronics - old devices (WEEE) 2011/65/EU Dangerous materials in electrical and electronics devices (RoHS II) Vendor should provide the high vacuum flexible tubing for vacuum pump based on the requirement 		
	Note: The overall dimensions of item no. 1,2,3,5 and 6 are approx. bearing a tolerance of ± 50 mm. for the Length & width		

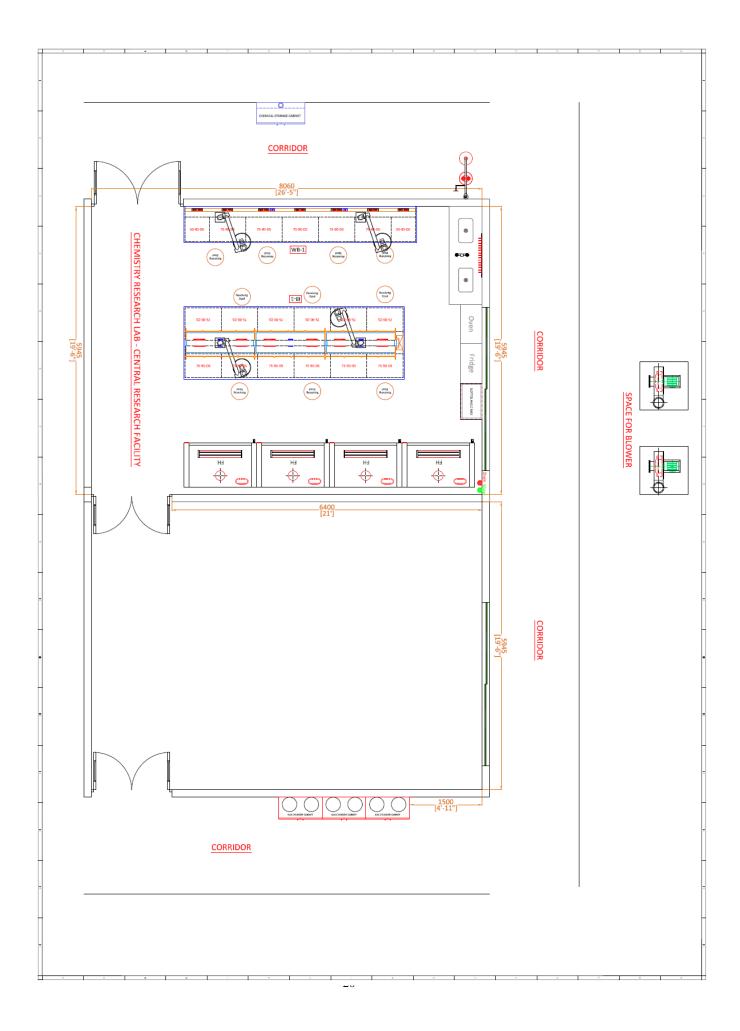
LIST OF APPROVED MAKES:

MATERIAL	LIST OF APPROVED MAKES
Steel/GI	TATA Steel / Jindal
Powder Coating	Kansai Nerolac / Vijay Coat
Glass	Saint Gobain / Modi
Emergency Devices, Water	Watersaver / Premier Polymer
Faucets and Gas Valves,	
Fume Hood Utility Fittings	
Spot Extractor	Fumex / Premier Polymer
Switches and Sockets	Northwest / Legrand
LED lights	Philips / Equivalent
Fire Safety Storages	Justrite, Labor Security System, Asecos, Duperthal
Locks	Hettich / Haffle
Ball Slides	Hettich / Haffle
Hinges	Hettich / Haffle
Sink/Cup Sink (PP)	KL Labs, Malaysia / Premier Polymer
Worktop	Jet Black Granite
Blower	Seat / Premier Polymer
Safety Shower & Eye Wash	Watersaver/Premier Polymer

IMPORTANT NOTES AND SPECIFIC TERMS AND CONDITIONS:

S.No.	Terms and Conditions
1.	Manufacturers/vendors/suppliers interested in participating in the tender SHOULD MAKE A PRETENDER SUBMISSION VISIT TO THE SITE (LT-1, V Block) taking prior appointment with the buyer (Prof. M. RAMU YADAV, 7330655324). Visit the site and take necessary measurements/details etc. before submitting the quotation. Alternatively, video conferencing can be arranged on request for vendors who are unable to visit the site. A CERTIFICATE ISSUED BY PROF. M. RAMU YADAV IN HIS LETTER HEAD THAT YOU HAD MADE A PRE-VISIT (BY PERSON OR VIDEO) TO THE SITE HAS TO BE ENCLOSED ALONG WITH TENDER DOCUMENTS. QUOTATIONS SUBMITTED BY MANUFACTURERS/VENDORS/SUPPLIERS WHO HAD NOT MADE VISIT BY PERSON OR THROUGH VIDEO CONFERENCING TO THE SITE OR DO NOT ATTACH THE SAID CERTIFICATE WILL BE TECHNICALLY REJECTED.
2.	MANUFACTURERS/VENDORS/SUPPLIERS SHOULD TAKE EXACT MEASUREMENTS (IF POOSIBLE) OR APPROXIMATE IN CASE OF VIDEO CONFERENCING, REQUIRED FOR DUCTING/TUBING/PIPING/ELECTRICAL WIRING/WATER CONNECTION/DRAINAGE/GAS PIPING, CHILLED WATER TUBING, VACUUM TUBING AS WELL AS CALCULATE THE NUMBER OF

	CLAMPS, FERRULES, NUTS BOLTS AND OTHER SIMILAR ITEMS ETC. AND QUOTE ACCORDINGLY.
	FINAL PAYMENT TO THE SUCCESSFUL BIDDER FOR SUCH WORKS WILL BE AS PER ACTUAL LENGTH/NUMBER OF ITEMS USED OR AS PER QUOTATION WHICHEVER IS LOWER. UNDER NO CIRCUMSTANCES THE FINAL BILL CAN NOT BE HIGHER THAN WHAT HAS BEEN QUOTED IN THE FINANCIAL BID.
3.	REPRESENTATIVE LAYOUT OF THE PROPOSED LAB IS ATTACHED ALONG WITH THE TECHNICAL SPECIFICATIONS. PLEASE NOTE THAT THE LAYOUT IS ONLY REPRESENTATIVE JUST TO GIVE AN IDEA ABOUT THE PROPOSED LAB FOR PROSPECTIVE BIDDER. THIS IS NOT THE FINAL LAYOUT. FINAL LAYOUT SHOULD BE ARRIVED AT BY EACH BIDDER AFTER THE SITE VISIT EITHER IN PERSON OR VIDEO CONFERENCING AND SHOULD BE SUBMITTED ALONG WITH THE TECHNICAL QUOTATION.
	TENDER DOCUMENTS SHOULD BE IN ACCORDANCE WITH YOUR LAYOUT. FAILURE TO SUBMIT THE LAYOUT WITH THE TECHNICAL TENDER WILL LEAD TO THE REJECTION OF THE TENDER.
4.	ONLY ONE INLET FOR WATER AND ONE DRAINAGE OUTLET WILL BE AVAILABLE IN THE LAB. SUCCESSFUL BIDDER SHOULD CONNECT THIS INLET AND DRAINAGE TO FUME HOODS, SINK AND OTHER REQUIRED PLACES THROUGH PROPER TUBING.
5.	ALL ELECTRICAL CONNECTIONS SHOULD COME THROUGH INSTALLED ELECTRICAL LINES TO THE RESPECTIVE PLACES FROM THE SOURCE. THESE ARE TO BE DONE BY THE SUCCESSFUL BIDDER.
6.	SUPPLY OF MATERIALS TO IIT, TRANSPORTATION OF THEM TO THE SITE AND INSTALLATION ARE ALL AT THE SOLE DISCREATION OF THE SUCCESSFUL BIDDER. THERE IS NO PROVISION FOR THE BUYER TO TRANSPORT/SHIFT ANY OF THE MATERIALS FROM THE PLACE OF DELIVERY TO THE SITE WITHIN IIT.
7.	ALL ELECTRICAL SWITCHES/MCBs ARE LEGRAND or NORTHWEST MAKE ONLY.
8.	BIDDER SHOULD HAVE EXPERINCE OF SUCCESSFUL INSTALLATIONS AT ONE OF THE FOLLOWING INSTITUTIONS SUCH AS IITs, IISC AND IISERs.
9.	Warranty: All parts should be covered under 3 years warranty
10.	VENDORS SHOULD PROVIDE SPERATE QUOTATION FOR 4^{TH} AND 5^{TH} YEAR AMC.



A complete set of tender documents* may be Download by prospective bidder free of cost from the website http://eprocure.gov.in/eprocure/app. Bidder has to make payment of requisite fees (i.e. Tender fees (if any) and EMD) online through RTGS/NEFT only.

Terms & Conditions Details

Sl. No.	Specification
1.	Due date : The tender has to be submitted on-line before the due date. The offers received after the
1.	due date and time will not be considered. No manual bids will be considered.
2.	Preparation of Bids: The offer/bid should be submitted in two bid systems (i.e.) Technical bid and
	financial bid. The technical bid should consist of all technical details along with commercial terms
	and conditions. Financial bid should indicate item wise price for the items mentioned in the
	technical bid in the given format i.e BoQ_XXXX.
	The Technical bid and the financial bid should be submitted Online.
	Note: -Comparison of prices will be done ONLY on the bids submitted for the Main Equipment and
	anything asked as 'Optional' in the specs is not to be included for overall comparison.
3.	EMD (if applicable): The tenderer should submit an EMD amount through RTGS/NEFT. The
	Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted.
	The EMD will be refunded without any interest to the unsuccessful bidders after the award of
	contract. Refer to Schedule (at page 1 of this document) for its actual place of submission.
4.	Refund of EMD : The EMD will be returned to unsuccessful Tenderer only after the Tenders are
	finalized. In case of successful Tenderer, it will be retained till the successful and complete
	installation of the equipment.
5.	Opening of the tender : The online bid will be opened by a committee duly constituted for this
	purpose. Online bids (complete in all respect) received along with EMD (if any) will be opened as
	mentioned at "Annexure: Schedule" in presence of bidders representative if available. Only one
	representative will be allowed to participate in the tender opening. Bid received without EMD (if
	present) will be rejected straight way. The technical bid will be opened online first and it will be
	examined by a technical committee (as per specification and requirement). The financial offer/bid
	will be opened only for the offer/bid which technically meets all requirements as per the
	specification, and will be opened in the presence of the vendor's representatives subsequently for
	further evaluation. The bidders if interested may participate on the tender opening Date and Time.
	The bidder should produce authorization letter from their company to participate in the tender
	opening.
6.	Acceptance/ Rejection of bids: The Committee reserves the right to reject any or all offers without
	assigning any reason.
7.	Pre-qualification criteria:
	(i) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original
	equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.
	(ii) An undertaking from the OEM is required stating that they would facilitate the bidder on a
	regular basis with technology/product updates and extend support for the warranty as well. (Ref.
	Annexure-II)
	(iii) OEM should be internationally reputed Branded Company.
	(iv) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the
	specifications, contradiction between bidder specification and supporting documents etc. may lead to
	rejection of the bid.
	(v) In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can
	bid but both cannot bid simultaneously for the same item/product in the same tender. (vi) If an agent submits hid on behalf of the Principal/OFM, the same agent shell not submit a hid on
	(vi) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product
8.	behalf of another Principal/OEM in the same tender for the same item/product. Performance Security: The supplier shall require to submit the performance security in the form of
0.	Performance Security : The supplier shall require to submit the performance security in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount which is stated at
	page #1 of the tender document within 21 days from the date of receipt of the purchase order/LC and
	should be kept valid for a period of 60 days beyond the date of completion of warranty period.
	should be kept valid for a period of oo days beyond the date of completion of warranty period.

- 9. Force Majeure: The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. 10. Risk Purchase Clause: In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause. 11. **Packing Instructions**: Each package will be marked on three sides with proper paint/indelible ink, the following: i.Item Nomenclature ii.Order/Contract No. iii.Country of Origin of Goods iv. Supplier's Name and Address v.Consignee details vi.Packing list reference number 12. **Delivery and Documents:** Delivery of the goods should be made within a maximum of 4 months maximum (for goods ready for shipment) & Maximum (To be filled by Purchaser) weeks (For special/to be fabricated goods) from the date of the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company: 1. 4 Copies of the Supplier invoice showing contract number, goods' description, quantity 2. unit price, total amount;
 - 3. Insurance Certificate if applicable;
 - 4. Manufacturer's/Supplier's warranty certificate;
 - 5. Inspection Certificate issued by the nominated inspection agency, if any
 - 6. Supplier's factory inspection report; and
 - 7. Certificate of Origin (if possible by the beneficiary);
 - 8. Two copies of the packing list identifying the contents of each package.
 - 9. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.
- Delayed delivery: If the delivery is not made within the due date for any reason, the Committee will have the right to impose penalty 1% per week and the maximum deduction is 10% of the contract value / price.
- Prices: The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of taxes & duties shall be clearly indicated. The price should be quoted without custom duty and excise duty, since IIT Delhi is exempted from

payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand. In case of imports, the price should be quoted on FOB/FCA origin Airport Basis only. Under special circumstances (eg. perishable chemicals), when the item is imported on CIF/CIP, please indicate CIF/CIP charges separately upto IIT Delhi indicating the mode of shipment. IIT Delhi will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges. At any circumstances, it is the responsibility of the foreign supplier to handover the material to our forwarder at the origin airport after completing all the inland clearing. No Ex-Works consignment will be entertained. "In case of CIF/CIP shipments, kindly provide the shipment information at least 2 days in advance before landing the shipment along with the documents i.e. invoice, packing list, forwarder Name, address, contact No. in India to save penalty/demurrage charges (imposed by Indian Customs). Otherwise these charges will be recovered from the supplier/Indian Agent." Note: -Comparison of prices will be done ONLY on the bids submitted for the Main Equipment and anything asked as 'Optional' in the specs is not to be included for overall comparison. 15. Notices: For the purpose of all notices, the following shall be the address of the Purchaser and Supplier. Purchaser: Dr. M. Ramu Yadav Department of Chemistry Indian Institute of Technology Hauz Khas, New Delhi - 110016. **Supplier:** (To be filled in by the supplier) (All supplier's should submit its supplies information as per Annexure-II). **Progress of Supply**: Wherever applicable, supplier shall regularly intimate progress of supply, in 16. writing, to the Purchaser as under: Quantity offered for inspection and date; Quantity accepted/rejected by inspecting agency and date; 3. Quantity dispatched/delivered to consignees and date; 4. Quantity where incidental services have been satisfactorily completed with date; 5. Quantity where rectification/repair/replacement effected/completed on communication from consignee/Purchaser with date; 6. Date of completion of entire Contract including incidental services, if any; and 7. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified). 17. **Inspection and Tests:** Inspection and tests prior to shipment of Goods and at final acceptance are as follows: After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance.

The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser's site in the

presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified. In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser. Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Supplier. 18. **Resolution of Disputes**: The dispute resolution mechanism to be applied pursuant shall be as follows: • In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. dispute shall be referred to the Director, Indian Institute of Technology (IIT) Delhi and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order. • In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. • The venue of the arbitration shall be the place from where the order is issued. 19. Applicable Law: The place of jurisdiction would be New Delhi (Delhi) INDIA. 20. **Right to Use Defective Goods** If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation. 21. **Supplier Integrity** The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract. 22. **Training** The Supplier is required to provide training to the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment. 23. **Installation & Demonstration** The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the IITD site of installation, otherwise the penalty clause will be the same as per the supply of materials. In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. IITD will not be liable to any type of losses in any form. 24. **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final

destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a

	period of not less than 3 months after installation and commissioning. In case of orders placed on FOB/FCA basis, the purchaser shall arrange Insurance. If orders placed on CIF/CIP basis, the				
	insurance should be up to IIT Delhi.				
25.	Incidental services: The incidental services also include:				
	• Furnishing of 01 set of detailed operations & maintenance manual.				
	• Arranging the shifting/moving of the item to their location of final installation within IITD premises at the cost of Supplier through their Indian representatives.				
26.	Warranty: (i) Warranty period shall be (as stated at page #2 of this tender) from date of installation of Goods at the IITD site of installation. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site. (ii) The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately within in 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier shall like over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract. (iii) The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components. (iv) After the warranty period is over, Annual Maintenance Contract (AMC)/Comprehensive Maintenance Contract (CMC) up to				
27.	Governing Language				
	The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.				
28.	Applicable Law The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.				
29.	Notices • Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address.				
20	• A notice shall be effective when delivered or on the notice's effective date, whichever is later.				
30.	Taxes Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, GST etc, in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.				

	For research purpose(s) ONLY , 5% GST will be applicable with concessional GST Certificate.
31.	Duties IIT Delhi is exempted from paying custom duty under notification No.51/96 (partially or full) and necessary "Custom Duty Exemption Certificate" can be issued after providing following information and Custom Duty Exemption Certificate will be issued to the shipment in the name of the Institute, (no certificate will be issued to third party): The procured product should be used for teaching, scientific and research work only. a) Shipping details i.e. Master Airway Bill No. and House Airway No. (if exists)
	b) Forwarder details i.e. Name, Contact No., etc. IIT Delhi is partially exempted from paying GST and necessary GST Exemption Certificate will be provided for which following information are required.
	b) Quotation with details of Basic Price, Rate, Tax & Amount on which ED is applicablec) Supply Order Copyd) Proforma-Invoice Copy.
32.	Agency Commission : Agency commission if any will be paid to the Indian agent in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in case of Nil commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent.
33.	Payment: (i) For imported items Payment will be made through irrevocable Letter of Credit (LC) Cash Against Documents (CAD)/Against delivery/after satisfactory installation by T.T. Letter of Credit (LC) will be established in favour of foreign Supplier after the submission of performance security. The letter of credit (LC) will be established on the exchange rates as applicable on the date of establishment. For Imports, LC will be opened for 100% FOB/CIF value. 80% of the LC amount shall be released on presentation of complete and clear shipping documents and 20% of the LC amount shall be released after the installation and demonstration of the equipment at the INST site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation and subject to the production of unconditional performance bank guarantee as specified in Clause 8 of tender terms and conditions. (ii) For Indigenous supplies, 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at IITD in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 9 of tender terms and conditions. (iii) Indian Agency commission (IAC), if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items. (iv) All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.
34.	User list: Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided. (Ref. Annexure-III)
35.	 Manuals and Drawings (i) Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications. (ii) The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
	(iii) Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the

36. Application Spavailability and (Ref. to Annexu Site Preparatio	of taking over until such manuals and drawing have been supplied to the Purchaser. pecialist: The Tenderer should mention in the Techno-Commercial bid the names of Application Specialist and Service Engineers in the nearest regional office.				
availability and (Ref. to Annexu 37. Site Preparatio					
(Ref. to Annexu 37. Site Preparatio	availability and names of Application Specialist and Service Engineers in the nearest regional of				
_					
_	n: The supplier shall inform to the Institute about the site preparation, if any, needed				
i ioi uic iiistaliati	on of equipment, immediately after the receipt of the purchase order. The supplier				
	omplete details regarding space and all the other infrastructural requirements needed				
	ent, which the Institute should arrange before the arrival of the equipment to ensure				
	ation and smooth operation thereafter.				
	all visit the Institute and see the site where the equipment is to be installed and may				
	and render assistance to the Institute in the preparation of the site and other pre-				
installation requ					
38. Spare Parts					
l -	ay be required to provide any or all of the following materials, notifications, and				
	aining to spare parts manufactured or distributed by the Supplier:				
I -	parts as the Purchaser may elect to purchase from the Supplier, providing that this				
_	all not relieve the Supplier of any warranty obligations under the Contract; and				
	t of termination of production of the spare parts:				
	otification to the Purchaser of the pending termination, in sufficient time to permit the				
	o procure needed requirements; and				
	such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and				
	ons of the spare parts, if requested.				
_ -	earry sufficient inventories to assure ex-stock supply of consumable spares for the				
**	gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied				
	ossible but in any case within six months of placement of order.				
39. Defective Equip	pment: If any of the equipment supplied by the Tenderer is found to be substandard,				
refurbished, un-	merchantable or not in accordance with the description/specification or otherwise				
faulty, the com	mittee will have the right to reject the equipment or its part. The prices of such				
equipment shall	be refunded by the Tenderer with 18% interest if such payments for such equipment				
	en made. All damaged or unapproved goods shall be returned at suppliers cost and				
	dental expenses incurred thereon shall be recovered from the supplier. Defective part				
in equipment, if	found before installation and/or during warranty period, shall be replaced within 45				
•	of the intimation from this office at the cost and risk of supplier including all other				
_	supplier fails to replace above item as per above terms & conditions, IIT Delhi may				
	ng" the supplier.				
40. Termination for					
	nay, without prejudice to any other remedy for breach of contract, by written notice of				
	ne Supplier, terminate the Contract in whole or part:				
· · · · · · · · · · · · · · · · · · ·	oplier fails to deliver any or all of the Goods within the period(s) specified in the order,				
	any extension thereof granted by the Purchaser; or				
_	oplier fails to perform any other obligation(s) under the Contract.				
_	plier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices				
in compet	ting for or in executing the Contract.				
• For the pur	pose of this Clause:				
	upt practice" means the offering, giving, receiving or soliciting of anything of value				
	influence the action of a public official in the procurement process or in contract				
	xecution.				
ii. "Frau c	dulent practice" means a misrepresentation of facts in order to influence a				
	rocurement process or the execution of a contract to the detriment of the Borrower,				
=	nd includes collusive practice among Bidders (prior to or after bid submission)				

45.	Compliancy certificate : This certificate must be provided indicating conformity to the technical specifications. (Annexure-I)
44.	Disputes and Jurisdiction : Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within New Delhi.
43.	Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.
42.	Downtime: During the warranty period not more than 5% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 5% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.
41.	Shifting : After 1-2 years once our new Academic Block will be ready, the supplier has to shift and reinstall the instrument free of cost (if required).
	 Borrower of the benefits of free and open competition;" In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.
	designed to establish bid prices at artificial non-competitive levels and to deprive the

COMPLIANCE SHEET

TECHNICAL SPECIFICATION

S.No.	Description	Unit	Quantity	Compliance (Yes/No) with detailed information
1.	Wall Bench (WB - 1) Size: L 4800 mm x W 750 mm x H 900 mm	Nos.	1	
	General Description:			
	Laboratory furniture must be tested as per SEFA-8M standards in SEFA Approved labs with latest 2016 Guidelines published by SEFA.			
	All modular construction & design must be made of mainly skin passed/zero spangle G.I. (Galvanized Iron) sheet duly coated with at least 50-60-micron Epoxy Powder Coated in panel form and in CKD (Completely Knocked Down) construction. The design should have provision for reconfiguration for change in layout using simple tooling and should provide independent access to the utilities installed, electrical panel & instrumentation panel. It should be removable without removing other panels.			
	All GI sheet components are of superior brand like TATA Steel / Jindal and are fabricated by precision shearing, levelling, and notching, piercing, machines to achieve consolidated dimensions within close tolerances under the strict quality checks and assembled with the aid of fixtures. Exposed welding marks should be polished smooth to improve aesthetic. Corner intersections of vertical and horizontal members should in the same plane with bolted joints and should be suitably aligned.			
	Laboratory Work Stations are available in 2 heights of 900mm (Standing purpose) and 750mm (Sitting purpose) in metallic construction designed to have completely flexible modular system. Each module will have independent base frame. Work table should consist of;			
	a) SEFA-8M standards heavy duty under cabinets & drawers: SEFA-8M standards heavy duty under module, comprising of one drawer - one shutter and adjustable height shelf, all drawers and only shutters. Cabinet shutter will be in			

double skin construction and shall be provided with heavy duty, knuckle and barrel type SS hinges of German make and positive catch arrangement. Shutter and drawer handles are also provided with recessed designed in Aluminum const. with epoxy powder coating. The under module shall be fabricated out of heavy gauge special grade Galvanized Iron sheet in weldless construction and shall be finished with pure epoxy coating for extra ordinary corrosion resistance.

Detailed specifications and thickness of GI items in each module:

- Cabinet end panels; min. 1.0 mm thick GI Sheet
- Cabinet rear panel and top panel; min. 1.0 mm thick GI sheet
 - Cabinet base skid; 1.0 mm thick GI Sheet
 - Cabinet drawers; 1.0 mm thick GI Sheet
- Cabinet shutters & drawer front panels; double skin const, min 0.8 mm thick GI sheet
- Cabinet main frame structure and drawer slide rails, 1.6 mm thick GI Sheet
- Each cabinet shall have self-standing type base skid plinth in GI const.

- Surface Treatment:

The complete GI material of cabinet is pretreated (degreased, Zinc phosphated) and epoxy powder coated for better corrosion resistance. The thickness of powder coat shall not be less than 50-60 microns, conforming to relevant BIS code, which accordingly passes the test of Salt Spray for 1000 hours and having the scratch hardness of 3 kgs.

- **b) Worktops:** Work top in 18 ± 1 mm thick Black Granite construction
- **d)** Electrical Fittings: Sockets and switches complete with internal wiring. Fittings are mounted on electrical trunk. Electrical Trunking are 1 mm thick GI with epoxy powder coating. Electrical Sockets Legrand make.

The Wall Bench shall include the following:

- Work top in 18 ± 1 mm thick Black Granite construction
- 750 mm wide storage module with one drawer two shutters - 5 Nos.
- 500 mm wide storage module with one drawer one shutter 2 Nos.
- Worktop mounted electrical raceway in GI powder coated construction
- 6/16 Amp electrical sockets and 16 Amp one way switch - 14 Nos
- Data Socket 2 Nos
- Filler Panel in G.I. Construction 2 Nos

2. ISLAND Bench (IB - 1) Size: L 4550 mm x W 1500 mm Nos. 1 x H 900 mm

General Description:

Laboratory furniture must be tested as per **SEFA-8M** standards in **SEFA Approved labs** with latest 2016 Guidelines published by SEFA.

All modular construction & design must be made of mainly skin passed/zero spangle G.I. (Galvanized Iron) sheet duly coated with at least 50-60-micron Epoxy Powder Coated in panel form and in CKD (Completely Knocked Down) construction. The design should have provision for reconfiguration for change in layout using simple tooling and should provide independent access to the utilities installed, electrical panel & instrumentation panel. It should be removable without removing other panels.

All GI sheet components are of superior brand like TATA Steel / Jindal and are fabricated by precision shearing, levelling, and notching, piercing, machines to achieve consolidated dimensions within close tolerances under the strict quality checks and assembled with the aid of fixtures. Exposed welding marks should be polished smooth to improve aesthetic. Corner intersections of vertical and horizontal members should in the same plane with bolted joints and should be suitably aligned.

Laboratory Work Stations are available in 2 heights of 900mm (Standing purpose) and 750mm (Sitting purpose) in metallic construction designed to have completely flexible modular system. Each module will have independent base frame. Work table should consist of:

a) SEFA-8M standards heavy duty under cabinets & drawers: SEFA-8M standards heavy duty under module, comprising of one drawer - one shutter and adjustable height shelf, all drawers and only shutters. Cabinet shutter will be in double skin construction and shall be provided with heavy duty, knuckle and barrel type SS hinges of German make and positive catch arrangement. Shutter and drawer handles are also provided with recessed designed in Aluminum const. with epoxy powder coating. The under module shall be fabricated out of heavy gauge special grade Galvanized Iron sheet in weldless construction and shall be finished with pure epoxy coating for extra ordinary corrosion resistance.

Detailed specifications and thickness of GI items in each module:

- Cabinet end panels; min. 1.0 mm thick GI Sheet
- Cabinet rear panel and top panel; min. 1.0 mm thick GI sheet
 - Cabinet base skid; 1.0 mm thick GI Sheet
 - Cabinet drawers; 1.0 mm thick GI Sheet
 - Cabinet shutters & drawer front panels; double skin

	 const, min 0.8 mm thick GI sheet Cabinet main frame structure and drawer slide rails, 1.6 mm thick GI Sheet Each cabinet shall have self-standing type base skid plinth in GI const. Surface Treatment: The complete GI material of cabinet is pretreated (degreased, Zinc phosphated) and epoxy powder coated for better corrosion resistance. The thickness of powder coat shall not be less than 50-60 microns, conforming to relevant BIS code, which accordingly passes the test of Salt Spray for 1000 hours and having the scratch hardness of 3 kgs. b) Worktops: Work top in 18 ± 1 mm thick Black Granite construction c) Reagent Rack: Worktop mounted reagent rack in single or double tier design. Vertical member and main bracket of the reagent rack are in GI construction and epoxy coated for excellent corrosion resistance. Rack platform are in wire reinforced glass or Phenolic Resin construction. Shelf height are adjustable as per requirement. d) Electrical Fittings: Sockets and switches complete with internal wiring. Fittings are mounted on electrical trunk.			
	Electrical Trunking are1 mm thick GI with epoxy powder coating. Electrical Sockets - Legrand make. The Island Bench shall include the following:			
2	 Work top in 18 ± 1 mm thick Black Granite construction 750 mm wide storage module with one drawer two shutters - 12 Nos Double sided double tier reagent rack with electrical raceway 6/16 Amp electrical sockets and 16 Amp one way switch - 24 Nos Data Socket - 6 Nos Vertical Service Pendent in GI Construction (300x150) - 1 No. Matrix Scaffold Grill in 12mm Dia Epoxy Rod Construction (1500x750) - 6 Nos Filler Panel in G.I. Construction - 2 Nos. 	Nos	4	
3.	Low Constant Volume (LCV) type Bench Fume Hood (Size: L 1500 x D 915 x H 2300 mm) (For AC Lab) ASHRAE 110 Test: All fume hoods should be subjected to ASHRAE 110 test. A certificate to this effect must be submitted along with the Technical quotation.	Nos.	4	

All Fume Hoods must also comply as per EN-14175, SEFA 1 and SEFA 10 testing norms. Certificates to this effect must be submitted along with the Technical quotation.

9. Fume Hood Super Structure

Fume hood super structure should consist of

- Frame structure in at least 1.6 mm thick galvanized iron construction.
- Inner lining, rear baffles and top baffles in 6mm thick fire retardant proprietary lab grade Phenolic resin construction of any reputed make.
- Outer panels of the super structure should be in at least 1.2mm thick high finished GI construction, duly coated with epoxy powder.
- Front post should be broad enough to mount service fittings and should be in fabricated out of at least 1.2 mm thick high finished GI construction, duly coated with epoxy powder.
- Air Foil should be in Flip-on type design and should be fabricated out of 1.6 mm thick SS 316 construction. Air foil should be with hard Teflon coating for extra ordinary chemical resistant.
- Exhaust outlet should be provided with streamlined shaped duct collar in PP construction.
- The front sash should be in Combination type design, 5 mm thick toughened glass construction with full length sash handle in anodized Al construction duly coated with epoxy powder.
- Sash movement mechanism should be provided with multi core SS wire having dia. not less than 3.0 mm.
 The wire pulleys should be provided with ball bearings in SS construction for smooth movement of the sash.
- Super structure should be provided with LED lights of sufficient capacity for proper illumination within the hood chamber. The light intensity at work top level should be atleast 300 lux.

10. Fume Hood Worktop

Fume hood work top in granite construction having thickness not less than 18mm. The work top shall be provided with raised rails on all 4 sides to prevent spillage and should also be provided with a cup sink in PP construction on rear side corner.

11. Service Valves

All the service valves should be in forged brass

construction with spindle in SS construction. Valves should be providing with angular shaped serrated nozzles also in brass construction with epoxy powder coating. The valve knobs should be with color sign as per DIN standard. All the valves should be provided with service pipe connection at least 1.5-meter-long in following construction.

Services Tube Construction

Compressed Air (1 no.) - PU pipe dia. 4 mm id
Nitrogen Gas (1 No.) - PU pipe dia. 4 mm id
Argon Gas (1 No.) - PU pipe dia. 4 mm id
Vacuum Valva (1 No.) - PU pipe dia. 4 mm id
Se braided Taffan Ha

Vacuum Valve (1 No.) - SS braided Teflon Hose id

at least 8.0 mm

Potable Water (1 No.) - Nylon braided PVC Hose (duly insulated in case of chill water)

LPG (1 No.) - ISI grade Rubber Tubes All the service valves shall be mounted on left side vertical post.

12. Electrical Services with internal wiring (all in non-FLP const.)

Fume hood should be provided with following services along with internal wiring in FRLS flexible wire construction.

- Touch Type Panel for light / Fan On-Off 1 No.
- 16A, 2 Pole MCB Legrand or eq. Make 1 No.
- 5/15A 3-pin Socket with Switch Legrand or eq. Make –
 4 Nos.
- Air Velocity Monitor with low air alarm, Model AFA/1000 TEL UK Make 1 No.
- 13. Fume Hood Under Structure: Fume Hood should be mounted on Heavy duty frame structure made out of Hot Deep Galvanized, MS hollow pipes of size not less than 80 mm x 40 mm x 2.5 mm thick. duly finished with corrosion resistant specialty coatings.
- 14.FIRE SAFETY SOLVENT CABINET (YELLOW): 90minute Fire Rated FM approved fire rated manual 2 doors cabinet with poly liners and tray of any approved make. Size: L 595 mm x W 510 mm x H 620 mm (Justrite(USA)/Asecos (Austria)/Labor Security System (Italy)/ Duperthal (Germany) make only)
- **15. CORROSION RESISTANT ACID CABINET (BLUE):** Acid Cabinet 2 doors for storing Hazardous/corrosive chemicals with chemical

	resistant liners and PP tray. Size: L 820 mm x W 510 mm x H 620 mm The under cabinet should be provided with 1 No. removable shelves and the cabinet should essentially be SEFA certified Detachable design general purpose cabinets fabricated out of GI sheet Special arrangement for air ventilation inside the cabinet Twin doors in double wall const. Flushed type recessed handle. Heavy duty Knucle-Barrler special design door hinges. 1 No. adjustable shelf. Recessed base frame in heavy duty GI const. FRP Lining inside the chemical storage cabinet PP Tray for chemical storage Twin castors for easy removal of the cabinet. 16. Accessories: Fume hood should also be provided with following accessories d. 200 mm dia. Duct damper in PP const. complete with pre drilled flanges on both sides, manual operation handle and extended spindle, suitable for manual as well as motorized drive. Scaffold Grill (1630 x 750mm) in Vertical rod design, fabricated out of 12.0mm dia., Epoxy rods, having 150mm pitch between two rods. Ceiling enclosure panels in GI powder coated construction up to false ceiling height.			
4.	Exhaust Fan (PP35) - 1 fan for 4 Nos. 1500 mm wide Fume Hood Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 2500 to 2600. Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. Drive - 5 HP, 2800 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non-FLP const. 16A, 3Ph MCB for Fan - Legrand or eq. Make. Electrical Panel with necessary internals and VFD for fan.	Nos.	1	

5.	Slotted angle rack Size: L 750 x D 450 x H 1830mm	Nos.	1
	Fabricate out of Min. 50x50x2mm GI slotted angle construction duly epoxy powder coated with 5 Nos. adjustable shelves and SS hardware. Overall Dimensions: - W 750mm x Depth 450mm x Height 1830mm (Length can be changed as per client's requirement)		
6.	Ventilated Chemical Storage Cabinet Size: L 1000 x D 450 x H 1830mm	Nos.	1
	General Specifications:		
	The cabinet shall be fabricated out of galvanized iron sheets. Cabinet should be provided with 4 adjustable & 1 fixed shelf comporting 6 compartments. Proper design, stiffening / structural members should be provided for strength and rigidity. Front door of the cabinet shall be in twin door design having air vent provision with metallic frame in galvanized iron construction. Dimension and constructional detail of the cabinet is furnished below. Chemical storage cabinet should be chemical and corrosion resistance.		
	Overall Dimensions: - W – 1000 mm x Depth – 450 mm x Height – 1830 mm No. of Shelves: - 1 fixed & 4 adjustable shelves; forming 6 compartments.		
	 Outer Skin: 1.2 mm thk epoxy powder coated Gl construction Inner Skin: 5.0 mm thk PP construction 4 Doors in Glass/Metal construction Shelf: - 1.2 mm thick G.I. sheet Door supporting frames: - 1.6 mm thick G.I. sheet Door Hinges: - Knuckle Barrel type SS hinges of German make and positive catch Door Handles: - SS 304 const. Lock: - With two keys for doors PP Damper - 100mm Dia. 8 Nos. trays in 3.0 mm PP construction, kept on shelves 		
7.	 Spot Extractors Technical Specifications: Size: 1500mm X 75mm MOC: Pipe – PP in Milky White Color Joints – Polypropylene Dome - (Dia 385mm) Polypropylene Inbuilt Damper 	Nos.	4

	 Bracket: Wall Mounted / Ceiling Mounted Ceiling Mounted Bracket Standard Length: 1ft Long (Extra Long size available on request) MOC for Bracket: Aluminum Powder Coated 			
8.	Exhaust Fan (PP-25) - 1 fan for 4 No. Spot Extractor & 1 Ventilated Chemical Storage Cabinets	Nos.	1	
	Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 500 to 600. Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. Drive - 1 HP, 1400 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non-FLP const. 16A, 3Ph MCB for Fan - Legrand or eq. Make. Electrical Panel with necessary internals and VFD for fan. DOL Starter for Motor.			
9.	Peg Board with 38 Nos. PP Pegs, Drain Tray & Pipe (Size: L 900 x D 600) Peg Board in Acrylic / Phenolic resin construction with 38 Nos. PB Pogs Drain Tray & Pipe	Nos.	1	
10.	PP Pegs, Drain Tray & Pipe Worktop mounted, double outlet eye wash with SS	Nos.	1	
	breaded flexible hose Worktop mounted, hand held type, double outlet Eyewash is Brass construction with Gun Metal Valve and SS Braided Flexible Hose. Eye wash to be made from high quality brass forging Grade as per IS 8737 2007 and machining Grade as per IS 319 (I) material to avoid porosity & Leakage. Eye Wash are powder coated with Full Glossy Epoxy Fusion Bond available in Red colour. Eye Wash are tested in Hydraulic test at 30 PSI to avoid leakage. Water Static Pressure Max: 4 bar. Minimum operating pressure required to operate Eye Wash is 2Kg/CM2 (30 PSI)			
11.	Emergency Safety Shower Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication. Worktop mounted, hand held type, single/double outlet eye wash with SS breaded flexible hose. Minimum Discharge of Water for Eyewash = 32 Ltr/Min @2 Kg/Sq. CM. For shower 250-300 Ltr/Min@2 Kg/Sq. CM. Safety Shower is as per India Standard 10592:1982 and made from high quality SS – 304. Safety Shower is tested in Hydraulic Test at 30 PSI to avoid leakage. Water Static Pressure	Nos.	1	

	Max 3 Kg/CM2. Minimum operating pressure required for shower & Eyewash is 2 Kg/CM2 (30 PSI)			
12.	FOR NITROGEN and ARGON:- moisture filter consist of molecular sieve - 13X silica gel, length 11", Activated alumina filter length 11", inlet & outlet machine sealed type stainless steel pressure gauge outlet brass chrome plated pressure gauge regulator with SS diaphragm brass chrome plated on/off valve (IT CONTAINS ON/OFF VALVE, PRESSURE GAUGE, PRESSURE REGULATOR, COLOUR COATED STICKERS & APPROPRIATE END FITTINGS)	Nos.	2	
13.	FOR ZERO AIR: moisture filter consist of molecular sieve - 13X silica gel, length 11", Activated alumina filter length 11", inlet & outlet machine sealed type stainless steel pressure gauge outlet brass chrome plated pressure gauge regulator with SS diaphragm brass chrome plated on/off valve (IT CONTAINS ON/OFF VALVE, PRESSURE GAUGE, PRESSURE REGULATOR, COLOUR COATED STICKERS & APPROPRIATE END FITTINGS)	Nos.	1	
14.	SUPPLY OF Online micron filter 1/4" OD (SS-304)	Nos.	3	
15.	Flash back arrester SS 304 Body SS 304 /Body brass with Necessary Connector 1/4 " OD BOTH SIZE (Make - GC Druva or eq.) - (SS-304)	Nos.	1	
16.	SUPPLY OF Dual stage cylinder manifold moc SS 304 with MS powder coated mounting bracket working pressure 200kg/cm2 with cylinder isolation valve as per fume hood services -(SS-304)	Nos.	4	
17.	SUPPLY OF Two stage Cylinder Regulator with fully S.S. body with S.S.316 Diaphragm for Gas Inlet Pressure gauge: 0-280 kg/cm2 Outlet Pressure gauge: 0-14 kg/cm2 Outlet Connection: 1/8" & 1/4" ferrule fitting Inlet Connection: 5/8" BSP Male (RHT/LHT) - (SS-316)	Nos.	4	
18.	SUPPLY OF "S.S Braided Pigtails of 1mt Length for each cylinder with safety Ropes - (SS-304)	Nos.	8	
19.	SUPPLY OF MS powder coated Cylinder mounting bracket with chain for holding the 1 cylinder - MS	Nos.	8	
20.	1/2" SS 304 TUBING with 0.9 - 1.2 mm wall thickness and colour coded sleeving.(Make- Sumotomo or eq.) - (SS-304)	Mtrs.	110	
21.	1/4" SS 304 TUBING with 0.9 1.2 mm wall thickness and colour coded sleeving (Make- Sumotomo or eq.)	Mtrs.	40	
22.	PP clamp with profile 1/2" & 1/4" od	Nos.	150	
23.	Source connector for vacuum & water As per actuals - (SS-304)	Nos.	2	
24.	63 mm OD HDPE pipe Providing and fixing of UV stabilized & antimicrobial fusion welded multi- layer,	Mtrs.	20	

	HDPE PE 100 PN-6 pipes confirming to IS 4984			
	complete with necessary slope and HDPE fittings			
	specials like flanges, gaskets, bolts, nuts, washers,			
	elbows, tees, unions, reducers, reducing tees, end caps,			
	reducing sockets, reducing elbows, heat welding, etc			
	(excluding earth excavation). Mode of measurement shall be in running Meters as described below.			
25.	20 mm diameter Providing and fixing Chlorinated	Mtrs.	25	
25.	Polyvinyl Chloride (CPVC) pipes for WATER, having	IVILIS.	25	
	thermal stability for hot & cold water supply, including all			
	CPVC plain & brass threaded fittings including fixing the			
	pipe with clamps at 1.00 m spacing. This includes jointing			
	of pipes & fittings with one step CPVC solvent cement			
	complete as per direction of Engineer-in-Charge.			
26.	CPVC ball valves 20 mm dia	Set	12	
27.	Standard fittings like 1/4" ball valve -32, 1/2" ball vave -	Lot	1	
	5,1/2" BSPF X 1/4" OD FH Connector-37, 1/2"x 1/4" x 1/2" od Tee SS30415, 1/2"x 1/2" x 1/2" od Tee SS304			
	-5, 1/2"x 1/4" reducer SS3045, Nut Bullnose for GAS			
	24, Check Valve 1/4" -24 nos and nuts, ferrules, union,			
	clamps, hardware etc.			
28.	Ball Valve 1/4 " OD - (SS-304)	Nos.	18	
29.	Ball Valve 1/2" OD - (SS-304)	Nos.	8	
30.	Connector for Fume hood 1/2" BSPF x 1/4" OD - (SS-	Nos.	22	
	304)			
31.	Tee 1/2" x 1/4" x 1/2" OD - (SS-304)	Nos.	15	
32.	Tee 1/2" x 1/2" x 1/2" OD - (SS-304)	Nos.	5	
33.	Reducer 1/2" x 1/4" - (SS-304)	Nos.	5	
34.	Nut Bullnose for Gas - (SS-304)	Nos.	12	
35.	Check Valve 1/4" NPTM x 1/4" NPTF - (SS-304)	Nos.	4	
36.	Union 1/2" OD - (SS-304)	Nos.	9	
37.	Union 1/4" OD - (SS-304)	Nos.	5	
38.	Hardware - (SS-304)	Set	1	
39.	MS Support for GDS & Drainage line work	Set	1	
40.	Cylinder Storage Cabinets	Nos.	3	
	Gas Cabinets are designed to provide a safe and cost effective means to isolate hazardous gas cylinders from			
	the surrounding work place. The cabinets, which can			
	safely store 2 gas cylinders			
	Constructed of durable, 2 mm galvanized steel with a			
	tough powder-coat paint to provide excellent corrosion			
	resistance.			
	2. Equipped with explosion-proof windows on the door,			
	making it convenient to observe.			
	3. Pass holes set on the side ensure well ventilation.			
	Cylinder Holding Brackets for holding cylinder			
41.	Lah Stool	Nos.	10	
71.	Lab Stool	1103.	10	

	Providing & supplying ergonomically designed 375mm diameter Laboratory stools with chrome plated hydraulic height adjuster and chrome plated 450mm diameter rest ring, chrome plated 5 legged base with leatherite seat.			
42.	Ducting:	Sq.	80	
	The Ducting will be fabricated out of 3mm thk PPGL	Mtrs.		
	Sheets & the same will be externally coated with 3 mm			
	Thk FRP using Isopthalic grade resin (Suitable for Highly			
	Corrosive atmosphere) along with 450Gm/cc Chopped			
	strande mate. All the required Gaskets, Nut Bolts.			
43.	MS Support For Duct & Chimney Stand	Kg.	145	
44.	Two-stage rotary vane pump	Nos.	4	
	- Pump internal surface coated with PTFE and black			
	oxide to protect against chemical attack & corrosion.			
	- Advanced module design makes pump to run 10°C			
	cooler to extend oil life.			
	- Low noise level : 50 dBA			
	- Pump fitted with Georator oil circulation system for			
	effective cooling & lubrication at each part			
	- Fitted with Gas Ballast valve to protect pump from			
	condensable liquids			
	 Fitted with Anti-Suck back valve to prevents oil from 			
	being sucked into application in the event of a power			
	failure.			
	- Free Air Displacement: 67 LPM			
	- without gas ballast partial : 5x10-4 mbar			
	- Ultimate total pressure: 2x10-3 mbar (w/o gas ballast			
	valve)			
	- Ultimate total pressure: 7x10-2 mbar (with gas ballast valve)			
	- Connection flange: DN16 KF			
	- Motor: 370 W			
	- Motor with thermal overload protection			
	- Large 1150 ml oil capacity to dilute contaminants			
	- Weight: <21 KG			
	- Dimension: L< 463, W< 157, H<230			
	- Supplied with Directorr™ Premium vacuum oil to			
	resist breakdown at higher RPMs and operating			
	temperatures of direct-drive vacuum pumps;			
	maintaining stable vacuum all the time.			
	- Slotted base plate for easy mounting			
	- Voltage: 220V, 50Hz, 1ph. : Power rating to suit			
	Indian condition			
	- CE, UL marked: Ensures product meets global safety			
	regulations			
	- IP 44 Protection			
	- Pump supplied with following directives to conform			
	safe operation:			

- 2006/42/EC Machinery Directive		
 2014/30/EU Electromagnetic Compatibility Directive 		
 2012/19/EU Electrical and electronics - old devices (WEEE) 		
 2011/65/EU Dangerous materials in electrical and electronics devices (RoHS II) 		
 Vendor should provide the high vacuum flexible 		
tubing for vacuum pump based on the requirement		
Note: The overall dimensions of item no. 1,2,3,5 and 6		
are approx. bearing a tolerance of \pm 50 mm. for the		
Length & width		

LIST OF APPROVED MAKES

MATERIAL	LIST OF APPROVED MAKES	Compliance (Yes/No) with detailed information
Steel/GI	TATA Steel / Jindal	
Powder Coating	Kansai Nerolac / Vijay Coat	
Glass	Saint Gobain / Modi	
Emergency Devices, Water Faucets and Gas Valves, Fume Hood Utility Fittings	Watersaver / Premier Polymer	
Spot Extractor	Fumex / Premier Polymer	
Switches and Sockets	Northwest / Legrand	
LED lights	Philips / Equivalent	
Fire Safety Storages	Justrite, Labor Security System, Asecos, Duperthal	
Locks	Hettich / Haffle	
Ball Slides	Hettich / Haffle	
Hinges	Hettich / Haffle	
Sink/Cup Sink (PP)	KL Labs, Malaysia / Premier Polymer	
Worktop	Jet Black Granite	
Blower	Seat / Premier Polymer	
Safety Shower & Eye Wash	Watersaver/Premier Polymer	

IMPORTANT NOTES AND SPECIFIC TERMS AND CONDITIONS:

S.No.	Terms and Conditions	Compliance (Yes/No) with detailed information
1.	Manufacturers/vendors/suppliers interested in participating in the tender SHOULD MAKE A PRETENDER SUBMISSION VISIT TO THE SITE (LT-1, V Block) taking prior appointment with the buyer (Prof. M. RAMU YADAV, 7330655324). Visit the site and take necessary measurements/details etc. before submitting the quotation. Alternatively, video conferencing can be arranged on request for vendors who are unable to visit the site. A CERTIFICATE ISSUED BY PROF. M. RAMU YADAV IN HIS LETTER HEAD THAT YOU HAD MADE A PREVISIT (BY PERSON OR VIDEO) TO THE SITE HAS TO BE ENCLOSED ALONG WITH TENDER DOCUMENTS. QUOTATIONS SUBMITTED BY MANUFACTURERS/VENDORS/SUPPLIERS WHO HAD NOT MADE VISIT BY PERSON OR THROUGH VIDEO CONFERENCING TO THE SITE OR DO NOT ATTACH THE SAID CERTIFICATE WILL BE TECHNICALLY REJECTED.	
2.	MANUFACTURERS/VENDORS/SUPPLIERS SHOULD TAKE EXACT MEASUREMENTS (IF POOSIBLE) OR APPROXIMATE IN CASE OF VIDEO CONFERENCING, REQUIRED FOR DUCTING/TUBING/PIPING/ELECTRICAL WIRING/WATER CONNECTION/DRAINAGE/GAS PIPING, CHILLED WATER TUBING, VACUUM TUBING AS WELL AS CALCULATE THE NUMBER OF CLAMPS, FERRULES, NUTS BOLTS AND OTHER SIMILAR ITEMS ETC. AND QUOTE ACCORDINGLY.	
	FINAL PAYMENT TO THE SUCCESSFUL BIDDER FOR SUCH WORKS WILL BE AS PER ACTUAL LENGTH/NUMBER OF ITEMS USED OR AS PER QUOTATION WHICHEVER IS LOWER. UNDER NO CIRCUMSTANCES THE FINAL BILL CAN NOT BE HIGHER THAN WHAT HAS BEEN QUOTED IN THE FINANCIAL BID.	
3.	REPRESENTATIVE LAYOUT OF THE PROPOSED LAB IS ATTACHED ALONG WITH THE TECHNICAL SPECIFICATIONS. PLEASE NOTE THAT THE LAYOUT IS ONLY REPRESENTATIVE JUST TO GIVE AN IDEA ABOUT THE PROPOSED LAB FOR PROSPECTIVE BIDDER. THIS IS NOT THE FINAL LAYOUT. FINAL LAYOUT SHOULD BE ARRIVED AT BY EACH BIDDER AFTER THE SITE VISIT	

	EITHER IN PERSON OR VIDEO CONFERENCING AND SHOULD BE SUBMITTED ALONG WITH THE TECHNICAL QUOTATION. TENDER DOCUMENTS SHOULD BE IN ACCORDANCE WITH YOUR LAYOUT. FAILURE TO SUBMIT THE LAYOUT WITH THE TECHNICAL TENDER WILL LEAD TO THE REJECTION OF THE TENDER.	
4.	ONLY ONE INLET FOR WATER AND ONE DRAINAGE OUTLET WILL BE AVAILABLE IN THE LAB. SUCCESSFUL BIDDER SHOULD CONNECT THIS INLET AND DRAINAGE TO FUME HOODS, SINK AND OTHER REQUIRED PLACES THROUGH PROPER TUBING.	
5.	ALL ELECTRICAL CONNECTIONS SHOULD COME THROUGH INSTALLED ELECTRICAL LINES TO THE RESPECTIVE PLACES FROM THE SOURCE. THESE ARE TO BE DONE BY THE SUCCESSFUL BIDDER.	
6.	SUPPLY OF MATERIALS TO IIT, TRANSPORTATION OF THEM TO THE SITE AND INSTALLATION ARE ALL AT THE SOLE DISCREATION OF THE SUCCESSFUL BIDDER. THERE IS NO PROVISION FOR THE BUYER TO TRANSPORT/SHIFT ANY OF THE MATERIALS FROM THE PLACE OF DELIVERY TO THE SITE WITHIN IIT.	
7.	ALL ELECTRICAL SWITCHES/MCBs ARE LEGRAND or NORTHWEST MAKE ONLY.	
8.	BIDDER SHOULD HAVE EXPERINCE OF SUCCESSFUL INSTALLATIONS AT ONE OF THE FOLLOWING INSTITUTIONS SUCH AS IITs, IISC AND IISERs.	
9.	Warranty: All parts should be covered under 3 years warranty	
10.	VENDORS SHOULD PROVIDE SPERATE QUOTATION FOR 4 TH AND 5 TH YEAR AMC.	

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

	Signature of Bidder
Name:	
Designation:	
Organization Name:	
Contact No.:	

<< Organization Letter Head >> DECLARATION SHEET

We, _____ hereby certify that all the information and data furnished by

our organization with regard to this tender specifi	cation are true and complete to the best of our knowledge. I have
gone through the specification, conditions and st	ipulations in details and agree to comply with the requirements
and intent of specification.	
This is certified that our organization has been a	uthorized (Copy attached) by the OEM to participate in Tender.
	all the conditions of eligibility criteria laid down in this tender
9	t on regular basis with technology / product updates and extend
support for the warranty.	
The prices quoted in the financial bids are subsidi	zed due to academic discount given to HT Delhi.
r 4	6
We, further specifically certify that our	NAME & ADDRESS OF
organization has not been Black Listed/De	THE Vendor/ Manufacturer / Agent
Listed or put to any Holiday by any Institutional	-
Agency/ Govt. Department/ Public Sector	
Undertaking in the last three years.	
1 Phone	
2 Fax	
3 E-mail	
4 Contact Person Name	
5 Mobile Number	
6 GST Number	
7 PAN Number	
(In case of on-line payment of Tender Fees)	
8 UTR No. (For Tender Fee)	
(In case of on-line payment of EMD)	
9 UTR No. (For EMD)	
10 Kindly provide bank details of the bidder	
in the following format:	
a) Name of the Bank	
b) Account Number	
c) Kindly attach scanned copy of one Cheque	
book page to enable us to return the EMD to	

(Signature of the Tenderer)

Name:

Seal of the Company

unsuccessful bidder

Annexure-III

List of Govt. Organization/Deptt.

List of Government Organizations for whom the Bidder has undertaken such work during last three years (must be supported with work orders)				
Name of the organization	Name of Contact Person	Contact No.		
	e Engineer who have the technical compet	ency to handle and		
support the quoted product during the value of the organization	Name of Contact Person	Contact No.		
Time of the organization	Trumbe of Contract 1 62501			
		Signature of Bidder		
	Name:			
	Designation:			
	Organization Name:			
	Contact No. :			

PREVIOUS SUPPLY ORDER DETAILS

Annexure - IV

Order placed	Order	Description	Value	Date of	Has the	Contact
by (Full	No. and	and quantity	of	Completion	equipment been	person along
address of	Date	of order	order	of delivery	installed	with
Purchaser)		equipment		as per	satisfactorily	Telephone
				contract	(Attach a	No., Fax No.
					Certificate	and email
					from the	address)
					Purchaser/	·
					Consignee)	

Signature and Seal of the Manufacturer/ Bio	dder
Place:	
Date:	

ORIGINAL EQUIPMENT MANUFACTURER (OEM)

Manufacturing authorisation form (MAF)

(On Letter Head of Manufacturer)

ANNEXURE-V (Revised) Tender No.:-Date:- To The Director, Indian Institute of Technology Delhi, New Delhi- 110016 Dear Sir, We manufactures of original equipment (.....address ofat factory.....) do hereby authorize M/s (Name and address of Agent) to submit a bid, negotiate and receive the order format against your tender enquiry. M/s. is authorized to bid and conclude the contract in regard to this business. We hereby extend our full guarantee and warranty as per clause of the terms and conditions NIO for the goods and services offered by the above firm. Yours Faithfully, (Name) (Name & Seal of Manufactures)

Note: -

- 1. **Items of indigenous nature or quoted in INR**, more than 1 authorized representative may participate in the same tender and submit their bids on behalf of their OEM/Principal/Manufacturer if the OEM permits more than one authorized bidder in such case as per their policy.
- 2. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer
- 3. The letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. The same should be included by the bidder in its techno-commercial unpriced bid.

Bid Submission

Online Bid Submission:

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below:-

Envelope – 1 (Following documents to be provided as single PDF file)					
Sl. No.	Document	Content	File Types		
1.	Technical	Compliance Sheet as per Annexure - I	.PDF		
2.	Bid	Organization Declaration Sheet as per Annexure - II	.PDF		
3.		List of organizations/ clients where the same products have been supplied (in last two years) along with their contact number(s). (Annexure-III)	.PDF		
4.		Technical supporting documents in support of all claims made at Annexure-I (Annexure-IV)	.PDF		
5.		PREVIOUS SUPPLY ORDER as per Annexure - IV	.PDF		
6.		ORIGINAL EQUIPMENT MANUFACTURING (OEM) MANUFACTURING AUTHORISATION FORM as per Annexure - V	.PDF		
Envelope – 2					
Sl. No.	Document	Content			
1.	Financial	Price bid should be submitted in given BOQ_XXXX.xls format.	.XLS		
	Bid	(Note: -Comparison of prices will be done ONLY on the bids			
		submitted for the Main Equipment and anything asked as 'Optional' in the specs is not to be included for overall comparison.) Bids for optional items are to be submitted in 'sheet2_Quote for optional items'			