



INDIAN INSTITUTE OF TECHNOLOGY DELHI

HAUZ KHAS, NEW DELHI – 110016

AC DIVISION

TENDER DOCUMENT

NAME OF WORK : Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi

ESTIMATED COST ₹ : 6,15,84,276.00

EMD ₹ : 12,31,686/- (No exemption allowed)

N.I.T. No. : 135/0599/IITD/AC/2025-26

Date of Opening : 03-03-2026

NIT for the subject work has been prepared with the following:

1	Amount of NIT (INR)	:	6,15,84,276.00
2	Earnest money (INR)	:	12,31,686/-
3	Completion time	:	180 days (SITC) + 5 Yrs CAMC post DLP
4	Last date of submission (online)	:	02-03-2026 upto 3 PM
5	Date of opening	:	03-03-2026 after 3 PM
6	Form of NIT	:	CPWD / IITD – 8
7	Schedule applicable	:	Market Rate, DSR
8	Material stipulated	:	As per Schedule of Work
9	Chargeable heads	:	35.01.05 (IOE) & 31.06.30
10	Work code no.	:	35.01.05/2021/007/0599 31.06.30/2021/007/0600
12	NIT No.	:	135/0599/IITD/AC/2025-26

Certified that this NIT contains **1 to 79 pages**.

NIT amounting to Rs.6,15,84,276.00 is approved.

AEE-in-Charge, AC Division

EE(CD-II)

JE(E)

JE(C)

Institute Engineer

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INDIAN INSTITUTE OF TECHNOLOGY DELHI

AC DIVISION

NOTICE INVITING E-TENDER

IITD/WORKS (SP- 5250)/2026

Assistant Executive Engineer-in-charge, AC Division, Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110016, Ph. No. 011-2659 1746 on behalf of Board of Governors invites online Item Rate Tender from **Specialised Agencies** in two bid system as per details given below.

1	Name of work	:	Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi
2	NIT No.	:	135/0599/IITD/AC/2025-26
3	Estimated Cost (Rs.)	:	6,15,84,276.00
4	Earnest Money Deposit (Rs.)	:	12,31,686/- (No exemption allowed)
5	Period of completion	:	180 days (SITC) + 5 Yrs CAMC post DLP
6	Last date & time of bid submission	:	02-03-2026 upto 3 PM
7	Performance Bank Guarantee	:	5 percent of the tendered amount

The bid forms and other details 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 enrol / register themselves before participating through web site <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."

Bidders can access quotation / tender documents on the website (for searching in the NIC site), kindly go to quotation search option and type 'IIT'. Thereafter, click on "GO" button to view all IIT quotations. Select the appropriate quotation / tender and fill them with all relevant information and submit the completed Quotation / Tender document online on the website <http://eprocure.gov.in/eprocure/app> as per the schedule given in the next page.

No manual bids will be accepted. All bids (both Technical & Financial) should be submitted in the e-procurement portal.

Assistant Executive Engineer-in-charge, AC Division
For & on behalf of BOG, IIT Delhi

Ch. Head	:	31.06.30	CAMC	Work Code	:	2021/007/0600
	:	35.01.05 (IOE) Laboratory Development in 99B & 99C	ORIGINAL		:	2021/007/599

Copy to:-

1. A.R. (Works)
2. JE. (C)
3. A.R. (Store Purchase Section)
4. Notice Board
5. Website Administrator, IIT Delhi
6. Office copy

SCHEDULE

1	Name of organisation	:	Indian Institute of Technology Delhi
2	Tender / Quotation type (open / limited / EOI / auction / single)	:	Open
3	Tender / Quotation category (services / goods / works)	:	Goods & Works
4	Type of Contract (work / supply / auction / service / buy / empanelment / sell)	:	Work & Supply
5	Form of contract (IITD – 7/8)	:	IITD – 8
6	Work Category (civil / electrical / fleet management / computer systems)	:	Electrical & Associated Civil works
7	Is multi-currency allowed?	:	No
8	Date of publishing / issue / start	:	12-02-2026 at 15.00 Hrs.
9	Document download start date	:	12-02-2026 at 15.00 Hrs.
10	Document download end date	:	02-03-2026 at 15.00 Hrs.
11	Date & time of pre-bid meeting	:	Not Applicable
12	Venue of pre-bid meeting	:	Not applicable
13	Last date & time of uploading of bids	:	Upto 3 PM of 02-03-2026
14	Date & time of opening of Technical Bids	:	03-03-2026 after 3 PM
15	Tender fee	:	NIL
16	Earnest Money Deposit (EMD) Rs.	:	12,31,686/- (No exemption allowed)
17	Mode of payment of EMD	:	<p>(To be paid through RTGS/NEFT or OFFLINE MODE in favor of Registrar IIT Delhi.). Bank details are as under:</p> <p>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</p> <p>(This is mandatory that UTR Number is provided in the on-line quotation/bid. (Kindly refer to the UTR Column of the Declaration Sheet at Annexure-I) OR Demand Draft / FDR favouring Registrar, IIT Delhi Payable at SBI, IIT Delhi Branch. Scanned copy of</p>

			DD / FDR needs to be uploaded along with the Technical Bid. Exact Original DD/ FDR shall have to be submitted to the tender inviting authority by the bidder as and when required after opening of bid.
17	Bid without EMD / Non-submission of original DD	:	To be considered as UNRESPONSIVE and bid shall summarily be rejected
18	No. of bids / covers (1 / 2 / 3 / 4)	:	2
19	Address for communication	:	Assistant Executive Engineer-in-charge, AC Division, Works Department, IIT Delhi, Hauz Khas, New Delhi – 110016
20	Contact No.	:	011 2659 1746
21	e-mail address for communication	:	a26984@admin.iitd.ac.in

INSTRUCTIONS FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this quotation / tender document has been published on the Central Public Procurement Portal (URL: <http://eprocure.gov.in/eprocure/app>). The bidders are required to submit softcopies of their bids electronically on the CPP portal, using valid Digital Signature Certificates (DSC). 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.

More information useful for submitting online bids on the CPP portal may be obtained at <http://eprocure.gov.in/eprocure/app>

REGISTRATION

1. Bidders are required to enrol 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 enrol". Enrolment on the CPP portal is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique user name and assign a password for their accounts.
3. Bidders are advised to register their valid e-mail address and mobile number as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (class 2 or class 3 certificates with signing key usage) issued by any certifying authority recognised by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.) with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.

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

SEARCHING FOR TENDER DOCUMENTS

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, organisation 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 organisation name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. The 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.
3. The bidder should make a note of the unique Tender ID assigned to each other, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bids. Please note the number of covers in which the bid documents have to be submitted. Any deviations from these may lead to rejection of the bids.
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 & white option.
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's 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.

SUBMISSION OF BIDS

1. Bidder should log into the site well in advance for bid submission so that he / she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. 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. 3)

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 coloured [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 online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases financial bids can be submitted in PDF format as well (in lieu of BOQ).

5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorised 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.
7. The uploaded tender documents become readable only after the tender opening by the authorised bid openers.
8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

1. Any queries relating to 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.
2. Any queries relating to the process of online bid submission or queries relating to CPP portal in general may be directed to the 24 x 7 CPP Portal Help Desk. The contact number of the helpdesk is 18002337315.

GENERAL INSTRUCTIONS TO THE BIDDERS

1. The tenders will be received online through portal <https://eprocure.gov.in/eprocure/app>. In the technical bids, the bidders are required to upload all the documents in PDF format.
2. Possession of a valid class II / III Digital Signature Certificate (DSC) in the form of smart card / e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through

<https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorised certifying agencies, details of which are available in the website <https://eprocure.gov.in/eprocure/app> under the link “Information about DSC”.

3. Tenderers 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>.

INFORMATION & INSTRUCTION TO BIDDERS FOR E-TENDERING

Assistant Executive Engineer-in-charge, AC Division, Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110016, Ph. No. 011-2659 1746 on behalf of Board of Governors invites online **Item Rate Tender** from Specialised Agencies in two bid system as per details given below:

Sr. No.	NIT No.	Name of Work & Location	Estimated cost put to bid (Rs.)	Earnest money (Rs.)	Period of completion	Last date & time of submission of bid	Time & date of opening of Technical Bid	Time & date of opening of Financial Bid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	135/0599/IITD/AC/2025-26	Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi	6,15,84,276.00	12,31,686.00(No exemption allowed)	180 days (SITC) + 5 Yrs CAMC post DLP	Upto 3 PM of 02-03-2026	03-03-2026 after 3 PM	To be decided after assessing Technical Bids

- The successful bidder shall be required to submit a performance guarantee of 5% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized / Scheduled Bank within fifteen days of issue of letter of intent before award of work. In case of failure by the Contractor to submit the performance guarantee within the specified period, full earnest money will be forfeited by the Institute and the tender shall be treated as null and void. EMD shall be refunded after submission of PBG. **The performance guarantee shall be initially valid up to the stipulated date of completion (i.e. 180 days) plus one hundred eighty days beyond that. Fresh PBG for CAMC period shall be submitted @5% of CAMC amount and to be submitted after completion / commissioning of original work. Original PBG shall be refunded following that event.**
- Earnest money of Rs. 12,31,686/- in the form of Banker's cheque or Demand draft or fixed deposit receipt of a scheduled bank or through online mode i.e. RTGS/ NEFT in favor of Registrar, IIT Delhi with UTR details. No relaxation in EMD will be allowed for MSMEs and MSEs as per the CPWD Manual.
- Contractors who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted.

- a. Should have satisfactorily completed the works as mentioned below during the last Seven years ending **last day of the month previous to one in which tenders are invited.**
4. **Three** similar works each costing not less than **Rs.2,29,39,000.00**, or **two** similar works each costing not less than **Rs.3,44,08,000.00**, or one similar work costing not less than **Rs.4,58,77,000.00** The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to previous day of last day of submission of bids.
5. **Similar work means providing and Installation of exhaust system with Scrubber Unit.**
6. **Work means** work done with some Central Government Department / State Government Department / Central Autonomous Body / *State Autonomous Body* / Central Public Sector Undertaking / *State Public Sector Undertaking* / *City Development Authority* / *Municipal Corporation of City formed under any Act by Central / State Government and published in Central / State Gazette / any reputed private organisation.*
7. Completion certificates are required to be got issued by an officer not below the rank of Executive Engineer (for Public Work) and Managerial Level in case of Private Work of similar works completed by the Firm. The work experience certificates submitted by the bidders shall clearly indicate that:
- a. The similar work executed shall be as per '5' above
- b. The completed cost of the work
- c. Actual date of completion of the work
8. IITD is committed to follow the principle of transparency, equity, and competitiveness in public procurement. Before submission of bid, **each bidder should sign integrity pact at respective places** and submit the bid. **If duly signed integrity pact is not submitted by bidder, such bid shall not be considered.**
9. **The intending bidder must read the terms and conditions [both commercial & Additional] & IITD - 6 carefully** which will be the part of the Contract. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
10. Information and Instructions for bidders posted on website shall form part of bid document.
11. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website e-procure.gov.in free of cost.
12. But the bid can only be submitted after submission/uploading of EMD as prescribed in the schedule.
13. Copy of all mandatory documents as desired in the NIT shall be scanned and up-loaded to the e-Tendering website within the period of bid submission. During scrutiny of technical bids, if required, bidders may be asked to submit original documents for cross checking. However, certified / original copy of all the scanned and up-loaded documents shall have to be submitted by the lowest bidder only within a week physically in the office of the tender inviting authority.

14. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has submitted prescribed EMD, and other documents scanned and uploaded are found in order.
15. Those contractors not registered on the website mentioned above, are required to get registered beforehand. Bidders should refer “Instruction for Online Bid Submission” given earlier for further assistance.
16. When bids are invited in two / three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted, then the bid submitted earlier shall become invalid.
17. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
18. Contractors must ensure to quote rate of each item.
19. **The bid submitted shall become invalid if:**
 - a. The bidder is found ineligible.
 - b. The bidder does not upload scanned copies of all the documents stipulated in the bid document.
 - c. If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening / accepting authority.
 - d. If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
 - e. EMD not deposited / submitted as specified.
20. Equipment to be supplied shall satisfy Class-1 criteria. ‘Class – 1 Local Supplier’ means a supplier or service provider, whose goods, services or works offered for procurement has local content equal to or more than 60% as defined under Order No. P-46021/2/2017-PP(BE-II) dated 04-06-2020 issued by Department for Promotion of Industry and Internal Trade (Public Procurement Section), Ministry of Commerce and Industry, Govt of India.
 - a. ‘Local Content’ means the amount of value added in India which shall unless and otherwise prescribed by the nodal ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all domestic duties) as a proportion of the total value, in percent.
 - b. For the purpose of verification of ‘Local Content’, the Class-1 Local Supplier / Service Provider at the time of bidding, tender or solicitation shall be required to indicate percentage of local content and provide self-certification that the items offered meet the local content requirement for Class – 1 Local Supplier. They shall also give details of the location(s) at which the local value addition is made.
 - c. In cases of procurement for a value in excess of 10 crore, the Class – 1 Local Supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of the companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

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- d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-certifications and auditor's / accountant's certificates on random basis and in the case of complaints.
- e. False declarations will be in breach of Code of Integrity under rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for upto two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

List of MANDATORY DOCUMENTS to be scanned and uploaded within the period of bid submission:

Sr. No.	:	Details of Document
1	:	Annexure – 1 duly filled in and got signed by the bidder
2	:	Annexure – 3 duly filled in and got signed by the bidder
3	:	Annexure – 4 duly filled in and got signed by the bidder (if applicable)
4	:	Proof of online EMD deposit / Scanned copy of DD / FDR submission (favouring 'Registrar, IIT Delhi') The following undertaking on firm's letter head shall be uploaded by the bidder if scanned copy of DD/FDR is uploaded by the bidder: <i>"The exact physical EMD (as uploaded) shall be deposited by me / us with the authority inviting tender, in case I / we become the lowest tenderer, within a week of the opening of financial bid, otherwise, IITD may reject the tender and also take actions to debar me / us from tendering in any form in IIT Delhi."</i>
5	:	Certificate of work experience as desired (vide clauses 3 to 7 above) along with Annexure – 3 duly filled in and signed
6	:	Certificate of Registration for GST & acknowledgement of upto date filled return of GST.
7	:	Affidavit as per provision of the clause 1.2.2 of IITD-6 vide in following page (To be submitted on <u>stamp paper</u> (not less than One Hundred Rupees only) and <u>date of affidavit</u> and <u>purchase of stamp paper shall not be earlier</u> than the publication of NIT. <u>NIT number, Name of work and matter of the clause 1.2.2 shall be written on the 1st page of the Stamp Paper and can be continued upto backside of the page</u>) No separate annexure paper should be attached. Affidavit shall be duly notarised. Bidder will be required to re-submit fresh Affidavit, if any deviations noticed.
8	:	Acceptance to execute INTEGRITY PACT. <i>N.B. If the Contractor is a partnership or a consortium, this pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a company, the pact must be signed by a representative duly authorized by Board Resolution.</i>
9	:	IITD 7 / 8 duly signed (vide pp – 28, 29)
10	:	EPFO & ESIC registration with upto date paid challan (challan shall be not older than two month from the month on which the tender is invited)
11	:	Valid Electrical Licence in the name of the contractor. <i>if the bidder does not possess electrical licence in his own name, he shall have to submit an undertaking on their letter head and the bidder shall scan and upload following undertaking along with</i>

		<p>other bid documents.</p> <p><i>“I/We undertake that, if I/we do not possess in my/our name a valid electrical license as required, I/we shall associate an agency having such a licence for execution of work which requires such a licence”.</i></p>
12	:	<p>Following documents are to be provided by the bidder if Private Organisation Experience certificate is submitted in support of eligibility:</p> <ol style="list-style-type: none"> TDS certificate of the work experience duly highlighted Turnover Certificate duly issued by Chartered Accountant with UDIN during the immediate last three consecutive financial years This should be at least 30% of the estimated cost put to tender. The value of annual turnover figures shall be brought to current value by enhancing the actual turnover figures at simple rate 7% per annum. (N.B.: Entire balance sheet should not be uploaded) Banker's Certificate from a Commercial Bank or Net Worth certificate: Banker's Certificate of the amount equal to 40% of the estimated cost put to tender OR Net Worth Certificate of minimum 10% of the estimated cost put to tender issued by certified Chartered Accountant with UDIN. (vide Annexure – 4)
13	:	<p>Power of Attorney, as applicable, as per following</p> <p><i>“In the event of tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorising him to do so, such power of attorney to be produced with the tender and it must disclose that the firm is duly registered under the Indian Partnership Act 1952.”</i></p>
14	:	Any other document as specified

Note:

- Hard copies of documents are to be submitted as per clause 9.1 of IITD-6
- Original copies of documents are to be submitted for verifications as and when demanded by the tender inviting authority
- Bidders are advised to keep the Original DD / FDR, Affidavit, Exp. Certificate, etc. 'as it is' in safe custody till finalisation of bid

**Assistant Executive Engineer in-charge, AC Division
For & on Behalf of BOG, IIT Delhi**

INDIAN INSTITUTE OF TECHNOLOGY DELHI NOTICE INVITING E-TENDER

- 1.0 Item rate tenders are invited on behalf of The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 110016 from Specialised Agencies in two bid system as per details given below for the work of **Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi**
- 1.1 The work is estimated to cost Rs. 6,15,84,276.00. This estimate, however, is given merely as a rough guide.
- 1.2 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-
- 1.2.1 **Criteria of eligibility for submission of bid documents: Conditions for intending bidders / contractors**
- 1.2.1.1 **Three similar works each costing not less than Rs.2,29,39,000.00, or two similar works each costing not less than Rs.3,44,08,000.00, or one similar work costing not less than Rs.4,58,77,000.00** in last 7 years ending last day of the month previous to the one in which tenders are invited. The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of submission of bid.
- 1.2.2 **To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under: - “I / We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I / we shall be debarred for bidding in IIT Delhi in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy to be uploaded at the time of submission of bid)”**
- 2.0 Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 7/8 which is available as IIT Delhi Publication. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.
- 3.0 The time allowed for carrying out the work will be **180 days** from the date of start as defined in schedule ‘F’ or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4.0 The site for the work is available.
- 5.0 The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site **e-procure.gov.in**.
- 6.0 After submission of the bid the contractor can re-submit revised bid any number of times

but before last time and date of submission of tender as notified.

- 7.0 While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- 8.0 If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.
- 9.0 EMD shall have to be deposited / submitted as stipulated in the schedule of the NIT.
- 9.1 Copy of all 'mandatory documents' and other documents as specified in the press notice shall be scanned and uploaded to the e-tendering website within the period of bid submission. ***However, original affidavit and certified copies of all the scanned and uploaded documents as specified in press notice shall have to be submitted by the lowest bidder only within a week physically in the office of tender opening authority. Original copies of other documents are also to be shown for scrutiny and verifications by the tender opening / accepting authority.***
- 10.0 **The bid submitted shall become invalid if:**
- 10.1 The bidder is found ineligible.
- 10.2 The bidder does not upload scanned copies of all the documents stipulated in the bid document.
- 10.3 If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening / accepting authority.
- 10.4 If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 10.5 EMD not deposited / submitted as specified.
- 11.0 The contractor whose bid is accepted will be required to furnish **performance guarantee** of 5% (Five Percent) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.
- 12.0 Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice

and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

- 13.0 The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 14.0 Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 15.0 The competent authority on behalf of the Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 16.0 The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.
- 17.0 No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract liable to be cancelled, if, either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 18.0 **The bids for the work shall remain open for acceptance for a period of 75 (Seventy Five) days from the date of opening of technical bids. Further -**
- 18.1 If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 60% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- 18.2 If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- 18.3 In case of forfeiture of earnest money as prescribed in para (18.1) and (18.2) above, the bidders shall not be allowed to participate in the rebidding process of the same work.
- 19.0 This notice inviting bid shall form a part of the contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall **within fifteen days**

from the stipulated date of start of the work, sign the contract consisting of:-

- 19.1 The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- 19.2 Standard IITD Form –7/8 or other Standard IITD Form as applicable.
- 20.0 **Integrity Pact:** The contractor shall download the Integrity Pact, which is a part of tender documents, affix his signature and upload the same while submitting online bids. In the event of his failure to sign and upload the Integrity Pact along with other bid documents, his bid shall be rejected.

21. For composite Bid:

The AEE In charge (AC Division) shall be Engineer-in-charge of the major component and will call the bids for the composite work; Earnest Money will be fixed with respect to the combined estimate cost put to tender for the composite bid.

- i. The bid document will include the following three components: -

PART A : IITD-6, IITD-7 including schedule A to F for the major component of the work. Standard General Conditions of contract for CPWD 2023 for Maintenance Works as corrected/modified up to date.

PART B : General/Specific conditions, specifications and schedule of quantities applicable to major component of the work.

PART C : Schedule A to F for minor components of the work (Competent authority under clause 2 and clause 5 shall be same authority as mentioned in schedule A to F for major components), General/ specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.

- ii. The bidder must associate himself with experienced agencies of the appropriate class eligible of bid for each of the minor components individually.
- iii. The eligible bidders shall quote rates for all items of major component as well as for all items of minor component of work.
- iv. After acceptance of the bid by Competent authority, the AEE In charge (AC Division) i.e., Engineer in charge of the work shall issue letter of award on behalf of the Board of Governors, IIT Delhi, After the work is awarded, the main contractor will have to enter into one agreement with AEE In charge (AC Division) and has also to sign two or more copies of agreement. On such a signed set of agreement shall be handed over to EE (CD-II) in charge of minor component. AEE In charge (AC Division) of major component will operate part A and EE (CD-II) in charge of minor component shall operate part B along with Part A of the agreement.

- v. Entire work under the scope of composite bid including major and all minor components shall be executed under one agreement.
- vi. Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works.
- vii. The main contractor has to associate agencies for specialized / Minor component(s) conforming to eligibility criteria as defined in the bid document and has to submit details of such agency(s) to Engineer-in-Charge of relevant component(s) within prescribed time. The name of the agency(s) to be associated shall be approved by the Engineer-in-Charge of relevant component(s).
- viii. In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in Charge of relevant specialized component(s). The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case the Engineer-in-Charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- ix. The main contractor must enter into MoU with agency(s) associated by him for execution of the specialized component(s), in case the main contractor does not have the capability to execute the Specialized / Minor components of the work. Copy of such MoU shall be submitted to AEE in charge (AC Division) and EE(CD-II), in charge of each relevant component as well as to AEE-in-charge of major component. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new contractor associated by him.
- x. Running payment for the major component shall be processed by AEE in charge (AC Division) of major discipline to the main contractor. Running payment of minor components shall be made by EE(CD-II), discipline of minor component directly to the main contractor.
- xi. The composite work shall be treated as completed when all the components of the work are complete and certified. The completion certificate of the composite work shall be recorded by Engineers-in-charge of major component after record of completion certificate of all other components.
- xii. The final bill of the whole work shall be finalized and paid by the AEE in charge (AC Division) of major component. EE(CD-II), in charge of minor component(s) will prepare and pass the final bill for their respective component of work and pass on the same to the AEE in charge (AC Division) of the major component for including in the final bill for composite contractor.

INTEGRITY PACT

To

.....,
.....,
.....

Sub: NIT No. 135/0599/IITD/AC/2025-26 for the work of “Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi”

Dear Sir,

It is hereby declared that IIT Delhi (IITD) is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the Integrity Agreement, which is an integral part of the tender/bid documents, failing which the tender/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the IITD.

Yours faithfully,

**Assistant Executive Engineer in-charge, AC Division
For & on Behalf of BOG, IIT Delhi**

[TO BE SUBMITTED DULY SIGNED BY THE BIDDER ALONGWITH BID DOCUMENTS]

To

**Assistant Executive Engineer-in-charge, AC Division,
IIT Delhi, Hauz Khas,
New Delhi – 110016**

Subject: Submission of Bid for the work of “Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi”

Dear Sir,

I / We acknowledge that IIT Delhi is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I / We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I / We will sign the enclosed integrity Agreement, which is an integral part of tender / bid documents, failing which I / We will stand disqualified from the tendering process. I / We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I / We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IITD. I / We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I / We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IITD shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully,

(Duly signed by authorized signatory of the Bidder)

(To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of IITD)

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of.....
20.....

BETWEEN

The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 represented through **Assistant Executive Engineer-in-charge, AC Division, IIT Delhi**, (Hereinafter referred as the '**Principal/Owner**', '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

.....
.....
(Name and Address of the Individual/firm/Company)

Through.....
..... (Hereinafter referred
(Details of duly authorized signatory)

to as the "**Bidder/Contractor**" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

PREAMBLE

WHEREAS the Principal / Owner has floated the Tender (NIT No. 135/0599/IITD/AC/2025-26) (hereinafter referred to as "**Tender/Bid**") and intends to award, under laid down organizational procedure, contract for "**Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi**" (Name of work) hereinafter referred to as the "**Contract**".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s) AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "**Integrity Pact**" or "**Pact**"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

ARTICLE 1: COMMITMENT OF THE PRINCIPAL / OWNER

1. The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - 1.1. No employee of the Principal / Owner, personally or through any of his / her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - 1.1.1. The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and

C ... Nil I Nil O Nil

reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

- 1.1.2. The Principal/Owner shall Endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
2. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PoC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

ARTICLE 2: COMMITMENT OF THE BIDDER(S) / CONTRACTOR(S)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or coercion or collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
2. The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - 2.1. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - 2.2. The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - 2.3. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PoC Act. Further the Bidder(s) / Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal / Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - 2.4. The Bidder(s) / Contractor(s) of foreign origin shall disclose the names and addresses of agents / representatives in India, if any. Similarly Bidder(s) / Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
 - 2.5. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practices **means a wilful misrepresentation or omission of facts or submission of**

fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.

5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

ARTICLE 3: CONSEQUENCES OF BREACH

Without prejudice to any rights that may be available to the Principal / Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**
2. **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
3. **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal / Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

ARTICLE 4: PREVIOUS TRANSGRESSION

1. The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
3. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

ARTICLE 5: EQUAL TREATMENT OF ALL BIDDERS/CONTRACTORS/SUBCONTRACTORS

C ... Nil I Nil O Nil

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
2. The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

ARTICLE 6: DURATION OF THE PACT

1. This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 6 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.
2. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority of IIT Delhi.

ARTICLE 7: OTHER PROVISIONS

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Head Quarters of the Division of the Principal/Owner, who has floated the Tender.
2. Changes and supplements need to be made in writing. Side agreements have not been made.
3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by Board Resolution.
4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

ARTICLE 8: LEGAL AND PRIOR RIGHTS

1. All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of Principal / Owner)

.....

(For and on behalf of Bidder / Contractor)

WITNESSES:

1.
(signature, name and address)
2.
(signature, name and address)

Place:

Dated :

INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI - 110016

Percentage Rate Tender / Item Rate Tender & Contract for Works

Tender for the work of “Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi”

1. To be submitted online by Upto 3 PM of 02-03-2026
2. To be opened on 03-03-2026 after 3 PM online

e-TENDER

I / We have read and examined the Notice Inviting Tender, schedule, A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I / We hereby tender for the execution of the work specified for the Board of Governors, IIT Delhi within the time specified in Schedule ‘F’ viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (75) days from the due date of its opening and not to make any modification in its terms and conditions.

A sum of Rs. 12,31,686.00 is hereby deposited in IIT Delhi Revenue Account No. 10773572622 as earnest money / A Demand Draft / FDR of Rs.12,31,686.00 favouring Registrar, IIT Delhi has been scanned and uploaded with the Technical Bid. If I / We, fail to furnish the prescribed performance guarantee within prescribed period I / We agree that the said The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I / We fail to commence the work as specified, I / We agree that The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I / We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid I / We shall be debarred for participation in the re-tendering process of the work.

I / We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / We shall be debarred for tendering in IIT Delhi in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I / We hereby declare that I / We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate

information/derived there from to any person other than a person to whom I / We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 110016 for a sum of (Rupees.....).

The letters referred to below shall form part of this contract agreement:-

- (a)
- (b)
- (c)

For & on behalf of Board of Governors, IIT Delhi

Signature

Dated:

Designation

PROFORMA OF SCHEDULES

SCHEDULE "A"

Schedule of Quantities (PWD-3)

SCHEDULE "D"

Extra schedule for specific requirements / documents for the work, if any.

----- NIL -----

SCHEDULE "E"

Reference to General Conditions of Contract: GCC of Maintenance Work 2023 published by CPWD as amended up to last date of submission of bid.

1.	Name of work	:	Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi
2.	Estimated cost of work (₹)	:	6,15,84,276.00
3.	Earnest Money (₹)	:	12,31,686.00(to be refunded after receiving performance guarantee and signing of agreement)
4.	Performance Guarantee	:	5 percent of tendered value
5.	Security Deposit	:	2.5% (percent) of tendered value

SCHEDULE "F"

GENERAL RULES & DIRECTIONS:

Officer inviting tender	:	Assistant Executive Engineer in-charge, AC Division
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3	:	See below

DEFINITIONS:

2 (V)	Engineer-in-charge	:	Assistant Executive Engineer, in-charge, AC Division For E&M work &
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			EE(CD-II) for Civil Work
2 (viii)	Accepting authority	:	Institute Engineer
2 (x)	Percentage on cost of materials and labour to cover all overheads and profits	:	15 percent
2 (xi)	Standard Schedule of Rates	:	Market, DSR (E&M) & Civil DSR 2023
2 (xii)	Department	:	Estate & Works, AC Division IIT Delhi
9 (ii)	Reference to General condition of contract	:	CPWD / IITD Form 7 / 8 as modified and corrected upto date, GCC 2023 for Maintenance work of CPWD with latest modifications

CLAUSE 1

i)	Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance	:	15 days
ii)	Maximum allowable extension beyond the period provided in (i) above with late fees @0.1% per day of performance guarantee	:	10 days

CLAUSE 2

(i)	Authority for fixing compensation under Clause 2	:	Institute Engineer
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CLAUSE 2A

(i)	Whether Clause 2A shall be applicable	:	No
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CLAUSE 5

(i)	Number of days from the date of issue of letter of acceptance for reckoning date of start	:	10 days
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TABLE OF MILESTONE(S):

Sr. No.	Description of Milestone (physical)	Time allowed in days (from date of	Amount to be with-held in case of non-
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		start)	achievement of milestone
(1)	(2)	(3)	(4)
	--- NOT SPECIFIED ----		

Time allowed for execution of work	:	180 days
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Authority to decide:	Extension of time	:	Director
	Rescheduling of milestones	:	Director
	Shifting of date of start in case of delay in handing over of site	:	Institute Engineer

CLAUSE 5

Clause applicable 5 / 5A	:	5
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CLAUSE 6

MB applicable: Computerised Measurement Book (CMB) / Electronic Measurement Book (EMB)	:	CMB
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CLAUSE 7

Gross work to be done together with net payment / adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment	:	100 Lakhs
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CLAUSE 7A

Whether Clause 7A shall be applicable	:	No
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CLAUSE 10A

List of testing equipment to be provided by the contractor at site					
1	600 Volt Megger	2	Digital Multimeter	3	Anemometer

C ... Nil I Nil O Nil

4	NIL	5	NIL	6	NIL
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CLAUSE 10B (ii)

Whether Clause 10 B (ii) shall be applicable (Yes / No)	:	No
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CLAUSE 10 C

Component of labour expressed as percent of value of work	:	20 Percent
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CLAUSE 10CC

Whether Clause 10CC shall be applicable	:	Not applicable
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CLAUSE 11

Specification to be followed for execution of work	:	CPWD General Specifications for Electrical Works for HVAC Work with other relevant parts as applicable as amended upto date & CPWD specification 2019 Vol-I & Vol-II for civil work.
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CLAUSE 12

12.2 & 12.3	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work / HVAC work	:	100%
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CLAUSE 16

Competent authority for deciding reduced rates	:	Institute Engineer
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CLAUSE 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site					
1	All safety equipment for personnel to be deployed at site	2	NIL	3	NIL
4	NIL	5	NIL	6	NIL

CLAUSE 19C

C ... Nil I Nil O Nil

Authority to decide penalty for each default	:	Engineer-in-charge
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CLAUSE 19D

Authority to decide penalty for each default	:	Engineer-in-charge
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CLAUSE 19G

Authority to decide penalty for each default	:	Engineer-in-charge
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CLAUSE 19K

Authority to decide penalty for each default	:	Not applicable
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CLAUSE 25**Constitution of Dispute Redressal Committee (DRC)**

Conciliator	:	Dean Infra
Arbitrator Appointing Authority	:	Director
Place of Arbitration	:	IIT Delhi

CLAUSE 32**Requirement of Technical Representative(s) and recovery rate**

Sr. No.	Minimum qualification of Technical Representative	Discipline	Designation	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36 (i)	
						Figures	Words
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Graduate Engg.	Electrical or Elect & Electronics or Mechanical	Project Manager	5 years having similar nature experience	1	Rs.25000/- per month per Representative	Twenty Five Thousand

2	Graduate or Diploma Engg.	Civil Engineer	Manager Planning	2 years Graduate or 5 years Diploma	1	Rs.15,000/- per month per Representative	Fifteen Thousand
3	Graduate or Diploma Engg.	Electrical or Elect & Electronics or Mechanical	Technical Representative / Supervisor	2 years Graduate or 5 years Diploma	1	Rs.15,000/- per month per Representative	Fifteen Thousand

Assistant Engineers retired from Govt. / IIT Delhi services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10-year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 60% of requirement of degree engineers.

CLAUSE 38

Applicability of Clause 38	:	Not applicable
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COMMERCIAL AND ADDITIONAL CONDITIONS

1. GENERAL

- 1.1. This specification covers supply and delivery of materials at site, all preparatory work assembly and installation, commissioning and putting into operation of scrubber system & final testing & commissioning at site. This is a turnkey project.
- 1.2. Location: Academic Complex East & West (99 B & C) at IIT Delhi
- 1.3. The work shall be executed as per CPWD General Specifications for Electrical Works Part-I (Int.) 2013, Part-II (Ext.) 1994, HVAC Work 2017, as amended upto date, relevant I.E. Rules, BIS/IEC and as per directions of Engineer-in- Charge. These additional specifications/conditions are to be read in conjunction with above and in case of variations; specifications given in these additional conditions shall apply. However, nothing extra shall be paid on account of these additional specification and conditions, as the same are to be read along with schedule of quantities for the work.
- 1.4. The tenderer should in his own interest visit the site and get familiarized with the site conditions before tendering.
- 1.5. No T&P shall be issued by the Department and nothing extra shall be paid on account of this.

2. COMMERCIAL CONDITIONS:

- 2.1. **Type of contract:** The work to be awarded by this tender shall be treated as indivisible works contract.
- 2.2. **Submission and opening of Tenders:**
 - 2.2.1. The tender is in two parts:
 - 2.2.1.1. Part-I -Technical cum Un-priced commercial Bid
 - 2.2.1.2. Part-II-Price Bid
- 2.3. The tender shall be submitted online, duly completed as per NIT conditions within period of bid submission.
- 2.4. The tenderers are advised not to deviate from the technical specifications / item, commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.
- 2.5. Technical cum un-priced commercial bid only shall be opened on the due date and time in the presence of tenderers or their authorized representative who wish to remain present.
- 2.6. Scrutiny/evaluation of the technical-cum-commercial bid shall be done by the department. In case, it is found that the technical-cum-commercial bid of a tenderer is not in line with NIT specifications/requirements and/or contains too many deviations, the department reserves the right to reject the technical bid of such firms(s) without making any reference to the tenderer(s).
- 2.7. Necessary clarifications required by the department shall have to be furnished by the tenderer within the time given by the department for the same. The tenderer will have to depute his representative to discuss with the officer(s) of the department as and when so

desired. In case, in the opinion of the department a tenderer is taking undue long time in furnishing the desired clarifications, his bid will be rejected without making any reference.

- 2.8. After obtaining clarification from all the tenders, the department will intimate the tenders whose technical cum commercial bids are acceptable.
- 2.9. The price bids of only those tenderers shall be opened whose technical bids are found to be technically acceptable. The time and date of opening of price bid shall be fixed after the technical cum unpriced commercial bid is accepted and intimated to them by post/Fax/e-mail.
- 2.10. The department reserves the right to reject any or all the price bids and call for fresh prices/tenders as the case may be without assigning any reason.

3. TERMS OF PAYMENTS

- 3.1. The following percentage of contract rates for the various items included in the contract shall be payable against the stage of work shown herein; (i) 80% after initial inspection and delivery at site in good condition on prorata basis. (ii) 10% after completion of installation in all respect. (iii) Balance 10% will be paid after testing, commissioning, trial run and handing over to the department for beneficial use including fire inspection. **Original copies of supplier's GST invoice showing contract number, goods description, quantity, packing list, unit price and total amount, dispatch detail, test done at factory etc. have to be submitted by agency for ascertaining the genuinity of material source and supply.** Bidder should note that necessary documents (PAN card, Cancelled cheque, GST Reg. proof and RTGS mandate form as per prescribed proforma of IIT Delhi) be submitted as soon as the work is awarded to them. Separate Contractor's Code shall be generated in IIT Delhi if the bidder is a new contractor to IIT Delhi ('Code' is perpetual in nature). Payment shall be processed after submission of Invoice and necessary documents / certificates (as mentioned in the NIT). There is a prevailing practice of pre-audit (for total tendered amount more than 6 lakhs) at IIT Delhi before releasing payment. Bidder shall have to comply all necessary documents as outlined in the Contract as to be desired by the Auditor and or by the accountant. It may take one to two months in the whole process (from submission / acceptance of bill in CMB / MB by the contractor upto processing by Accounts section) to release payment subject to quick compliance of all submittals by the contractor. Applicable Taxes shall be got deducted from the bill as per prevailing orders of the Government. 'GST part of the bill' shall be released after submission of proof of payment of GST, i.e. B2B challan, etc. by the contractor.
- 3.2. Income tax, GST, labour cess & other statutory deduction etc. shall be made at source as per the prevalent laws. The deduction of Security Deposit, Income Tax, etc., shall be done after calculation for the above due payment as per clause 3.1 above and net payment shall reduce accordingly.

4. AWARD OF WORK

- 4.1. Work shall be awarded to the successful bidder only after concurrence of the **Auditor of the Internal Audit Section** of the IIT Delhi as per extant Rules of the Institute.

5. SECURITY DEPOSIT

6. Security Deposit shall be deducted from bill to the extent of 2.5% of the tendered amount. **The security deposit shall be released after defect liability period is over and clearance of all obligations as per contract.**

7. PERFORMANCE GUARANTEE

7.1. The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposit mentioned elsewhere in the contract for his proper performance of the contract agreement within 15 days of issue of letter of acceptance of tender. This guarantee shall be in the form of Demand Draft/Pay order of irrevocable bank guarantee bond of any schedule bank or the State Bank of India in the specified perform a of Government Security, fixed deposit receipt pledged in favour of **Registrar, IIT Delhi** or as specified in the letter of acceptance of tender. The performance guarantee shall be initially valid up to the stipulated Period of completion plus six months. This bank guarantee shall be kept valid till the recording of completion certificate for the work by the competent authority.

8. RATES

8.1. The work shall be treated as on works contract basis and the rates tendered shall be for complete items of work (except the materials, if any, stipulated for supply by the department) inclusive of all taxes, GST (including works contract tax, if any), duties, and levies etc. and all charges for items contingent to the work, such as, packing, forwarding, insurance, freight and delivery at site for the materials to the supplied by the contractor, watch and ward of all materials (including those, if any, supplied by the department), post installation services till defect liability period etc. for the work at site etc.

9. COMPLETENESS OF TENDER, APPROVAL OF DRAWINGS AND COMMENCEMENT OF WORK

9.1. All sundry equipment, fitting, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specially mentioned in the tender documents or not.

9.2. The contractor shall submit the drawings to the Engineer – in- Charge for approval before start of work.

9.3. The contractor shall commence work as soon as the drawings submitted by him are approved.

10. STORAGE AND CUSTODY OF MATERIAL

10.1. The agency has to make his own arrangement for storage. No separate storage accommodation shall be provided by the department Watch and ward of the storage and their safe custody shall be responsibility till the final taking over of the installation by the department.

11. CARE OF THE BUILDING

11.1. Care shall be taken by the contractor while handling and installing the various equipment and components of the work to avoid damage to the building. He shall be responsible for

repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste material arising out of the installation from the site of work.

12. COMPLETION PERIOD

12.1. The completion period indicated in the tender documents is for the entire work of planning, designing, approval of drawings etc., arrangement of materials & equipments, delivery at site including transportation, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-in-charge.

13. GUARANTEE

13.1. The contractor shall guarantee the entire installation as per specifications both for components and for system as a whole. All equipments shall be guaranteed for **one year** from the date of commissioning against unsatisfactory performance and / or breakdown due to defective design, workmanship or material. The equipment or component, or any part thereof, so found defective during guarantee period shall be forthwith replaced free of cost to the satisfaction of the Engineer-in-Charge. In case, it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of Engineer-in-Charge in this regard shall be final & binding on the contractor.

13.2. The tenderer shall guarantee among other things, the following:

- 13.2.1. Quality, strength and performance of the material used as per manufacturer's standards.
- 13.2.2. Safe mechanical and electrical stress on all part under all specified conditions of operation.

14. POWER SUPPLY & WATER

14.1. Power and water supply shall be made available by the department at one point near the location of installation free of cost, if required. Further, the arrangement for tapping power and water supply from this point shall be made by the contractor.

15. VALIDITY

15.1. Tenders shall be valid for acceptance for a period of 75 days from the due date of opening of Technical of bid.

16. COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS

16.1. All works shall be carried out in accordance with relevant regulation both statutory and those specified by the Indian Standards related to the works covered by this specification in particular, the equipment and installation will comply with the following:

- 16.1.1. Factories Act
- 16.1.2. Indian Electricity Rules
- 16.1.3. B.I.S. & other standards as applicable
- 16.1.4. Workmen's compensation Act
- 16.1.5. Statutory norms prescribed by local bodies like fire department, CEA, Power Supply Co. etc.

17. INDEMNITY

- 17.1. The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer on account of the above.

18. ERECTION TOOLS

- 18.1. No tools and tackles either for unloading or for shifting the equipments for erection purposes would be made available by the department. The successful tender shall make his arrangement for all these facilities.

19. COOPERATION WITH OTHER AGENCIES AND OCCUPANTS OF THE BUILDING

- 19.1. The successful tenderer shall co-ordinate with other working contractors, if any and other occupants of different offices / Labs, etc., and exchange freely all technical information so as to make the execution of this work / contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of work was not under taken by the tenderer himself.

20. MOBILIZATION ADVANCE

- 20.1. No mobilization advance shall be paid for this work.

21. INTERPRETING SPECIFICATION

- 21.1. In interpreting the specification, the following order of decreasing importance shall be followed in case of contradictions:

- 21.1.1. Schedule of quantities
- 21.1.2. Technical Specification
- 21.1.3. Drawing (if any)
- 21.1.4. General Specification for Electrical Works of CPWD (relevant Parts)
- 21.1.5. Relevant BIS or other international code in case BIS code is not available.

22. QUALITY OF MATERIALS AND WORKMANSHIP

- 22.1. The components of the installation shall be of such design so as to satisfactorily function under all conditions of operation.

- 22.2. The entire work of manufacture / fabrication, assembly and installation shall conform to sound engineering practice. The entire installation shall be such as to cause minimum transmission of noise and vibration to the building structure.
- 22.3. All equipments and materials to be used in work shall be manufactured in factories of good repute having excellent track record of quality manufacturing, performance and proper after sales service.
- 22.4. None of the equipment / machines supplied shall be more than six months old from date of supply at site, Copy of Excise Gate Pass / Invoice / Shipment / Custom Clearance certificate / details (in case of Imported equipment) / GST Bills shall be submitted to prove the date of manufacture & genuineness of the equipment / machines supplied.

23. TENDER DRAWINGS, DRAWINGS FOR APPROVAL & COMPLETION DRAWINGS

Drawings for approval on award of the work

- 23.1. The contractor shall prepare & submit three sets of hard copy & one Digital / soft copy in Auto Cad format of following drawings (2D/3D) AND GET THEM APPROVED FROM THE Engineer-in-charge before the start of the work. The Approval of drawings however does not absolve the responsibility of contractor to supply the equipment/ materials as per agreement, if there is any contradiction between the approved drawings and agreement.
- 23.2. Lay out drawings of the equipments to be installed in various rooms such as labs, rooftop etc.
- 23.3. Plumbing drawings showing the layout of entire piping, dia. & length of pipes, valves and isometric drawings showing connection of various equipment.
- 23.4. Ducting drawings showing sizes, locations of dampers, grilles & diffusers.
- 23.5. Electrical wiring diagrams for all electrical equipments and controls including the sizes and capacities of the various cables and equipments.
- 23.6. Dimensioned drawings of all electrical and control panels.
- 23.7. Drawings showing details of supports for pipes, cable trays duct etc.
- 23.8. Any other drawings relevant to the work.

24. POLICY OF THE INSTITUTE

- 24.1. Institute has a policy against **sexual harassment** and is committed to providing an environment free from **sexual harassment of women** at the workplace. Contractor shall have to abide by the policy of the Institute with due diligence. Any violation on the part of the contractor shall be dealt with the extant rules of the Institute.

25. COMPREHENSIVE MAINTENANCE

- 25.1. A separate **supplementary agreement** shall be made with the successful tenderer for sub head "CAMC *including* Routine, Preventive & Breakdown Maintenance" (for 5 years after one year guarantee period i.e. DLP) of schedule of work. The payment of maintenance may be made yearly after successful maintenance. Separate PBG shall be submitted for the maintenance work for the entire period of CAMC plus 6 months more at the rate of 5% of the CAMC amount.

SPECIFICATIONS

1.0 The work shall be carried out as per CPWD General Specifications for HVAC works 2024 as amended upto date alongwith, CPWD general Specifications for Electrical Works Part – I, II & IV as amended upto date, relevant IE Rules and as per directions of Engineer-in-Charge. For electrical panels, CPWD General Specifications for Electrical Works Part-IV shall be applicable.

2.0 SPECIFICATIONS FOR EXHAUST BLOWER:

2.1 Supply, Installation , Testing & Commissioning of Medium Pressure Direct / Belt Driven PP Centrifugal Blower for the following capacity with Motor suitable for 3 Phase, 415 Volts, TEFC B5, IP 55, Protection Class F, 50 Hz, 2P/4P, Flange / Foot mounted and compatible for VFD Operations. Blower make as per NIT. The exhaust fans supplied and installed shall be of 'Centrifugal Corrosion Resistant' type and shall be capable of delivering the design flow rate against designed pressure drop. The fans shall be robust in construction and suitable for continuous duty operation. It shall be mounted with ease of maintenance and shall be installed with proper vibration isolators to minimize vibration transmission to ductwork and support structure. Fans selected shall be silent and vibration free when running and suitable for outdoor use and shall not exceed designed impeller speed. Aerodynamic performance of the fan shall be tested and comply 'ISO 5801' standards. Sound level shall be tested and comply with 'ISO 5136.2' standards. The casing shall be of self-supporting design, thermoformed (size 400 and below), welded by machine (automatically welded for size 400 and below). The material of construction shall be fire retardant polypropylene (PPs) for fire safety and suitable for use against corrosive 'medium' and a maximum allowable operating temperature of 70°C. No metal parts shall be exposed and in contact with the airstream. Impeller material of construction shall be fire retardant polypropylene (PPs) for fan size up to 400 (polypropylene {PP} for fan size 450 and above) suitable for use against corrosive 'medium' and a maximum allowable operating temperature of 70°C. It shall consist of 20 forward curved blades injection molded up to size 710 (thermoformed blades, automatically welded from 800). The impeller balancing shall be tested in accordance to VDI 2060, Q6.3 standards. Each impeller above size 450 shall be tested in an over speed test stand above its nominal rate and dynamically balanced on two levels in accordance to VDI 2060, Q6.3 standards. Electro-galvanized stand shall be used to support the fan and the motor for fan sizes up to 400 in view of the corrosive environment. Sturdy metal galvanized steel stand shall be used from fan size 450 onwards. A standard hub seal shall be fitted onto the impeller hub to prevent the corrosive 'medium' from contacting the shaft.

3.0 The complete system under the individual cluster shall modulate speed automatically as per the load taking sense from pressure sensor to be installed in duct. Control panel shall be provided with the logic for automodulation of speed of blower.

4.0 Contaminated water from all scrubbers shall be guided / drained to ETP or as to be instructed by the Engineer-in-charge for proper disposal. Necessary plumbing work shall be done in accordance with the specifications.

-
- 5.0** One technician shall be deployed on-site throughout the comprehensive maintenance period (including DLP) for operation and maintenance of the entire system of all cluster. No extra cost shall be provided by the Institute for this purpose.
- 6.0** The lowest tenderer will have to submit alongwith performance guarantee after acceptance of tender, an undertaking from the OEM of Blower and Scrubber regarding: -
- 6.1** Authorisation certificate
 - 6.2** The OEM is unconditionally support the lowest tenderer technically throughout the execution of contract as well as for Maintenance/Comprehensive Maintenance Contract for the useful life of the system.
- 7.0** Test certificates of equipments shall have to be submitted to the Engineer-in-charge by the contractor in compliance with the laid down specifications before / following supply of materials.

LIST OF ACCEPTABLE MAKE OF MATERIALS / EQUIPMENT

1	Exhaust Scrubber	Enviguard, SFI Systems, Lifeline Systems, Doshi Technologies
2	Exhaust Blower	Colasit, Systemair, Greenheck, Kruger
3	Blower Motor	Siemens, ABB, Marathon, Nidec, Bharat Bijlee
4	PP - FRP Duct	Lifeline Systems, Enviguard, Corrosion Controls, Gujarat Composite
5	PP-FRP Dampers	Lifeline Systems, Enviguard, Corrosion Controls, Gujarat Composite
6	VFD	ABB, Danfoss, Schneider, Siemens, Yaskawa
7	Damper Actuators	Belimo, Honeywell, Siemens, Johnson Controls
8	VAV/MMD Damper	Trox, Honeywell, Greenheck
9	UPVC Damper	Cosmos, Alloy Plast, Armac, Rex Polyextrusion
10	MCB, DB	Havells /Siemens/ Legrand /ABB / L&T / Schneider / C&S/ HPL/ Hager
11	Copper conductor cable XLPE / PVC insulated power & control cable	Havells / Gloster / KEI / Universal / Finolex / Polycab / RR Kabel / Rallison with ISI marked
12	All other items	As per prior approval of the Engineer-in-charge

SPECIAL TERMS AND CONDITIONS
MAINTENANCE SCHEDULE

A. This section covers the maintenance schedule and various recovery rates for not complying maintenance schedule during the contract period.

The maintenance provided during the contract period shall include but not limited to all equipments, labour part and emergency calls providing and site response within 24 hours. However, during the maintenance period, the material including consumable materials shall be arranged by the contractor, if any, replacement is warranted.

1. Free replacing of defective / worn out parts with new or repaired parts for any part, cut outs and other electrical components.
2. Free repairing of equipment like motors, pumps, at site / service station as the case may be
3. Free cleaning of scrubber and fresh air unit as and when required
4. Time to time bleeding of wet scrubber for discharging contaminated water

B. RECOVERY RATES FOR NON-COMPLIANCES

The various amounts as mentioned below are the recovery rates to be deducted from the bills payable to the contractor.

Sr. No.	Description of non-compliance	:	Amount to be recovered (Rs.)
1	Routine Monthly checking and visit	:	Rs.6,000.00 per lapse of visit
2	Not repairing / replacing of any other spare parts within 3 days after occurrence	:	To be got done at the risk and cost of the contractor and amount actually spent to be recovered from the bill of the contractor payable or PBG shall be encashed and for continuous inaction, action to be taken as per relevant clause of GCC.

**<< Organization Letter Head >>
DECLARATION**

I / We, _____ hereby declare that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I / we have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

1	Name & Address of the bidder	:	
2	Phone	:	
3	E-mail	:	
4	Contact person name	:	
5	Mobile number	:	
6	GSTIN number	:	
7	PAN number	:	
8	UTR no. for EMD	:	
BANK DETAILS of the Bidder			
1	Bank name	:	
2	Branch address	:	
3	Branch telephone no.	:	
4	MICR Code of the bank	:	
5	IFSC code	:	
6	Bank Account no.	:	
7	Type of account	:	
8	PI attach one cancelled cheque	:	

We further declare that our organization has not been blacklisted / delisted or put to any holiday by any Institutional agency / Govt. Department / Public Sector Undertaking in the last three years.

(Signature& name of the bidder)
Seal of the bidder

ON NON-JUDICIAL STAMP PAPER OF MINIMUM Rs.100
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(Guarantee offered by Bank to IIT Delhi in connection with the execution of contracts)
Sample Form of Bank Guarantee for Performance Guarantee

- 1 Whereas the Assistant Executive Engineer-in-charge of AC Division of IIT Delhi on behalf of the Board of Governors of IIT Delhi (hereinafter called "IIT Delhi") has entered into an agreement bearing number with(name and address of the contractor) (hereinafter called "the Contractor") for execution of work (Name of work) The IIT Delhi has further agreed to accept an irrevocable Bank Guarantee for Rs. (Rupees only) valid upto (date)..... as Performance Guarantee/Security Deposit/Mobilization Advance from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.
- 2 We, (indicate the name of the bank) (herein after referred to as "the Bank"), hereby undertake to pay to the IIT Delhi an amount not exceeding Rs. (Rupees..... only) on demand by the Government within 10 days of the demand.
- 3 We, (indicate the name of the Bank), do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only).
- 4 We, (indicate the name of the Bank), further undertake to pay the IIT Delhi any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
- 5 We, (indicate the name of the Bank), further agree that the IIT Delhi shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the IIT Delhi against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the IIT Delhi or any indulgence by the IIT Delhi to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
- 6 We, (indicate the name of the Bank), further agree that the IIT Delhi at its option shall be entitled to enforce this Guarantee against the Bank as a

C ... Nil I Nil O Nil

principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee IIT Delhi may have in relation to the Contractor's liabilities.

- 7 This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
- 8 We, (indicate the name of the Bank), undertake not to revoke this guarantee except with the consent of the IIT Delhi in writing.
- 9 This Bank Guarantee shall be valid up to unless extended on demand by IIT Delhi. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

1. Signature.....
Name and address

Authorized signatory
Name
Designation
Staff code no.
Bank seal

2. Signature
Name and address

*Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

**In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/security deposit/mobilization advance, as the case may be.

Annexure - 3**DETAILS OF ELIGIBLE SIMILAR NATURE WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF TENDERS**

Sr. no.	Name of work / project and location	Owner or sponsoring organisation	Cost of work done (INR)	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Name and address / telephone number of officer to whom reference may be made
1	2	3	4	5	6	7	8
1							
2							
3							

(Signature & name of the bidder)

Seal of the bidder

FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s / Sh..... having marginally noted address, as a Customer of our bank are / is respectable and can be treated as good for any engagement upto a limit of Rs. (Rupees.....)

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature) For the Bank

NOTE

1. Bankers Certificates should be on letter head of the Bank, addressed to tendering authority.
2. In case of Partnership firm, certificate should include names of all partners as recorded with the Bank.

FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT

“It is to certify that as per the audited balance sheet and profit & loss account during the financial year....., the Net worth of M/s (Name & Registered Address of individual / firm / company), as on (the relevant date) is Rs..... After considering all liabilities. It is further certified that the Net Worth of the company has not eroded by more than 30% in the last three years ending on (the relevant date).”

Unique Document Identification Number (UDIN)

Signature of Chartered Accountant

Name of Chartered Accountant

Membership No. of ICAI

Date and Seal

BID SUBMISSION CHECK LIST

ONLINE BID SUBMISSION:

The bid (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.	Documents	Content	File Types
1	Technical Bid	Annexure - 1	.PDF
2		Annexure - 3	
3		Annexure - 4	
4		Demand Draft/Pay order or Banker`s Cheque /Deposit at Call Receipt/FDR of any Scheduled Bank or through RTGS/ NEFT with UTR details against EMD	.PDF
5		Certificate of work experience as desired	.PDF
6		TDS certificate, Turn Over Certificate, Banker's certificate or Net worth certificate (if Private Organisations Experience certificate submitted) as applicable as per format in a single PDF	.pdf
7		Certificate of Registration for GST and acknowledgement of up to date filed return of GST.	.PDF
8		Affidavit as per provision of the clause 1.1.2 of IITD-6	.PDF
9		Acceptance to execute INTEGRITY PACT	.PDF
10		IITD 7 / 8 duly signed	.PDF
11		EPFO & ESIC Registration proof with challan as desired	.PDF
12		Electrical Licence of the bidder / Undertaking	.PDF
13		Power of Attorney	.PDF
14		Any other document as specified in the NIT	.PDF
Envelope – 2			
Sl. No.	TYPES	Content	
1.	Financial Bid	Price bid should be submitted in BOQ format.	.xls

SCHEDULE OF QUANTITY

Name of Work :- Providing Exhaust-Scrubber System for 99B & 99C Labs IIT Delhi

Sub Head :-Exhaust system, Ducting & Civil work.

Sr.No	Description	Qty	Unit	Rate	Amount
1	SINGLE STAGE PACKED BED VERTICAL WET SCRUBBER.				
2	<p>Supply, Installation, Testing and Commissioning of Single stage, Vertical Wet Scrubber with integrated liquid tank.</p> <ul style="list-style-type: none"> - Airflow : As mentioned below for individual Scrubbers - Temperature: 70 Deg C (max.). - Pressure drop 100 mm WG (approx.). - Material: PP+FRP with Isophthalic resin. - Scrubber Sink height not less than 750mm. Complete makeup water connection, 5" Float valve, 12mm x 1000 mm Glass water level indicator, drain & over flow pipe connections with required valves. - Scrubber recirculation pump with Mechanical seal coupled with suitable IP-55, 3 Phase, 50 Hz, motor with rain protection of PP+FRP guard. Inlet flange connection with valve and 'Y' Strainer with brass filter. Outlet flange connection with non return (NRV) valve with gaskets & bolt nuts. - Scrubber Inlet collar with 15 Deg inclination towards down at shell inside. - 12mm Perforated sheet with 35mm hole diameter and total open area is not less than 66% of perforated sheet area. - Single stage packing material consists of 50mm PP pal rings filled upto 750 mm Height. 				

	<ul style="list-style-type: none"> - One Set of liquid spray nozzle system with equal space matrix not less than 300mm. - Circular 3 pass PVC mist eliminator secured with 6 number mounting bolts mounted on lugs / circular ring. - Acrylic/ White PP dosing tank 500 mm Diameter x 500 mm Height with lead & handle and supported with galvanised MS support stand and with 12mm Pipe connection to the scrubber with control valve for manual dosing. - MS Ladder with 5mm Thick maintenance platform, finished with Chlorinated rubber paint and attached to the scrubber shell near the view port / window. - 5mm Thick acrylic Inspection and maintenance door /window between packing material & mist eliminator zone. - 0-500mm U-Tube manometer across inlet & outlet collars with transparent connecting tubes. - Mounting Bolt & Nuts with Anti Vibration Pads. 				
3	Location: 99B 1F				
4	<p>Cluster EEC (cluster) : 1 Capacity - not less than 500 CFM & Diameter 450 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM</p>	1	No	.	
5	Location: 99B 2F				

6	<p>Cluster EEC : 1 Capacity - not less than 5,027 CFM & Diameter 1200 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM</p>	1	No		
7	<p>Cluster EEC : 2 Capacity - not less than 11,831 CFM & Diameter 1800 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM</p>	1	No		
8	<p>Cluster EEC : 3 Capacity - not less than 12,200 CFM & Diameter 1800 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM</p>	1	No		

9	Cluster EEC : 4 Capacity - not less than 2,866 CFM & Diameter 900 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No .		
10	Cluster EEC : 5 Capacity - not less than 9,670 CFM & Diameter 1350 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No .		
11	Cluster EEC : 6 Capacity - not less than 4,087 CFM & Diameter 1050 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No .		
12	99B 3F				

13	Cluster EEC : 1 Capacity - not less than 4,356 CFM & Diameter 1050 mm Type of Scrubber - Packed Bed Vertical Scrubber .Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No		
14	Cluster EEC : 2 Capacity - not less than 1,876 CFM & Diameter 900 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No		
15	Cluster EEC : 3 to 6 Capacity - not less than 5,280 CFM & Diameter 1200 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	6	No		

16	Cluster EEC : 7 Capacity - not less than 4,400 CFM & Diameter 1050 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No	.		
17	EXHAUST CENTRIFUGAL BLOWER					
18	Supply, Installation , Testing & Commissioning of Medium Pressure Direct / Belt Driven PP Centrifugal Blower for the following capacity with Motor suitable for 3 Phase, 415 Volts, TEFC B5, IP 55, Protection Class F, 50 Hz, 2P/4P, Flange / Foot mounted and compatible for VFD Operations. Blower make as per NIT. Outlet Velocity less than 15 m/s					
19	99B 1F (For respective cluster as above)					
20	500 CFM SP 125 mm WG SISW 1.1 Kw	1	No	.		
21	99B 2F (For respective cluster as above)					
22	5027 CFM SP 125 mm WG SISW 5.5 Kw.	1	No	.		
23	11831 CFM SP 125 mm WG SISW 15 Kw.	1	No	.		
24	12199 CFM SP 125 mm WG SISW 15 Kw.	1	No	.		
25	2866 CFM SP 125 mm WG SISW 3.75 Kw.	1	No	.		
26	9669 CFM SP 125 mm WG SISW 11 Kw.	1	No	.		

27	4086 CFM SP 125 mm WG SISW 5.5 Kw.	1	No		
28	99B 3F (For respective cluster as above)				
29	4356 CFM SP 125 mm WG SISW 5.5 Kw.	1	No		
30	1876 CFM SP 125 mm WG SISW 2.2 Kw	1	No		
31	5280 CFM SP 125 mm WG SISW 5.5 Kw.	6	No		
32	4400 CFM SP 125 mm WG SISW 5.5 Kw.	1	No		
33	Supply and Installation of 4PP + 3FRP Weather cowl and MS Stack support for the following blower sizes. Inclusive of Blower inlet & outlet flexible connections and excluding duct between blower & cowl. (For respective cluster as above)				
34	For SISW 500 CFM	1	No s.		
35	For SISW 5027 CFM	1	No s.		
36	For SISW 11831 CFM	1	No s.		
37	For SISW 12199 CFM	1	No s.		
38	For SISW 2866 CFM	1	No s.		
39	For SISW 9669 CFM	1	No s.		
40	For SISW 4086 CFM	1	No s.		
41	For SISW 4356 CFM	1	No s.		
42	For SISW 1876 CFM	1	No s.		
43	For SISW 5280 CFM	6	No s.		
44	For SISW 4400 CFM	1	No s.		
45					

46	Fabrication, supplying, installation, testing & commissioning of following Variable Frequency Drive electrical control panel of cubicle construction, floor/wall mounted type of suitable size, fabricated out of 2 mm thick CRCA sheet, with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley of suitable size, interconnection, having switchgears and accessories (broadly as per following), mounting and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for operation on 415 V, 3 Phase, 50 Hz a.c supply with enclosure protection class IP 42 including connection to blower-motors of Exhaust Blower etc. complete as required. The drive panel shall run and control speed of motor automatically as per requirement taking pressure sense from main duct water through static pressure sensor. The panel shall consist of 3 phase indicating lamps, other indicating lamps with NO & NC, illuminated push buttons, etc., Digital voltmeter, ammeter, CTs, SPP, control MCB and all other accessories as to be required for complete automation with manual provision.				
47	Not less than 0.75 kW Capacity	1	No		
48	Not less than 1.1 kW Capacity	1	No		
49	Not less than 2.2 kW Capacity	3	No		
50	Not less than 3.75 kW Capacity	5	No		
51	Not less than 5.5 kW Capacity	8	No		

			.		
52	Not less than 11 kW Capacity	1	No		
53	Not less than 15 kW Capacity	2	No		
54	BLOCK 99 C 2F - 3F - 4F WING 1, 2 & 3.				
55	SINGLE STAGE PACKED BED VERTICAL WET SCRUBBER.				
56	<p>Supply, Installation, Testing and Commissioning of Single stage, Vertical Wet Scrubber with integrated liquid tank. - Airflow : As mentioned below for individual Scrubbers- Temperature: 70 Deg C (max.)- Pressure drop 100 mm WG (approx.)- Material: PP+FRP with Isophthalic resin. - Scrubber Sink height not less than 750mm. Complete makeup water connection, 5" Float valve, 12mm x 1000 mm Glass water level indicator, drain & over flow pipe connections with required valves. - Scrubber recirculation pump with Mechanical seal coupled with suitable IP-55, 3 Phase, 50 Hz, motor with rain protection of PP+FRP guard. Inlet flange connection with valve and 'Y' Strainer with brass filter. Outlet flange connection with non return (NRV) valve with gaskets & bolt nuts.- Scrubber Inlet collar with 15 Deg inclination towards down at shell inside.- 12mm Perforated sheet with 35mm hole diameter and total open area is not less than 66% of perforated sheet area.</p> <p>- Single stage packing material consists of 50mm PP pal rings filled upto 750 mm Height.</p>				

	<ul style="list-style-type: none"> - One Set of liquid spray nozzle system with equal space matrix not less than 300mm. - Circular 3 pass PVC mist eliminator secured with 6 number mounting bolts mounted on lugs / circular ring.- Acrylic/ White PP dosing tank 500 mm Diameter x 500 mm Height with lead & handle and supported with galvanised MS support stand and with 12mm Pipe connection to the scrubber with control valve for manual dosing. - MS Ladder with 5mm Thick maintenance platform, finished with Chlorinated rubber paint and attached to the scrubber shell near the view port / window. - 5mm Thick acrylic Inspection and maintenance door /window between packing material & mist eliminator zone. - 0-500mm U-Tube manometer across inlet & outlet collars with transparent connecting tubes. - Mounting Bolt & Nuts with Anti Vibration Pads. 				
57	99C 2F				
58	<p>Cluster EEC (SF cluster) : 1 Capacity - Not less than 3,498 CFM & Diameter 900 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM</p>	1	No		
59	99C 3F				

60	Cluster EEC (3F cluster) : 1 Capacity - Not less than 3,960 CFM & Diameter 900 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No .		
61	99C 4F				
62	Cluster EEC (4F cluster) : 1 Capacity - Not less than 2,110 CFM & Diameter 600 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No .		
63	Cluster EEC (4F cluster) : 2 Capacity - Not less than 1,568 CFM & Diameter 600 mm Type of Scrubber - Packed Bed Vertical Scrubber .Thickness - 5mm PP + 3mm FRP Using Isophthalic ResinPacking Ht. - 750 mmPacking Type - PP Pall Ring of 2" Dia.PP Vertical Pump (Coupled Drive)Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No .		

64	Cluster EEC (4F cluster) : 3 Capacity - Not less than 1,606 CFM & Diameter 600 mm Type of Scrubber - Packed Bed Vertical Scrubber . Thickness - 5mm PP + 3mm FRP Using Isophthalic Resin Packing Ht. - 750 mm Packing Type - PP Pall Ring of 2" Dia. PP Vertical Pump (Coupled Drive) Pump Motor - Matching Capacity of TEFC 2900 RPM	1	No	.		
65						
66	EXHAUST CENTRIFUGAL BLOWER					
67	Supply, Installation , Testing & Commissioning of Medium Pressure Direct / Belt Driven PP Centrifugal Blower for the following capacity with Motor suitable for 3 Phase, 415 Volts, TEFC B5, IP 55, Protection Class F, 50 Hz, 2P/4P, Flange / Foot mounted and compatible for VFD Operations. Blower make as per NIT.					
68	99C 2F (For respective cluster)					
69	3498 CFM SP 175 mm WG SISW INLET SIZE 400 3.75 Kw.	1	No	.		
70	99C 3F (For respective cluster)					
71	3960 CFM SP 175 mm WG SISW INLET SIZE 400 3.75 Kw.	1	No	.		
72	99C 4F (For respective cluster)					
73	2110 CFM SP 75 mm WG SISW INLET SIZE 315 1.5 Kw	1	No	.		
74	1568 CFM SP 75 mm WG SISW INLET SIZE 315 1.5 Kw	1	No	.		
75	1600 CFM SP 75 mm WG SISW INLET SIZE 315 1.5 Kw	1	No	.		
76						

77	Supply and Installation of 4PP + 3FRP Weather cowl and MS Stack support for the following blower sizes. Inclusive of Blower inlet & outlet flexible connections and excluding duct between blower & cowl.				
78	For SISW Outlet size 400 mm	2	No s.		
79	For SISW Outlet size 315 mm	2	No s.		
80	Ducting for Lab Exhaust- Designing, Supply and installation of PP FRP duct of 3mm PP + 3 mm FRP Using Isophthalic Resin. Duct area complete with connecting fittings, necessary flanges, bends, entry branches, tapers, inspection door, gaskets for flanges, bolt & nuts, washers, support angle, hanger threaded rods with anchor bolts for fixing, guide vanes, adjustable splitters, pressure testing, air balancing etc.. complete confirming to IS Standards. Rate is inclusive of enamel painting for exposed surfaces. Mode of measurement shall be in sqm, measured as circumference x running length, extra will not be paid for accessories such as flanges, entry doors, inspection doors, gaskets etc. Also making ducts/pipes/cable tray openings and closing the same. Up to 750 mm Dia	2320	Sq m		

81	<p>Ducting for Lab Exhaust- Designing, Supply and installation of PP FRP duct of 4mm PP + 3 mm FRP Using Isophthalic Resin. Duct area complete with connecting fittings, necessary flanges, bends, entry branches, tapers, inspection door, gaskets for flanges, bolt & nuts, washers, support angle, hanger threaded rods with anchor bolts for fixing, guide vanes, adjustable splitters, pressure testing, air balancing etc.. complete confirming to IS Standards. Rate is inclusive of enamel painting for exposed surfaces. Mode of measurement shall be in sqm, measured as circumference x running length, extra will not be paid for accessories such as flanges, entry doors, inspection doors, gaskets etc. Also making ducts/pipes/cable tray openings and closing the same. Above 750 mm Dia & Below 1000 mm Dia</p>	320	Sq m		
82	<p>SS Ducting : Designing, Supply and installation of SS 304 seamless duct of 18 SWG. Duct area complete with connecting fittings, necessary flanges, bends, entry branches, tapers, inspection door, gaskets for flanges, bolt & nuts, washers, support angle, hanger threaded rods with anchor bolts for fixing, guide vanes, adjustable splitters, pressure testing, air balancing etc.. complete confirming to IS Standards. Mode of measurement shall be in sqm, measured as circumference x running length, extra will not be paid for accessories such as flanges, entry doors, inspection doors, gaskets etc. Also making ducts/pipes/cable tray openings</p>	25	Sq m		

	and closing the same.				
83	Supply & fixing of PP Moulded 250/300 mm dia, Single leaf butterfly damper for Fume Hoods & BSC & Canopy	133	No .		
84	Supply & fixing of PP Moulded 100 mm dia, Single leaf butterfly damper for Spot Extractor & Chemical storage.50mm for Base Cabinets	300	No .		
85	Supply & fixing of 5PP+3FRP Volume Control Manual Dampers.@ manifolds.	9	sq m		
86	Supply & fixing of 40 / 50 mm Flexible connection for Fume Hood Base Cabinet.. Number considered 1No as 2.5 Rmt.	195	R mt		
87	Supply & fixing of 100 mm Flexible connection for Spot Extractors & Chemical storage Cabinets. Number considered 1No as 1.5 Rmt.	230	R mt		
88	Fresh air bleed manual damper				
89	Supply & fixing of 1200 X 600 mm Ht., UPVC Multivane fresh air bleed control manual damper.	21	No		
90	CONSTANT AIR VOLUME (CAV) BOX / CONSTANT VOLUME AIR REGULATOR.				

91	Supply of Plastic type (fire retardant) non exposed spring loaded, silicone regulating membrane mechanical type CAV Box. The constant volume regulator type CVR is a control element which works independently of the pressure without an external power supply. It can be regarded as a self-actuating duct damper, as it delivers a required volume of air regardless of changes in system pressure.				
92	0 - 300 CFM Dia 100 - 200 mm	21	No		
93	300 - 700 CFM Dia 250 - 300 mm	5	No		
94					
95	Supply and fixing of low leakage Motorized fire and smoke dampers made out of GI materials coated with Corrosion resistant epoxy Powder coating with Actuator shall be with 90min fire rating, automatically modulate based on supply voltage of 0 V to 10 V. Damper to be multi function for smoke and fire complete with actuator ready for hook up with fire alarm control panel. Approve Make as per NIT.	6	sq m		
96	Supply, installation, Testing & commissioning of motorized actuators, sensors, controls and all accessories as per specification for above Motorised fire damper.	30	No s		
97					
98	Duct Static Pressure Sensor @ Exhaust duct				
99	Supply, Installation, Testing & Commissioning of Static pressure sensor with all the mounting accessories included. The maximum pr limit shall be 0-500Pa all other mounting	19	No s		

	accessories complete as required.				
100	Supply, Laying, Termination of ISI Certified 4 Core 1.5 sq.mm ATSC, PVC insulated, armored, Tinned Copper, twisted, shielded, PE insulated, Cable with proper ferrules, lugs and other necessary accessories. The spec shall meet the system manufacturer specifications.	1000	Mt r		
101	Supplying, laying, termination of following size ISI marked power cable of pvc insulated pvc shated XLPE armored copper cable 1.1 kV grade etc. complete as required.				
102	4 core x 10 sqmm	800	Mt r		
103	Manual Air Balancing using third party agency For 99 C Building	1	Lo t		
104	Manual Air Balancing using third party agency For 99 B Building	1	Lo t		
105	TOTAL				
106	CAMC				
107	Comprehensive maintenance including routine, preventive and breakdown maintenance of the complete exhaust ventilation system of both buildings 99B & C for proper operation of the system, repairing and replacement of spare parts as and when required etc. as required. (during DLP free of cost)				

108	Comprehensive maintenance including routine, preventive and breakdown maintenance of the complete exhaust ventilation system of both buildings 99B & C for proper operation of the system, repairing and replacement of spare parts as and when required etc. as required. (after DLP) N.B. - 1 job means for 12 months				
109	1st year	1	Job		
110	2nd year	1	Job		
111	3rd year	1	Job		
112	4th year	1	Job		
113	5th year	1	Job		
114	TOTAL OF CAMC				
115	Grand Total for Original + CAMC(A)				
116	Civil Work				
117	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge : In cement mortar	146.73	cu m		
118	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	28.57	cu m		
119	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : -Of area 3 sq. metres and	15.00	Each		

	below				
120	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area beyond 3 sq. metres	15.00	Each		
121	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	1175.00	Sq m		
122	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand)	13.00	cu m		
123	Centering and shuttering including strutting, propping etc. and removal of form for : Foundations, footings, bases for columns	396.99	sq m		
124	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete above plinth level. ∴ Thermo-Mechanically Treated bars of grade Fe-500D or more.	3291.23	kg		
125	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and	51.62	cu m		

	struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)				
126	Steel reinforcement for R.C.C. work ready to use "cut and bend" rebars of approved make from factory/workshop to construction site including placing in position and binding all complete above plinth level.Thermo-Mechanically Treated bars of grade Fe-500D or more.	610.06	Kg		
127	15 mm cement plaster on rough side of single or half brick wall of mix: 1:4 (1 cement: 4 coarse sand)	145.62	Sq m		
128	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	2664.00	kg		
129	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing: 1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	13.63	cu m		

130	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete	15.00	kg		
131	<p>Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to form grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum)sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T', bottom exposed with</p>	717.19	Sq m		

	24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge. :Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm.The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non- combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/mK.				
132	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge 10 x 80 mm	200.00	No s		
133	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter	450.00	Me tre		

134	<p>Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of</p>				
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	tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
135	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks)	1369.00	Sq m		
136	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	45.00	Sq m		
137	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	157.60	Sq m		
138	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour : 13.41.1 New work (two or more coats) over and including water	1944.00	Sq m		

	thinnable priming coat with cement primer having VOC content less than 50 gram/litre				
139	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	97.60	Sq m		
140	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	172.83	cu m		
141	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with	1172.50	Sq m		

	essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.				
142	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design : In 75x75 mm deep chase	417.93	me tre		
143	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	1369.00	Sq m		
144	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter	393.00	Me tre		

145	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	26.00	Each		
146	Making core cutting for fixing pipe/duct in RCC slab/wall/beam up to 150 mm dia for duct fitting as per detailed drawing and as directed by engineer in charge.	1344.00	Each		
147	Filling and finishing the holes of varies sizes and shades with GP-2 cementitious polymer compound around Duct/ pipes etc. mixed with water in ratio prescribed by manufacturer to form consistent workable enough for pushing it in the holes upto full depth of wall using appropriate tools and finishing smooth all complete as per directions of the Engineer-in-charge.	1406.00	Each		
		Total			

JE (C)

JE(E)

EE(CD-II)

AEE-in-charge AC Division

C ... Nil

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JE (E)

JE(C)

EE(CD-II)

AEE-in-charge AC Division