



INDIAN INSTITUTE OF MANAGEMENT LUCKNOW

Postbagh Road, IIM Road, Lucknow 226013

Date: 25/10/2024

CORRIGENDUM-1

EXTENSION OF LAST DATE OF SUBMISSION

Reference to Tender No. IIT NO. IIML/PROJ/TENDER/2024-25/4452 Dated- 11/10/2024 for NOTICE INVITING B-TENDER FOR SUPPLY INSTALLATION TESTING & COMMISSIONING OF 100 HP COIL & RUS VRF/ YRV SYSTEM IN REPLACEMENT OF EXISTING FROSTER AIRCONDITIONING SYSTEM AND SUBSEQUENT ANNUAL MAINTENANCE OF THE SAME AT LIBRARY OF IIM, LUCKNOW.

It is hereby informed that the tender closing date is extended for a further 07 days i.e. the new closing date for Tender No. IIT NO. IIML/PROJ/TENDER/2024-25/4452 Dated-11/10/2024 is 21/10/2024 15:00 pm. The tender opening date will also be changed to 07/11/2024 at 15:00 pm. The remaining Terms and Conditions of the tender will be the same.


25/10/2024
Anubandh Gupta
Executive Engineer



INDIAN INSTITUTE OF MANAGEMENT LUCKNOW

Pratibha Nagar, IIM Road, Lucknow 226017

Date: 25/12/2024

CORRIGENDUM-1

Reference to S-tender Tender No. IIT NO. 0961/PW1/TENDER/2024-25/4453 Dated-
11/10/2024 for NOTICE INVITING S-TENDER FOR SUPPLY INSTALLATION TESTING
& COMMISSIONING OF 200 HP COLD & HOT VRF/VRV SYSTEM IN REPLACEMENT OF
EXISTING DUCTED AIRCONDITIONING SYSTEM AND SUBSEQUENT ANNUAL
MAINTENANCE OF THE SAME AT LIBRARY OF IIM, LUCKNOW.

It is hereby informed that the pre-bid meeting will take place at Sanshodhan Building IIM
Lucknow on 27/10/2024 11:00 AM.

Anshuman Garg
Executive Engineer



**NOTICE INVITING E-TENDER FOR SUPPLY
INSTALLATION TESTING & COMMISSIONING OF 208
HP COLD & HOT VRF/VRV SYSTEM IN
REPLACEMENT OF EXISTING DUCTED
AIRCONDITIONING SYSTEM AND SUBSEQUENT
ANNUAL MAINTENANCE OF THE SAME AT LIBRARY
OF IIM, LUCKNOW.**

To
M/S. _____

SUB: NOTICE INVITING E-TENDER FOR SUPPLY INSTALLATION TESTING & COMMISSIONING OF 208 HP COLD & HOT VRF/ VRY SYSTEM IN REPLACEMENT OF EXISTING DUCTED AIRCONDITIONING SYSTEM AND SUBSEQUENT ANNUAL MAINTENANCE OF THE SAME AT LIBRARY OF IIM, LUCKNOW.

Dear Sir,

Tenders are invited, on behalf of the Director, Indian Institute of Management, Lucknow for SUPPLY INSTALLATION TESTING & COMMISSIONING OF 208 HP COLD & HOT VRF/ VRY SYSTEM IN REPLACEMENT OF EXISTING DUCTED AIRCONDITIONING SYSTEM AND SUBSEQUENT ANNUAL MAINTENANCE OF THE SAME AT IIM, LUCKNOW, Prabodh Nagar, Lucknow as per BOQ attached. The Institute invites you to participate and to send your offers as per the attached NOTICE INVITING E-TENDER.

E-Tenders are invited under two bid systems (both Technical and Financial) from reputed Companies. The complete Tender document containing General Terms and Conditions, pre-qualification requirements, BOQ, the scope of work, Specifications, etc. are available at <http://eprocure.gov.in/procure/app> and our website <http://www.iiml.ac.in> for reference only.

Reputed Companies may submit their bids in the prescribed format with all the necessary documents online at <http://eprocure.gov.in/procure/app> on or before bid submission closing Date & Time

Sd/-
Chief Administrative Officer
For Indian Institute of Management



INSTITUTE OF MANAGEMENT LUCKNOW

NOTICE INVITING E-TENDER

NIT NO. IIML/PROJ/TENDER/2024-25/4455 Dated-11/10/2024

NOTICE INVITING E-TENDER FOR SUPPLY INSTALLATION TESTING & COMMISSIONING OF 200 HP COLD & HOT VRF/VRV SYSTEM IN REPLACEMENT OF EXISTING DUCTED AIRCONDITIONING SYSTEM AND SUBSEQUENT ANNUAL MAINTENANCE OF THE SAME AT LIBRARY OF IIM, LUCKNOW.

Dear Sir,

Bidders are invited from reputed companies for Supply Installation Testing & Commissioning of cold and Hot 200 HP VRF/ VRV systems in replacement of the existing ducted Air-conditioning System and subsequent annual maintenance of the same at the Library of IIM, Lucknow. To submit their tender, quote your minimum rates on the enclosed bill of quantity on behalf of the Director, IIM, Lucknow. The General terms & conditions of the service contract are also enclosed which are binding to both IIML and the Bidder.

Name of work	Supply Installation Testing & Commissioning of cold and Hot 200 HP VRF/ VRV system in replacement of the existing ducted Airconditioning System and subsequent annual maintenance of the same at IIM, Lucknow
Earnest Money	Rs. 4,00,000/- (Rupees Four lakh Only)
Total Estimated Cost	Rs. 1,97,00,000/- (Inclusive of GST)
Period of Contract	1 - 4 years (3 year Warranty + 4 years CAMC)
Date of issue of tender document	As mentioned in E-procure NIT
Date Pre-Bid Meeting	As mentioned in E-procure NIT
Last Date for Submission Tender Document	As mentioned in E-procure NIT
Date of opening of Technical Bid Opening	As mentioned in E-procure NIT
Date of opening of Financial Bid Opening	Will be informed to the Bidders Qualifying the Technical Bid
Starting of work	15 days from the Date of the LOI

Tenderers are advised to visit the site and see the work before submitting the tender. The Technical and Financial bids should be uploaded through the E-tendering process only before the due date & time.

Sd/-

Chief Administrative Officer
For Indian Institute of Management Lucknow

TECHNICAL BID

A. SCOPE OF WORK

The work shall comprise of the entire material, equipment, Tools & plant, labor including supervision, and all associated material necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the department. The term complete installation shall not only mean major items of the plant and equipment covered by the specification but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in detail in the tender documents in connection with this contract.

In addition to the supply, installation, testing, and commissioning of the VRF / VRV system including outdoor units, ducted indoor units, and robotic cleaning of the duct the following works shall be deemed to be included with the scope of work to be executed by the tenderer.

1. SITC of the VRF/VRV System:

The work involves the following:

1. Understanding, accessing, and calculating the actual Quantities of material required to complete the work.
2. The capacity of indoor and outdoor units is not fixed, it can vary as per the OEM nearby capacity available.
3. Supply of the required material at the site.
4. Parallely preparation of the site such as dismantling the equipment's piping, wiring, civil work, etc. and stacking them at the desired location indicated by the Engineer in charge. The sealing the vent pipes cutting, etc. should be per the applicable safety norms.
5. Robotic cleaning of all ducts. Closing any gap in ducting if found.
6. Any ducting joining work required for connection the machine with the duct, insulation of the duct wherever found damaged, any repair for damage to part of the existing A.C. system (which will be used for the replaced system also) done during the work/ found damaged etc. are in the scope of contractor's work.
7. The contractor should take care to do least Dismantling of the false ceiling. Only as per the requirement for work, piping, wiring etc. The false ceiling should be dismantled in such a way that there is least damage of the adjacent of existing false ceiling any support etc. required to prevent the damage of adjacent false ceiling should be taken so that the adjacent false ceiling remains stable and properly fixed.
8. Contractor will not use any library furniture in any case for the installation works. Any damage done because of any such activity will be recovered from the contractor.
9. Executing the civil, electrical and other associated works needed for the installation of the A.C. indoor & outdoor units, pipe racks, cable trays, control panel, Electrical panels, switches, sockets, Breakers etc.
10. All the wiring, cabling, piping should be done in standard manner i.e. proper Cable/ pipe tray/ saddle with complete installation and fixtures for installation on R.C.C. slab etc.
11. Installation of all machines and electrical, electro mechanical equipment's etc.
12. Supply and fixing of proper drain pipes which are properly tested for leakage and insulated and properly drain out to the desired location suggested.
13. Inspection, testing and commissioning of the complete system.
14. Repair and restoration of dismantled area, any damage due to above works.
15. Buy back of the dismantled machines as per the rates Quoted in the BOQ.
16. Proper disposal of debris/ wastes generated.
17. Submission of the required documents.

12. The contractor will provide the comprehensive maintenance services mentioned below as the part of Defect liability period (DLP) for 1 year and as part of Annual maintenance works for the next 4 years after the completion of DLP.
13. If in case any other civil contractor is engaged for executing any civil work which was either in the scope of the A.C. contractor or found new and decided by the engineer In charge to be executed separately then the A.C. contractor will coordinate and cooperate with the civil contractor for completion of work. No dispute between the contractors will be entertained and if any dispute is not resolved among the contractors then adverse action can be taken against the contractors as per the decision of the Engineer In charge.

II. 5 Years (1-4) Comprehensive Annual Maintenance of the VRF/ VRF system installed.

Routine, Preventive & Breakdown maintenance for (1-4) years from completion and handing over.

The scope and nature of services to be provided by the contractor shall include scheduled preventive maintenance services which cover periodic and breakdown servicing, along with replacement of defective spare parts, including compressor and other consumables if required during the contract period. The scope of the work under AMC includes the following:

1. 4 (Four) routine services in a year.
2. Immediate attendance of breakdown, if any.
3. Repairing of leakage, refrigerant Gas charging, if necessary.
4. Replacement of parts viz. Compressor, fan, Fan Motor, Belts, radiator fins, PCB Magnetic Switch, Transformer, gas leak, pipe welding, control panel and other electrical parts of AC etc. what ever required to repair and restore the A.C. functioning.
5. The setting of the central controller whenever required.
6. Cleaning and maintenance of Air Filter, Sheet Metal parts, Evaporator coils, Condenser Coil Circuit Breaker, Frost grill assembly / plastic cover/panel, Circuit Breaker (MCB), Remote Handset and Voltage stabilizer. If any such part requires replacement then the same must be replaced within the timelines specified below.
7. Any spare parts, gas, etc. including labor, etc. will be provided by the contractor and will be part of the AMC contract and nothing will be paid extra on this account. The contractor will be responsible for the logistics of any spare part required to be replaced for repair. In case any part needs to be taken to the works shop/ service center of the Contractor then the entire cost of loading, unloading, transportation etc. will have to be borne by the contractor only.
8. It shall be the responsibility of the contractor to hand over awarded VRF/VRF HVAC units to EOP Lucknow in working condition at the expiry of the Contract period.
9. The contractor is required to maintain the stock of necessary spares in his local store at Lucknow, so that the complaints can be attended within the time lines.
10. During any break down which requires replacement of part which is not on the stock of the contractor and is expected to take more than 24 hours then standby replacement for that part should be provided and fixed by the contractor within 24 hours.
11. Breakdown service will include the replacement of genuine spares.
12. Contractor is required to prepare proper service report, get it signed from the user and submit the copy of same at the time of billing.
13. The received complaint should be attended within 24 hours by the contractor. Nature of the complaint can be two type minor fault or major fault.

In case of minor fault:

- a. Fail to attend the complaint within 24 hours the penalty of Rs. 1500/- will be imposed plus the work will be carried by other agency at the risk and cost of contractor and amount will be deducted from AMC bill.

- b. Minor complain should be rectified within 24 hours. Fail to do so the penalty of Rs.300 per day till 5 days. After that penalty of 1500/- will be imposed plus the work will be carried by other agency at the risk and cost of contractor and amount will be deducted from AMC bill.

In case of major fault:

- a. For repair/replacement of motor, PCB, Expansion Coil, Cooling coil, Condensing coil etc. should be rectified 4-5 days. After that penalty of 1500/- will be imposed plus the work will be carried by other agency at the risk and cost of contractor and amount will be deducted from AMC bill (Except in case of 3 national holidays).
- b. For repair/replacement of compressor, Gas leakage finding, Nitrogen testing, Gas charging etc should be rectified within 10-12 days. After that penalty of 3000/- will be imposed plus the work will be carried by other agency at the risk and cost of contractor and amount will be deducted from AMC bill. (Except in case of 3 national holidays).

As per urgency of requirement tenderer has to install or arrange standby.

The major or minor fault difference would be at the discretion of the Engineer-in-charge.

III. In addition to the above following conditions may also be followed:

1. Any damage to the building or any part of the equipment which might result during the operation shall be repaired by the contractor.
 2. Any damage resulting to the system on account of the negligence or mis-operation shall be made good by the contractor. Nothing extra will be paid for such work.
 3. The contractor shall arrange to render efficient service as outlined in this specification. However, in case the contractor fails to maintain the service to the satisfaction of the engineer-in-charge of the department any expenditure incurred thereon for alternative arrangements by the Engineer-in-charge shall be recovered from the contractor.
 4. At the time of acceptance of the tender, the contractor shall furnish the details of staff members along with contact details to the corporation that will look after the maintenance work of ACS.
 5. The contractor or his representative should not remove, disturb, or relocate the existing equipment and its parts from its positions until and unless it is authorized by the Engineer-in-charge. The entire installation should be intact at any time of inspection as was handed over to him at the time of initial taking over of its maintenance and operation. Care shall also be taken not to damage the installation by improper handling.
 6. Proper reports of preventive and breakdown maintenance of the VRF/VRF system shall be prepared and shall be signed by the contractor representative and the concerned Engineer.
 7. Transportation of Air-Conditioner Units from the office buildings to the service provider's workshop, from one building to another, and the service provider's workshop to the office buildings, will be at the cost of the service provider.
 8. The Service Provider is responsible for the payment of Minimum Wages (under the Central Act) to the personnel employed by it. The Service Provider is also responsible for compliance with the provisions of all the statutes applicable in its case.
- a. Cancellation of Contract in cases of poor workmanship and non-compliance of tender/agreement or services provided by the contractor is not found to be satisfactory, the contract shall be terminated by the department by giving 10 days' notice even before the

expiry of the contract period and shall be forfeited the security deposit without assigning any reason what so ever.

- b. The maintenance during one one-year warranty period & subsequent four years shall be as CPWD General Specifications for HVAC work 2017 as amended up to date. A separate supplementary agreement shall be made with the successful tenderer for subhead "AMC (i.e. Routine, Preventive & Breakdown Maintenance (for 4 years after one year guarantee period)" of schedule of work.
- c. The payment of maintenance may be made Quarterly.

B. INSTRUCTION TO TENDERER

- (i) The Tenderer shall read the document carefully before filling it.
- (ii) Bidders are required to deposit an amount of Rs. 4,00,000/- (Rupees four lakhs only) towards Earnest Money Deposit (EMD) to the bank account given below. Those who are exempted from the deposit of EMD shall upload the valid certificate in this regard.

Account No.	07231400000294
IFSC Code	HDFC0000713
Name of Bank & Type of Account	HDFC BANK, Saving

- (iii) Financial bids must be filled and submitted in the prescribed format given on the CPP portal separately. A sample format of the financial bid has been attached with the Technical bid just for the understanding of the bidders. This is required to be kept blank and just signed and stamped along with the other documents of this Tender. If a quoted financial bid is found along with the Technical bid of this Tender, then the Tender shall be straight away rejected.
- (iv) Tender must be valid for a minimum period of 120 days from the date of opening.
- (v) Technical offers shall be opened first, if the tenderer fails to submit the EMD then their technical offer will not be Opened/Evaluated. The technical offers will be evaluated by the selection committee based on the technical evaluation criteria of this document. The Financial offers from technically unqualified tenderers as per evaluation criteria will not be opened.
- (vi) Financial offer shall be opened only for those tenders who are technically qualified as per the evaluation criteria of this tender document.
- (vii) The dates for opening financial offer will be communicated to the tenderers and tenderers are requested to be present at the time of opening the tenders. An authority letter is must if any person other than who has signed the tender document attends such event.
- (viii) Each page of the tender document must be signed by the authorized signatory of the tenderer.
- (ix) Scanned Copy of Tender document duly signed and filled up should be uploaded.
- (x) The tender not accompanied by a complete document or duly filled in all respects shall be rejected.
- (xi) All erasures, cuttings and alterations made must be attested by the authorized person while filling the tender document. Over-writing of figures is not permitted.

- (xii) Successful tenderers must visit the site and see the means of access to the site and specifications and acquaint themselves fully with the works to be carried out and all other factors governing the works before quoting their rates.
- (xiii) The successful tenderer shall submit additional initial Performance security of 2% of Contract Value in case EMD was submitted. The EMD submitted in this case will also be converted to performance security. In case of the Exemption under MONE for EMD then 5 % of the contract value has to be submitted as performance security in the form of DD/FDR/Bank Guarantee in favor of the Director, Indian Institute of Management, Lucknow within 12 days of award of work. A maximum Grace period of 3 Days will be given after the levy of a penalty equal to 1 % of performance security value per Day. If in case after 12 days of issue of LOI the Performance security is not deposited unless otherwise any extension had been granted by IIM Lucknow then the Work awarded/ LOI issued will be straightaway considered as Terminated and EMD (if deposited) will be forfeited.
- Similarly, an Agreement on Rs 100 stamp paper will be required to be executed within 12 days of the issue of the LOI and if the contractor fails to get the agreement done within a maximum of 15 days unless otherwise any extension had been granted by IIM Lucknow then the Work awarded/ LOI issued will be straightaway considered as Terminated.
- The performance security (2%-2%) shall be released after 60 days of satisfactory completion of SITC work which is 6.5 months (133 days for SITC works + 2 months after satisfactory work completion) years or the extended period of the contract or the completion date of last work awarded till the completion/ extended date whichever is last. EMD of unsuccessful tenderer shall be returned after finalisation of the contract. No interest shall be paid on the amount.
- (xiv) This is an item rate Tender. The rate quoted by the Tenderer shall be inclusive of packaging, forwarding, insurance, freight, delivery, installation, testing, commissioning, any applicable tax/cess, etc. at the site i/c temporary construction storage, risks, overhead charges, general liabilities/obligations, and clearance from local authorities. The rate quoted by the tenderer shall be excluding GST. GST will be paid extra as applicable. Quantities in the BOQ can vary during the actual execution. The Contractor will have to calculate all the requirements etc. as per design/ as per OEM requirement and then only procure the material. No claim for any excess material purchase but not utilized will be entertained. Further if there any extraordinary variation in any item is expected then the same may be brought to the notice of IIML and IIML can consult its designer/ take internal Approval if it feels so. Under such condition, contractor shall wait for the instructions of IIML for further action.
- (xi) If any discrepancy/ misprint is noticed in the specification or BOQ it should be clarified with the Institute before quoting the rate.
- (xvi) Following procedures shall be adopted in case of difference in quoted rates in figures and words and extensions:
- Where there is a difference between rates in figures and the rates quoted in words. The rates quoted in words shall be considered as correct.

- b. Where the amount of an item is not worked out or it does not correspond to the rate either in figure or in words, the rates quoted in words shall be considered as a correct and necessary extension made.
- c. Where the rate quoted by the tenderer in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the tenderer shall be considered as correct and the amount shall be corrected accordingly.
- (xvi) The Indian Institute of Management, Lucknow does not bind themselves to accept the lowest or any other tender and reserves the right to accept or reject any or all the tenders either in full or in part without assigning any reason.
- (xvii) The tender shall be opened & evaluated by the tender committee and the successful tenderer shall be informed.
- (xviii) If any of the documents submitted by the tenderer is found false, even after the acceptance of tender, the contract will be terminated for which the concerned tenderer will itself be responsible and no compensation, etc., will be paid by the IIM, Lucknow.
- (xix) The Director, Indian Institute of Management, Lucknow reserves the right to reject one or all the tenders without assigning any reason. No claim, whatsoever, shall be entertained on this account.
- (xx) 5% of the payable bill value will be retained from each bill as a defect liability period & shall be released after the successful completion of the defect liability period of 12 months from the date of successful completion of the work and submission of performance security for four years on CANC works which is 5 % of the quoted ANC value for 4 years. No interest shall be paid on the amount.
- (xxi) Comprehensive Annual maintenance contract for 4 years will start from the date of completion of the Defect liability period i.e. 12 months from the date of successful completion of the work.
- (xxii) Tenderers are required to execute the agreement in accordance with the approved Proforma on non-judicial Rs. 100 stamp paper of appropriate value within a maximum 15 days (15*2) from the date of receipt of this Letter of Intent else work will be terminated by default. The cost of non-judicial stamp paper is to be borne by the tenderer.
- (xxiii) Tenderer can avail relaxation (EMD only, No relaxation will be given for experience) given as per Govt norms for MSME/MDME registered firm. Under the MSE category, only manufacturers for goods and Services. Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.
- (xxiv) Successful tenderer's uploaded document can be verified with the original at the time of LOI / Agreement.
- (xxv) Tender terms & condition also includes GCC which is uploaded on the IIM, website and also be part of this contract and its terms and conditions shall be binding to both IIM, and the successful Tenderer. So please read it properly. Link <https://www.iiml.ac.in/sites/default/files/upload/tender/20202022gcc.pdf>

(viii) In case extraordinary variation is found in the CPMC rate quoted by the bidder as compared to the rates quoted by other bidders/ market rates for CPMC then the financial bid of that bidder will be Disqualified.

(ix) Intending parties are required to submit an undertaking that their firms have never been debarred/ blacklisted by any Government/ Public sector Dept. And there is no criminal case on the Proprietor/ partners/ any of the Directors in any Police station of any court of India. This undertaking is to be given in the following format:

- i. I / We declare and confirm that- I/ we have never been blacklisted /debarred from any Govt. /Public sector enterprises
- ii. There is no Arbitration case/ legal case/ dispute of my firm with Indian Institute of Management Lucknow
- iii. There is no criminal case on me/ and my partner/ board of directors is there in any court/Police station of India.
- iv. All the information and attachments submitted in the tender document/ envelope are true and correct.
- v. There is no suppression or concealment of information / document with regard to execution of work during the last 05 years.
- vi. I / We are aware that any false information provided herein will result in the rejection of my tender at any stage.

(x) If any discrepancy/misprint is Noticed in specification or BOQ or rate or unit, it should be clarified from the Institute before quoting the rate.

If any discrepancy is between the price bid format of this Tender document and macros enabled excel file of the actual price bid on CPP portal is observed by the bidder or if any item unit/ rates are found illogical/ impractical then in that case the same has to be brought to the notice of the Institute before the last date of submission, so that the required correction/ corrigendum can be made. If such issue is found at the later stage after award of the work either by the Contractor or by the Institute, then the logical decision based on the standard practice and as per the Institute's internal documentation shall be taken by the Institute and the same decision will be binding to the contractor and no claim whatsoever will be entertained in this regard.

C. TECHNICAL DETAILS OF BIDDER

The technical offer submitted by the bidders will be evaluated based on the below credential criteria.

SNO.	Particulars	Credential Criteria of Firm
1	Name of the firm & Address (Where registered post can be received)	
2	Contact No and Email-ID	
3	GST Registration No. of the firm/Agency (Enclose copy)	
4	Income Tax Permanent Account No (Enclose copy)	
5	Experience of the firm in a similar field during the last five years, ending the last day of the month previous to the one in which tenders are invited to submission of tender (Copy of Completion Certificate to be enclosed).	
6	Average Annual Turnover during Average annual financial turnover during any Three years from the last 3 financial years ending 31-March 2024. (Copy of Annual Audited Accounts Statement for each year or the certificate for the average Turnover of the Tenderer issued by a registered Chartered Accountant). The certificates being submitted by the bidder should carry UDIN.	
7	Either OEM directly or its authorized vendor or a bidder who had been authorized by OEM to participate in this tender. Relevant certificate from the OEM to be submitted and mentioned.	
8	Details of EMD uploaded or MSME registration no and year	
9	Address of Lucknow after-sales service provider (for Annual Maintenance, availing warranty, etc.)	
10	Make of VRY/VRF System	
11	Year of Establishment of OEM	

Eligibility Criteria

a) ANNUAL TURNOVER:

Average annual financial turnover during any Three years from the last 3 financial years ending 31-March 2024 should be 100 lakhs. This Condition is Mandatory. The Bidder has to enclose documentary proof indicating Turnover.

b) The Bidder should have experience working with any Government Organization/ PSU/ IIT/ IT/ NIT/ Any Government Institution/ Pvt Organization (Turnover more than 100 cr). This Condition is Mandatory.

- c) The Bidder should have Experience in SITC of VRF/VRV in total for a single work in Any Government/PSU/ Autonomous Body such as IIR, IIT, etc. or should have executed works in any registered Private Limited Organization having Turnover more than 100 Cr in any of the last 5 financial years. As is published by the company in its Annual Financial Report of 23-24. If the bidder encloses experience of Pvt. Ltd. Company then documentary proof of annual turnover of that Pvt. Ltd. Company should also be enclosed. This Condition is Mandatory.
- d) EMD: Earnest Money Deposit as specified in IOT to be furnished in any of the following forms and shall be valid up to 90 days from the last date of submission:
- > In case needs exemption under MIMC criteria then a valid MIMC certificate is required to be uploaded on the e-procurement portal.
 - > Can be deposited in the below-mentioned Institute Bank Account and shared the UTR/Transaction number and date of Transaction in the Technical bid and the copy of the transaction receipt must be uploaded online on the portal with other documents. Those bidders, who are exempted from the deposit of Tender Fee & EMD (Earnest Money Deposit) must submit the relevant certificate to claim the exemption and mention 'Exempted' in the Technical Bid where the UTR number has been asked. In case the enclosed certificate is not valid or not acceptable to the Institute, the submitted bid will be treated as a bid without a Tender fee/ EMD and will be rejected.

Bank Account No.	07221430000294
IFSC Code	HOFC0000722
Name of Bank & Type of Account	HOFC/Savings

Exemption of MIMC for Tender Fee will be as per the format available on the CPP portal. This Condition is Mandatory

4) **EXPERIENCE**

- (i) Experience in SITC of VRF/VRV with any Central or State Government/ Public Sector/ Autonomous Institution/ Registered Private limited having a Turnover of more than 100 Cr (as published by the company in its Annual Financial Report of 22-23/21-22/20-21/19-20/18-19. Registered means: The definition of a Registered private limited company given by the Ministry of Corporate Affairs on its website. The minimum value of the work/ works as mentioned above during the last 5 years ending the last day of the month previous to the one in which tenders are invited (31 August 2024) should be either of the following

- I. Three completed contracts of SITC of VRF/VRV costing not less than Rs 77 Lakhs each.
- OR
- II. Two completed contracts of SITC of VRF/VRV costing not less than Rs 110 Lakhs each.
- OR
- III. One completed contract of SITC of VRF/VRV costing not less than Rs 156 Lacs each.

This Condition is Mandatory

Note:

- (1) The work shall be completed as a whole. Partial value/ partial completion is not to be considered.
 - (2) The meaning of 'Similar Work' for the purpose of the tender has been defined as 'SITC of VRF/VRV for a single work'.
- f) Copy of PAN/ CIR No. Registration certificate issued by Income Tax Authority. This Condition is Mandatory.
- g) Copy of Certificate of GST number. This Condition is Mandatory

- k) Intending parties are required to submit an undertaking that their firms have never been debarred/ blacklisted by any Government/ Public sector department And there is no criminal case on the Proprietor/ partners/ any of the Directors in any Police station of any court of India as per the format given above in Instructions to Tenderer. This Condition is Mandatory
- l) Either OEM directly or its authorized vendor or a bidder who had been authorized by OEM to participate in this tender. Relevant certificate from The OEM to be submitted and mentioned. This Condition is Mandatory
- f) Declaration/Undertaking for the supply of spares for 15 years from OEM. (Format attached as ANNEXURE-4) This Condition is Mandatory
- k) The OEM must have a service center in Lucknow. This Condition is Mandatory
- l) The OEM must be established not less than 10 years from the last date of bid submission. Documentary proof must be attached.
- m) The manufacturer shall comply with the Public Procurement (Preference to Making in India) Order 2017 (as amended from time to time) issued by the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry.
- n) The bidder must fill in technical specifications in the format given in the tender document. It is a part of the technical qualification criteria. The product offered by the bidder shall be around spec already mentioned in specification format.
- o) **Undertaking to be furnished by the intending DECLARATION**
1. All the information furnished by me/us here above is correct to the best of my knowledge and belief.
 2. I/we have no objection if inquiries are made about the work listed by me/us in the accompanying sheets / Annexures.
 3. I / We agree that the decision of the Indian Institute of Management Lucknow in the selection of contractors will be final and binding to me/us.
 4. I / We have read the instructions and I/we understand that if any false information is detected later, the tender shall be cancelled at the Company's discretion and liable for any action, as deemed unfit by the Indian Institute of Management Lucknow.
 5. I / We hereby confirm that my/ our company has never been blacklisted by any State/ Central Government organization.

Signature and Stamp of the Bidder

TENDER Declaration

I/We have read and examined the Notice Inviting tender, Instructions to the tenderer, Specifications applicable, Drawings and designs, General Rules, and Divisions, Conditions of Contract, clause of the contract, General Conditions of Contract, Special conditions, & other documents and rules referred to in the conditions of contract and all other contents in the tender document for the work including GCC attached separately or a/pled on line/in.

I/We have thoroughly read the tender specification and have understood the site/ working conditions

I/We hereby tender for the execution of the work specified for IDL Lucknow within the time specified, viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings, and instructions in writing.

I/ We agree to keep the tendered rates valid till 120 days from the date of opening of the tender and not to make any modifications to its terms and conditions.

A sum of Rs. 400,000/- is hereby forwarded in the IDML account through DTCC/NEFT issued by a scheduled bank as earnest money.

OR

I/We had submitted a self-attested copy of a valid certificate as proof of exemption from submission of Earnest money deposit.

In case I/ our company is identified LI in this Tender and if I/we, fail to furnish the prescribed performance guarantee fail to commence the work within the prescribed period, or fail to execute the agreement within the prescribed period from the date of declaration of LI I/ we agree that the IDL Lucknow or its successors in office shall without prejudice to any other right or remedy be at liberty to forfeit the said earnest money absolutely, award the work to other agency as per the direction of IDL Lucknow and can tender my/ our company/ firm for further bidding for next Two years. Further, if I/we fail to commence work as specified, I/we agree that IDL Lucknow or his 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 to credit security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations/ additional/ extra items as may be ordered as per the provisions in the Contract.

Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money and 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 a back-to-back basis. Further that, if such a violation comes to the notice of the Department, then I/we shall be debarred for tendering in IDL Lucknow in the future forever. Also, if such a violation comes to the notice of the Department before the 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 therefrom to any person other than a person to whom I/we are/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated _____, 20____.

Signature of contractor
with seal of the agency/ firm.

D. DEFINITIONS

In this Contract, the following words and expressions shall have the meanings as stated below:

- (i) 'IIM' shall mean Indian Institute of Management, UPL Road, Lucknow and shall include their successors and assigns, as well as their authorized representatives.
- (ii) 'ENGINEER-IN-CHARGE' shall mean the engineer appointed by the IIML to supervise all activities of the project.
- (iii) 'TENDERER' shall mean the company/agency who quotes against the tender inquiry for undertaking the work.
- (iv) 'CONTRACTOR' shall mean the successful tenderer whose tender has been accepted by the IIML and to whom the order is placed by the IIML and shall include his heirs, legal representatives, successors etc.
- (v) 'PERMANENT WORKS' shall mean all the works included in the schedule of quantities and shall also include additions, alterations, etc. communicated in writing.
- (vi) 'SITE' shall mean all places i.e. IIML Lucknow where the project is to be executed.
- (vii) 'PROJECT' shall mean the extra work specified in the contract documents inclusive of extra items/extra quantities (if any) executed during the contract period.
- (viii) 'ACCEPTANCE LETTER' shall mean written consent by a letter of IIML to the tenderer recognizing him that his tender has been accepted.
- (ix) 'CONTRACT' shall mean the articles of Contract Agreement. The conditions of the contract, schedule of quantities, and specifications, are attached and duly signed by the IIML and the Contractor.
- (x) 'DATE OF CONTRACT' shall mean the date on which the IIML has issued an acceptance letter.
- (xi) 'CONTRACT PERIOD' shall mean the period (including rainy season) specified in the tender documents during which the contract shall be executed.
- (xii) 'COMPLETION CERTIFICATE' shall mean the certificate issued by the IIML to the contractor after the successful completion of the project. This certificate will be issued on the basis of the consultant's/ User's certificate to IIML about the completion of the job.
- (xiii) 'EXTRA ITEMS' are those items, which are not appear in the BOQ but are required to be executed during the project period and for which rates are to be derived as per the formula given in the conditions of the contract.
- (xiv) 'EMD' shall mean Earnest Money Deposit. The Owner takes this amount to check the earnestness, seriousness of the tenderers in case they are selected as winners.

E. GENERAL CONDITIONS OF THE CONTRACT

General conditions of the Contract are available at the IIM, Lucknow website and at the Project Division Office. These conditions shall be part of the contract. The successful Bidder shall be required to submit the signed hard copy of these General Terms and Conditions after the issue of the LOI and before starting of the work.

F. SPECIAL CONDITIONS OF CONTRACT.

1.1 Directive to Contractor

1.1.1 Interpretation of Contract Documents:

- (i) All the documents (such as INT, TENDERER DECLARATION, DEFINITIONS & SCOPE OF WORK, TECHNICAL SPECIFICATIONS, General Conditions of Contract, Special conditions of Contract which are available on IIML Web site and FINANCIAL BID) forming part of the contract are to be taken as mutually explanatory, supplementary and complementary to each other. If there is any error, omission, or discrepancy in any of them, it shall be brought to the notice of the IIM. The decision of the IIM, shall be final and binding. The contractor shall execute the work accordingly.
- (ii) The contractor shall examine all the contract documents thoroughly including the scope, nature, and magnitude of work he has to execute in accordance with the contract documents.
- (iii) The contractor shall visit the project site so as to study the site conditions, means of access to the site, and other factors governing the work.

1.1.2 Period of Contract:

The time period for **SUPPLY INSTALLATION TESTING & COMMISSIONING OF DOB HPF COLD & HOT VRF/VRV SYSTEM IN REPLACEMENT OF EXISTING DUCTED AIRCONDITIONING SYSTEM AT LIBRARY** of IIM Lucknow shall be completed within 135 days from the date of issue of LOI (Letter of Intent). The defect liability period on complete work is 1 year including maintenance, service, and repair.

Comprehensives Annual maintenance contract for 4 years of the same system will start immediately after the completion of 1 year of defect liability.

1.1.3 Authorities

The work shall conform to all provisions of the relevant Government Legislation, Regulations, and by-laws of the Central/Local Authorities and of any Companies to whose system the installation is proposed to be connected. The Contractor shall give all notices required under the said Acts, Regulations and/or by-laws. The Contractor shall be liable for any omissions and commissions in this regard.

1.1.4 Specifications and Schedules

The Specifications and Schedule of Quantities shall be considered as part of this contract and any work or materials shown in Schedule and not called for in the Specifications or vice versa, shall be executed as if specially called for in both.

The work shall be installed as indicated on the drawings. However, any minor changes found essential to coordinate the installation of this work with other trades shall be made without any additional cost. The data given herein is as estimated, but its complete accuracy is not guaranteed. Exact locations, distances, and levels will be governed by the site conditions. Quantities can vary to any extent above or below. No compensation in this regard will be given. Any such kind of request will not be entertained.

If in case some change in Cooling/ heating capacities of indoor/ outdoor VRF units is required because of the limitation of OEM which produces different models of indoor and outdoor units in specific capacities as per their own standards, the contractor has to take Approval from the designer/ Engineer in charge before procuring each model of indoor/ outdoor unit.

1.1.5 Completeness of tender

All fittings, equipment, units, assemblies and accessories, hardware, bolts, terminal lugs for electrical connections, cable glands, junction box, piping, fittings and items that are useful and necessary for efficient assembly in operation and installation shall be complete in all details whether such details

have been mentioned in the specification or not. Scope of work also include steel requirements for machine beams, bearing plates, buffer supports, and channels as required. All steel items not including but required for the installation work shall be part of the tender document.

1.1.6 Scaffolding

Scaffolding and minor builders work shall be the responsibility of the Contractor.

1.1.7 Certificate

Contractor may be required to submit the manufacturer Test certificates, Internal quality test reports from the factory and Guarantee/ warranties etc. Further, if required e-way bill may be submitted by the contractor on demand.

1.1.8 Spares

Contractors shall submit the list of recommended spares for 15 years of operation listing name with individual prices. Undertaking from OEM that the Spares will not be ruled out of the Market for the next 13 to 20 years.

1.1.9 Documentation

The Contractor shall provide three sets of operation & maintenance manuals with instructions for routine and periodic maintenance. Training record, guarantee, warranties should also be submitted.

1.1.10 Delay in work execution due to reasons beyond contractor control:

Force Majeure:

If the execution of work is delayed due to force majeure, or due to circumstances which were not in the control of the Tenderer then EML as per the affected period may extend the time period as per the discretion of the Director of the Institute.

1.1.11 Dispute & Arbitration:

- (i) All disputes or differences whatsoever arising between the parties out of or relating to this contract or the specifications, designs and quality of work, quality of materials used for the work, construction, erection and operation or effect of the work or the breach thereof that cannot be settled by good faith and negotiations between the parties within 60 days of the commencement of the negotiation shall be settle by mutually referring the dispute to a sole Arbitrator and the award passed by him shall be final and binding on the parties. The selection of an arbitrator shall be made by mutual consent. The cost of arbitration shall be divided equally. The proceedings will be governed by the provisions of the Arbitration & Conciliation Act, of 1996 and its latest amendments. The place of arbitral proceedings will be Lucknow. The language of the arbitral proceedings shall be English.
- (ii) By consent of Parties the jurisdiction of all other courts is excluded and the courts at Lucknow alone shall have jurisdiction.
- (iii) "Abandonment, incomplete work", wherein it should be mentioned that apart from the forfeiture of security the incomplete work shall be completed from some other agency, and the costs thereof be recovered from the contractor.
- (iv) The service of notice will be given by e-mail, fax, courier, speed post, or registered post, and the address for service of notice be specified both for DPO, Lucknow and the contractor.

1.1.12 Escalation:

The rates quoted by the contractor in the contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation wages or inflation in the cost of materials or fuel or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion.

1.2 Execution of Work:

1.2.1 General:

All the works shall be executed in accordance with the specifications and instructions approved by the IML as mentioned in the contract document.

1.2.2 Inspection of works:

- (i) The IML shall have the full authority to inspect the works at any time, at any stage. The contractor shall provide adequate facilities to carry the inspection work. The contractor should present himself or his authorized representative during the inspection so that the IML can convey the instruction regarding the works.
- (ii) The contractor shall give information to the IML before covering up the works so that the same can be inspected and measured jointly & correctly to true dimensions.
- (iii) If the contractor fails to get the work inspected before covering it up, then the IML has full authority to get the work uncovered at the expense of the contractor and if any fault is found then the contractor should rectify the same without claiming any extra payment.

1.2.3 Inadequate / substandard works and materials:

- (i) Material used should be make mention in BOQ
- (ii) If any work executed by the contractor is found to be of bad workmanship, then the same is to be dismantled and re-executed by the contractor without claiming any extra payment or extension in time period.

1.2.4 Default of Contractor in Compliance

If the contractor or his authorized representative fails to follow the instructions given by the IML regarding any of the works, then the same shall be got executed by engaging other contractors/ persons by IML at the risk and cost of the contractor.

1.2.5 Discrepancies between instructions:

The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions. In the case of discrepancy between the schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:-

- i. Description of Schedule of Quantities.
- ii. Particular Specification and Special Conditions, if any.
- iii. Drawings.
- iv. IML, LUCHON/ Specifications.
- v. Indian Standard Specifications of B.I.S.
- vi. C.C.C., S.C.C. etc.

If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor. Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

If any discrepancy occurs between the various instructions conveyed to the contractor or his authorized representative or if any misunderstanding arises between the contractor's staff and IITL's staff, the contractor shall report the matter immediately to the IITL. The decisions of IITL shall be final and binding. Moreover, no claims for losses due to discrepancies between instructions, doubts or misunderstandings shall be admissible.

1.2.6 Liabilities for defects and rectifications:

If it shall appear to the IITL that any work has been executed with imperfect or unskilled workman or with materials of any inferior description, or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the contractor shall on demand in writing from the IITL or his representative specifying the work, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for forthwith rectify or remove and reconstruct that work as specified and provide other proper and suitable materials or articles at his own charges and cost, and in the event of failure to do so within a period to be specified by the IITL or his demand aforesaid, the Engineer-in-charge may on expiry of notice period rectify or remove, re-execute the work at the risk of Contractor and the cost shall be recovered from the Contractor. The decision of the IITL as to any question arising under this clause shall be final and conclusive.

1.2.7 Period of warranty:

1 Year comprehensive warranty and subsequent 1 year Comprehensive Annual maintenance.
The Guarantee/ warranties beyond one year for VRF/ VRF system as per the policy of OEM.

The contractor shall perform the maintenance services as agreed to in the contract and in these terms and conditions. In performing the said services, the contractor shall take all reasonable steps to maintain the equipment in proper operating condition. The contractor shall use trained and appropriately supervised personnel to perform the maintenance services shall be conducted during normal working hours, shall be done at regular intervals and as frequently as the company thinks necessary, having regard to the age, nature, and condition of the VRF/VRF system.

Upon notification by the user of a breakdown or failure in the VRF/VRF system, the contractor shall send his technical team within the time limits mentioned in scope of work (except beyond their control) to carry out necessary repairs in order to repair the fault. Otherwise, IITL, Lucknow may impose a penalty on the contractor on a per-day basis finalized by the competent authority of the Institute by assessment of loss incurred to the Institute due to delay in the rectification of the defect. Any breakdown that requires a special spare is not available and needs to be brought from the manufacturer factory or from a distant state then such breakdown should be restored within 7 days.

The parts which are replaced shall become the contractor's property.

1.2.8 Suspension of work:

The contractor shall suspend the progress of work on receipt of the written order from the IITL.

In case of suspension of work:

- a. The contractor shall during such suspension, properly protect and secure the works and carry out the instructions of the IITL.
- b. In such case the contractor shall be entitled for an extension of time equal to the period of every such suspension but no compensation for damages etc. shall be admissible on account of suspension of work.

1.2.9 Possession Prior to Completion:

The IITL shall have the authority to take possession of any completed or partially completed works. Such possession shall not be deemed to be acceptance of any work completed in

accordance with the contract. If such prior possession delays the progress of works then the adjustment in the time of completion shall be done accordingly. The decision of the Engineer-in-charge regarding the extent of delay shall be final and binding.

1.2.10 Care of Works:

From the commencement to the completion of works, the contractor shall take full responsibility for the care of all works and in case any damage or loss occurs then the contractor shall repair and make good the same at his own cost so that on completion of the work, the same shall be in good order in every respect in accordance with the contract and to the satisfaction of the IIM.

1.3 Certificate and Payment

1.3.1 Schedule of Rates:

- (i) The payments to be made to the contractor shall be as per the finalized rates in tender documents and the rates of extra items finalized from time to time.
- (ii) The rates finalized in the tender document shall remain firm till the completion of work including extension of time, if any.

1.3.2 Mobilization Advance:

No mobilization advance shall be paid.

1.3.3 Billing:

Payments for SITC of VRF/ VRV system

- a. For payment against the delivery of outdoor and indoor units only the payment will be made as secured advance which will be 50% of the payable value of these two items as per the BOM. This will be adjusted from the payment made on completion of associated work of respective units.
- b. In total max. 4 running bill payments will be made. First RA bill after the delivery of the material. During execution 2 Running bills will be allowed to be submitted, and the fourth will be a full and final bill it will be executed only after completing all work and commissioning in all respects after obtaining user verification.

Payment for Annual maintenance works after 1-year DLP:

- a. Payment will be made quarterly on successful completion of maintenance, and submission of user verification/ service report duly signed by the user. No retention will be deducted from the CAMC bills.
- b. The performance security for CAMC works will be released only after the successful completion of the CAMC period.

1.3.4 Terms of Payment

- (i) The payment due to the contractor shall be made only in Indian Currency by Crossed Account Payee Cheque or RTGS. In no case, will the IIM be responsible if the cheque is mailed or misappropriated by the contractor or his representatives.
- (ii) The IIM reserves the right to carry out post-payment audit and technical examination of the bills and work executed including all supporting vouchers etc. The IIM further reserves the right to enforce recovery of over-payment when detected. Similarly, if any underpayment is discovered, the amount shall be paid to the contractor.

- (iii) Whenever any claim for the payment against the contractor arises as per the contract, the same may be deducted from the bill of the contractor or from his security deposit.
- (iv) 5% of the payable bill value will be retained from each bill as retention money/ security deposit for IITC works & shall be released on the satisfactory completion of the job after the defect liability period and submission of performance security for 4 years APC works. No interest shall be paid on the security deposit amount.
- (v) **Tax Deductions:** All statutory deductions like Income Tax, Works Contract Tax, E.S.I., P.F., entry tax, labour cess or any other government-imposed liability shall be borne by the contractor (as applicable at the time of execution of the job). Statutory deduction as per the govt. direction shall be deducted from each bill submitted by the contractor.

1.3.5 Provisional Completion Certificate:

When the contractor successfully completes the works as per the contract, he shall be eligible to apply for a provisional completion certificate in respect of the works. The IITC shall issue to the contractor the provisional completion certificate after verifying the completion documents submitted by the Engineer-in-charge and satisfying him/ user Department that the work has been completed in accordance with the contract document. Further, the certificate from the designer will be needed that the work had been completed as per the drawing/ design.

The work will not be considered as complete until all the temporary works, labour hutsments, etc. are removed and the work site cleared to the satisfaction of the IITC.

If the contractor fails to comply with the requirements of the above on or before the date for the completion of the works, the IITC may, at the expense of the contractor, remove the tools and plants, hutsment and surplus materials and dispose off the same and the contractor shall pay the amount of all expenses incurred.

1.4 Labour Laws and Safety Regulations

1.4.1 Labour Laws:

- (i) Labour below the age of 18 years shall not be employed on the work.
- (ii) The contractor shall not pay less than what is specified by the law to labour engaged by him on the work.
- (iii) The contractor shall, at his own expense, comply with all labour laws and the IITC shall not be responsible for any recovery/penalty imposed by the respective authorities for violating the labour laws.
- (iv) If the contractor is covered under the Contract Labour (Regulation & Abolition) Act, he shall obtain a license from the licensing authority (i.e. the office of Labour Commissioner) before starting the work, by payment of the necessary prescribed fee and deposit, if any shall be borne by the contractor.
- (v) The contractor shall furnish to the IITC, the details of the workers employed on the works.
- (vi) The contractor shall comply with the provisions of the existing rules and regulations relating to labour laws.
- (vii) The IITC shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act, 1990, have the power to deduct from the amount due to the contractor any sum required or estimated to be required for making good the losses suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, or if

deductions made from his or their wages which are not justified by the terms of contract or non-observance of the said regulations.

1.4.2 Minor/Fatal Accident on Duty:

For cases of minor/Fatal accident on duty not covered under compensation by IMI, the contractor shall have to compensate the affected person/ family. The absence from duty, if takes place, due to such accident shall be considered as special leave and full payment shall have to be made for duration of such absence.

1.5 Safety Code

1.5.1 Safety and Protection:

The contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. While carrying out the work, the contractor should provide for:

- (i) Safety of personnel engaged in the construction.
- (ii) Protection and safety of works and materials during their progress.
- (iii) Sanitary and hygienic conditions of working and living for his workers, as required by the IMI.

1.5.2 Use of Safety Gadgets:

The contractor shall have to ensure the availability and use of all desired safety gadgets like safety belts, helmets, goggles, hand gloves, gumboots, caution tape, barricading, warning sign etc.

1.5.3 First Aid:

The contractor shall provide first aid facilities for his employees and those of his sub-contractors. The requisite first aid box and medicines should always be available at the work site.

1.5.4 Preservation of Peace:

The contractor shall take precautions to prevent any riotous or unlawful behavior by his workers, for the preservation of peace and protection of inhabitants and the security of property in the neighborhood of the work.

1.6 Details of Work Execution

- (i) The work shall be done in such a manner so as to dear workforce availability for other agencies working at the site.
- (ii) The finish of work shall be as per the details given by IMI.
- (iii) In general the complete work is to be done as per Indian Standards and esthetical norms as specified and detailed in the Tender.

1.7 Site

The site is located at IMI, Lucknow, IMI Road, Lucknow. The contractor shall be responsible for the accommodation of the manpower, and the movement of his men, materials and equipment at his own cost.

1.8 Electricity

Electrical power at one point is to be provided by the IIM. The Contractor will be responsible for getting electrical connectivity from the point specified IIM, to his work site including supplying of cables, connections, and other required items.

1.9 Contractor's Scope of Supply

All materials required for executing the jobs specified in the Bill of Materials, inclusive of all tools, tackles, scaffolding, consumables, and testing equipment shall be procured and supplied by the contractor at his own cost except for any items specified as IIM-supplied.

1.10 Liquidated damage charges

0.05% per day of contract value for delays up to 15 days; 0.10% per day of contract value for delay from 15-30 days and for delay beyond 30 days it will be 0.25 % of the contract value per day. The total levy of this Liquidated damage shall not exceed more than 10% of the contract value.

In case the delay continues beyond 2 Months then the tender/ Contract will be automatically canceled. Under These circumstances, the EMD/ Performance Security available with the Institute will be forfeited and the Retention money/ balance 05 % payable value of the work (as the case may be) will not be paid. The Agency will be debarred from Bidding with IIM Ludhiana and will be blacklisted for 2 Years.

1.11 Recovery from the Contractor

- (i) If the contractor or his employees damage or destroy the property of the IIM, then the same shall be replaced/ refunded by the contractor, otherwise the expenses may be recovered from his bill or security deposit.
- (ii) All compensation and recoveries to be made as per terms of the contract shall be deducted from the contractor's bill or security deposit.
- (iii) Forfeiture of Security Deposit: Whenever any claim against the contractor is to be recovered then the same may be made from the security deposit (performance and retention or any other security available) if the contractor abandons the work or leaves the work incomplete, then the IIM, has the right to forfeit the security deposit.
- (iv) The contractor will make a fence around the area given for labour hutment to avoid unauthorized entry.

1.12 Buy Back Clause

The Machines/ Indoor and outdoor units, Piping, wiring, cables, electric and control panels, fittings, and fixtures dismantled from the old A.C. system shall be taken on Buy back by the contractor @ rates quoted by the contractor in BOQ. Any Debris/unused item that is dismantled along with the A.C. system shall be disposed off as per the instructions.

1.13 Altered/ Additional/ substituted work

If the altered/additional or substituted work or any additional work required to be executed as per Institute's requirement shall be carried out by the contractor on the same conditions in all respects including a price on which he agreed to do the main work except as hereafter provided for which there are no established rates in the schedule of rates and Bills Schedule of rates, the same shall be payable as per the provision stated hereunder.

- a) If any extra item crops up during the work (Other than that given in the Work Order), the rate for such item shall be computed as per rates of CPWD (DSR-2013 with the same percentage above or below as is quoted by the Contractor in the Price Bid).
- b) Rates for items where rate is not available in DSR-2013 shall be derived from the similar item of nearest DSR. If not available in the nearest DSR then in the nearest District Schedule of Rates issued by the Uttar Pradesh PWD department. If the item is not found in DSR and District Schedule of rates, then the Percentage Rate from nearest available Schedule of rates of any Central/ Uttar Pradesh Government Department shall be considered with whatever applicable Cost index plus or minus (if any as per relevant Circular from the department) on the schedule of rates considered.
- c) If direct working out is not possible as mentioned in a) & b) above, the contractor shall be paid on the basis of the actual cost of material and labor cost plus 15% towards profit, supervision, overheads establishment, plants, machinery, etc. and applicable taxes as decided by the Competent Authority.
- d) In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para:
 - (i) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the Contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
 - (ii) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of the substituted item and the agreement item (to be substituted).

1.14 Service of Notice

All notices, consents, approval or other communication required to be given or served hereunder by either party hereto to the other party shall be in writing, and in English and shall be personally delivered to, left at, sent by registered post, email, courier, speed post or facsimile by either party to the other at the addresses mentioned herein below. Both parties agree that the facsimile transmission will not be used as a sole method for the communication of important notices such as any modification or termination.

- (i) **THE DIRECTOR**
INDIAN INSTITUTE OF MANAGEMENT
FRABANDH NAGAR, SIML ROAD
LUCKNOW-226013

(ii) Notice to the Tenderer at the Address mentioned in the Tender Document

APPENDIX-I

G. TECHNICAL SPECIFICATION OF VRF/VRV

Please fill in the details of the offered product it is the criterion for the Technical Qualification

			12 HP ODU	OFFERED PRODUCT SPECIFICATION
Model				
Power Supply		T-RLPS	240~415V, 60Hz	
Cooling	Capacity	67l	45.0	
	Input	67l	0.24	
	Current	A	13.29	
	SEER	l/W	4.16	
Heating	Capacity	67l	45.0	
	Input	67l	0.40	
	Current	A	13.83	
	SEER	l/W	4.74	
Max. Current		A	19.00	
Max. Input Consumption		67l	18.00	
Discharge		A	30	
EC Inverter Compressor	Quantity		1	
	Type		DC In	
	Brand			
Outdoor Fan Motor	Type		DC In	
	Brand			
	Output Power	W	720	
Oil Flow Volume		CFM	7497	
		kg/h	12000	
Rated Load		dB(A)	58	
Dimension(W-D-H)	Net	mm		
	Packing	mm		
Weight	Net	kg	212	
	Gross	kg	222	
Refrigerant type/Quantity	Type		R410a	
	Charged Volume	kg	07	
Design Pressure		MPa	1.4/1.2	
Refrigerant Piping	Liquid Side	mm	218.88	
	Gas Side	mm	81.8	
	Thickness	mm	0.8 to 1.2	
	Max. Length	m	1000	
	Max. Weight	m	80/100	
Ambient Temp (Cooling/Heating)		°C	5~32/10~24	
Wiring specification	Power wiring (ODU)	mm ²	216	
	A-B signal wiring (ODU)	mm ²	216/18	
	A-B signal wiring (In ODU)	mm ²	216/18	
Stuffing Quantity		mm	14/14/18	

			34 HP ODU	OFFERED PRODUCT SPECIFICATION
Model				
Refrigerant Supply		R-32/RP2	300-410.00 / 30.0	
Cooling	Capacity	kW	40.0	
	Input	kW	8.04	
	Current	A	16.23	
	EFF	W/W	4.92	
Heating	Capacity	kW	42.0	
	Input	kW	8.40	
	Current	A	17.02	
	EFF	W/W	4.74	
Max. Current		A	20.00	
Max. Input Current/Section		kW	16.00	
Circuit Breaker		A	30	
DC In Compressor	Quantity		1	
	Type		DC In	
	Brand			
Outdoor Fan Motor	Type		DC In	
	Brand			
	Output Power	W	730	
Air Flow Volume		CFM	7447	
		m ³ /h	10000	
Noise Level		dB(A)	68	
Dimension(H-D-W)	Net	mm		
	Packing	mm		
Weight	Net	kg	210	
	Gross	kg	220	
Refrigerant type/Quantity	Type		R410a	
	Charged Volume	kg	17	
Design Pressure		MPa	1.4 / 6.3	
Refrigerant Piping	Liquid Side	mm	φ12.70	
	Gas Side	mm	φ16	
	Thickness	mm	0.8 to 1.0	
	Max. Length	m	1000	
	Max. Weight	m	30 / 1.0	
Ambient Temp. (Cooling/Heating)		°C	5-35 / 5-35	
Energy Efficiency	Power Rating (ODU)	kW	300	
	A.E. Rating (Cooling (ODU))	kW	100.76	
	A.E. Rating (Heating (ODU))	kW	100.70	
Buffing Quantity		10.40/40k	Unit	14/16/18

			36 HP DDC	OFFERED PRODUCT SPECIFICATION
Model				
Power Supply		V-36LPS	200-415.00 / 3C3	
Cooling	Capacity	6TR	48.0	
	Input	6TR	15.24	
	Current	A	14.87	
	EFF	W / TR	4.27	
Heating	Capacity	6TR	22.0	
	Input	6TR	15.24	
	Current	A	14.87	
	EFF	W / TR	4.81	
Max. Current		A	25.00	
Max. Input Consumption		6TR	16.00	
Circuit breaker		A	30	
DC fan Compressor	Quantity		1	
	Type		DC fan	
	Brand			
Outdoor Fan Motor	Type		DC fan	
	Brand			
	Output Power	W	730	
Air Flow Volume		CFM	7447	
		m ³ /h	10000	
Noise Level		dB(A)	68	
Dimension(H-D-W)	Net	mm		
	Packing	mm		
Weight	Net	kg	227	
	Gross	kg	227	
Refrigerant type/Quantity	Type		R410a	
	Charged Volume	kg	14	
Design Pressure		MPa	1.4/4.1	
Refrigerant Piping	Liquid Side	mm	12.80	
	Gas Side	mm	21.8	
	Thickness	mm	0.8 to 1.0	
	Max. Length	m	1000	
	Max. Weight	m	30 / 1.0	
Ambient Temp. (Cooling/Heating)		°C	5-35 / 15-35	
Energy Efficiency	Power Rating (DDC)	kw ³	206	
	A.E. Rating (Cooling)	kw ³	109.76	
	A.E. Rating (Heating / In DD)	kw ³	109.70	
Buffing Quantity		10-W/40W	Unit	14/28/14

			38 HP DDC	OFFERED PRODUCT SPECIFICATION
Model				
Refrigerant Supply		R-32/RP3	380-410.00 / 30.0	
Cooling	Capacity	RT	14.30	
	Input	RT	21.40	
	Current	A	24.24	
	EFF	W / W	2.62	
Heating	Capacity	RT	13.40	
	Input	RT	17.70	
	Current	A	22.02	
	EFF	W / W	4.22	
Max. Current		A	25.88	
Max. Input Consumption		RT	21.4	
Circuit breaker		A	30	
DC Inverter Compressor	Quantity		1	
	Type		DC In	
	Brand			
Outdoor Fan Motor	Type		DC In	
	Brand			
	Output Power	W	400-0	
Air Flow Volume		CFM	7447	
		m ³ /h	10000	
Noise Level		dB(A)	68	
Dimension(H-D-W)	Net	mm		
	Packing	mm		
Weight	Net	kg	240	
	Gross	kg	270	
Refrigerant type/Quantity	Type		R410a	
	Charged Volume	kg	11	
Design Pressure		MPa	1.6 / 6.1	
Refrigerant Piping	Liquid Side	mm	18.1	
	Gas Side	mm	21.8	
	Thickness	mm	0.8 to 1.0	
	Max. Length	m	1000	
	Max. Weight	m	30 / 1.0	
Ambient Temp. (Cooling, Heating)		°C	5-35 / 15-24	
Energy Efficiency	Power Rating (DDC)	kw ³	1018	
	A.E. Rating (Cooling (DDC))	kw ⁴	109.76	
	A.E. Rating (Heating (DDC))	kw ⁴	100.70	
Buffing (Quantity)		10, 40, 40k	Unit	11, 02, 12

			28 HP ODU	OFFERED PRODUCT SPECIFICATION
Model				
Power Supply		T-ALPS	40-410/0-600	
Cooling	Capacity	BTU	41.5	
	Input	BTU	11.41	
	Current	A	34.04	
	SEER	BTU/W	100	
Heating	Capacity	BTU	43.0	
	Input	BTU	11.82	
	Current	A	35.02	
	SEER	BTU/W	4.41	
Max. Current		A	34.00	
Max. Input Consumption		BTU	16.00	
Circuit breaker		A	30	
DC Inverter Compressor	Quantity		2	
	Type		DC In	
	Brand			
Outdoor Fan Motor	Type		DC In	
	Brand			
	Output Power	W	400-0	
Air Flow Volume		CFM	740*	
		M ³ /h	12000	
Noise Level		dB(A)	58	
Dimension(H*W*D)	Net	mm		
	Packing	mm		
Weight	Net	kg	127	
	Gross	kg	140	
Refrigerant type/Quantity	Type		R410A	
	Charge Volume	kg	14	
Design Pressure		MPa	1.4/6.3	
Refrigerant Piping	Copper Side	mm	28.1	
	Gas Side	mm	21.8	
	Thickness	mm	0.8 to 1.2	
	Max. Length	m	1000	
	Max. Height	m	80/100	
Ambient Temp (Cooling/Heating)			°C	
Wiring specification	Power wiring (ODU)	mm ²	2/14	
	A.B signal wiring (ODU)	mm ²	2/0.75	
	A.B signal wiring (in ODU)	mm ²	2/0.75	
Soldering Quantity		mm	11/12/13	

			24 HP DDU	OFFERED PRODUCT SPECIFICATION
Model				
Power Supply			1- ϕ , 200V	100-415, 50/60 Hz
Cooling	Capacity	kW		47.0
	Input	kWh		17.77
	Current	A		18.42
	ISA	W/HP		0.77
Heating	Capacity	kW		70.0
	Input	kWh		17.66
	Current	A		26.22
	COE	W/HP		4.24
Max. Current			A	26.22
Max. Input Consumption			kWh	18.00
Circuit breaker			A	32
DC Inverter Compressor	Quantity			1
	Type			DC In
	Brand			
Outdoor Fan Motor	Type			DC In
	Brand			
	Output Power	W		400-2
Air Flow Volume		CFM		7447
		m ³ /h		12000
Noise Level		dBS(A)		52
Dimension(D1 \times D \times H)	Flat	mm		
	Flashing	mm		
Weight	Flat	kg		227
	Crane	kg		242
Refrigerant type/Quantity	Type			R410a
	Charged Volume	kg		14
Design Pressure			MPa	1.4-4.1
Refrigerant Piping	Liquid Side	mm		18.1
	Gas Side	mm		21.8
	Thickness	mm		0.8 to 1.2
	Max. Length	m		100
	Max. Radius	m		90/100
Ambient Temp. (Cooling/Heating)			°C	5-32/10-24
Wiring specification	Power wiring (DDU)	mm ²		4/14
	A.B signal wiring (DDU)	mm ²		2x5 to
	A.B signal wiring (in DDU)	mm ²		2x5 to

Stuffing Quantity	20,40,408	unit	11/01/21	
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LIST OF ELECTRICAL ITEMS/MATERIALS AND IT'S MAKE

S.No.	Item	Name of Manufacturer
1.	Thumbtack	Downall's
2.	PVC Conduit Pipe	ISI marks
3.	P.V.C Copper Wire	Polycab/ Havells/Anchor/Pindlex/KEI or Equivalent
4.	Conduit Accessories like Junction Boxes etc.	ISI Mark
5.	LT Cable	Polycab/ Havells/Anchor/Pindlex/KEI or Equivalent
6.	MCB, MCCB	Havells, Anchor, Standard, L&T or Equivalent

Sequence for Work Execution

Sno.	Description
1.	Site survey, Agreement execution & Performance Security submission
2.	Supply of A.C. machinery and equipment and associated piping, wiring, cables, panels, etc.
3.	Supply and installation of electric panel for VRF/VRF
4.	Dismantling of old AC, Robotic ducting cleaning.
5.	Cable tray laying for outdoor and wiring & copper pipe laying tray for indoor
6.	Execution of site works Installation of indoor and outdoor units, piping, wiring, cabling, drain pipes, control cables, etc. both up-side and down-side complete
7.	Testing and commissioning of the System
8.	Restoration for repair of damaged false ceiling etc. other civil works
9.	Completion after proper submission of documents, training, user verification, and Test run of 07 days
10.	Defect Liability Period (DLP)
11.	CA&MC for the VRF/ VRF system

DECLARATION OF SPARE/ SERVICE SUPPORT: Manufacturer's Authorization

Date: _____

To: _____

WHEREAS

We _____ (OEM Name and Address), who are official manufacturers of _____ (VRF Component Description), having factories at _____ do hereby authorize _____ (Bidder Name) to submit a Bid the purpose of which is to provide the following goods, manufactured by us _____ (VRF Component Description). We hereby authorize M/s _____ (Bidder Name) for Supply Installation Testing & Commissioning of cold and Hot 100 HP VRF/ VRV system in replacement of the existing ducted Airconditioning System and subsequent annual maintenance of the same at IIT, Lucknow. We hereby confirm our full guarantee & warranty including support of spares & services for a minimum period of 15 to 20 years from operational acceptance.

Seal & Signature of both Date





FINANCIAL BID

BILL OF QUANTITY

AIR CONDITIONING WORK AT LIBRARY BUILDING, IM LOCKNOW

SlNo	Description	Unit	Qty	Rate	Amount
OUTDOOR UNITS					
1	Supply of Modular type outdoor units, with all Inverter compressors (Copper winding) for cooling and heating application. The unit above 18HP must run with two no's of Inverter compressors (auto on/off loading) along with the same shall have a minimum COP of 4.2 to 4.4 at standard condition. All inverter capacity controlling compressors are suitable for 300-410 volts. All ODU units must be fully charged with R-410A and must be equipped with Auto Clean Technology in which after every 60 days condenser fan rotate the rotation to clean dust for lesser efficiency. The Outdoor PCB should have the technology to be needed by refrigerant. Outdoor units must have a wide operation range from (-5° C to 55° C).				
1.1	12 HP (Heating & Cooling)	Nos	2		
1.2	14 HP (Heating & Cooling)	Nos	5		
1.3	16 HP (Heating & Cooling)	Nos	2		
1.4	18 HP (Heating & Cooling)	Nos	2		
1.5	20 HP (Heating & Cooling)	Nos	1		
1.6	24 HP (Heating & Cooling)	Nos	2		
2	INDOOR UNITS				
	Supply of Indoor units equipped with pre-filter, fan section with adjustable static fan, multi-speed motor, coil section with DR coil, water reheat, drain pan, insulation, pipe connections etc. of various capacities as per specifications.				
2.1	High Static Ductable Unit				
2.1	1 TR High Static Duct	Nos	3		
2.2	3 TR High Static Duct	Nos	2		
2.4	4 TR High Static Duct	Nos	1		
2.5	6 TR High Static Duct	Nos	10		
2.6	8 TR High Static Duct	Nos	11		
2.7	ACCESSORIES				
2.8	Single Wired Remote	Nos	27		
2.9	V/lines ODU-ODU	Nos	8		
2.10	Controlled Remote	Nos	1		
3	Installation Testing & Commissioning FOR OUTDOOR UNIT				
3.1	12 HP (Heating & Cooling)	Nos	2		
3.2	14 HP (Heating & Cooling)	Nos	5		
3.3	16 HP (Heating & Cooling)	Nos	2		
3.4	18 HP (Heating & Cooling)	Nos	2		
3.5	20 HP (Heating & Cooling)	Nos	1		
3.6	24 HP (Heating & Cooling)	Nos	2		
4	Installation Testing & Commissioning FOR INDOOR UNIT				
4.1	High Static Ductable Unit				
4.2	1 TR High Static Duct	Nos	3		
4.3	1 TR High Static Duct	Nos	2		
4.4	4 TR High Static Duct	Nos	1		

4.5	6 TR High Static Duct	Res	10	
4.6	8 TR High Static Duct	Res	11	
5	SFC of Y Branch IBU			
5.1	Y Joint ID/OD	Res	11	
6	Refrigerant Piping for VRF / VRF System			
6.1	Supply & Piping of COPPER REFRIGERANT PIPING of appropriate size and thickness as recommended by ODH, suction and discharge line complete with fittings, elbow, elbow, bearing, flushing, Pressure testing with N ₂ , vacuuming, nitric rubber insulation of 19 mm thickness for gas line and 19 mm thickness & 12 mm for liquid line. Measurement of pipe individually. (Gas and liquid line) including bend and accessories etc. Copper Pipe should handle Pressure upto 300 Psi.			
6.2	24.9 mm OD (insulation 15mm)	10%	40	
6.3	28.58 mm OD (insulation 15mm)	10%	105	
6.4	32.2 mm OD (insulation 15mm)	10%	85	
6.5	38.95 mm OD (insulation 15mm)	10%	120	
6.6	45.88 mm OD (insulation 14mm)	10%	115	
6.7	52.7 mm OD (insulation 14mm)	10%	140	
6.8	59.5 mm OD (insulation 13 mm)	10%	190	
7	Supplying and installation of MC Ducted cable for Copper Pipe & Communication Cable horizontally & vertically along with threaded rod nut, bolt, saddle, etc etc (The distance between two hangers should be CC 1200mm (max) or as per the requirement for lots, etc) C section of hanger will be measured in Rmt	10%	120	
8	CI Cable tray, 200 mm x 50 mm threaded Rod & nut, Anchor Fastener, Nut/Bolt, Washer, Tie for top Covering Cable Tray, etc for 600 Unit along Civil work for Platform (11'x12') on the terrace wherever is required	3%	100	
9	Condensate Drain Piping			
9.1	Supplying, installing and testing of hard PVC pipe (Heavy duty) with 10 kg thick nitric rubber insulation (tube insulation) with pressure testing as per the approved shop drawings and specifications along with it accessories for hanging			
9.2	Hard PVC drain Pipe 32 mm, 10 kg with insulation	10%	120	
10	TRANSMISSION WIRING			
	Supply, laying, testing, and commissioning of the following size (Shielded) PVC insulated Copper Communication cable in PVC conduit of the following size on surface/recessed (i/c stamping completely as required: 2 core x 1.5 Sq mm, armored/ Shielded copper cable			
10.1	2C x 1.5 Sq mm Unarmoured (For Transmission)	10%	1200	
11	Civil work like Wall Capping / wall chasing and wiring for Copper pipe and cables. (plastering finishing etc complete for dimensional portion	Let	1	
12	CI Sheet Rectangular Duct modification work at the mouth of intake unit as per new machine and connected to the old existing duct.	Let	1	
13	CI Sheet Rectangular Duct at the time of clearing/dismantling if damaged including insulation, Nitric Rubber Sheet/SLP / CI S/S Solvent Nut/Bolt/Washer Threaded Rod, etc	5%	15	
14	supply and fixing Aluminum Powder Coated supply & Return Air Normal Grill etc	5%	1	

15	ODU Unit & IDU Unit Lifting, shifting, unloading and Gauffolding/supporting items work	Lot	1		
16	Supply & Fixing of 15 mm thickness duly laminated aluminium foil of mat finish closed cell butyl rubber (Class D) insulation on the existing duct after applying suitable adhesive for Mastic Rubber.	Sqm	60		
17	Supply and fixing of Flexible Conduit in accordance with and compatible with indoor unit to duct, as per the capacity of mentioned in T&E/DG as per the OEM recommendation.	Nos.	17		
18	Supplying and fixing the following size of perforated Galvanized Iron Cable Tray (150mm x 50mm) including beads and tee with perforation, in convenient sections, Anchor Fastener Threaded Rod Nut lock Washer joined with connectors, suspended from the ceiling with H.S. supports for Indoor Unit Power Supply.	Nos	150		
19	Supply and fixing 10 x 2.5 sq. mm. Copper Multi Strand Wire cable for Indoor Unit Power Supply. [Or as per the OEM recommendation to take the proper load]	Nos	195		
20	Supply & Return Aluminium Grid Cleaning & Retain Dust inside Cleaning of existing Duct to remove dust, bacteria, mold spores, and other foreign bodies by using HEPA-filtered vacuum unit Area Library.	Lot	1		
21	Design, fabrication, supply, installation, testing and commissioning of LT Panel / Sub-distribution panels fabricated out of 2mm thick for structural members and 1.6mm thick for door and covers. CRCA sheet in suitable compartmentalized free standing floor mounted, dust and vermin proof Cable gland glass shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anti-rust process before painting as per specifications. 1 Nos. earthing terminals shall be provided for all distribution panels. Panels shall be suitable for 415V, 3-phase, 4-wire, 50Hz supply system and linking hooks shall also be provided in case of large panels. Degree of ingress protection of 10-55. Suitable size of Inverter with 400A, 50 KVA breaking capacity 4-pole, Measuring & indication item like digital amperes meter, CT, digital voltmeter, Digital multifunction meter and kWh indicators, Suitable size of TBN Aluminium busbar with color coded, Suitable size of MCCB/RCCB/ELCB Outgoing with 4 Pole 40 A 6 nos & 63 A 4 nos for 12 Outdoor Unit & for Indoor Unit MCC single pole 6 A 5 nos, 10 A 1 nos, 16 A 10 nos, 20 A 11 nos.	Lot	1		
22	Supply and laying, affixing proper accessories, testing & commissioning of the following size of 1.1 KV unarmoured/unarmoured XLPE insulated PVC sheathed aluminium/copper conductor cables conforming to IS: 7090 Part 1 with latest amendments laid over H.S. supports in existing RCC ducts / laid in ground / laid on Cable Trays 100 mm x 50 mm including clamping the cables to supports in an approved manner as required complete with all accessories. 4C x 10/16/25 sq.mm. Copper Armoured cable for ODU Unit.				
22.1	Supplying and fixing following size of perforated Galvanized Iron Cable Tray (100 mm x 50mm) including beads and tee with perforation, in convenient sections, Anchor Fastener Threaded Rod Nut lock Washer joined with connectors, suspended from the ceiling with H.S. supports for Outdoor Unit Power Supply.	Nos	160		

22.2	4C x 10/16/25 sq. mm. Copper Main Ground cable x 1.5 sq. mm. for earth for outdoor Unit Power supply and fusing from Electrical Panel to Outdoor Unit (Or as per the OEM recommendation to take the proper lead)	Run	100		
23	Providing and fixing 25 mm T2 mm GI strip on the surface or in recess for connections etc. as required	Run	100		
24	Providing and fixing 6 SWG dia GI wire on the surface or in recess for long working as required.	Run	200		
25	Supply and installation of Earth Pit with GI earth plate 800 mm X 400 mm X 6 mm thick including accessories, and providing masonry enclosure with a cover plate having to look arrangement and masonry pipe of 1.7 meters long etc. with charcoal coils and well as required (As per CPWD norms)	Nos.	1		
26	Supply and installation of Small size panel box with MCCC/BCCB/ELCB Outgoings with 4 Pole 40 A 6 mm & 63 A 6 mm for 11 Outdoor Units for Outdoor unit maintenance/operation. The panel should be suitable for outdoor installation (sufficiently water resistant).	Nos.	11		
27	Supply and installation of H/L Outdoor unit stand with two coats paint, Outdoor stand mounted on Terrace area of library including Backer Panel.	Nos.	11		
28	POP/Gypsum Ceiling Work Dismantling as per site requirement for any kind of installation	Sq/ft	400		
29	Providing and fixing Gypsum board Ceiling to match with the existing design/ gation to match with proper jointing with existing with TAPCO adhesive etc & Paint POP	Sq/ft	900		
30	VRF Gas Supply and gas Charging of Complete system	HP	100		
31	CAMC of the complete VRF/CRV system (after OLR)				
31.1		First Year	Per TG	100	
31.2		Second Year	Per TG	100	
31.3		Third Year	Per TG	100	
31.4		Fourth Year	Per TG	100	
32	Backlash				
32.1	Less cost of Backlash of removed ducted air-conditioning system along with panel copper pipe cable etc				
Basic Total Amount Installation					

Note:

- The contractor is advised to survey the actual site for assessment of critical applications if any & accordingly quote the rates.
- In case extraordinary variation is found in the CAMC rate quoted by the bidder as compared to the rates quoted by other bidders/ market rates for CAMC than the financial bid of that bidder will be disqualified.

Signature with the seal of the Contractor