



**SHORT NOTICE INVITING E-TENDER FOR SUPPLY  
INSTALLATION TESTING AND COMMISSIONING  
OF 12 NOS. 11TR PACKAGE AIR-CONDITIONER  
WITH JET NOZZLE SPRAY TYPE DIFFUSER ALONG  
WITH ELECTRICAL CABLING, WIRING AND  
RELATED CIVIL AND OTHER MISCELANEOUS  
WORKS FOR STUDENT MESS AT IIM LUCKNOW,  
LUCKNOW CAMPUS.**

To,  
M/S. \_\_\_\_\_

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**SUB.: SHORT NOTICE INVITING E-TENDER FOR SUPPLY INSTALLATION TESTING AND COMMISSIONING OF 12 NOS. 11TR PACKAGE AIR-CONDITIONER WITH JET NOZZLE TYPE DIFUSSER ALONG WITH ELECTRICAL CABLING, WIRING AND RELATED CIVIL AND OTHER MISCELANEOUS WORKS FOR STUDENT MESS AT IIM LUCKNOW, LUCKNOW CAMPUS.**

Dear Sir,

Tenders are invited, on behalf of the Director, Indian Institute of Management, Lucknow for Short Notice Inviting E-Tender for Supply Installation Testing and Commissioning of 12 Nos. 11tr Package Air-Conditioner with Nozzle Type Diffuser along with electrical cabling, wiring and related civil and other miscellaneous works for student Mess at IIM Lucknow, Lucknow Campus 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 system (both Technical and Financial) from reputed Companies. The complete Tender document containing General term and Conditions, pre-qualification requirements etc. are available on <http://eprocure.gov.inprocure/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.inprocure/app> on or before bid submission closing Date & Time

Sd/-  
Chief Administrative Officer  
For Indian Institute of Management



**INSTITUTE OF MANAGEMENT LUCKNOW**

Prabandh Nagar, IIM Road

Lucknow 226013

**E-TENDER NOTICE INVITING SHORT TENDER**  
**IIML/PROJ/TENDER/2023-24/4406 Date: 23/03/2023**

**Memorandum**

Name of work	:	<b>Short Notice Inviting E-Tender for Supply Installation Testing and Commissioning of 12 nos. 11TR Package Air-Conditioner with Nozzle Type Diffuser along with Electrical Cabling and Wiring Work for Student Mess at IIM, Lucknow</b>
Earnest Money	:	Rs. 1,35,000/- (Rupees One Lakh thirty five Thousand Only)
Total Estimated Cost	:	Rs. 65,88,000/- (Inclusive of GST)
Period of Contract	:	<b>60 days</b>
Date of issue of tender document	:	<b>24.04.2023, 11.00 am</b>
Date Pre-Bid Meeting	:	<b>28.04.2023, 11.00 am</b>
Late Date for submission tender document	:	<b>04.05.2023, 3.30 pm.</b>
Date of opening of Technical Bid Opening	:	<b>05.05.2023, 11.30 am</b>
Date of opening of Financial Bid Opening	:	Will be informed to the Bidders Qualify the Technical Bid.
starting of work	:	Within <b>7</b> days of the Date of LOI

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

Sd/ -

Chief Administrative Officer  
For Indian Institute of Management Lucknow

## SCOPE OF WORK

- The scope of this work covers the following:
- (i) SUPPLY INSTALLATION TESTING AND COMMISSIONING OF 12 NOS. 11TR PACKAGE AIR-CONDITIONER WITH NOZZLE SPRAY TYPE DIFFUSER ALONG WITH ELECTRICAL CABLING, WIRING AND RELATED CIVIL AND OTHER MISCELANEOUS WORKS for Student Mess.
  - (ii) The Indoor and outdoor unit combination as supplied by the OEM Indoor unit, its ducting casing to be covered with M.S. casing of similar colour as that of indoor unit to match with the indoor unit along with Jet Nozzle type diffuser. All three should look to be a part of a single unit. Tentative location for placement of the A.C. indoor units and outdoor units is marked in the drawings. But contractor (in consultation with the OEM and Engineer In charge) may shift this placement of A.C. as per the requirement to get best and effective cooling in the dining area for the students.
  - (iii) The indoor unit stand/ civil platform, ducting/ casing for coolant & drainage piping should be appropriately covered as per the instruction of the Engineer In charge.
  - (iv) Supply inspection testing and commissioning the appropriately design Electric Feeder/ control panel with appropriate breakers, switch etc. for operation of the Air conditioners to be placed at the desired location (tentative location is marked in the Drawing attached). The Panel should have **a timer control switch to switch on and off the A.C. system according the timings decided by the user.**
  - (v) Supply, Inspection, laying, terminating and fixing the LT cables from the Substation no. 1/ 4 to the LT Panel for A.C. system at the Mess. Suitable Route marker to be properly fixed to indicate the underground cabling done. Proper cable tagging and feeder naming to be for identifying the cable for Mess A.C. at the Substation no. 1/ 4 LT Panel.
  - (vi) Supply Installation of Air Curtain at the entrance door as per specification to stop the loss of cool air.
  - (vii) All materials to be used in execution of project shall be of first class quality conforming to relevant I.S. code/ I.S.I marked or European standard if I.S. Code is not available/ applicable on the material and shall be approved by IIM before its application.
  - (viii) The tentative location of the indoor units, Panel, PVC curtain had been shown in the drawing attached. But this is for the reference only. Actual; positioning/ placement has to be decided as per the design and approval of the Engineer in charge so as to get the best effective conditioning.
  - (ix) The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the Engineer-In charge before completely executing the work.
  - (x) It may happen that during the execution of the work the Mess may be operational. Under these circumstances the preference will be given to the students dining timings. The contractor will have to accordingly adjust his

working timings so that there is least disturbance during the erection, installation A.C. and other associated civil & electrical works.

- (xi) The schedule of activities as submitted by the contractor shall have to be strictly adhered to the completion schedule. Regular progress reports shall have to be submitted by the contractor giving all details for monitoring of the schedule, manpower and material mobilization to meet the schedule. If Required in case of lag in any activity, the contractor will have to submit and adhere to the revised mobilization chart so as to achieve the completion dates.
- (xii) Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
- (xiii) All the scrap/waste/debris etc. generated during the execution of these works must be disposed of to the location specified by the engineer in charge.
- (xiv) This scope covers the designing, manufacture, testing at manufacturer's works, supply and delivery, at site, installation, testing and commissioning of Air conditioning system.
- (xv) Supplying and laying of Suspenders, brackets and floor/ wall supports etc. for suspending/ supporting ducts and pipes, cables etc. as per the requirement and specifications/ relevant I.s. code to be executed.
- (xvi) Excavation and refilling of trenches in soil wherever the cable are to be laid directly in ground, including necessary base treatment and supports, suitable caution tape, sand cushion etc. as per the Specification/ as per the relevant Safety standards/ I.S. Code. Tentative Cable routing has been indicated in the drawing attached. It may happen that at some location Road/ permanent flooring etc. may be need to dismantle for excavation of the electric trench.
- (xvii) Sealing of all floor slab/ wall openings provided by the Department or contractor for pipes and cables, from fire safety point of view, after laying of the same.
- (xviii) Painting of all exposed metal surfaces of equipment's and components with appropriate color as per standard scheme if required.
- (xix) Making openings (including core cutting if required) in the walls/ floors/ slabs, chase cutting to conceal the cable/ wires or modification in the existing openings wherever provided for carrying pipe line, ducts, cables etc.
- (xx) Making good all damages caused to the structure during installation and restoring the same to their original finish.
- (xxi) A copy of operations manual shall be provided to the Engineer-in-Charge or his representative containing following information:
  - a. Package AC equipment capacity.
  - b. Equipment operation and maintenance manuals
  - c. Package system control maintenance and calibration information, including wiring diagrams, schedules, and control sequence descriptions.
  - d. A complete written narrative of how each system is intended to operate.
  - e. Guarantee/ warrantee certificate ( As per the OEM).
  - f. Manufacturer test certificates for all the equipment's. Cables, wires etc. matching with the LOT supplied for this work has to be submitted.

Training of the User staff for Operation of the A.C. System to be given after successful commissioning of the A.C. system.

After completion of the work user certificate for satisfactory completion of the work in the standard IIML Format will be needed.

## INSTRUCTION TO TENDERER

- (i) The Tenderer shall read this Tender document carefully before filling it.
- (ii) Bidders are required to deposit an amount of Rs. 1,35,000/- (Rupees One Thirty Five Thousand only) towards Earnest Money Deposit (EMD) to below mentioned bank account of Institute on or before the last date & time mentioned above. EMD through any other form will not be accepted. UTR number / Transaction ID and date of Deposit/Transfer of EMD shall be mentioned in Technical Bid at appropriate place. **Those who seek exemption from deposit of EMD shall upload the valid MSME certificate in this regard.** Bank

Account No.	07231450000294
IFSC Code	HDFC0000723
Name of Bank & Type of Account	HDFC BANK/Saving

- (iii) Financial bid must be filled and submitted in the prescribed formats 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 filled in 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 fail to submit the EMD than their technical offer will not be Opened/Evaluated. The technical offers will be evaluated by the selection committee based on 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 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. 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 have signed by the authorized signatory of the tenderer.
- (ix) Original tender document duly signed and filled up should be uploaded.

- (x) The tender not accompanied by complete document or duly filled in all respect 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 about the works to be carried out and all other factors governing the works before quoting his rate.
- (xiii) Tenderer has to submit Performance Security deposit 05% (if EMD exemption was taken) and 3 % (If 2 % EMD was paid. In that case 2% EMD will be converted to performance security) of total contract value within 10 days after issue of LOI with minimum validity of 1 year in form of DD/FDR from Nationalized Bank. EMD of unsuccessful tenderer shall be returned after finalization of contract. EMD of successful tenderer shall be returned only after deposit of Performance Security deposit. Performance Security deposit will be release after successful completion of work. No interest shall be paid on amount.
- (xiv) Performance Security deposit shall be in the form of FDR Drawn on any nationalized bank in favour of Indian Institute of Management, Lucknow payable at Lucknow.
- (xv) This is an item rate Tender. The rate quoted by the tenderer shall be the total sum of material & labour at the IIM Lucknow campus, Lucknow Excluding of GST, **GST will be paid extra as applicable.**
- (xvi) If any discrepancy / misprint is noticed / specification or BOQ/ unit of measurement etc. then the same should be clarified from the Institute before quoting the rate. Any claim in this regard later will not be entertained. In such case Logical Decision will be taken based on the past/standard engineering practice and Institute's internal documentation. The decision of the Institute will be binding to the contractor.
- (xvii) Following procedures shall be adopted in case of difference in quoted rates in figures and words and extensions:
  - a. Where there is difference between rates in figures and 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 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 amount shall be corrected accordingly.

- (xviii) The Indian Institute of Management, Lucknow do not bind themselves to accept the lowest or any other tender and reserve the right to accept or reject any or all the tenders either in full or in part without assigning any reason.
- (xix) The tender shall be opened & evaluated by the tender committee and the successful tenderer shall be informed.
- (xx) If any of the document submitted by the tenderer is found fake, 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.
- (xxi) The Director, Indian Institute of Management, Lucknow has reserves the right to reject one or all the tenders without assigning any reason. No claim, whatsoever, shall be entertained on this account.
- (xxii) 5% of the payable bill value will be retained from each bill as defect liability period & shall be released after the warranty of Package Air-Conditioner. No interest shall be paid on amount.
- (xxiii) Tenderer are required to execute the agreement in accordance with the approved Proforma on non-judicial Rs. 100 stamp paper of appropriate value within 10 days from the date of receipt of this Letter of Intent. The cost of non-judicial stamp paper is to be borne by tenderer.
- (xxiv) Tenderer can avail relaxation given as per Govt. norms for NSIC/MSME registered firm.
- (xxv) Uploaded documents of the Successful tenderer may be verified with the original at the time of LOI / Agreement.
- (xxvi) Tender term & condition also includes GCC which is uploaded on IIML website and also be the part of this contract and its terms and conditions shall be bidding to both IIML and the successful Tenderer. So please read it properly. Link <https://www.iiml.ac.in/sites/default/files/upload/tender/293037022gcc.pdf>.
- (xxvii) Intending parties are required to submit an undertaking (Properly signed and stamped) that their firms have never been debarred / black listed by any Government/Public And there is no criminal case on the Proprietor/ partners/ any of the Directors in any Police station of any court of India dept. and few other points as specified in the eligibility criteria. The format for the undertaking is given in the Eligibility criteria below.

# **TECHNICAL BID**

## TECHNICAL DETAILS OF BIDDER

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

S.No.	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 similar field during last five years, ending last day of month previous to the one in which tenders are invited of 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 5 financial years ending 31 <sup>st</sup> March 2022 should be at least Rs 36 lakhs. (Copy of Annual Audited Accounts Statement for each year or the certificate for the average Turnover of the Tenderer issued by registered Chartered Accountant).	
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 Nearest after sales service provider (for Annual Maintenance, availing warranty etc.)	

### 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 enquiries are made about the work listed by me / us in the accompanying sheets / Annexures.
3. I / We agree that the decision of Indian Institute of Management Lucknow in selection of contractor 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 at a later date the tender shall be cancelled at the discretion of the Company and liable for any action, as deem fit 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 of the Contractor (or) His authorized signatory  
With seal of the agency/ firm

### Eligibility Criteria

**a) ANNUAL TURN OVER:**

Average annual financial turnover during any Three years from the last 5 financial years ending 31<sup>st</sup> March 2022 of the previous financial year, should be at least Rs 36 Lacs. **This Condition is Mandatory.** The Bidder has to enclose documentary proof clearly indicating Turnover.

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

**c)** The Bidder should have **Experience in SITC of Ducted or Package or VRF with minimum 70 ton of Air-conditioning in total for a single work in Any Government/PSU/ Autonomous Body such as IIM, IIT etc. or. Should have executed Ducted or Package or VRF 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 21-22. This Condition is Mandatory.**

**d) EMD:** Earnest Money Deposit as specified in NIT to be furnished in any of the following forms and shall be valid up to 90 days from the last date of submission:

- FDR/ Demand Draft payable to-Indian Institute of Management Lucknow, from any Nationalized Bank/ Scheduled Bank payable at Lucknow, & Deposition of EMD through any other form will not be accepted. **The scanned image of earnest money deposit/ MSME certificate (In case the Bidder is taking relaxation in EMD) to be uploaded online along with the Technical bid and the proof/ original of EMD deposition should reach through speed post or email or courier to the address mentioned below so as to reach Latest by 12:00 Hrs on the last date of submission of tender.** However, the details of DD no. date etc. to be provided in the technical bid. In case needs exemption under MSME criteria then a valid MSME certificate is required to be uploaded on e-procurement portal.
- Can be deposited in the below mentioned Institute Bank Account and share the UTR/  
Transaction number and date of Transaction in the Technical bid and the copy of transaction receipt must be uploaded online on 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 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 bid without Tender fee/ EMD and will be rejected.

Bank Account No.	07231450000294
IFSC Code	HDFC0000723
Name of Bank &Type of Account	HDFC/Savings

**Exemption of MSME for Tender Fee will be as per the format available on CPP portal**

This Condition is Mandatory

**e) EXPERIENCE:**

(i) **Experience in SITC of Ducted or Package or VRF** with any Central or State Government/ Public Sector/ Autonomous Institution/ Registered Private limited having Turnover more than 100 Cr (as is published by the company in its Annual Financial Report of 21-22/20-21/19-20/18-19/17-18. Registered means: Definition of Registered private limited company given by Ministry of Corporate Affairs on its website. **Minimum Value of the work/ works** as mentioned above during last 5 years ending last day of month previous to the one in which tenders are invited ( 31 March 2023 ) should be either of the following.

i. Three **completed contracts of SITC of Ducted or Package or VRF costing not less than Rs 28.90 Lakhs each.**

**OR**

ii. **Two completed contracts of SITC of Ducted or Package or VRF costing not less than Rs 43.30 Lakhs each.**

**OR**

iii. **One completed contract of SITC of Ducted or Package or VRF costing not less than Rs 57.70 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 purpose of tender has been defined as "SITC of Ducted or Package or VRF **with minimum 70 ton of Air-conditioning in total for a single work**".
- f)** Copy of PAN/ GIR No. Registration certificate issued by income tax Authority. This Condition is Mandatory.
- g)** Copy of Certificate of GST number. This Condition is Mandatory
- h)** Constitution & legal status of firm :( Proprietary/ Partnership/ Limited): If the Bidder is Pvt. Ltd. Company then the memorandum of Article and Association and Authorization of the person signing the Bid has to be submitted. This Condition is Mandatory.
- i)** 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 below.
- j)** 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 undertaking is to be given in the following format on their letter head with proper Stamp and signature of the Authorized signatory:**

**Undertaking to be furnished by the intending**

**Tenderers: -**

**I/ We declare and confirm that: -**

- i) I/ we have never been blacklisted/ debarred from any Govt./ Public sector enterprises/ Autonomous Body/ IIM Lucknow in minimum last 5 years.**
- 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.**
- v) I/ We are aware that any false information provided herein will result in the rejection of my tender at any stage.**

**This Condition is Mandatory**

**Signature and Stamp of the Bidder**

## **TENDER Declaration**

I/We have read and examined the Notice Inviting tender, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses 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 upload on iiml.ac.in.

I/We hereby tender for the execution of the work specified for IIM 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 tender and not to make any modifications in its terms and conditions.

A sum of Rs. 1,35,000/- is hereby forwarded in Cash/Receipt Treasury Challan/Deposit at call Receipt of a Scheduled Bank/Fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by scheduled bank as earnest money.

OR

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

If I/we, fail to furnish the prescribed performance guarantee or fail to commence the work within prescribed period I/we agree that the IIM 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. Further, if I/we fail of commence work as specified, I/we agree that II, 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 towards 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 & 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 IIM, Lucknow 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 therefrom 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  
Postal Address \*\*

## **TENDER EVALUATION CRITERIA**

Financial bids of only technically qualified bidder will be opened at CPP portal. Any term/condition mentioned by the bidder in price bid shall not be accepted. Any document received in hard copy shall be disqualified straight away. Conditionals bids wherein the bidder self-impose his condition will be straight away rejected.

Contract shall be awarded to the firm (s) offering the lowest in overall total given in financial bid at CPP portal. The firm (L-1) will be awarded the work.

## DEFINITIONS

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

- (i) **'IIM'** shall mean Indian Institute of Management, IIM 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 IIM to supervise all activities of the project.
- (iii) **'TENDERER'** shall mean the company / agency who quote against the tender enquiry for undertaking the work.
- (iv) **'CONTRACTOR'** shall mean the successful tenderer whose tender has been accepted by the IIM and to whom the order is placed by the IIM 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 the all place i.e. IIM, Lucknow where the project is to be executed.
- (vii) **'PROJECT'** shall mean entire 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 IIM to the tenderer intimating him that his tender has been accepted.
- (ix) **'CONTRACT'** shall mean the articles of Contract Agreement. The conditions of contract, schedule of quantities, specifications, attached and duly signed by the IIM and the Contractor.
- (x) **'DATE OF CONTRACT'** shall mean the date on which the IIM has issued 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 IIM to the contractor after successful completion of the project. This certificate will be issued on the basis of consultant's/ User's certificate to IIM about the completion of the job.
- (xiii) **'EXTRA ITEMS'** are those items, which are not appearing 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.

## **GENERAL CONDITIONS OF THE CONTRACT**

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

## **SPECIAL CONDITIONS OF CONTRACT.**

### **1.1 Directive to Contractor**

#### **1.1.1 Interpretation of Contract Documents:**

- (i) All the documents (such as SNIT, ITT, TENDERER DECLARATION, DEFINITIONS & SCOPE OF WORK, TECHNICAL SPECIFICATIONS, General 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 works 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 works.

#### **1.1.2 Period of Contract:**

The time period for completion of Supply Installation Testing and Commissioning of 12 nos. 11TR Package Air-Conditioner along with associated civil & Electrical Cabling and Wiring Work for Student Mess shall be **completed 60 days** from the date of issue of LOI (Letter of Intent).

#### **1.1.3 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 the circumstance which were not in the control of the Tenderer then IIM as per the affected period may extend the time period as per the discretion of the Director of the Institute.

#### **1.1.4 Dispute & Arbitration:**

All disputes or differences whatsoever arising between the parties out of or relating to the construction, meaning and operation or effect of this contract or subject thereof or the breach thereof that cannot be settled by good faith and negotiations between the parties within 60 days of the commencement of negotiations may be settled

by referring the dispute to the Director, IIM Lucknow, who may appoint an Arbitrator who is unconnected with IIM to adjudicate the same. The proceedings will be governed by the provisions of the Arbitration & Conciliations Act, 1996. The place of arbitral proceedings will be Lucknow. Other clauses of the agreement can be seen in the Office of Executive Engineer, IIM Lucknow. There shall be for termination, Arbitration, Force Majeure, Extension of time, Completion Certificate, Rules for Safety & Labour welfare, Labour laws etc.

**1.1.5 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 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 IIM as mentioned in the contract document.

**1.2.2 Inspection of works:**

- (i) The IIM 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 IIM can convey the instruction regarding the works.
- (ii) The contractor shall give information to the IIM 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 IIM 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 IIM regarding any of the works, then the same shall be got executed by engaging other contractor/ persons by IIM at the risk and cost of the contractor. The Amount will be deducted from Performance security or security deposit or Retention money. In case of unsatisfactory performance security deposit or performance security or retention may forfeited.

### **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 (tentative drawing) and figured dimensions in preference to scale and special conditions contract in preference to General Conditions of contract. 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 Condition, if any.
- iii. Drawings.
- iv. IIM LUCKNOW Specifications.
- v. CPWD specification.
- vi. Indian Standard Specifications of B.I.S.

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 unit or rate in Schedule of Quantities or any omission there from 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 contractor or his authorized representative or if any misunderstanding arises between the contractor's staff and IIM's staff, the contractor shall report the matter immediately to the IIM. The decisions of IIM 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 IIM 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 IIM 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 so 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 IIM or his demand aforesaid, the Incharge 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 IIM as to any question arising under this clause shall be final and conclusive.

### **1.2.7 Period of warranty/ Defect liability period:**

The warranty period of the work shall be equivalent to warranty of Package AC (Minimum 2 years) from the date of completion of the work as certified by the IIM. If any problem occurs during the period of liability the same will be changed by the contractor at his own expense. Warranty of Compressor will be also be two years or as given by OEM which will be higher will be considered.

### **1.2.8 Suspension of work:**

The contractor shall suspend the progress of work on receipt of the written order from the IIM for any of the following reasons:

- (i) On account of any default on the part of the contractor. In this case the contractor shall be entitled for the extension of time, but the contractor shall have no claim for payment of compensation for re-execution of faulty works.
- (ii) For execution of the works for reasons other than the default of the contractor.
- (iii) For safety of the works.

**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 IIM.
- b. If the suspension is ordered for the reasons 1.2.8 (i) (ii) as stated above, the contractor shall be entitled for 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 IIM shall have 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-Incharge 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. *Mode of Payment:*

All measurements shall be in the metric system and in accordance with Indian Standard Specifications and in accordance with standard engineering practice. If the contractor has any objection regarding the measurements, then the contractor shall inform the IIM immediately. The decision given by the IIM shall be final and binding on the contractor.

**1.3.2 Mobilization Advance:**

No mobilization advance shall be paid.

**1.3.3 Billing:**

The contractor shall submit running bill for the part/items/ portion completed (complete in all respect).

The same will be measured by the concerned J.E. and payment will be made by the Finance section after Approval of the competent authority as per the IIM procedure.

Final Bill payment will be processed after the submission of user verification as per the standard IIML format, submission of relevant Guarantee/ warrantee, Manufacture test certificate, any other inspection/ test documentation mentioned in this tender document or instructed to be submitted.

#### **1.3.4 Terms of Payment:**

- (i) The payment due to the contractor shall be made only in Indian Currency through RTGS.
- (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 under payment is discovered, the amount shall be paid to the contractor.
- (iii) Wherever 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 security deposit & shall be released on the satisfactory completion of the defect liability period. No interest shall be paid on security deposit amount.
- (v) **Tax Deduction:** All statutory deduction like Income Tax, Works Contract Tax, E.S.I., P.F, labour cess, TDS or any other government-imposed liability shall be borne by the contractor (as applicable at the time of execution of job) and shall be deducted from each bill submitted by the contractor.

#### **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 labours engaged by him on the work.
- (iii) The contractor shall, at his own expenses, comply with all labour laws and the IIM 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), by payment of the necessary prescribed fee and deposit, if any, before starting the work.
- (v) The contractor shall furnish to the IIM, 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 IIM shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act, 1980, 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 IIM, 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) Prescribed lifting equipment's as per the safety norms to be used for unloading, shifting and placing the Panel, A.C. indoor. Outdoor units etc.
- (iii) Loose/ open electric connections of any use will not be allowed. Proper industrial sockets to be used.
- (iv) Proper safety belt, helmets, shoes etc. to be used as per the requirement.
- (v) Applicable SOP while working on HT/ LT main Supply pane may be followed.
- (vi) Protection and safety of works and materials during their progress.
- (vii) Sanitary and hygienic conditions of working and living for his workers, as required by the IIM.

#### **1.5.2 Use of Safety Gadgets:**

The contractor shall have to ensure availability and use of all desired safety gadgets like safety belts, helmets, goggles, hand gloves, gumboots 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 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 clear work force availability for other agencies working at site.
- (ii) Finish of work shall be as per details given by IIM.
- (iii) In general the complete work is to be done as per Indian Standard and esthetical norms as specified and detailed in Tender.

### **1.7 Site**

The site is located at Annapurna Mess Society, IIM Lucknow, IIM Road, Lucknow. The contractor shall be responsible for accommodation of the manpower, the movement of his men, material and equipment at his own cost.

### **1.8 Electricity and water:**

Electrical power and water at one point to be provided by the IIM free of cost. The Contractor will be responsible for getting electrical connectivity 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 Quantities, inclusive of all tools, tackles, scaffolding, consumables and testing equipment's 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**

0.1% contract value per day of contract value for delay up to 10 days. 0.15% contract value per day of contract value for delay from 10-20 days, 0.25 % contract value for delay 20 to 30 days and for delay beyond 30 days it will be 0.25 % of the contract Value per day. Total levy of this Liquidated damage shall not exceed more than 10% of the contract value. In case the delay continues beyond 3 Months than the tender/ Contract will be automatically cancelled.

### **1.11 Unsatisfactory Performance**

1. The contractor shall be responsible for the acts and deeds of its staff. IIM Lucknow will in no way be responsible for violation of any applicable law, rules and / or other loss caused either by the contractor or its staff.
2. IIM Lucknow reserves its right to recover from periodical payments to be made to the Contractor, any loss or damage that may be caused to the equipment, machinery, building or any other property of IIM Lucknow by negligence or any other reason whatsoever by the Contractor.
3. The Contractor shall be responsible to comply with the provisions of all the applicable laws and other enactments and amendments made thereto, from time to time and the labour laws as may be in force and applicable.
4. None of the staff of the contractor shall be liable to claim any sort of employment with IIM Lucknow.
5. The Contractor shall ensure that the workmen employed are medically fit and in sound mind and health.
6. The contractor would ensure that his staff must have Identity cards to enter the premises of the IIM Lucknow for due performance of duties.
7. IIM Lucknow expects that contractor to ensure that his staff should maintain polite and courteous behaviour.
8. The contractor should ensure that his staff should not be under the influence of liquor or any other such substance while on duty and any damage caused by such of the contractor's employee will be borne by the contractor.

### **1.12 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. 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 fence around the area given for labour hutment to avoid unauthorized entry.

### **1.13 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 here in 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 MANAMEMENT  
PRABANDH NAGAR, IIM ROAD  
LUCKNOW-226013**

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

## **TECHNICAL SPECIFICATION**

### **A. SPECIFICATION OF AIR COOLED PACKAGED AIRCONDITIONERS**

#### **Package AC specification:-**

<b>S. No.</b>	<b>Parameter</b>	<b>Value</b>
1.	Cooling Capacity	11 TR
2.	Max. Ambient temp.	50 °C or above
3.	Nominal Cooling Capacity (BTU/Hr)	102000 or above
4.	Condensing / Cooling Coil	100% Copper
5.	Electrical input	415V±40/50Hz/Three Phase
6.	Compressor type	Hermetically Sealed Scroll type
7.	Nominal Air flow rate (CMH)	7475 or above
8.	Nominal Air flow rate (CFM)	4400 or above
9.	Body surface finish	Powder coated/high quality paint finish
10.	Air filter	Non-woven polyester media enclosed by HDPE mesh
11.	Controller	Microprocessor based with LCD display
12.	Remote	Corded Remote
13.	Refrigerant type	R-410A or any other refrigerant as per current industry standard Eco Friendly
14.	Warranty	2 Year on complete machine including service
15.	Brand	LG, Daikin, Mitsubishi Heavy Industries, Voltas, Blue Star, Hitachi

#### **Refrigeration Pipe:-**

Suction Pipe Size	: 1½ inches
Discharge Pipe Size	: ¾ inches
Insulation of pipe	: 19mm Nitrile Rubber

#### **Duct Specification:-**

1. Galvanized Steel Sheet for Rectangular ducting (Class VIII Galvanized)
2. Duct Sheet should be 22 Gauge.
3. Duct Insulation should be 19 mm Insulation.
4. Duct Acoustic lining with 25 mm thick fiberglass (density 32 Kg/cb.mt.) covered with RP Tissue paper & perforated AI sheet.

#### **Specification for Electrical Work: -**

1. Communication & Control Cable size will be 6 x 2.5 sq. mm Cu. Wire/Cable.

### **B. SPECIFICATION OF LT PANEL AND WIRING**

LT Cable: 400 Sq. mm 4 core. PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade for buried in ground as per CPWD norms

Main Panel: Fabricated out of 2mm thick CRCA sheet, compartmentalized with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, interconnection with suitable size copper conductor

cable/solid copper strip, having switchgears and accessories, mountings and internal wiring, earth terminals, numbering etc. complete in all respect, as per CPWD specification

- a. INCOMING: 630A, 50kA 4 Pole MCCB, Ics=100% Icu rating Digital Voltmeter 0-500V with selector switch Digital Ammeter (0-630 A) with selector switch & CTs etc. LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps  
Set of Copper Bus Bar 800A.
- b. OUTGOING: 02 nos. 250 A, 50kA TPN MCCB, Ics=100% Icu, with overload protection single phase protection. Timer control switch.

Sub-Main: 315 A Isc = 25kA for 1 second capacity Air Insulated Compact Type Rising Mains for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply with enclosure having IP-54 rating after fixing the tap off boxes and all accessories, made of 1.6mm thick steel sheet duly powder coated in convenient sections complete with 4 Nos aluminium bus bars having current density of 130 A/ sq cm at nominal current rating, necessary joints & expansion joints, fire barrier at each floor, continuous earthing with 2 Nos aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required.

### C. SPECIFICATION OF AIR CURTAIN

Single-phase, 50/60Hz 220-240/220V Width: 6 feet length, Fan Speed: Low, Standard Shut out Distance: 3 meters, Air volume (m<sup>3</sup>/h): 4400,

### D. LIST OF ELECTRICAL ITEMS/MATERIALS AND IT'S MAKE

S.No.	Item	Name of Manufacturer
1.	Thimbles	Dowell's
2.	PVC Conduit Pipe	ISI marks
3.	P.V.C. Copper Wire	Polycab/ Havells/Anchor/Finolex/KEI or Equivalent
4.	Conduit Accessories like Junction Boxes etc.	ISI Mark
5.	LT Cable	Polycab/ Havells/Anchor/Finolex/KEI or Equivalent

Notes:

1. Out of the approved makes of materials mentioned above, the make of materials to be used on the work shall be as decided by the Engineer-In-charge.
2. The Contractor shall produce samples before procurement of the material for approval of the Engineer-In-charge. The material of the makes out of the above as approved by the IIM/ Engineer-In-charge shall be used on the work.
3. Materials for which approved makes are not specified above shall be makes to be decided by the IIM/ Engineer-In-charge and as per sample got approved before procurement.
4. The Contractor shall submit sample of materials immediately after award of the work for approval from concerned authorities.

# **PART B**

## **FINANCIAL BID**

## BILL OF QUANTITY

**SHORT NOTICE INVITING E-TENDER FOR SUPPLY INSTALLATION TESTING AND COMMISSIONING OF 12 NOS. 11TR PACKAGE AIR-CONDITIONER WITH JET NOZZLE TYPE DIFUSSER ALONG WITH ELECTRICAL CABLING, WIRING AND RELATED CIVIL AND OTHER MISCELANEOUS WORKS FOR STUDENT MESS AT IIM LUCKNOW, LUCKNOW CAMPUS  
(Rates are exclusive of GST, GST will be paid extra as Applicable)**

Sl. No.	Item description	Unit	Qty	Rate	Amount
<b>1</b>	<b><u>Normal Package</u></b>				
<b>1.1</b>	<b>Supply of Package type air-conditioning system with R410A Refrigerant complete with indoor and outdoor units with individual controller for cooling type operations. It also includes stand for indoor and outdoor</b>	<b>Nos</b>	<b>12</b>		
	<b><u>PART 'B' &amp; C (INSTALLATION OF EQUIPMENTS)</u></b>				
<b>2</b>	<b>Installation Testing Commissioning of PACKAGE type air-conditioning system with R410A Refrigerant complete with indoor and outdoor units with individual controller for cooling type operations With Gas</b>	<b>Nos</b>	<b>12</b>		
	-				
<b>3</b>	<b><u>Refrigerant Piping</u></b>				
<b>3.1</b>	<b>Supply and installation of hard drawn refrigerant piping between indoor and outdoor units covered with 19 mm nitrile rubber for Package for 11 TR</b>	<b>Nos</b>	<b>120.00</b>		
<b>4</b>	<b>Flexible Pipe for condensate Drain from indoor unit to the nearest drain point provided by you in consultation with us. 40mm</b>	<b>RMT</b>	<b>120.00</b>		
<b>6</b>	<b>GSS Rectangular ducting (Class VIII Galvanisind Std)</b>				
<b>6.1</b>	<b>22 Gauge Colour Should match with the indoor unit so that it looks as a part of indoor unit</b>	<b>Sqm</b>	<b>120</b>		
<b>7</b>	<b>Duct Insulation with 13 mm Insuation</b>	<b>Sqm</b>	<b>120</b>		
<b>8</b>	<b>Duct Acoustic lining with 25 mm thick fiberglass (density 32 Kg/cb.mt.)covered with RP Tissue paper &amp; perforated AI sheet</b>	<b>Sqm</b>	<b>120</b>		
<b>9</b>	<b>Jet Nozzle Dia 12 inches for supply of air</b>	<b>Nos.</b>	<b>88.00</b>		
<b>10</b>	<b><u>Electricals</u></b>				
<b>10.1</b>	<b>6 x 2.5 sq. mm. Communication &amp; Control cabling with PVC conduits and support clamps</b>	<b>Rmt</b>	<b>135.00</b>		

11	Supply of 4 core 400 Sq. mm. Aluminium PVC insulated Armour and PVC sheathed / XLPE power cable of 1.1 KV grade	Mtrs	400		
			(B)		
12	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation of trenches upto 1 m depth including dismantling of Concrete/ bitumen road/ floor etc, Laying cable on sand cushioning and covering with sand cushion including protective Caution covering as per CPWD Spec. and refilling the trench etc. as required.				
12.1	Above 185 sq. mm and upto 400 sq. mm	Mtrs	400		
13	Fabrication, supply, Installation testing & commissioning of Electrical control panel of cubical construction, floor mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalized with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, interconnection with suitable size copper conductor cable/solid copper strip, having switchgears and accessories, mountings and internal wiring, earth terminals, numbering etc. complete in all respect, as per CPWD specification with following in coming and Outgoings, suitable for operation on 415V, 3 phase, 50Hz Ac Supply with enclosure protection class IP 42 as required :INCOMING: 630A, 50kA 4 Pole MCCB, Ics=100% Icu rating Digital Voltmeter 0-500V with selector switch Digital Ammeter (0-630 A) with selector switch & CTs etc. LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps Set of Aluminium Bus Bar 63A OUTGOING: 02 nos. 250 A, 50kA TPN MCCB, Ics=100% Icu, with overload protection. Timer Control Switch	No	1		

13	Supplying, installing on wall, testing and commissioning of following capacity Air Insulated Compact Type Rising Mains for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply with enclosure having IP-54 rating after fixing the tap off boxes and all accessories, made of 1.6mm thick steel sheet duly powder coated in convenient sections complete with 4 Nos aluminium bus bars having current density of 130 A/ sq cm at nominal current rating, necessary joints & expansion joints, fire barrier at each floor, continuous earthing with 2 Nos aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required. Busbar must have atleast 8 nos. of hole in each phase. The length of Busbar must be atleast 18 inches				
13.1	315 A Isc = 25kA for 1 second	No.	2		
14	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
14.1	63A	No.	13		
15	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
15.1	25 mm	metres	600		
16	4 x 10 sq. mm, 1.5 sq.mm. earthing wire ISI marked, FRLS PVC insulated, copper conductor cable	metres	626		
	<b>EARTHING</b>				
17	Supplying and erecting earth pit of minimum bore dia. 150mm size , approved make Safe Earthing Electrode consisting Pipe-in-Pipe technology as per IS 3043-1987 made of corrosion free G.I. Pipes with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for effective and maintenance free earthing as mentioned below :With 3 mtr. G.I. Pipes having outer pipe dia of 50mm having 80-200 micron galvanizing, Inner pipe dia. of 25mm having 200-250 Micron galvanizing, connection terminal dia.of 12mm in nominal soil with 50 kg (Two Bag) Back filling Compound	Set	1		

18	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	Set	10		
19	Supply Installation of Air Curtain Single-phase, 50/60Hz 220-240/220V Width: 6 feet, Fan Speed: Low, Standard Shut Out Distance: 3 meters, Air volume (m3/h): 4400, along with all accessories required for installation on wall	Nos.	2		
20	Providing and fixing 3mm Thick PVC curtain as per door size with minimum 25% overlap on each side of each strip with width of each strip 200mm., having PVC material of Supersoft quality including all fixtures like 1mm thick powder coated M.S. hangers, DRapery/ M.S. Powder coated rod of sufficient dia and thickness so as to take the load of PVC curtain, Arrangements to hang the curtain rod from the ceiling tc. as required for proper and sturdy installation of PVC CURtains at site with anchoring arrangements and fittings complete in all respect as per design/colour/shade and standard specifications and as directed by Engineer-in-charge. (For payment clear opening of doors/window/ opening size will be measured and nothing shall be paid extra)	Sqm	75		
<b>TOTAL COST OF PROJECT</b>					

**Note:** This is just the format in which the Price bid will be available on the CPP in Macros enabled format. This should be left Blank.  
The contractor is advice to survey the actual site for assessment of critical application if any & accordingly quote the rates.

Signature with seal of the Contractor