



**NOTICE INVITING E-TENDER FOR DESIGNING,
SUPPLY, INSTALLATION, TESTING &
COMMISSIONING OF STANDBY 70TR AIR-
COOLED SCROLL CHILLER PLANT FOR UTSAV
AUDITORIUM AT IIM, LUCKNOW.**

To,
M/S. _____

SUB.: NOTICE INVITING E-TENDER FOR DESIGNING SUPPLY INSTALLATION TESTING & COMMISSIONING OF STANDBY 70TR AIR-COOLED SCROLL CHILLER PLANT FOR UTSAV AUDITORIUM AT IIM, LUCKNOW.

Dear Sir,

Tenders are invited, on behalf of the Director, Indian Institute of Management, Lucknow for DESIGNING SUPPLY INSTALLATION TESTING & COMMISSIONING OF STANDBY 70TR AIR-COOLED SCROLL CHILLER PLANT FOR UTSAV AUDITORIUM AT IIM, LUCKNOW, Prabandh 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.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

NOTICE INVITING E-TENDER

NIT NO. IIML/PROJ/TENDER/2025-26/4488 Dated-21/05/2025

NOTICE INVITING E-TENDER FOR DESIGNING SUPPLY INSTALLATION TESTING & COMMISSIONING OF STANDBY 70TR AIR-COOLED SCROLL CHILLER PLANT FOR UTSAV AUDITORIUM AT IIM, LUCKNOW.

Dear Sir,

E-Tenders are invited from reputed companies for designing, supplying, installing, Testing & commissioning of a standby 70TR Air-Cooled Chiller Plant for Utsav Auditorium at 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	:	Designing Supply, Installation, Testing & commissioning of a standby 70TR Air-Cooled Chiller Plant for Utsav Auditorium at IIM Lucknow
Earnest Money	:	Rs. 82000/- (Rupees Eighty-Two Thousand Only)
Total Estimated Cost	:	Rs. 4100000/- (Rupees Forty-One Lakh Only) (Inclusive of GST)
Period of Contract	:	120 days
Date of issue of tender document	:	As mentioned in the E-procure portal
Date Pre-Bid Meeting	:	As mentioned in the E-procure portal
Late Date for Submission Tender Document	:	As mentioned in the E-procure portal
Date of opening of Technical Bid Opening	:	As mentioned in the E-procure portal
Date of opening of Financial Bid Opening	:	As mentioned in the E-procure portal
starting of work	:	Within 10 days of the Date of LOI

Tenderer 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 scope of work is to **Design and Supply, install a new 70TR air-cooled chiller** on the **rooftop of the porch** while integrating it with the **existing water-cooled chiller plant**. This includes design, supply, installation, testing, and commissioning, ensuring seamless operation with the existing setup and compliance with safety and performance standards.

- A minimum 70-ton chiller plant is required. The technical specification of the chiller would be as per the OEM, and the technical specification of the chiller needs to be attached to the tender.
- Energy-efficient screw/scroll compressors.
- Design of pipeline GA drawing & foundation drawing, and get it approved from Engineer in Charge.
- The control/Starter panel for the chiller should be fixed/ installed in the existing chiller plant control room
- Environmentally friendly refrigerant.
- All the communication cables etc. should be laid till the current control room. The supply and laying of communication cable on the cable rack are within the scope of the vendor.
- Microprocessor-based controls with remote monitoring capability.
- Customized steel frame or RCC foundation with vibration isolation bed/vibration damper, designed for rooftop load distribution.
- Anti-corrosion coating for rooftop exposure.
- Piping (MS/SS/CPVC/GI) with insulation for chilled water distribution. Interconnection & integration of existing piping with the standby system.
- Valves — motorized, isolation, butterfly, balancing valves, NRV, strainers, and drain points. It requires integration with the existing system
- Dedicated control panel with PLC/MCC panel for standalone or integrated operation.
- Power cabling, control wiring, cable trays, and earthing system.
- Energy meters, temperature sensors, and pressure sensors.
- Weather protection enclosure for rooftop installation.
- Operation/ control valve and chiller water control in the current control room. Piping should be done in such a manner that the operator can control the standby chiller plant from the current control room.
- Fabrication and erection of support platforms, vibration isolators, and weather-resistant coatings.
- Use of cranes or mechanical lifts whatsoever is required for safe handling and precise positioning on the porch rooftop.
- Secure anchoring to prevent vibration and withstand wind loads.
- Connect the new chiller to the existing chilled water network with flow-balancing considerations.
- Insulation and weatherproofing for rooftop-exposed piping.
- New power connection or extension from the existing electrical system.
- Control wiring, safety interlocks, and integration with existing BMS/PLC systems.
- Lightning protection and rooftop earthing extensions.
- Proper slope arrangement for condensate drainage from the rooftop unit.
- **Pressure Testing:** Hydrostatic pressure testing of piping networks.
- **Electrical Testing:** Insulation resistance, phase balancing, and load testing.
- **Refrigerant Leak Test:** Ensure refrigerant circuit integrity.

- **Performance Testing:** Measure cooling output under partial and full load. Verify flow rates, pressure drops, and temperature differentials. Test under simulated peak ambient temperature.
- **Safety Tests:** Emergency shutdown, fire alarm interlocks, and power failure simulation.
- **Load Sharing Configuration:** Configure lead-lag operation (if required) between air-cooled and water-cooled chillers for energy optimization.
- **Operator Training:** Hands-on training for maintenance staff on operation, troubleshooting, and energy-efficient running.
- **Documentation:** Submission of as-built drawings, O&M manuals, factory & field test reports, and performance certificates.
- **Defects Liability Period:** 12-month defect liability support post-commissioning.
- Switching provisioning/system for the standby plant in place of the main plant.
- Foundation for the chiller, pipe, etc, is in the scope of the vendor.
- The standby system plant should integrate and synchronize with the existing cooling system, AHU, etc.
- If any equipment/material/Shed/wall/false ceiling is dismantled for work will be replaced in as same condition as it was.
- Chiller piping connection with the existing AHU, etc., with whatever reducer/ connector, etc. required to be in the scope of the contractor.

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. 82,000/- (Rupees Eighty-Two Thousand only) towards Earnest Money Deposit (EMD) to the below-mentioned bank account of the 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 an appropriate place. **Those who are exempted from the deposit of EMD shall upload the valid certificate in this regard.** Bank

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

- (iii) Financial bids 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 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) Original 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. Overwriting of figures is not permitted.
- (xii) 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 rate.
- (xiii) The successful tenderer shall submit additional Initial Performance security of 3% 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 MSME 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 the award of work. A maximum Grace period of 3 Days will be given after the levy of a penalty equal to 1 % of the performance security value per Day. If in case after 15 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 (3%+2%) shall be released after 60 days of satisfactory completion of SITC work which is 6 months (120 days for SITC works + 2 months after satisfactory work completion) 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 finalization of the contract. No interest shall be paid on the amount.
- (xiv) Performance Security deposit shall be the minimum validity of the work period plus two months in the form of a Bank Guarantee/ FDR Drawn on any nationalized bank in favor of the Indian Institute of Management, Lucknow payable at Lucknow, duly signed on the back (enchasing form) by the account holder. EMD of unsuccessful tenderer shall be returned after finalization of the contract. EMD of successful tenderer shall be returned only after deposit of Performance Security deposit. The performance Security deposit will be released after successful completion of work. No interest shall be paid on the amount.
- (xv) 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 as per requirement. 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.

- (xvi) Following procedures shall be adopted in case of difference in quoted rates in figures and words and extensions:
 - a. 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.
- (xvii) 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.
- (xviii) The tender shall be opened & evaluated by the tender committee and the successful tenderer shall be informed.
- (xix) If any of the documents 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.
- (xx) 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.
- (xxi) 5% of the payable bill value will be retained from each bill as a defect liability period & shall be released after defect liability of at least 12 months. No interest shall be paid on the amount.
- (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 15 days from the date of receipt of this Letter of Intent. The cost of non-judicial stamp paper is to be borne by the tenderer.
- (xxiii) Tenderer can avail relaxation (in tender fees and EMD only, no relaxation will be given for experience) given as per Govt. norms for NSIC/MSME registered firm. MSME exemption will only be given to the OEM of the chiller plant.
- (xxiv) The successful tenderer's uploaded document will be verified with the original at the time of LOI / Agreement.

(xxv) Tender terms & condition also includes GCC, which is uploaded on the IIML website and also be part of this contract and its terms and conditions shall be binding 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>

(xxvi) Intending parties are required to submit an undertaking that their firms have never been debarred/blacklisted by any Government/Public sector Dep't. 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:

Undertaking to be furnished by the intending Tenderers:-

I/We declare and confirm that: -

- i. I/we have never been blacklisted /debarred from IIM, Lucknow or any Govt. /Public sector enterprises.
- ii. There is no criminal case on me/ and my partner/ board of directors is there in any court/Police station of India.
- iii. All the information and attachments submitted in the tender document/ envelope are true and correct.
- iv. There been no suppression or concealment of information/document with regard to the 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.

(xxvii) If any discrepancy/misprint is Noticed in the specification or BOQ or rates or unit, it should be clarified by the Institute before quoting the rate. If any discrepancy between the price bid format of this Tender document and macros enabled Excel file of the actual price bid on the 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 an issue is found at a later stage after the 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 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 st March 2024. (Copy of Annual Audited Accounts Statement for each year or the certificate for the average Turnover of the Tenderer issued by a a registered Chartered Accountant). The certificates being submitted by the bidder should carry UDIN. Please submit the certificate only	
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.)	
10.	Make and specification of Air-Cooled Chiller (Attached)	
11.	Technical Data Sheet of Air-Cooled Chiller (As per the parameters on page 27-28)	

Eligibility Criteria

a) ANNUAL TURN OVER:

Average annual financial turnover during any Three years from the last 5 financial years ending 31st March 2023 of the previous financial year. **This Condition is Mandatory.** The Bidder has to enclose documentary proof clearly indicating Turnover.

b) The Bidder should have experience 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 Chiller Plant in total for a single work** in Any Government/PSU/ Autonomous Body such as IIM, 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 22-23. **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:

- In case needs exemption under MSME criteria then a valid MSME 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 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 (only to OEM of chiller manufacturer) for Tender Fee will be as per the format available on CPP portal. This Condition is Mandatory

e) **EXPERIENCE:**

(I) **Experience in SITC of Chiller Plant** 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 23-24/22-23/21-22/20-21/19-20. 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 should be either of the following.

i. **Three completed contracts of SITC of Chiller Plant costing not less than Rs 16.40 Lakhs each.**

OR

ii. **Two completed contracts of SITC of Chiller Plant costing not less than Rs 24.60 Lakhs each.**

OR

iii. **One completed contract of Chiller Plant costing not less than Rs 32.80 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. Experience Certificate is essential
- (2) The meaning of "Similar Work" for the purpose of the tender has been defined as **"SITC of Airconditioning System, i.e. HVAC/Chiller/AC system with Chiller Plant as its part"**. Experience only in the SITC of the window/split will not be

considered.

- f)** Copy of PAN/ GIR No. Registration certificate issued by the Income Tax Authority. This Condition is Mandatory.
- g)** Copy of Certificate of GST number. This Condition is Mandatory
- h)** 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.
- i)** 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.
- j)** Declaration/Undertaking for the supply of spare for 15 years from OEM. (Format attached as ANNEXURE-A)
- k)** The OEM must have a service center in Lucknow. This Condition is Mandatory
- l)** The OEM must be established not less than 25 years from the last date of bid submission. Documentary proof must be attached.
- m)** The manufacturer shall be compliant with the Public Procurement (Preference to Make 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)** Escalation matrix for service and maintenance.
- o)** Technical Datasheet of Air-Cooled Chiller plant.
- p) Undertaking to be furnished by the intending D E C L A R A T I O N**
 - 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 Directions, Conditions of Contract, clauses 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 upload on iiml.ac.in.

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

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 the tender and not to make any modifications to its terms and conditions.

A sum of Rs. 82,000/- is hereby forwarded in the IIML account through RTGS/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 L1 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 L1 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, award the work to other agency as per the discretion of IIM, Lucknow and can debar 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 IIM, 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 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 IIM, 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 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
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, IIML 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. IIM, Lucknow where the project is to be executed.
- (vii) **'PROJECT'** shall mean the 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 IIML to the tenderer intimating 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 this 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. Link <https://www.iiml.ac.in/sites/default/files/upload/tender/293037022gcc.pdf>

F. SPECIAL CONDITIONS OF CONTRACT.

1.1 Directive to Contractor

1.1.1 Interpretation of Contract Documents:

- (i) All the documents (such as NIT, 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 IIML 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 the job for Supply Installation Testing & commissioning of standby 70TR Air-Cooled Chiller Plant for Utsav Auditorium at IIM Lucknow shall be completed 120 days from the date of issue of LOI (Letter of Intent).

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 drawings indicate the extent and general arrangement of the equipment, landings, hoistways etc. and area essentially diagrammatic.

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 exact as could be secured, but its complete accuracy is not guaranteed. Exact locations, distances and levels will be governed by the site conditions.

1.1.5 Coordination with other agencies

The successful contractor shall coordinate air cooled chiller installation work with other contractors/agencies engaged in the construction of the building/other electrical works if any and exchange freely all technical information so as to make the execution of the works contract smooth.

1.1.6 Completeness of tender

All fittings, equipment, units, assemblies and accessories, hardware, foundation bolts, terminal lugs for electrical connections, cable glands, junction box 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.

1.1.7 Scaffolding

Scaffolding, and minor builders work including providing dash fasteners for fixing rails, brackets, etc. shall be the responsibility of the Contractor.

1.1.8 Steel

The contractor shall include in his scope of work all 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.

1.1.9 Statutory Approvals

The Contractor shall submit the required applications, drawings, etc to the Corporation, Electrical Inspectors, Factory Inspectors and/or any other statutory authorities and obtain the approval, licenses and/or sanctions. The final completion certificate shall be obtained by the Contractor from all statutory authorities to enable the Owners to commission the equipment or its utilization. The Contractor shall be responsible for all fees etc to be paid to the various authorities in this respect. The work shall not be deemed to have been completed until the above approval certificates, etc have been obtained by the Contractor.

1.1.10 Spares

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

1.1.11 Documentation

The Contractor shall provide three sets of operation & maintenance manuals with instructions for routine and periodic maintenance.

1.1.12 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 IIML as per the affected period may extend the time period as per the discretion of the Director of the Institute.

1.1.13 Default of Contractor:

If the contractor fails to maintain progress and quality of work proportionate to time period allotted for the work in spite of notices or complete the work within the stipulated time period or extended time period, then the IIM shall have the right:

- (i) **To determine the contract:** In this event, the contract shall be terminated by giving written notice to the contractor and the unfinished works shall be got completed by labour's engaged by IIM or through other agency at the cost of the contractor. Either party hereto may terminate the Agreement without cause at any time, upon at least thirty (30) days written notice. If the contract is terminated due to poor performance or non-performance or reason of bidder's convenience the security money would be forfeited. If any loss of property occurs due to negligence of the party, the amount of loss of property decided by the competent authority would be deducted from the running bill along with the forfeited of Performance Security.
- (ii) **Without determining the contract:** In this event, the remaining works shall be got executed through a fresh contractor in which case the contractor shall not have any objection or claim on this account.
- (iii) **Before determining the contract:** In this event, if the IIM finds that the defaults of the contractor can be rectified, then an opportunity shall be given to the same contractor to rectify the defects / defaults in the specified time.
- (iv) **Termination of contract for death:** If the contractor is an individual of a proprietary firm and proprietor of the firm dies and if the contractor is Attorney of partnership firm and dies, then the IIM has the right to terminate the contract unless and until the IIM is satisfied that the surviving partners are capable of executing and completing the remaining contract. In case of termination of contract, the legal representatives of the deceased contractor are not entitled for any compensation or claim. Also, the IIM shall not levy any penalty against the damage caused by incomplete work.
- (v) **Termination of Contract in part or in full for contractors default:** If the contractor fails to execute the work in the manner described in the contract documents or if at any time, in the opinion of the IIM:
 - a. Fails to carry out the works in accordance with the contract conditions or as per the specifications mentioned in the documents.
 - b. Stops the execution of works without giving prior information to the IIM.
 - c. Fails to carry out the works to the satisfaction of the Engineer-In-Charge, both with respect to quality and time schedule.
 - d. Fails to supply sufficient or suitable work, materials, and labour's etc.
 - e. Commits a breach of any of the provisions of the contract.
 - f. Abandons the work.
 - g. Becomes bankrupt during the continuance of the work. Whenever the IIM shall exercise his authority to cancel the contract under the above condition, the IIM shall be at liberty to hold and retain in their hands materials, tackles, machinery and stores of all kinds on site as they may think proper and may at any time sell any of the materials, tackle, machinery and stores and apply the proceeds of sale in or towards the satisfaction of any loss which may arise from the cancellation of contract as aforesaid. The IIM shall also be at liberty to use materials, tackle, machinery and other stores on the site of contractor as they think proper in completing the work and the contractor will be allowed the necessary credit. The value of materials and stores and amount of credit to be allowed for tackle and machinery belonging to contractor and used by IIM

in completing work shall be assessed by the IIM and amount assessed shall be final and binding on the contractor. In case IIM completes or decides to complete the work under the provisions of this condition, the cost of completion to be taken into account in determining the excess cost to be charged to the contractor under the condition shall consist of the cost of materials purchased or required to be purchased, labour provided or required to be provided.

1.1.14 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, meaning 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. 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 IIM, Lucknow and the contractor.

1.1.15 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 IIML as mentioned in the contract document.

1.2.2 Inspection of works:

- (i) The IIML 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 IIML can convey the instruction regarding the works.

- (ii) The contractor shall give information to the IIML 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 IIML 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 IIML regarding any of the works, then the same shall be got executed by engaging other contractors/ persons by IIML at the risk and cost of the contractor & performance security & available retention money will be 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 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. IIM, LUCKNOW Specifications.
- v. Indian Standard Specifications of B.I.S.
- vi. G.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 IIM's staff, the contractor shall report the matter immediately to the IIM. The decisions of IIML 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 IIML 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 IIML 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 IIML 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 IIML as to any question arising under this clause shall be final and conclusive.

1.2.7 Period of warranty:

The contractor has to carry out Comprehensive Maintenance for 12 months from the date of handing over. Nothing extra shall be paid for this.

1.2.8 Suspension of work:

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

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. IN such a case, the contractor shall be entitled to 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 IIML 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:

The following percentage of contract rates for the various items included in the contract shall be payable against the stage of the work shown herein.

- a. 70% after initial inspection and delivery of material at the site in good condition on a pro-rata basis. (For BOQ SNo. 1)
- b. 20% after completion of installation in all respects.
- c. Balanced 10% will be paid after testing, commissioning, trial run for complete functionality, and handing over to the department for beneficial use.
- d. Payment will be made in 03 RA Bills.

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 IIML be responsible if the cheque is misled or misappropriated by the contractor or his representatives.
- (ii) The IIML reserves the right to carry out post payment audit and technical examination of the bills and work executed including all supporting vouchers etc. the IIML 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 Retention money/ security deposit & shall be released on the satisfactory completion of the job after the defect liability period. No interest shall be paid on the security deposit amount.
- (v) **Tax Deduction:** 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 IIML 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.

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

If the contractor fails to comply with the requirements of the above on or before the date for the completion of the works, the IIML may, at the expense of the contractor, remove the tools and plants, hutment 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 labours engaged by him on the work.
- (iii) The contractor shall, at his own expenses, comply with all labour laws and the IIML 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 IIML, 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 IIML 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 IIML, 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 IIM.

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 signs 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 clear workforce availability for other agencies working at the site.
- (ii) The finish of work shall be as per the details given by IIM.
- (iii) In general, the complete work is to be done as per Indian Standards and aesthetic norms as specified and detailed in the Tender.

1.7 Site

The site is located at IIM, Lucknow, IIM 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 & Water

Electrical power and water at one point is to be provided by the IIM free of cost. The Contractor will be responsible for getting electrical connectivity from the point specified IIML to his work site, including the supply 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, shall be procured and supplied by the contractor at his own cost except for any items specified as IIML-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 Biding with IIM Lucknow 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 IIML 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 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
PRABANDH NAGAR, IIMLROAD
LUCKNOW-226013**

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

TECHNICAL DATASHEET

DESCRIPTION	UNITS	PARAMETERS
NOMINAL COOLING CAPACITY	TR	AHRI Certified 70 TR inverter Scroll Chiller
<u>ELECTRICAL POWER SUPPLY:</u>		
(A) POWER SUPPLY	V / PH / HZ	400±10% V , 3 PH. , 50HZ±3% , AC
(B) TOTAL CURRENT AT RATED LOAD	AMP	150-175 (Unit operating current at 100% load)
(C) POWER CONSUMPTION AT RATED LOAD	KW	90-100
<u>OVERALL DIMENSIONS:</u>		
(A) LENGTH	mm	Chiller Package Size (L x W x H mm) 2625 X 2236 X 2440 or OEM Standard
(B) WIDTH	mm	
(C) HEIGHT	mm	
<u>REFRIGERANT CHARGE (407C) / 410A</u>	kg.	60-70, depending on capacity Operating Weight (kgs.) 3350 Depending on the OEM standard
<u>UNIT WEIGHT (APPROX.):</u>	kg.	
<u>COOLER INSULATION</u>	MATERIAL / THK	
<u>COMPRESSOR:</u>		
(A) QUANTITY	No.	4/5
(B) TYPE		HERMETICALLY SEALED SCROLL
(C) MAKE		OEM standard
(D) MODEL		OEM standard
(E) OPERATING SPEED	RPM	OEM standard
(F) DISPLACEMENT	CU M/HR	OEM standard
(G) MOTOR PROTECTION		OEM standard
(H) TYPE OF LUBRICATION		OEM standard
(I) OIL CHARGE/COMPRESSOR	Litres	OEM standard
(J) POWER SUPPLY	V / PH / HZ	OEM standard
(K) OPERATING VOLTAGE RANGE	V	OEM standard
(L) MOUNTING ARRANGEMENT		OEM standard
(M) WEIGHT OF EACH COMPRESSOR	Kg	OEM standard
(N) LOCK ROTOR CURRENT/ COMPR	AMP	OEM standard
(O) CRANK CASE HEATER	Watts	OEM standard
<u>CONDENSER:</u>		
NO OF COILS	No.	OEM standard
(A) TOTAL FACE AREA	Sq. Mt.(SQ FT)	OEM standard
(B) TUBE MATERIAL	MATERIAL	OEM standard
(C) OD x THICKNESS	mm x mm	OEM standard
(D) TOTAL TUBE OUTER SURFACE AREA	Sq. FT	OEM standard
(E) TOTAL TUBE INNER SURFACE AREA	Sq. FT	OEM standard
(F) TYPE OF FIN		OEM standard
(G) FIN MATERIAL	MATERIAL	OEM standard
(H) FPI	FIN PER INCHES.	OEM standard
(I) ROWS DEEP	No.	OEM standard
<u>CONDENSER FAN MOTOR:</u>		
(B) TYPE		OEM standard
(C) QUANTITY	No.	OEM standard

(D) POWER SUPPLY	V / PH / HZ	OEM standard
(E) POWER	KW / HP	OEM standard
(G) SPEED	RPM	OEM standard
(H) FULL LOAD CURRENT	AMP	OEM standard
(I) SHAFT DIAMETER	mm	OEM standard
(J) CLASS OF INSULATION	CLASS	OEM standard
(K) CONNECTION		OEM standard
<u>FAN FOR CONDENSER UNIT :</u>		
<u>Air-flow over condenser</u>	CFM	OEM standard
(A) QUANTITY	No.	OEM standard
(B) FAN DIA	mm	OEM standard
(C) MATERIAL		OEM standard
(D) HUB BORE DIA	mm	OEM standard
<u>DX-COOLER</u>		
(A) TYPE		Single/TWIN CIRCUIT
(B) SHELL OD & THK	MM	OEM standard
(C) TUBE TYPE & MATERIAL		OEM standard
(D) NO OF TUBES	NOS	OEM standard
(E) TUBE OD & THICKNESS	IN	OEM standard
(F) SURFACE AREA (OUTSIDE)	Sq. FT	OEM standard
(G) SURFACE AREA (INSIDE))	Sq. FT.	OEM standard
(H) OVER ALL LENGTH	MM	OEM standard
(I) NO. OF PASS /EACH CRT	NOS	OEM standard
(J) WATER CONNECTION SIZE IN/OUT.	INCH	OEM standard
(K) NO OF REFRIG CIRCUIT	NOS	OEM standard
<u>EXPANSION DEVICE:</u>		
(A) TYPE		OEM standard
(B) MAKE		OEM standard
(C) QUANTITY	No.	OEM standard
(D) SUPER HEAT SETTING	DEG C	OEM standard
<u>FILTER DRIER :</u>		
(A) TYPE		OEM standard
(B) MAKE		OEM standard
(C) QUANTITY	No.	OEM standard
(D) SIZE OF SAE FLARE CONNECTION	INCH	OEM standard
<u>PRESSURE SWITCH :</u>		
(i) TYPE	EACH	OEM standard
(ii) QUANTITY	NOS	OEM standard
(iii) RANGE - HIGH PRESSURE	PSIG	OEM standard
LOW PRESSURE	PSIG	OEM standard
(iv) ELECTRICAL RATING		OEM standard

CONTROLLER (ELECTRONIC MICROPROCESSOR) MODE THERMOSTAT SINGLE PHASING PROTECTION REVERSE POLARITY PROTECTION COMPRESSOR RESTART PROTECTION TIME DELAY BETWEEN SYSTEM SHORT CIRCUIT PROTECTION ANTI FREEZE PROTECTION DISPLY ON MICORO CONTROL PASS WORD PROTECTION COMPRESSOR CURRENT TRANSFORMER	AUTO SEC 5 DEG C LED LED/SWITCH LED/SWITCH DEG C DEG C DEG C	OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard OEM standard
FUSE(CONTROL CIRCUIT) QTY MAKE TYPE RATING	NOS	OEM standard OEM standard OEM standard OEM standard
FUSE(CRANKCASE) QTY MAKE TYPE RATING	NOS	OEM standard OEM standard OEM standard OEM standard
INCOMING CABLE SIZE	MM2(ALUMINIUM)	OEM standard
ISOLATOR SWITCH SIZE	Amps	STANDARD OEM standard

APPENDIX-I

ANNEXURE – A

DECLARATION OF SPARES/ SERVICES SUPPORT: Manufacturer's Authorization

Date: _____

To:

WHEREAS

We _____ (OEM Name and Address), who are official manufacturers of _____ (Air Cooled Chiller 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 _____ (Air Cooled Chiller Component Description). We hereby authorize M/s ----- (Bidder Name) for Supply Installation Testing & commissioning of standby 70TR Air-Cooled Chiller Plant for Utsav Auditorium at IIM 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 with Date

FINANCIAL BID

FINANCIAL BID

BILL OF QUANTITY

S.no	Description	Qty	UOM	Rate	Amt
1	Supply, installation, testing & commissioning of Air-Cooled Scroll Chiller Package (MAKE: BLUE STAR/VOLTAS/CARRIER), Skid-mounted self-contained air-cooled chiller Unit, complete with 4/5 Nos. scroll compressors, unit mounted appropriate starter as per OEM, shell and tube and cooler, condenser coil with fans, refrigerant (R-407C / R-410A) piping, thermostatic expansion valve, microprocessor control panel, all necessary safety and operating controls, as per enclosed technical data sheet with an additional panel control/starter panel, along with all accessories in the existing chiller plant room	1	No.		
2	Supply & installation of 100 mm dia MS class 'C' Chilled Water Piping including elbow, tee, reducer etc. (Make: Jindal / Tata).	100	Rmt		
3	Supply & installation of TF quality, 16 kg/cum density, 50 mm thick EPS insulation for Chilled Water Piping covered with wire mesh, sand & cement plaster and painting on above chilled water pipe.	120	Rmt		
4	Supply & installation of 100 mm dia Balancing Valves including flanges, nut, bolt & gasket complete in all respects (Make- Castle / Advance) covered with wire mesh, sand & cement plaster and painting.	2	Sets		
5	Supply & installation of 100 mm dia Butterfly valves with lever including flanges, nut, bolt & gasket complete in all respects (Make-Castle / Advance) covered with wire mesh, sand & cement plaster and painting.	4	Sets		
6	Supply & installation of 100 mm dia 'Y' Strainer including flanges, nut, bolt & gasket complete in all respects (Make- Castle / Sant) covered with wire mesh, sand & cement plaster and painting.	2	Sets		
7	Supply & installation of 100mm dia dial type water pressure gauge with syphon & cock. Range: 0 to 7 Kg/cm ² (Make- H Guru/ Eqv)	4	Nos		
8	Supply & installation of 100mm dia dial type Thermometer with fitting. Range: 0-50 °C (Make- H Guru / Eqv)	4	Nos		
9	Supply & installation of Water flow switch in the chilled water line.	2	No.		

10	Supply & installation of an Auto air vent in the chilled water line.	2	No.		
11	Supply & installation of 25 mm dia Ball valve for drain in chiller.	4	Nos		
12	Supply & laying of 3.5C X 185 sq. mm. Aluminium armoured power cable (Make - Polycab / KEI / Havells / Eqv)	50	Rmt		
13	Supply & laying of 2C X 1.5 sq. mm copper multi strand cable (Make - Polycab / KEI / Havells / Eqv)	80	Rmt		
14	Supply & installation of Isolating switch	1	Lot		
15	Supply & installation of 100 x 40 x 40 mm GI perforated cable tray. Clamped on the wall and 150 x 150 x 200 mm PCC columns with an angle support on top of the roof.	40	Rmt		
16	Minor civil work for the foundation for the chiller unit and cutting & finishing of the wall for laying of piping & cabling. Repair any damage done during execution	1	Lot		
17	Supply, Fabrication & Installation of mild steel ladder made up of M.S. Angle, Flat & M.S. pipe railing with proper design to take the load of the machine during loading & unloading For Step Min. Angle size 35 x 35 x 5 and strip 25 x 3, and side step support angle size 50 x 50 x 6 built up in truss kind of section for taking the load. The width of the step is to be 100 cm and a railing on both side.	1	Lot		
	Total				
(GST will be paid extra as applicable)					

Note: The contractor is advised to survey the actual site for assessment of critical applications if any & accordingly quote the rates.

Signature with the seal of the Contractor