HOMI BHABHA CENTRE FOR SCIENCE EDUCATION

Tata Institute of Fundamental Research Autonomous Institution of the Atomic Energy, Government of India (A Deemed University)

V. N. Purav Marg, Mankhurd, Mumbai – 400 088. Telephone: 022-25072100/6310 2100 E-mail: <u>purchase@hbcse.tifr.res.in</u> Website: <u>www.hbcse.tifr.res.in</u>



NIT cum Tender Document for

ANNUAL MAINTENANCE CONTRACT (COMPREHENSIVE) OF REFRIGERATION, AIR CONDITIONING AND WATER COOLERS INSTALLED AT HOMI BHABHA CENTRE FOR SCIENCE EDUCATION-TIFR FOR THE YEAR 2025-2027

Date: October 14, 2025 (TENDER NO: HBC/P-S/PUBLIC TENDER 29/2025-26)

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SECTION 1: NOTICE INVITING TENDER

Ref: HBC/P-S/PUBLIC TENDER 29/2025-26

Annual Maintenance Contract (Comprehensive) of Refrigeration, Air Conditioning and Water Coolers Installed at Homi Bhabha Centre for Science Education – TIFR for the year 2025-2027 Estimated Cost only = Rs. 48,16,784.78/(Incl. GST)

Date: October 14, 2025

Earnest Money Deposit (EMD): Rs. 96,336/-

(Rupees Ninety-Six Thousand Three Hundred Thirty-Six only) by way of Demand Draft in favour of "HBCSE" payable at Mumbai. Alternatively, this amount can be remitted by bank transfer. The details are as follows: HBCSE-TIFR Non Plan A/C, Account No.:1038019943 Bank Address: Central Bank of India Jigna Apartment, Sion-Trombay Road,

Mankhurd, Mumbai – 400 088 IFSC Code: CBIN 0282523.

<u>Contract Period</u>: The Contract will be valid initially for a period **Two year** commencing from date of signing of contract. However, in order to evaluate the performance and services of the service provider, the contract shall have **probationary period of three months**. The contract for the remaining contract period shall be confirmed only if the qualities of services/ work performed by the service provider are found satisfactory during the probationary period.

Tender documents can be downloaded from HBCSE website: www.hbcse.tifr.res.in/tenders or https://eprocure.gov.in/epublish/app

Pre-bid meeting with all the prospective bidders is schedule to be held on October 21, 2025 at 11:00 hrs at Homi Bhabha Centre for Science Education - TIFR, V.N. Purav Marg, Mankhurd, Mumbai, Maharashtra - 400 088. Interested bidder to attend the pre- bid meeting and site visit to understand the exact requirements. Tender should reach us before or on November 03, 2025 by 14.30 hrs. (BID DUE DATE)

Tender (Technical bid only) will be opened on **November 03, 2025** at 15.30 hrs.

Tender (Financial bid only) will be opened on – The date and time of opening of financial bids will be conveyed to the Technically suitable bidders through e-mail and Telephone.

Contract Period: Two (02) years after the date of issue of Work Order/ LOI/ PO or date of completion of Handing Over taking over process whichever is latest.

Bids under **TWO Bid System** (Technical + Financial Bid) are invited on behalf of Centre Director, HBCSE Mumbai for award of contract for 'Annual Maintenance Contract (Comprehensive) of Refrigeration, Air Conditioning and Water Coolers Installed at Homi Bhabha Centre for Science Education – TIFR for the year 2025-2027'. The details of the tender including the scope of work, technical specification, drawings (if applicable) etc. is given in this tender document. All the prospective bidders are requested to go through the tender document before submitting their bids.

Quotation sent by hand delivery/courier are to be deposited in the Tender Box kept at the Main Gate after obtaining stamp, date and signature of the Security Officer.

To assess the nature of job, bidder must visit the HBCSE site before bidding. Bidder may seek prior appointment for site visit. The contact person is Shri. Srikanth Banda (Tel No. 25072121/6310 2121, Email: banda@hbcse.tifr.res.in.)

Tenders to be sent to:

Head, Administrative Operations

Homi Bhabha Centre for Science Education

V. N. Purav Marg, Near Anushakti Nagar Bus Depot, Mumbai – 400 088.

Bids sent by Fax/email shall be rejected straightway. The Centre reserves the right to accept/ reject the proposal either in part or in full without assigning any reasons.

Sd/-

Head Administrative Operations For and on behalf of Centre Director, HBCSE

SECTION 2: PRE-QUALIFICATION/ELIGIBILITY CRITERIA

Bidders are required to comply with the following eligibility criteria.

1. Pre-bid meeting and Site Visit.

- i. Interested bidder to attend the pre-bid meeting and visit the site to understand the exact requirements of the
- ii. The bidder may collect information, understand the work requirement, and satisfy himself/ herself about the location, and accessibility of the site, nature/ extent/ character of services/ work and obtain required clarifications, if any, in connection with the execution of the work.
- 2. Registration /empanelment /worked in past with Government organizations like CPWD, MES, Railways, State PWDs etc. /Semi Government organizations, PSUs etc. / reputed private organizations in appropriate class and having experience in execution of similar nature of works.
- 3. The contractor should have zonal office in Mumbai Metropolitan Region, Maharashtra only.
- **4.** Annual turnover as per ITCC or profit & loss statement for the last 3 financial years should be at least **Rs. 48,16,784.78/** not having incurred any loss in more than 2 years during last 5 years ending 31st March, 2025.
- **5.** Experience of having successfully completed the following works (during last **Three** years ending 31st March, 2025):
 - i. One similar order not less than Rs.38,53,428/-; Or
 - ii. Two similar works completed costing not less than Rs.28,90,071/- each; Or
 - iii. Three similar works completed costing not less than Rs.19,26,714 /- each

Similar works: Shall means maintenance of Refrigeration, Air conditioning systems and water coolers, supply and fixing of air conditioners and misc. works of BOQ mentioned magnitude of quantities. The quality & satisfactory performance of the submitted work will be verified by HBCSE technical team if required by inspecting the said work.

Notes:

- 1. The above (Pre-qualification criteria) should be supported by relevant documentary evidence like copies of work orders and completion certificates issued by clients indicating the detailed scope of work covering the above aspects, value of work, completion/commissioning dates etc., in support of meeting all the qualification criteria given as above.
- 2. Relaxation may be provided from the above-mentioned pre-qualification criteria for the firms registered under MSME / NSIC.
- **3.** The certificates submitted, as evidence of works executed for private organization should be accompanied with TDS certificates. These certificates in addition to the certificates issued by the organization shall form the basis for considering experience of work executed for private organization.
- **4.** The offers of the Bidders not meeting the pre-qualifying requirements and not producing supportive documents are likely to be rejected.
- **5.** HBCSE reserves the right to verify the documents/ information submitted or inspect the installation done. The Bidder shall provide necessary facilities for this purpose.
- 6. Even though the Bidders meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted in proof of qualification requirements; and/or record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, in case of blacklisting by any PSU/Govt. body, or financial failures etc.
- 7. The Contractor must confirm in writing that the spares supplied & installed by them shall be as per specification of goods and in case of any variation, the contract shall be liable to cancel immediately.

SECTION 3: INSTRUCTIONS TO BIDDERS

A) General Instructions:

- 1. The Prospective bidder shall carefully examine and understand the specifications/conditions of the tender document/RFP and seek clarifications in writing if required, to ensure that they have understood all specifications/conditions of tender. These clarifications should be sought before submission of bids. If no such clarifications are sought in writing, it will be taken that the Bidder has read, understood and accepted all the terms, conditions and specifications in the tender document.
- 2. The Bidder is required to submit a copy of this tender document, with all pages signed by the authorized person, to confirm that Bidder has read and understood the conditions of this tender document and that the proposal is submitted in full understanding and agreement of the requirements of HBCSE.
- **3.** The Bidder shall bear all costs associated with the preparation and submission of the Bid, and HBCSE will in no case be responsible for those costs, regardless of the conduct or outcome of the bidding process.
- **4.** HBCSE reserves its rights to amend any of the terms and conditions of the tender document. All such changes can be made up to one week before the last date of submission of bid. The notice of such amendment will be published on HBCSE website only. No separate advertisement will be issued in the newspapers for such changes/Corrigenda. All the prospective bidders are therefore requested to regularly visit HBCSE website for any such updates.
- 5. The complete bid will be as per the specified formats only. The bids should be without alteration or erasures, except those to accord with instructions issued by the HBCSE or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- **6.** The bidder shall submit only one option, which is best suitable to meet HBCSE requirements. The bids submitted with more options shall be liable to be rejected.
- 7. The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and HBCSE, shall be in English only.
- **8.** Wherever a specific form is prescribed in the Bid document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the said information. For all other cases, the Bidder shall design a form to hold the required information.
- 9. The Bidder shall explicitly indicate the non-compliance or deviation of the Solution offered in the Proposal to all the terms, clauses, conditions and specifications stipulated in this document. If non-compliance or deviation for any term, clause, condition or specification is not explicitly indicated, it will be construed as compliance and if successful in the bid, the bidder is obligated to comply with all the requirements (excluding those non compliances explicitly accepted by HBCSE in writing).
- 10. Successful bidder shall perform all the obligations specified in accordance with the terms and conditions laid down in the tender document. All details provided by the Bidder should be specific to the requirements specified in this tender document. Detailed clarification may be provided by Bidder, if so desired by HBCSE. The Bidder shall specify the responsibilities of HBCSE, if any, separately for the successful implementation of the project.
- 11. Bidder/Contractor should accept the instructions, guidelines, & clauses reinforced by HBCSE and conveyed to the vendor from time to time at any point of contract period.

12. Bidder shall ensure that all documents are submitted with the technical bid. The bid should contain the following documents:

- i. Copy of PAN (Permanent Account Number) card.
- ii. Valid Registration Certificate of the Firm and Contractor license.
- iii. List of similar works in hand & works carried out by them for last 3 years indicating A) Agency for whom executed, B) Value of work, C) Completion time as stipulated and actual, or present position of the work.
- iv. PF, ESI registration copies.
- v. Experience testimonials along with work orders and completion certificates.
- vi. Certificate of Registration for GST, Audited Balance sheets signed by charted accountant & Income Tax of up to date filed return.
- vii. EMD (Earnest Money Deposit) In the form of Demand Draft as described in format or if paid through bank transfer a receipt of the same should be attached.
- viii. Entire tender document (Inclusive of all Annexures), duly signed & sealed on every page by the contractor, along with technical information Annexures as per attached format and subsequent necessary supporting documents.
- ix. The bidder should have an office at Mumbai or nearby areas.

- x. Shall have adequate technical manpower on its rolls in the form of skilled & unskilled staff. The details on the type of organization (i.e., sole-proprietor or partnership or company), organization matrix etc. shall be provided.
- xi. The bidder must be associated with and have valid authorization from a minimum of two OEMs likely Voltas, Hitachi, Daikin, Blue star and O General etc.... (Original Equipment Manufacturers).
- B) Earnest Money Deposit (EMD): An earnest money for Rs. 96,336/- i.e. 2% of the total estimated cost has to be deposited in the form of Demand Draft, Fixed Deposit Receipt, Banker's cheque or through online transfer through bank in favour of 'Homi Bhabha Centre for Science Education' Mumbai along with the Technical Bid (Part 'A'). After online transfer of earnest money, the vendor should intimate us by email or proof of online transfer of EMD should be part of tender.

EMD shall be interest free and it will be refunded to the unsuccessful bidder without any interest. EMD will be forfeited if the bidder withdraws or amend impairs or derogates from the tender in any respect. **Kindly submit your bank details along with the tender like Cancelled Cheque/NEFT/Bank A/C details.**

C) Bid Security Declaration:

The firms registered under MSMEs are exempted from submission of EMD as per rule 170 of GFR 2017, provided they must submit a 'Bid Securing Declaration' as per the format in the annexure. The declaration should be submitted on the company letterhead duly signed by the officer authorized to submit the bid.

If the bidder withdraws amends/ impairs or derogates their bid during the period of bid validity, Centre reserves the right to suspend the vendor from participating in any tender for a period of three years.

D) Performance Guarantee: The tenderer, whose tender is accepted, will be required to furnish a performance Guarantee of 5% of the WO value within **7 (seven) working days** from the date of intimation. This Guarantee shall be in the form Demand Draft / Pay Order / Banker's cheque issued by a Scheduled Bank in favour of **'Homi Bhabha Centre for Science Education'**.

The performance guarantee shall be returned to the contractor, without any interest, after recording of the completion certificate for the work by the competent authority and submission of final bill by the contractor as per the joint measurement within 60 days.

The Engineer-in-charge shall make a claim under the Performance guarantee for amounts to which the Centre Director, HBCSE entitled under the contract (notwithstanding and / or without prejudice to any other provisions in the contract agreement) in the event of: Failure by the contractor to pay Centre Director, HBCSE any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in- charge. In the event of the contract being determined under provisions of any of the relevant clauses of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Centre Director, HBCSE. For Successful tenderer the EMD shall be returned to the contractor, without any interest, after receiving of Performance Guarantee and for unsuccessful tenderers EMD will be refunded after placing the order on successful tenderer.

- E) Security Deposit: The tenderer, whose tender is accepted, will also be required to furnish by way of Security Deposit for fulfillment of his contract, an amount equal to 2.5% of the value of the work. The successful tenderer shall permit HBCSE at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 2.5% of the gross amount of each running bill. The Security Deposit shall be released after the Defect Liability Period reckoned from the date of completion as certified by Engineer.
- F) Defect Liability period: Twelve (12) months from the satisfactory completion of work (for works carried out under Annexure –B' only).
- G) In case Bidder finds discrepancies or omissions from the specifications or other documents or has any doubt as to their meaning, he/she shall at once request in writing to the Head, Administrative Operations (HBCSE) who will issue interpretation and clarifications as he/she may consider necessary in writing as an addendum. Copies of such addenda, if issued, shall be signed by the Bidder and shall form a part of his bid. Verbal clarifications given shall not be binding on HBCSE.
- **H)** HBCSE does not bind itself to accept the lowest or any bid/ all bids or a portion hereof. HBCSE is competent to reject any or all offers without assigning any reason whatsoever or to split the contract or to eliminate the portion of contract during the progress of work due to unsatisfactory work. HBCSE will not entertain any claim from the contractor as a result of such action on the part of the owner.

I) Micro and Small Enterprises (MSEs):

As per the Public Procurement Policy (PPP) for Micro and Small Enterprises (MSEs) Order, 2012 issued vide Gazette Notification dated 23.03.2012 by Ministry of Micro, Small and Medium Enterprises of Govt. of India, in order to avail the EMD exemption, the MSEs, must have valid UDYAM registration as on due date for submission of a bid.

The MSEs who have applied for registration or renewal of registration with any of the agencies/bodies, but have not obtained the valid certificate as on close date of the tender, are not eligible for exemption/preference.

- J) Acceptance of Tender: The competent authority, on behalf of Centre Director, HBCSE, Mumbai, does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all the tenders received, without assignment of any reason. All tenders, in which any of the prescribed condition is not fulfilled or any condition, including that of conditional rebates is put forth by the tenderer, shall be summarily rejected. The Competent Authority, on behalf of HBCSE, Mumbai reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest tender or any other tender.
- **K)** Eligibility Criteria: The bidder must have a registered office, branch office, or operational service center within the Mumbai Metropolitan Region, Maharashtra only. Valid proof such as a GST registration certificate, lease/rent agreement, or recent utility bill must be submitted along with the bid.

L) Clarifications/Addendum/Corrigendum

- **a.** At any time prior to the deadline for submission of bids, the HBCSE-TIFR, Mumbai may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, add or withdraw any of the terms and conditions contained in the tender document.
- **b.** In order to give prospective bidders time to take into consideration the amendments while preparing their bids; HBCSE-TIFR Mumbai may extend the deadline for the submission of bid.
- c. Any addition or amendment in the biding document, at any time prior to the deadline for the submission of bids, shall be uploaded as "Addendum" or "Corrigendum" respectively on the HBCSE website www.hbcse.tifr.res.in and CPPP https://eprocure.gov.in/epublish/app such additions/ modifications shall be binding on all the prospective bidders.
- M)Validity of Tender: The tender for the work shall remain open for acceptance for a period of 180 days from the last date of submission of tenders. If any tenderer withdraws his/her tender before the said period, or before issue of Letter of Intent, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the Department, then HBCSE, TIFR, Mumbai shall, without prejudice to any other right or remedy, the tenderer shall not be allowed to participate in the retendering process of the work.

N) Levy / Taxes payable by contractor:

- **a.** GST @18% on materials and services in respect of this contract shall be payable by the contractor.
- **O) Deduction of Income Tax:** Income Tax will be deducted as per Section 194-C of Income Tax Act 1961 and a certificate for the amount so recovered will be issued by the HBCSE Centre.
- P) Site visit by the bidder before tendering: Bidders are advised to inspect and examine the site and its surroundings during working hours and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. The Bidder shall be deemed to have full knowledge of the site whether he/she inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
- Q) Signing of Tender and receipts for payments: In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of-attorney authorizing him to do so, such power of attorney to be

produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act-1952. Receipts for payments made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority togive effectual receipts for the firm.

- R) Tenderer's responsibilities: The tenderer shall be responsible for arranging and maintaining at his/her own cost all materials, tools & plants, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he/she has read this notice & all other contract documents, and has made himself aware of the scope & specifications of the work to be done and local conditions and factors having a bearing on the execution of the work. Water and electricity shall be provided for the work by HBCSE-TIFR free of charge.
- S) Signing of contract: The Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his/her tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of: The Notice Inviting Tender, all the documents including all conditions, specifications and drawings, if any, forms the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- **T)** Canvassing: either directly or indirectly, in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection and may be barred from the future participation in HBCSE-TIFR works.
- U) The terms 'Municipal Corporation', 'Electricity Boards' etc. indicated in this tender shall also represent the 'Local statutory authority'/ 'State Govt.'/ 'Union Territory' etc., for works at different station.
- V) As this is an Annual Maintenance Contract and availability of Work front on Day to Day Basis by the residents will be limited, the Bidder should have an Office in Mumbai Metropolitan R

SECTION 4: GENERAL RULES AND DIRECTIONS

- 1. **NIT & its contents:** All works proposed for execution by contractor will be notified in a form of invitation to tender pasted in public places and signed by the officer inviting tender or by publication in Newspapers as the case may be. This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited, and the amount of the security deposit and Performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from the bills. Copies of the specifications, designs and drawings, schedule of quantities of the various descriptions of work and any other documents required in connection with the work signed for the purpose of identifications by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours.
- 2. **Filling-up of tender:** Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other condition of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tenders shall have the name and number of the works to which they refer, written on the envelopes. It will be obligatory on the part of the tenderer to sign all the pages of tender documents affixing his/her stamp. All rates shall be quoted on the proper form of the tender alone. All corrections shall be attested by the dated initials of the tenderer. Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection. If it is found that the tender is not submitted in proper manner or contains too much corrections and/or absurd rates or amount, it would be open for the Government to take suitable disciplinary action against the Contractor. Bids prepared by the tenderer shall contain all requisite information along with self-attested supporting documents as per details in Technical Bid Part I
- 3. The Tender is consisting of two parts: PART I- TECHNICAL BID & PART II- FINANCIAL BID
 The bigger envelope must be super scribed 'Annual Maintenance Contract (Comprehensive) of
 Refrigeration, Air Conditioning and Water Coolers Installed at Homi Bhabha Centre for Science
 Education TIFR for the year 2025-2027.

The two envelopes inside the bigger envelope & must be super scribed as:

- i. Envelope No-1: The said envelope must be super scribed 'Technical Bid'& shall contain annexure and relevant technical documents.
- ii. Envelope No-2: The said envelope must be super scribed 'Financial Bid'& shall contain BOQ only. The tender must be placed in a properly sealed bigger envelope addressed to the 'Head Administrative Operations, Homi Bhabha Centre for Science Education, V. N. Purav Marg, Mankhurd, Mumbai 400088'.
- 4. **Opening of tenders:** The officer inviting tender or his/her duly authorized assistant will open the technical bids first. In selecting technically suitable parties, the decision of HBCSE Scrutiny Committee will be final and binding to all the contractors. Financial bids of only those tenderers who qualify in the technical bid will be opened. Intimation will be sent to through email/telephone/letter those tenderers who qualify in the technical bid. No correspondence in this regard will be entertained. Further the Financial bids may be opened in the presence of any intending tenderers who may be present at the time, and will enter the amount of the several tenders in a Comparative Statement in a suitable form.

The firms whose bids meet all the technical & financial conditions will be deemed eligible for being awarded an AMC contract. A Committee will shortlist the eligible bidders and determines the L1 bid for each category of equipment from the eligible bids only. This shall constitute the final AMC rate for each category of equipment. Any Financial bid which is considered highly unreasonable will be discarded and such bids will be considered deficient and rejected as ineligible. All the eligible bidders who are willing to provide AMC service for all categories of equipment at the final rate, as determined above, will be empaneled to provide AMC services to HBCSE.

In case of multiple empaneled AMC bidders, the award of AMC contracts for Air Conditioners, Refrigerators, Deep Freezer and Water Coolers to each firm will be a choice of HBCSE as determined by its internal processes of consultation with the users. The firm shall have no option in this matter and no guarantees will apply regarding the minimum number and types of Air Conditioners, Refrigerators, Deep Freezer and Water Coolers allotted

for AMC to any empaneled firm.

- 5. **Declaration by tenderer:** The tenderers shall sign a declaration under the Official Secret Act-1923 for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.
- 6. **Guidelines for quoting the rates:** All rates shall be quoted on the prescribed tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words, and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in word. In case of figures, the words "Rs." should be written before the figures of rupees and word "P" after the decimal figures, e.g. "Rs. 2.15 P". and in case of words, the word, "Rupees" should precede and the word "Paise" should be written at the end. Unless the rate is in whole rupees followed by the word 'only' it should invariably be up to two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
- 7. **Quoted rates to include all taxes (except GST):** Sales tax, VAT, Purchase tax or any other tax on materials in respect of this contract, including state Sales tax and Turnover tax on transfer of property as per Works Contract Act etc. if any, shall be payable by the contractor and Government will not entertain any claim whatsoever in respect of the same. As per the directives of the Sales Tax Authorities, the tax due at the rates notified by the State Government from time to time, shall be deducted from the bills payable to the Contractors, for which TDS certificate shall be issued by the Department.
- 8. **Filling-up of Financial Bid:** Unless otherwise called for, any tender containing percentage below / above the estimated cost put to tender is liable to be rejected. All rates shall be quoted on the tender form by the tenderers in figures and words shall be accurately filled in, so that there is no discrepancy in the rates written in figures and in words. The amount for each item should be worked out and requisite totals should be given. However,
 - i. The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.
 - ii. If, in the price structure quoted in the financial bid, there is a discrepancy between the rates and total price (which is obtained by multiplying the rates by the quantity), the rates shall prevail, and the total price shall be corrected accordingly;
 - **iii.** If there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail, and the total shall be corrected.
 - iv. If there is a discrepancy between words and figures, the amount in words shall prevail.
 - v. In event no unit price has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this / these item(s) in other items and unit price for such item(s) will be considered as zero.

If such a discrepancy is found, the same will be conveyed to the bidder and the bidder will be asked to respond by a target date. If the bidder does not agree to the Centre's observation, the bid is liable to be rejected.

- 9. Action in case of un realistic rates: In the case of any tender where unit rate of any item (s) appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
- 10. **Witnessing of a tender:** The tender for the work shall not be witnessed by a contractor or contractors, who himself/herself / themselves has / have tendered or who may and has / have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
- 11. **List of works in hand:** The contractor shall submit list of works which are in hand / in progress in the form as per Annexure IV.

SECTION 5: CONDITIONS OF CONTRACT

A. DEFINITIONS:

- 1. The 'Contract/ Agreement' means the documents forming the tender and acceptance thereof and the formal agreement executed between the Competent authority on behalf of the Centre Director, HBCSE and the Contractor together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
- 2. In the contract the following expression shall, unless the context otherwise requires, have the meanings hereby respectively assigned to them.
- i) The expression 'Works' or 'Work' shall, unless there be something either in the subject or context repugnant to such work, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original, altered, substituted or additional.
- ii) The 'Site' shall mean the land or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
- iii) The 'Contractor/ Bidder/ Vendor' shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personnel representative of such individual or the persons composing such firm or company or the successors of such firm or company and the permitted assignees of such individual, firm or company.
- iv) The 'Engineer-in-Charge' means the Engineer / Officer, who shall supervise and be in charge of the work
- v) 'Centre/ Institute/ Department/ Owner' shall mean the HBCSE-TIFR.
- vi) 'Temporary Work' means all temporary works of every kind required in or about the execution, completion and maintenance of the works.
- vii) 'Accepting authority' shall mean the Head, Administrative Operations, HBCSE-TIFR.
- viii) **Excepted Risk** are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works.
- ix) **Market Rate** shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage to cover, all overheads and profits.
- x) Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers.
- xi) **Tendered value** means the value of the entire work as stipulated in the letter of award.
- **B.** Works to be Carried out: The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
- **C. Sufficiency of Tender:** The Contractor shall be deemed to have satisfied himself/herself before tendering as to the correctness and sufficiency of his/her tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
- **a.** 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.
- **b.** 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. the works.

SECTION 6: GENERAL CLAUSES OF CONTRACT

- 1. **Determination of contract:** Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his/her any other right or remedy against the contractor in respect of any delay, inferior workmanship, any claim for damages and /or any other provisions of this contract or otherwise, and whether the date for completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:
- i. If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstructor replace any defective work or that the work is being performed in an inefficient or otherwise improper or un workman-like manner shall omit to comply with the requirements of such notice for a period of 7 days thereafter.
- ii. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he/she will be unable to secure completion of the work by the date for completion and continue to do so after a notice in writing of 7 days from the Engineer-in-Charge.
- iii. If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
- iv. If the contractor persistently neglects to carry out his/her obligations under the contract and / or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him/her in that behalf by the Engineer-in-Charge.
- v. If the contractor shall offer or give or agree to give to any person in HBCSE- TIFR or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for HBCSE- TIFR.
- vi. If the contractor shall obtain a contract elsewhere as a result of wrong tendering or other non-Bonafide methods of competitive tendering.
- vii. If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer-in-Charge. When the contractor has made himself/herself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Centre Director, HBCSE shall have powers:
- **a.** To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence) upon such determination, the Security Deposit already recovered and Performance Guarantee under the contract, shall be liable to be forfeited, and shall be absolutely at the disposal of HBCSE-TIFR.
- **b.** After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be unexecuted out of his/her hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.
- viii. In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he/she shall only be entitled to be paid the value so certified.
 - 2. Contractor liable to pay compensation even if contract is not determined: In any case in which any of the powers conferred upon the Engineer-in-Charge under the contract, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such

powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor), use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof, belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work / or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final and binding on the contractor, his/her representative of the works, foreman or other authorised agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice); in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

3. Time Extension for delay: The time allowed for execution of the works as stipulated in the contract or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in contract. If the Contractor commits default in commencing the execution of the work as aforesaid, HBCSE-TIFR shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the performance guarantee absolutely. As soon as possible after the Contract is signed, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and maybe amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) to complete the work as per the mile stones given.

If the work(s) be delayed by:

- **a.** Force majeure, or
- b. Abnormally bad weather, or
- c. Serious loss or damage by fire, or
- **d.** Civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- e. Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- **f.** Non-availability of stores, which are the responsibility of HBCSE-TIFR to supplier.
- g. Non-availability or break down of tools and plant to be supplied or supplied by HBCSE- TIFR or
- h. Any other cause which, in the absolute discretion of the Engineer-in-Charge is beyond the Contractor's control, then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

4. Measurements and Payments of work done:

a) All measurements and levels shall be taken jointly by the Engineer- in- Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer- in- Charge and the contractor or their representatives in token of their acceptance. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other

things necessary for measurements and recording levels. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed. The contractor shall give, not less than 7 days' notice to the Engineer-in-Charge or his authorized representative in-charge of the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in-charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defect's liability period.

- b) Payments: For AMC work under 'Annexure A' the payment will be released on quarterly basis on complete satisfaction of work by Engineer-In-Charge against the Tax Invoice submitted within 10-15 working days. The TDS and any such deductions will be made as per the Income Tax rules. The payment for the works under 'Annexure B' tax Invoice shall be submitted separately; Security deposit and TDS will be deducted as per the Income Tax rules. No any further matters in this regard will be entertained. NOTE: No payment will be made for goods rejected.
- 5. Completion Certificate: Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in- Charge and within fifteen days of the receipt of such notice, the Engineerin-Charge shall inspect the work, and if there is no defect in the work, shall furnish the contractor with a certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and / or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed, all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements, required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floors or other parts the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this clause before the date fixed for the completion of the work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish, etc., and dispose off the same as he thinks fit and clean off such dirt as aforesaid; and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.
- **6.** Contractor to keep site clean: When the works are carried out, the splashes and droppings from white washing, color washing, painting etc. on wall, floors, doors, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer- in-Charge shall give **10** days' notice in writing to the contractor.
- 7. Deviations / Variations : Extent And Pricing: The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in- Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as

hereafter provided.

- **a. Deviation and Time Extension:** The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, will be extended, if requested by the contractor, as follows:
- i. In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value, plus
- **ii.** 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.
- b. Extra Items and Pricing: In the case of extra item(s) which cannot be determined under the schedule of quantities, the contractor may within fifteen days of receipt of order or occurrence of the item(s), claim rates, supported by proper analysis, for the work and the engineer- in charge shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined. In the case of substituted items, the rate for the agreement items (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para:

c. Substituted Items and Pricing:

- i. If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- ii. If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- 8. Foreclosure of contract due to abandonment or reduction in scope of work: If at any time after acceptance of the tender, HBCSE-TIFR shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer- in- charge or competent authority shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he/she might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates full amount for works executed at site and in addition, a reasonable amount as certified by the Engineer-in-charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure.

- **a.** Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office, storage accommodation and water storage tanks.
- b. HBCSE-TIFR shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided however, HBCSE-TIFR shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by HBCSE-TIFR, cost of such materials as detailed by Engineer-in- charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- c. If any materials supplied by HBCSE-TIFR are rendered surplus, the same except normal wastage shall be returned by the contractor to HBCSE-TIFR at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to HBCSE-TIFR stores, if so required by HBCSE-TIFR, shall be paid.
- **d.** Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.
- e. Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary. The contractor shall, if required by the Engineer-in-charge furnish to him/her books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition. The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by HBCSE-TIFR as per item (ii) above 'Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-charge shall be

entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by HBCSE-TIFR from the contractor under the terms of the contract.

9. Absence of Deployed Engineer:

The deployed engineer shall be available on-site as per the agreed deployment schedule throughout the duration of the Annual Maintenance Contract (AMC). Any unauthorized absence of the deployed AC mechanic/Helper shall attract a penalty of ₹1,000 (Rupees One Thousand only) per day of absence. This penalty shall also be applicable in cases where the vendor deploys an unqualified or under-qualified substitute engineer in lieu of the originally approved personnel, without prior approval from the competent authority.

10. Replacement of Deployed Engineer:

It should be noted that if the vendor replaces the originally appointed engineer during the AMC period—whether due to resignation, reassignment, or any other reason—and such replacement results in a disruption of services or a degradation in the quality of support, the vendor shall be liable to pay a penalty of ₹5,000 (Rupees Five Thousand Only) per month. This penalty shall remain applicable until a replacement engineer is made available and possesses qualifications and experience equal to or greater than those specified in the original tender requirements.

11. Suspension of work:

- a. The contractor shall, on receipt of the order in writing of the Engineer-in-Charge or Competent Authority, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in- Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
- i. On account of any default on the part of the contractor or;
- ii. For proper execution of the works or part thereof for reasons other than the default of the contractor; or
- iii. For safety of the works or part thereof.
 - The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.
- **b.** If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
- i. The contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;
- ii. If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he/she intends to treat the suspension, where it affects only a part of the works as an omission of such part by HBCSE-TIFR or where it affects whole of the works, as an abandonment of the works by HBCSE-TIFR, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by HBCSE-TIFR, he shall have no claim to payment of any compensation on account of any profit or advantage which he/she might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

12. Action in case of work not done as per specifications:

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in- charge, his authorised subordinates in charge of the work and all the superior officers of the Department or any organization engaged by the Department for Quality Assurance and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his/her authorised subordinates in-charge of the work or

his/her subordinate officers or the officers of the organization engaged by the Department for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lakh and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause III (1) of the contract (for non-completion of the work in time) for this default in such case the Engineer-in- Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

13. Contractor liable for damages, defects during Maintenance (Defect Liability Period): If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within 12 months (6 months in the case of work costing Rs. 10,00,000/- and below) after a certificate final or otherwise of its completion shall have been given by the Engineer- in-Charge as aforesaid arising out of defective or improper materials or workmanship, the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense, or in default, the Engineer- in- Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due, or at any time thereafter may become due to the contractor, or from his security deposit, or the proceed of sale thereof or of a sufficient portion thereof.

The security deposit of the contractor shall not be refunded before the expiry of **12 months** after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Performance guarantee shall be refunded to the contractor after completion of the work and recording the completion certificate.

- 14. Contractor to supply tools & equipment's etc.: The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & equipment's. in addition to this, appliances, implements, other accessories, ladders, cordage, tackle and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his/her so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under the contract and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof.
- 15. Lump sum provision in tender: When the estimate on which a tender is made include lump sums in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates, as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump sum amount entered in the estimate, and the certificate in writing of the Engineer-in- Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.
- **16.Recovery of compensation paid to workmen:** In every case in which by virtue of the provisions of section 12 sub-section (1) of the Workmen's Compensation Act. 1923, HBCSE-TIFR is obliged to pay compensation to a workman employed by the contractor, in execution of the works, HBCSE-TIFR will recover from the contractor the amount of the compensation so paid; and, without prejudice to the rights of HBCSE-TIFR under

Section 12, sub-section (2) of the said Act, HBCSE shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by HBCSE to the contractor whether under this contract or otherwise. HBCSE shall not be bound to contest any claim made against it under section 12, sub-section (1) of the said Act, except on the written request of the contractor and upon his giving to HBCSE full security for all costs for which HBCSE might become liable in consequence of contesting such claim.

- 17. Fall Clause: At any point of time if it is observed that the vendor is providing similar services of Annual Maintenance Contract (AMC) for Refrigeration, Air Conditioning and water coolers units and installation to other any organizations in similar Regions / Zones with similar terms and conditions and status of work at a lower rate than offered to HBCSE, then the vendor shall have to compensate HBCSE by paying the difference amount and downward revise the rate of respective services with immediate effect.
- 18. Ensuring payment and amenities to workers if contractor fails: In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and of the contract labour (Regulation and Abolition) Central Rules, 1971, HBCSE is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the Rules, under Clause 19 H or under the Central Government Contractor's

Labour Regulations, or under the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the contractors, HBCSE will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of HBCSE under Section 20, sub-section (2) and Section 21, sub-section (4) of the contract labour (Regulation and Abolition) Act, 1970, HBCSE shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by HBCSE to the contractor whether under this agreement or otherwise. HBCSE shall not be bound to contest any claim made against it under Section 20, subsection (1) and section 21, sub-section (4) of the said Act, except on the written request of the contractor and upon his giving to HBCSE full security for all costs for which HBCSE might become liable in contesting such claim.

- 19. Disposal of Debris/ Electronic Waste items: The electronic waste/ debris generating out of the tender work needs to be get disposed at appropriate location. The disposal of such items will be the responsibility of contractor only. No matters in this regard will be entertained by HBCSE.
- **20. Termination of contract in case of death:** Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-Charge on behalf of the Centre Director, HBCSE shall have the option of terminating the contract without compensation to the contractor.
- 21. Labour laws to be complied by the contractor: The contractor shall obtain a valid license under the Contract Labour (R & A) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provision of the Child Labour Prohibition & Regulation) Act-1998. The contractor shall also comply with the provisions of the building and other Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Workers Welfare Cess Act, 1996. Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non execution of the work.
- 22. Minimum wages act to be compiled with: The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970 and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.
- **23. Settlement of Disputes & Arbitration:** Any dispute arising from this contract will be referred to two arbitrators one to be appointed by you and one by us. The two arbitrators, in the event of their disagreement will appoint an Umpire. The decision of the Umpire shall be final and binding. The arbitration will proceed as per Indian Arbitration Act, 1940, as amended up to date. Mumbai city will be the jurisdiction for the settlement of all court/ arbitration and related matters.
- **24.Confidential Information:** The drawings, specifications, proto-type, samples and such other information furnished to the contractor relating to the supply / work, sub-systems / equipment etc. are to be treated as confidential which shall be held by the contractor in confidence and shall not be divulged to any third party

without the prior written consent of the Department. The contractor, therefore, binds himself, his successors, heirs, executors, administrators, employees and the permitted assignees or such other persons or agents directly or indirectly concerned with the work / supply to the confidential nature of the drawings, specifications, prototype samples etc. It is a further condition of the contract that the contractor shall not, without prior written permission from the Department, transmit, transfer, exchange, and gift or communicate any such confidential information, and also the component, sub assembly, products, by-products	
25. Centre's right to vary the Quantities at the time of Award of Contract The Centre reserves the right to decrease or increase the contract quantity originally specified in the scope of work up to 25% in which case the Centre may ask for confirmation of rates before a fixed date.	
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SECTION 7: SPECIAL CLAUSES OF CONTRACT

The following Special clauses of contract shall be read in conjunction with General clauses of contract. The same shall be considered as an extension and not limitation of the obligations of the contractor. In case of any discrepancy between Special clauses of contract and the General clauses of contract, these Special clauses shall take precedence over the General clauses of the Contract.

- 1. Sequence of work: The contractor shall execute the work as per the sequence given by the Engineer-in-Charge from time to time so that all other items of the work to be executed by other agencies are completed progressively along with the main work.
- 2. Co-operation and Co-ordination with other contractors: The contractor will carry out the entire work in a planned manner by coordinating his work with other contractors, who will be simultaneously carrying out work in the same area and also co-ordinate in connection with the position of various fixtures, inserts, embedment and other allied work connected with the completion of the building / subject work. In case of any dispute between the contractors engaged on the same work, decision of Engineer-in-Charge shall be final and binding.
- 3. Operations and storage areas: All operations of the contractor shall be confined to areas authorised by the Engineer-in-Charge and storage of materials shall be over the areas specially indicated by the Engineer-in-Charge. The contractor shall be obliged to keep the premises in hygienic conditions by proper drainages of the area provided with suitable approaches throughout the period of contract. He/she shall rectify all damages caused to the Government property within the areas thus allotted. He/she shall be responsible to clear all rank, vegetation at site at his own cost. The contractor should provide Storage box for the working personal at his own cost with lock and key arrangement. The box can be placed at approved location by Engineer-In-Charge.
- **4. Traffic interference & inconvenience to the public:** The contractor shall so conduct his operations as to interfere as little as possible with the traffic/public. The contractor shall take all precautionary and other measure, such as providing warning signals, temporary diversion etc. all as directed by the Engineer-in-Charge. The contractor shall not deposit materials anywhere at work site which will seriously inconvenience the public. The Engineer-in-Charge may require the contractor to remove any materials which are considered to be a danger or inconvenience to the public or cause them to be removed at the contractor's cost.

The contractor shall exercise full care to ensure that no damage is caused by him or his workmen, during the operation to the existing water supply and power lines. The cost of any such damage and risks arising out of this shall be entirely borne by the contractor.

- **5. Supply of Water & Electricity:** Water and electricity shall be supplied to the contractor by HBCSE free of cost subject to the following conditions:
- i. The Source of Water and Power Supply will be given at one point. All other arrangements have to be arranged by Contractor.
- ii. Contractor(s) shall make his/ their own arrangement of water/ electricity connection and laying of pipelines/ connection from existing main of source of supply as directed by Engineer-In-charge.
- iii. HBCSE do not guaranty to maintain uninterrupted supply of water/ electricity and it will be incumbent on the contractor to make alternative arrangement for proper supply of the same at his/ their own cost in the event of any break down in the government water/ electricity mains so that the progress of his/ their work is not held up for the want of the same. No claim of damage or refund will be entertained on account of such break down.
- 6. Tendered rates to cover overheads and profit: The rates quoted shall also cover the cost of necessary protection including labour, materials and equipment to ensure safety and protection against risk or accident, compensation for injury to life and damage to property if any, caused by the contractor's operations connected with this work. The rates shall be firm and shall not be subject to change due to variations during the entire period of execution of the work in cost of materials, labour and conditions, or any other conditions. No separate claim on this account will be entertained by the Department.

Unless otherwise stated in schedule of quantities, rates for item quoted by the tenderer should be for the complete work including supply and fixing with all materials and should be for all heights and depths, lifts and leads, lengths and widths involved in the work.

The contractor when called for by the Department should furnish detailed rate analysis in support of the rates quoted by him against each item of the tender. The Department reserves the right to utilize the analysis thus supplied in settling the rate of any deviations or claims arising in this contract.

7. Claims against the contractor: Whenever any claim against the contractor for the payment of a sum or money arises out of or under the contract, Department shall be entitled to recover such sum by appropriating in part or whole, the security deposit of the contractor and to sell any Government promissory notes etc. forming the whole or part of such security. In the event of the security deposit having been taken from the contractor, the balance or the total sum recoverable, as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due from the contractor, under this or any other contract with the Department. Should this sum be not sufficient to cover the full amount recoverable, the contractor shall pay the Department, on demand the balance remaining due.

Department shall have the right to cause an audit and technical examination of the work and the final bill of the contractor including all supporting vouchers, abstracts etc. to be made after payment of the final bill and if as a result of the due audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done under the contract and found not have been executed, the contractor shall be liable to refund the amount of the over payment and it shall be lawful for the Department to recover the same from him in the manner prescribed above or in any other manner legally permissible and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, amount of such under payment shall be duly paid by the Department to the contractor.

8. Mode of measurements: Measurements for all hidden items once taken jointly and so accepted by the tenderer in the bills, in writing shall be final and binding. No re-recording of measurements for hidden items of work will be permitted. The contractor shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for execution of the work.

All measuring tapes (of steel), scaffolding and ladders which may be required for taking measurements shall be supplied by the contractor. If the contractor fails to accompany the Engineer-in-Charge or his duly authorised person to take measurements, then he shall be bound by the measurements, recorded by the Engineer-in-Charge or his representative.

9. Proper drawings and instructions: The Engineer-in-Charge shall have full powers and authority to supply to the contractor from time to time during progress of the work such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the work and the contractor shall carry out the work and be bound by the same.

10. Employment of staff for electrical works:

- **a. Employment of licensed electrician:** The contractor should employ a licensed electrical foreman to supervise the Electrical works.
- 11. Urgent repairs: If by reason of any accident or failure or other event occurring to or in connection with the work or any part thereof either during the period of maintenance, any remedial or other work or repair shall in the opinion of the Engineer-in-Charge be urgently necessary for security and the contractor is unable or unwilling, at once, to do such work or repair, the Engineer-in-Charge may be his own or other workmen do such work or repair as he may consider necessary. If the work or repair so done which in the opinion of the Engineer-in-Charge, the contractor was liable to do at his own expenses under the contract and all cost and charges properly incurred by the Engineer-in-Charge in so doing shall on demand be paid by the contractor or may be deducted from any sum due or which may become due to the contractor provided always that the Engineer-in-Charge shall soon after the occurrence of any such emergency as may be reasonable, practicable, notify the contractor thereof in writing.
- **12. Pandemic Situation:** If a Lock down or anything as such announced by Government of India/State Government due to pandemic condition like Covid 19 or any other and the work remain suspended, nothing extra shall be paid to contractor for any losses in this regard.
- 13. Medical Fitness of staff/ labour: Staff/ Labour to be engaged in work should have medical fitness certificate if required by the department. The contractor will also follow the guideline issued by Govt. of India/State Government during any pandemic and will follow the safety norms and be responsible for the safety of labours to be engaged in the work. No claim for any causality in this regard will be entertained.
- 14. Security regulations: The contractors have to follow strictly the regulations of the Department at the work site regarding entry of personnel, material etc. and any other regulation that might be enforced from time to time. All materials and articles brought by the contractor to the work site shall have to be declared at the security gate. Similarly, no materials shall be taken out from the Departmental premises without proper gate pass, which will be issued by the Engineer-in-Charge to the contractor on written request. It is to be noted that loading of

contractor's materials in vehicles and trucks shall be done in the presence of Departmental personnel.

For working on Sundays, Holidays and late hours, even though permission will be accorded by the Engineer- in-Charge, the contractor will have to make application to the Security Department also and keep them informed well in advance. The contractor, his agents, representatives, workmen etc. and his materials, carts, trucks or other means of transport etc. will be allowed to enter through and leave from such point of entry/exit at such times, the authorities in-charge of the area, at their sole discretion, may permit. The contractor, his agents and representatives are required to be in possession of the individual identity / muster cards or passes. The muster cards or passes are examined by the security staff at the time entry / exit inside the departmental area.

The contractor, his agents, representatives, workmen shall strictly observe the orders pertaining to prevailing fire precautions. In addition to the above, other security regulations as may be imposed by the Security authorities / Engineer-in-Charge shall be complied with / observed by the contractor and his workmen, in addition to the above. Any breach of above security regulations and rules in force from time to time will be viewed seriously. No claim whatsoever will be entertained by the Department on account of the observation of the Security regulations.

Once the contract staff/ workers enter on site in morning at 9:00 am will not be allowed to leave the campus before 6:00 pm for any kind of material purchase or any such related works. In case of emergencies and only after prior intimation and approval of EIC the worker/ staff will be allowed to leave.

- **15.** The contractor shall arrange to provide the service on Saturday, Sunday and other holidays in case of **Emergency** as required by Engineer in charge, failing which penal recovery shall be made, decision of Engineer in charge in this regard will be final and binding to the contractor.
- **16.** All breakdown calls (complaints received during normal working hours) should be attended to, at the shortest possible time. **TIME IS THE ESSENCE OF THE CONTRACT.**
- 17. The contractor shall provide a valid **ID card** to the workers issued by the contractor and signed by the HBCSE representative, showing name of the contractor with address and telephone number on ID card as approved by the Engineer in charge. **All the workers must wear the same while on duty.**
- 18. In extreme cases, the action of forfeiture of security money/pending bill/blacklisting of the firm can be resorted at the discretion of the competent authority in case of failure by the contractor to rectify the complaints within the specified time.
- 19. Any damage to the building or the any part of the equipment which might result during the operation shall be repaired by the contractor.
 - I) Any damage resulting to the system on account of the negligence or malpractice shall be made good by the contractor. Nothing extra will be paid for such work.
 - II) The contractor is sole responsible for the safety of his workers working on site at any heights. The contactor should make arrangements for the safety of the workers and take all measures to make accident-free work. Proper safety accessories such as safety belts, helmets of standard make and IS marked should be provided to the workers while working at heights and at stringent locations. Safety talks should be conducted by the contractor or his representative at least once in a month.
 - III) The contractor shall arrange to render efficient service as outlined in this specification. However, in case the contractor fails to maintain the service to the satisfaction of the Engineer- in charge of the department and any expenditure incurred therein for alternative arrangements by the Engineer-in-charge shall be recovered from the contractor.
 - IV) At the time of acceptance of the tender, the contractor shall furnish the details of staff members along with contact details to HBCSE who will look after maintenance work of Air Conditioners, Refrigerators, Deep Freezer and Water Cooler.
- 20. The contractor or his representative should not remove, disturb, and dislocate the existing equipment and its parts from its positions until and unless it is authorized by the Engineer—in Charge. The entire installation should be intact at any time of inspection as was handed over to him at the time of initial taking over of its maintenance and operation. Care shall also be taken not to damage installation by improper handling.
- 21. The material requires replacement shall be of same quality/manufacturer and specifications.
- **22.** All the technicians and helpers posted on duty shall sign the attendance prescribed for the purpose. Any absence/default in this regard would involve proportionate deduction of AMC charges payable to the service provider. Repeated absence/default in this regard shall lead to termination of contract.

- 23. All break-down calls shall be attended to immediately and on the same day. Breakdown calls that could not be attended to on the same day for exceptional reasons shall be attended to on the next day without fail.
- **24.** Transportation of Air Conditioners, Refrigerators, Deep Freezer and Water Cooler Units from the office buildings to the service provider's workshop, from one building to another and from the service provider's workshop to the office buildings, will be at the cost of the service provider.
- 25. To take the Air Conditioners, Refrigerators, Deep Freezer and Water Cooler related materials out of the campus for repair/ replacement it is the responsibility of the contractor to take prior approval and request for a valid GATE PASS for the parts of machine or any such material.
- **26.** The Service Provider is responsible for the payment of Minimum Wages (under Central Act) to the personnel deployed by it. The Service Provider is also responsible for compliance of the provisions of all the statutes applicable in its case.
- 27. Cancellation of Contract In cases of poor workmanship and non-compliance of tender/agreement or services provided by the contractor are not found to be satisfactory, the contract shall be terminated by the department by giving 15 days' notice even before the expiry of contract period and shall be forfeited the security deposit without assigning any reason what so ever. No further justifications in this regard will be entertained by HBCSE. The decision of Engineer-In-Charge on behalf of Centre Director HBCSE will be final and binding to the contractor.
- 28. No waste material shall be left over during the repair works under each item on any day.
- 29. Police Verification Certificate of all workers shall be obtained by Contractor.
- **30.** HBCSE will not provide any space at site for worker hutments.
- **31.**Contractor s workman should follow the COVID-19 related all the protocol declared by Ministry of Health/ State Government and Local Municipal corporation from time to time.

SECTION 8: SCOPE OF AMC WORK AND BILL OF QUANTITIES

Part- 'A' SCOPE OF WORK

Annual Maintenance Contract (Comprehensive) of Refrigeration, Air conditioning, and water coolers installed at Homi Bhabha Centre for Science Education, TIFR, for the year 2025-2027

The HBCSE has around 4.34 Acres of campus area including Main Building with Canteen & dining area, NIUS facility building with NIUS hostel having own Indoor Sports Centre, Olympiad facility & Olympiad Guest House with in-house Gymnasium facility for staff members, students and research scholars.

Therefore, the essence of this contract is to achieve a 'Zero Breakdown' and maintain the system in such a way that it is always normal, available, and can be used for optimum performance. To achieve this all efforts should be made to keep up with the latest maintenance, using predictive and proactive maintenance techniques from time to time, and, by strictly following preventive maintenance practices and schedules.

The scope and nature of services to be provided by the contractor shall include scheduled preventive maintenance, services which cover periodic and break down servicing, along with replacement of defective spare parts, including compressor and other consumables, required during the contract period.

The contractors will hire and deploy technical staff on a daily basis who have practical experience in the maintenance and troubleshooting of Refrigeration, Air conditioning, and water coolers systems to meet requirements like ours. That's why Technicians will have the ability to read diagrams of AC systems, understand the requirement, and provide hassle-free maintenance.

- Daily operation/monitoring, scheduled annual preventive/routine & predictive maintenance, breakdown maintenance including repair/replacement of all spare parts and consumables of the entire existing AC system in the campus. The system has FCU, air supply ducts, grills, diffusers, dampers, electrical panels, VFDs, control & protection systems. Work shall be carried out by deployment of competent, experienced & trained staff members at the site. All emergencies at all times are to be attended without fail.
- Addition & Alteration works: All the addition and alteration jobs in the air conditioning system shall be carried out by the maintenance contractor at the agreed rates.
- All fabrication works, repairs, and servicing of machines/equipment/parts therein (or arrangement for the same) within the purview (entire Refrigeration, AC system and Water coolers) of this contract, shall have to be carried out by the contractor within the specified time.
- The entire existing Refrigeration, Air conditioning, and water cooler systems are covered under the scope of this AMC. Any additions and alterations made in the system (whether by the contractor or by any other agency or by HBCSE), up to an extent of 10% of existing installed Refrigeration, Air condition, and water cooler and Split AC capacities are covered under the scope of this contract for operation & maintenance.
- AMC shall include supply of all material spares, replacement /repairs of compressor from OEM's, gas charging, air filter, electrical parts, servicing, overhauling, greasing, starting relay, overload protector, wiring repairs, motor rewinding with bush and shaft, tapes including handling charges, blower motor/outdoor fan motor, digital scanner, piping, insulation and spares of outdoor/indoor units replacement etc., complete in all respects, for ensuring the desired levels of cooling.
- It shall be responsibility of the contractor to take over & hand over the all AMC awarded AC units to HBCSE in working condition at the beginning and expiry of the Contract period.
- > The history sheet of servicing/breakdown repairing of each and every unit shall be maintained. No any charges for the same will be paid separately. The copy of service report shall be submitted along with the bill subsequent to the servicing activity.
- In case an AC is to be taken to the Service Station/Workshop for repairs etc. with the permission of the engineer in charge.

> TIME SCHEDULE OF WORK

DAILY:

- Operate the library Air conditioner from Monday to Friday.
- Check the server Air conditioners located at Main and NIUS Facility buildings.
- Check for any complaints that are reported and troubleshoot them immediately.

- AC systems of the important & critical facilities are to be continuously monitored and corrective actions are to be taken immediately so as not to affect the facility concerned.
- If any important activities like seminars/lectures/meetings/interviews are planned on the campus, the concerned AC system has to be inspected and normal functioning of the AC system is to be ensured.
- If there is any instruction to operate the AC systems in the specific timings, the same has to be materialized.
- General inspection of the all-AC system and rectification if any abnormality exists.
- Attend the planned/scheduled preventive maintenance
- Update all the relevant documents, logs, history books, etc.
- Reporting of day's work and progress to the concerned Engineer-in-charge.

MONTHLY:

- Cleaning of all filters
- Checking the performance of the Library AC, Server room ACs, Auditorium ACs, and Lecture room ACs etc.
- Cleaning of the All Refrigerators, ACs, and water coolers thoroughly.

OUATERLY:

- Checking motor bushings
- Ground connections
- Checking connections at the main plug
- Cleaning the equipment
- Checking & tightening of nuts and bolts
- Checking Cooling efficiency.
- Wet and dry cleaning of all the units installed at HBCSE.
- Overhauling of AC with Chemical washing process
- Servicing of Condensers and Evaporator coils using blower and brushes.
- Repairing and brazing over leakage area on cooling coil and condenser coil (as directed by EIC)
- Leakage testing of copper pipes & its flushing with Nitrogen (whenever asked by EIC)
 - Cleaning of all type air filters from time to time
- Wet Cleaning of front grills from time to time
- Oiling and greasing of fan motors as and whenever required.
- Cleaning, servicing including alignment of fan blade and blowers.
- Checking of all the sheet metal parts and supporting MS stand for any rusting or damage and taking remedial action like painting as and when required (minimum once in a year).
- Checking of all electrical contacts and cleaning them of any carbon deposits.
- Checking of grill temperature (10° C to 12° C) and current, and recording in the service cards.
- Changing refrigerant whenever necessary.
- Replacement of strainer filter, capacitor, swing motor & drier.
- Servicing and repair/ replacement of motorized damper & its control.
- Repair/ replacement of contactor relay.
- Repairing/Replace of swing (louvers) Patti/s.
- Repair/ replacement of NO NC contactor.
- Repairing/ replacement of suction and discharge service valve.
- Repairing/ replacement of Expansion valve, Drain pump & Capillary tube.
- Repairing/ replacement of compressor when it is burnt off, or whenever it is drawing more current.
- Repairing/ replacement of fan motor and its blade, when it gets damaged.
- Repairing/Replacement of old damaged PCB circuit.
- All other jobs not specifically indicated but are necessary for smooth and economical functioning of the A.C. units.
- Repairing of Remote controls under the observation of EIC.
- Repairing/Replace of Display controls under the observation of EIC.
- Check, report, and rectify, if any abnormal noise/vibration is observed.
- Repairing/Replace of Digital temperature controller (subzero).
- Cleaning and maintenance of all Refrigerators, Deep freezer and water coolers at HBCSE.

Yearly:

- Perform quarterly services.
- Cleaning the condenser and evaporator coils with suitable chemical solution and flushing with high-pressure jet of water (as per instructions of EIC).
- Overall servicing of the unit, cleaning, reduction of noise level, checking of mechanical assemblies, and foam insulators over the pipes.
- The ACs installed are of Carrier, Hitachi, Daiken, Toshiba, Haier, Onida, Midea, Voltas, LG, Blue Star & other

Brands. In off season i.e. during the lien period of winter the contractor shall attend all the Air conditioner units for major attentions and keep the equipment & spare parts ready for use for the next summer.

- Checking operation of controls of the air- conditioners such as thermostat, relays, remote control etc.
- Checking air flow through the supply air grill, return air grill, condenser.
- Checking operation of the drive motors and fans.
- Checking air temperature at supply air grill, return air grill, Inlet air condenser, outlet air from condenser for reviewing its efficiency.
- Checking Firmness of supporting arrangement for the compressor, blower motor, air conditioners casing and fixing of air-conditioners etc. If required necessary supporting arrangements should be provide as directed by EIC.
- Replacement of any component of air conditioners found defective after the above checks and tests.
- Painting of all the outdoor stands if it is required to ensure proper maintenance, protection from weather conditions, and to enhance the overall appearance.
 - Replacement of old and damaged swing louvers of air conditioners is required to ensure proper Functioning and efficient cooling.
 - Repairing and maintenance of AC remotes is required to ensure smooth operation and uninterrupted use of the air conditioners.
 - If the contractor fails to carry out the assigned or entrusted work, the department shall get the work done by engaging any other agency and twice the cost incurred shall be recovered from the AMC contractor.
 - Cleaning of a ducting system having diffusers, grills, dampers, etc.

NOTE:

- 1. If it is required to clean the cooling coil by water jet, the same has to be done by removing the cooling coil with all precautionary measures & taking it to a convenient place for a full cleaning of water & air circuits. The coil is to be cleaned with a suitable chemical & water jet. This work is to be done carefully without damaging the unit & the coil. This is also included in the AMC scope at no extra cost.
- 2. Coil, fins, filters, etc. are to be thoroughly cleaned to achieve desired air and water flow rates.
- 3. All the maintenance/servicing works should be carried out in such a way that the equipment /the unit can be used for its optimum performance. Any work which is found to be required for optimum performance of the system has to be done.
- 4. Necessary care should be taken while carrying out all types of maintenance/servicing of equipment to avoid damage. Any damages to equipment/equipment parts during the services have to be replaced free of cost.
- 5. There should not be loose cables, Cable joint, hanging boards, naked live cables etc. Proper earthing is must wherever it is required.
- 6. It shall be responsibility of the contractor to take over & hand over the all AMC awarded AC units to HBCSE in working condition at the beginning and expiry of the Contract period.
- 7. The air conditioners that are not serviceable by the agency / beyond economical repair due to obsolescence of technology or non-availability of parts / components / assemblies will be withdrawn from the maintenance contract. The decision of engineer in charge regarding non-availability and obsolescence of technology will be final.

Withdrawal of such air conditioners shall be communicated to the agency and equivalent maintenance charges shall be deducted from the amount due to the agency. Preventive maintenance service would be carried out by the service provider regularly to keep the equipment running in a trouble-free condition during the period of contract. Wash the filter of all the ACs every month.

Break-down service (BDS): Breakdown calls shall be attended to immediately and a record of such service, duly acknowledged by the person in charge of the location of the air-conditioner, shall be maintained. Breakdown service will include replacement of genuine spares & Compressor and Gas filling at the cost of the service provider.

PERSONNEL TO WORK AT HBCSE:

The rate quoted for services shall include the charges for deployment of full-time mechanic (Skilled) & helper (Unskilled) on all working days (Monday to Saturday) from 9.00 AM to 6:00 PM and routine maintenance services. In case of emergencies the contractor should arrange to send the Technician and Helper on site (even on Sundays & Bank holidays) at any point of time between 06:00 pm to 09:00 am as per the requirement and instructions of EIC at no any extra cost without compromising with the daily attending requirement of the Centre. **During the summer season (1st March to 30th June) or when the list of complaint has piled up (as per directions of EIC) at no extra charges.** They will report to Engineer in charge/ Technician of Technical Service Section for daily attendance and will take necessary instruction.

The following are the qualification & experience pre-requisites of the to be staff deployed: QUALIFICATIONS & EXPERIENCE:

Technician: AC Technician: ITI (Refrigeration and Air Conditioning branch) having more than 2 years' experience in relevant fields. Skilled.

Helper: 10th/SSC with minimum 1 year experience, preferably in HVAC in relevant fields of maintenance (Unskilled).

The EIC will conduct an interview of the deployed technician. Only if the technician is found satisfactory, will he be permitted to join the job.

This is the bare minimum requirement to maintain the system of this magnitude as observed till now. However, contractors can specify the personnel deployment pattern they propose to adopt for this work after thoroughly studying the scope of the work and clearly understanding the same by attending the PRE-BID meeting. The vendors shall have all their doubts cleared in the PRE-BID meeting. It is completely the contractor's responsibility to fix the staff deployment pattern and to fulfill the requirements of HBCSE. It is fully the responsibility of the contractor to deploy qualified staff with hands-on experience, and relevant Licenses/permits to handle electrical, Airconditioning works. They should be fully conversant with relevant Indian Standards and should follow electrical & Industrial safety norms/practices.

The personnel deployed to HBCSE shall have police verification clearance, and such documents shall be submitted within 15 days of the commencement of the contract.

- > Contractor should provide Uniforms, Shoes, safety & protection gear, Identity Cards (for one/two year), working tools etc. to the staff deployed, at no extra cost.
- Contractor will ensure consistency of work and work force, correct troubleshooting, good workmanship, follow all safety procedures and will make all necessary efforts to maintain a healthy environment and reliable services.
- Any air-conditioning work/exigency of HBCSE, even if it is not specifically mentioned in this document and does not incur cost in spares/material, shall be carried out by the deployed staff at no extra cost.
- If any of the staff members appointed by Contractor is found to be 'not competent', he has to be replaced by a right person within a stipulated time as given by Engineer In charge, HBCSE.
- All the relevant documents pertaining to staff deployed, like copies of job appointment orders with the contractor, address proof, photocopy of ID card etc. and any other details as sought shall be provided to HBCSE, by the contractor under his responsibility for the correctness.
- In no case, the contractor or his/her employees shall claim job/employment with HBCSE. No transport facility shall be provided for the contractor's employees by HBCSE.
- It is purely the contractor's responsibility to get his staff acquainted with the site condition, operation and maintenance procedure, Equipment detail, Safety devices, Scope of work etc.
- In case of delay, repetition of work, noncompliance, inadequate staff etc. fine will be imposed as per the fine clause mentioned.
- Safety aspects in workplaces have to be followed as per relevant standards & codes. Any accident or damage to death will be treated as negligence & it is purely the responsibility of the contractor. HBCSE is not responsible for any accidents or damages to death. The safety of all the staff under this contract is the sole responsibility of the contractor.
- Contractor employees will not be allowed to leave until 18:00 hrs.
- Eleanliness and aesthetic finish are very important in HBCSE. Hence any kind of work, be it maintenance, shifting or new work, generated dust & debris should be properly cleaned. Work finish should be neat and appealing. All spaces / areas where work is carried out shall be cleaned and left spic & span after completion of work.
- The department is not responsible for any accidents/damages/death. Safety of all the staff of the Contractor is the sole responsibility of the Contractor HBCSE will not be responsible, nor be liable for any accident, damage, loss to his men & materials Any act of commission or omission which jeopardizes the safety / security of the center, the contractor will be fined by the center and any expenses whatsoever incurred towards the work that need to be discharged by the center on account of this, shall be suitably recovered from the contractor, as deemed fit and as decided by HBCSE.
- In case of delay, repetition of work, noncompliance, and inadequate staff etc. fine will be imposed as per the fine clause mentioned.
- No more than two changes of technicians or helpers will be allowed. Any change request must be informed 15 days in advance, and the department personnel will conduct an interview of the technician or helper before final approval.

TESTING, MEASURING EQUIPMENT, TOOLS & TACKLES:

All the tools required for carrying out the work stipulated in this document shall be provided by the contractor at site. But the following minimums are a must at all times.

- 1. Test lamp set each (1 Ph).
- 2. Screwdrivers set (one light duty & one heavy duty).
- 3. Combination Pliers, 500V grade.
- 4. Live line tester, 500V.
- 5. Knife.
- 6. Wire stripper.
- 7. Nose Plier.
- 8. AC/DC tong testers/Clamp meter 1 Nos.
- 9. Complete spanner set.
- 10. Adjustable wrenches (8 & 12 inch)- 1 set.
- 11. Light weight A type Ladder (5ft-1Nos & 8 ft-1 Nos)-2.
- 12. Safety Belt.
- 13. Allen keys inch/mm- 1 Set.
- 14. Box Spanner 6-7 to 30 32 size- 1 Set.
- 15. Star screwdriver set- 1 No.
- 16. Hammer- 1 No.
- 17. Impact electric drill machine with drill bits (up to 13mm drill bits for SS grade)-1 set.
- 18. Hammering Electrical drill Machine with bit (Up to 25 mm)- 1.
- 19. Air Blower 1 No.
- 20. Vacuum pump- 1 No.
- 21. Oil Gun-1.
- 22. Grease Gun-1.
- 23. Pipe Wrench-1 set (12-24 inch).
- 24. Brazing Torch-1.
- 25. Electric Torch-1 Nos.
- 26. Manifold Gauge. 1 Nos.
- 27. Jet pump-1 Nos.
- 28. Nitrogen Cylinder.
- 29. AC Gas Cylinder.
- 30. Tube cutter
- 31.Flearing and swaging tools.
- 32. Hack saw frame with blades.

Other tools & tackles, instruments etc. as and when required, shall be arranged by contractor at no extra cost. All these shall be suitably kept at site, with contractors own security arrangement. These items should always be available for work. No work shall be partially or fully stopped for want of personnel or tools or instruments. If such an event occurs, the fine will be levied.

'PENALTY' CLAUSE:

Absenteeism: No absenteeism shall be allowed. In case of absence of any staff in the agreed staff pattern, a fine will be imposed at double the rate of wages or salary for the day the staff remains absent. The contractor shall provide reliever for the regular employee on leave / is sick.

- a) Non-Compliance of work: In the event of failure of compliance of awarded work in stipulated time, a fine will be imposed as per double of actual expenditure incurred in attending the same by another agency.
- **b)** Major faults viz. leakage testing/repairing/replacement of copper coils, motors, gas filling etc. not rectified within 4 days @ Rs. 1000/- per day.
- c) In case of repeated problems where the service personnel fail to diagnose the problem properly, a fine will be imposed at the rate of Rs.1000.00 per repeat.
- d) It is not at all advisable to bypass the connections to PCB & contactor for safe working of AC units. If at any point of contract period the AMC worker have found to have done so, the vendor will be penalized for Rs. 500/- for first instance, Rs. 1,000/- for second instance further if found again doing so, the contract may stand cancelled without any intimation thereof.
- e) No more than two changes of technicians or helpers will be allowed. Any change request must be informed 15 days in advance, and the department personnel will conduct an interview of the technician or helper before final approval. If this limit is exceeded, for each changes a fine of ₹5,000 will be imposed.

f) If complaints are not attended to within 4 hours the fine will be imposed at the rate of Rs.200.00 per hour.

Engineer-in-Charge (EIC) will be authorised to deduct the amount from the contractor bill or security deposit or initiate any other action as found suitable.

Special Terms and conditions of the contract

- 1. The Contractor shall appoint trained staff having a good bearing and maintain high standards of turn out, maintain adequate staff to ensure there is no hold up of any service for any reason whatsoever. Any deficiency in the number of staff deployed will entail penal reduction from the compensation payable as decided by the Centre. The successful Contractor as soon as the agreement is signed shall submit a list of their workmen/others along with a copy of the appointment order issued to them. As and when there is a change in the staff posted, a revised list shall be submitted along with a copy of the appointment order issued to the new appointee, simultaneously.
- 2. It is normally understood and agreed between both the parties that the Centre will not be responsible or be liable for any laws that are in force / that may come into force from time to time in respect of personnel engaged by the Contractor and he will be solely responsible for the terms and conditions of their services, safety, health, statutory requirement, etc.
- 3. Addition/alterations in the scope of work: Any alterations or additions to the scope of work will be communicated to the Contractor and the Contractor shall carry them out. For any reduction/increase in the Scope of work upto 25%, the increase/decrease in the rates shall be negotiated and finalized on a mutually agreed basis.
- 4. Once the Work Order is issued, the Contractor will receive instructions from an Officer designated for this purpose (Engineer-in-Charge) or his authorized nominee and the Contractor hereby undertakes to abide by his/her suggestions/instructions, etc. as regards services covered in this contract.
- 5. It is understood and agreed that the Contractor will be held responsible for any disciplinary matters arising out of their employees and the Contractor will take appropriate disciplinary action against those employees found indulging in any act of indiscipline in Center's premises or in connection with the services referred to herein.
- 6. The Contractor will immediately replace any employee found to be unfit in any manner immediately or on receipt of advice from Engineer in-charge (EIC) HBCSE.
- 7. The Contractor shall maintain a proper and detailed record for the job carried out by their employees and shall also maintain all records and returns as necessary for carrying out the work smoothly and as provided under the Contract Labour Act, Minimum Wages Act, ESI Act, PF Act, etc, as relevant and applicable from time to time.
- 8. The Contractor shall be solely responsible to comply with all legal and statutory requirements that arise out of this agreement and in respect of the employees engaged by the Contractor in fulfilment of the contractual obligations stated herein. It is understood and agreed that the Contractor will provide suitable uniforms with ID cards with photos and safety equipment and shoes to their employees. It is the Contractor's responsibility to have them periodically checked medically so as to ensure that medically fit staff only is deployed for the work.
- 9. The Contract employees should be covered under all statutory requirements like ESI, PF etc. by the Contractor and the Contractor shall comply with all the formalities in this regard. Copy of challan and Schedule of Contract Employees for payment of ESI/PF/or other benefits etc. to be furnished (whether running/quarterly or final) by the contractor for reimbursing the same every month.
- 10. The Contractor shall pay salary and other allowances/benefits as indicated by the Contractor in their tender and accepted by HBCSE. Such salary shall be equal to or more than minimum wages. The VDA amendment from time to time should be paid as and when revised.
- 11. The successful Contractor shall indemnify/deemed to have indemnified the Centre for all claims/losses arising out of this tender. The Contractor is deemed to have indemnified the Centre against any claim by any authority once the work order is awarded. In the event the Centre has to pay any individual, statutory body or any agency for reasons directly or indirectly attributable to this tender, the Contractor only shall pay such claim/damages and even if the Centre is called upon to pay, such damages/penalties and or cost shall be recovered from the contractor's dues /amount payable or shall be paid by the Contractor on demand from HBCSE.
- 12. The Contractor shall follow all rules as may be existing or may be framed from time to time at HBCSE on all

- aspects covering this tender. Material movement, entry/exit of personnel, identity card, safety, etc. shall be according to procedures existing in HBCSE as amended from time to time.
- 13. In the event of inadequate or unsatisfactory performance of duties by the Contractor, the Centre shall have the right to bring to the notice of the Contractor the default (s) on their part and the Contractor shall ensure that the said default (s) is/are not repeated and/or are duly remedied, within a period of three days from the receipt of the said notice. Failing such remedial action, or in the event of the said default(s) being inadequately corrected, the Centre shall have the right to immediately terminate the agreement.
- 14. Notwithstanding any other clause herein, if there is any act or omission by the Contractor or the Contract employees which jeopardizes the safety/security of the Centre including, but not limited to:
 - a) Theft or pilferage of property of HBCSE
 - b) Fire, flooding, breakage or damage
 - c) Violence or physical attack on the Campus
 - d) Any act or incident which may prove detrimental to the interests of HBCSE the contract would be terminated without any notice. Further, the Contractor would be levied penalties, as found appropriate by the deemed authority. The decision of the Centre Director shall be final in such matters.
- 15. During the pendency of the agreement, the contractor shall be liable fully to compensate all concerned for any loss, damage of construction of works, construction, plant & machinery, person, property, etc. including third party risks arising due to causes attributable to the agreement. The decision of the Centre Director will be final & will be binding on both parties.
- 16. The work mentioned in the schedule is only indicative. The Centre reserves the right to increase or decrease the quantum of work. The contractor shall execute the work on the same terms and conditions and rates throughout the period of agreement.
- 17. The Engineer-in-Charge is authorized to deduct any amounts as determined by the Centre Director from the amounts due to the Contractor for any deficiency in services, provided by the Contractor.
- 18. Payments to the contract employees shall be transferred to the bank accounts of the contract employees by the 10th of the succeeding month. The Contractor shall notify all his employees/workers of this date in their appointment order, and follow this very strictly, whether the Centre has paid the Contractor's bill or not. The proof of payment of salary and all other benefits such as bonus and overtime to the contract employees shall be submitted to accounts along with the quarterly bills.
- 19. No claims will be entertained in respect of any discrepancy or defect or short claim if such demand is not made within 90 days of payment of the final bill.
- 20. HBCSE will not be responsible for misplace of any items/tools. Secure your items/tools in your tool box

The following Shall NOT be a part of this Annexure – A (AC AMC): -

- 1. All plastic components, Bottom Tray, Cabinet cover.
- 2. Replacement of sheet metal part, front panel / grill, outer wrapper / casing.
- 3. Replacement of cooling and condenser coil.
- 4. Heating systems is not included.
- 5. Voltage stabilizers are not included.

Schedule of Quantities for Refrigeration, Air conditioning and Water coolers Comprehensive Maintenance Work Part-A (Annexure-A) for FY 2025-27 (To be submitted on Company's Letterhead)

	Regular required work (Part-A)		
Sr. No	Particulars	Capacity	Qty
1.0	Window ACs	1.5 Ton	11 Nos.
2.0	Split ACs (non-inverter type)	1.0 Ton	02 Nos.
3.0	Split ACs (non-inverter type)	1.5 Ton	60 Nos.
4.0	Split ACs (non-inverter type)	2.0 Ton	131 Nos.
5.0	Split ACs (inverter type)	1.0 Ton	0 Nos.
6.0	Split ACs (inverter type)	1.5 Ton	04 Nos.
7.0	Split ACs (inverter type)	2.0 Ton	15 Nos.
8.0	Cassette ACs (non-inverter type)	2.0 Ton	04 Nos.
9.0	Cassette ACs (non-inverter type)	4.0 Ton	02 Nos.
10.0	Cassette Acs (inverter type)	4.0 Ton	09 Nos.
11.0	Wired Concealed duct ACs (FCU)	2.0 Ton	08 Nos.
12.0	Ducted Split ACs	17.0 Ton	02 Nos.
13.0	Refrigerator (non-inverter type)	100 to 192 Ltr.	08 Nos.
14.0	Refrigerator (inverter type)	100 to 192 Ltr.	03 Nos.
15.0	Deep Freezer (non-inverter type)	280 to 563 Ltr.	07 Nos.
16.0	Deep Freezer (inverter type)	280 to 563 Ltr.	02 Nos.
17.0	Water cooler	80 Ltr.	11 Nos.
18.0	Water cooler	40 Ltr.	04 Nos.
height as pe	ed Split Air Conditioning systems at proper position and er manufacturer's specifications, including refrigerant gas quired. All as per instructions and directions of Engineer-	Per Unit	30.00
0. Gas Top up	onditioners unit up to 2.0 Tr. Refrigerant gas top up if	Per Unit	30.00
Supplying, refrigerant liquid). conbrazing bet manufactur with the inmonsoon ta should be clamp or a labour, tool In-Charge. Copper piequivalent. Nitrile ru	installing, fixing & testing of hard 100% copper piping between indoor and outdoor for gas (suction and implete with bends if any, using proper tools without any ween indoor to outdoor unit connection and as per AC unit er specifications. All the copper piping should be covered isulation of 9mm thick Nitrile rubber casing and white uping. The piping system supported at every 1.75 M. distance with non-rust GI as per site conditions. Including all material, wastage, is, etc. All as per instructions and directions of Engineer- ping make: Mandev/ Mexflow/ Total line/ approved ibber Insulation make: Acoflex/ Armaflex/ K-ved equivalent.	Per Meter	200.00
1			

	and accessories necessary, at all heights including scaffolding wherever required. Complete. All as per instructions and directions of Engineer-In-Charge.		
23.0	Drain Pipe (Thermal Insulated) Supply, Fixing & Installation of Drain water pipe line UPVC of approved make with all necessary fitting's accessories, Coupler, Elbows, Tees, Solvent cement, proper Clamping etc. Including material, wastage, tools, Insulation with Super lone/Nitrile rubber 9mm. thick to the drain etc. Complete. All as per instructions & directions of Engineer-In-Charge.		
	Pipe Make: Supreme/ Ashirvad/ Astral/prince approved equivalent.		
a.	Hard PVC pipe 25 mm.	Per Meter	200.00
b.	Hard PVC pipe 32 mm.	Per Meter	200.00
24 0	Supply, Fixing and Installation of 4 Core 2.5 Sq.mm ISI standard Copper connection cable of approved make to communicate from Outdoor Condensing unit to Indoor Control Panel & 3 Core 2.5 Sq.mm. copper connection cable of approved make for power supply from Indoor switch to outdoor unit with proper terminations on both sides using approved standard lugs. Cables should be carried through PVC conduits, flexible conduits as per suitable conditions on site. Complete. All as per instructions & directions of Engineer-In-Charge. Make: - Polycab/Havells/Finolex or approve equivalent.	Per Meter	300.00
25 0	MS Fabricated Table Top Supply, Installation and Commissioning of the Heavy-duty MS using 50X50X5 mm thick L- angle for outdoor unit duly painted with primer and two coats of black epoxy paint, fabricated table top making stand size (H x W x D) (15"x 36"x 16") with Rubber pad as per site requirement/design. Fixing. Complete. all as per instructions & directions of Engineer-In-Charge. Make: -TATA/JSW/Jindal or approved standard equivalent.	Per Unit	25.00
26 0	MS Fabricated Stand Supply, Installation and fixing of the Heavy-duty MS stand L- angle for outdoor unit duly painted with one coat of epoxy primer and two coats of epoxy paint of approved colour, welding, fabrication, finishing should be done as per site requirement/ design, including all labour, transport, etc. Complete. All as per instructions & directions of Engineer- In-Charge. Make: -TATA/JSW/Jindal or approved standard equivalent.	Per Kg.	60.00
27.0	L Bracket Jumbo Stand Supply, Installation and fixing of the Heavy-Duty Jumbo wall mounted L bracket stand. High Quality Powder Coating for long life. Suitable for 9K-24K BTU units. Make: Cruise/ D max/ Knape & Vogt or approve equivalent.	Per Unit	25.00
28 0		Per Unit	30.00

29. Removal of AC Unit Removal of Old Existing Split AC IDIL & ODI with stand Easteners		
removal of old Existing Spite He ibo & Obe with stand I asteriors		
& Copper pipe, drain pipe, electric wires & other necessary and	D 77.	20.00
keeping the same at approved location within Campus area lead	Per Unit	20.00
approved by the EIC and carting away all the debris out of the		
Campus and its disposal at nearest Municipal dumping ground. All		
Complete as per EIC. 30. Replacement of existing damaged only Indoor Unit (IDU) 3 star		
30. Replacement of existing damaged only Indoor Unit (IDU) 3 star including its removal, shifting, transportation, and its replacement with same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge. NOTE: The model of unit must be same or approved equivalent as		
per satisfaction of Engineer-In-Charge.		
		2.00
a. For New Unit 1.0 Tr	Per Unit	2.00
b. For New Unit 1.5 Tr.	Per Unit	3.00
c. For New Unit 2.0 Tr.	Per Unit	3.00
d. For Refurnish 1.0 Tr.	Per Unit	1.00
e. For Refurnish 1.5 Tr.	Per Unit	3.00
f. For Refurnish 2.0 Tr. 31. Replacement of existing (IDU) Cooling Coil including its removal,	Per Unit	3.00
31. Replacement of existing (IDU) Cooling Coil including its removal, shifting, transportation, and its replacement with NEW making Cooling Coil of same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge. NOTE: The model of unit must be same or approved equivalent as per satisfaction of Engineer-In-Charge.		
a. For AC Unit 1.0 Tr.	Per Unit	03.00
b. For AC Unit 1.5 Tr.	Per Unit	05.00
c. For AC Unit 2.0 Tr.	Per Unit	05.00
32. Replacement of existing damaged Copper Condenser Coil and fins including its removal, shifting, transportation, and its replacement with NEW condenser coil and fins of same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge.		
NOTE TO COLUMN T		
NOTE: The Copper Coil should be made as per satisfaction of		
NOTE: The Copper Coil should be made as per satisfaction of Engineer-In- Charge.		
	Per Unit	3.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr.	Per Unit Per Unit	3.00 5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr.		
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. 33. Replacement of existing damaged only Outdoor Unit (ODU) 3 star	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr.	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. 33. Replacement of existing damaged only Outdoor Unit (ODU) 3 star	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. 33. Replacement of existing damaged only Outdoor Unit (ODU) 3 star of same model with same capacity, including its removal, shifting, transportation and fixing & installation of new unit/Refurnished	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. 33. Replacement of existing damaged only Outdoor Unit (ODU) 3 star of same model with same capacity, including its removal, shifting,	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. Replacement of existing damaged only Outdoor Unit (ODU) 3 star of same model with same capacity, including its removal, shifting, transportation and fixing & installation of new unit/Refurnished with all connections with required spares, tools, equipment's,	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. 33. Replacement of existing damaged only Outdoor Unit (ODU) 3 star of same model with same capacity, including its removal, shifting,	Per Unit	5.00
Engineer-In- Charge. a. For AC Unit 1.0 Tr. b. For AC Unit 1.5 Tr. c. For AC Unit 2.0 Tr. 33. Replacement of existing damaged only Outdoor Unit (ODU) 3 star of same model with same capacity, including its removal, shifting, transportation and fixing & installation of new unit/Refurnished with all connections with required spares, tools, equipment's, accessories'. complete as per the instructions and directions of	Per Unit	5.00

	For AC Unit 1.5 Tr.	Per Unit	05.00
Э.	For AC Unit 2.0 Tr.	Per Unit	05.00
4. 0	The substituting in this income approximation in the substituting in the substitution		
U	transportation, tools, materials etc. Complete.		
	NOTE: Min. warranty - 03 months		02.00
a.	For AC Unit 1.0 Tr.	Per Unit	03.00
) .	For AC Unit 1.5 Tr.	Per Unit	07.00
c.	For AC Unit 2.0 Tr.	Per Unit	8.00
35. 0	To pump down existing Split ACs up to 2.0 Tr. unit and remove only Indoor unit and re-install the same unit at another location with all connections and with existing pipes and cable (If new cables or pipes installed, will be paid separately) including removal of IDU at new location and keeping it at approved location within Campus lead as directed by EIC, including labour, materials, tools, accessories etc. Complete.	Per Unit	10.00
6. 0	To pump down existing Split ACs up to 2.0 Tr. unit and remove only Outdoor unit and re-install the same unit at another location with all connections and with existing pipes and cable (If new cables or pipes installed, will be paid separately) including removal of IDU at new location and keeping it at approved location within Campus lead as directed by EIC, including labour, materials, tools, accessories etc. Complete.	Per Unit	10.00
7. 0	Supply up to 2.0 Tr. AC unit wireless Remote Control (OEM make).	Per Unit	20.00
88. 0	Supply up to 2.00 Tr. and type AC unit wireless Remote Control (Universal/Duplicate)	Per Unit	18.00
88. 0	Supply up to 2000 III und type III unit (iii closs I control	Per Unit	18.00
8. 0 99.	(Universal/Duplicate) SITC of Corded original (OEM) wired Remote Control of existing	Per Unit	18.00
88. 0 89.	(Universal/Duplicate) SITC of Corded original (OEM) wired Remote Control of existing unit make and model as per direction of EIC.		
38. 0 39. 0	(Universal/Duplicate) SITC of Corded original (OEM) wired Remote Control of existing unit make and model as per direction of EIC. 2.00 Tr. Hitachi make 17.00 Tr. Voltas make	Per Unit	05.00
88. 0 39. 0 50. 0	(Universal/Duplicate) SITC of Corded original (OEM) wired Remote Control of existing unit make and model as per direction of EIC. 2.00 Tr. Hitachi make 17.00 Tr. Voltas make To replace damaged Insulation sleeves whenever the copper pipes is exposed or found damaged sleeves due to weather conditions/birds/ monkey nuisance etc. to avoid any leakages at all heights including its cutting, fixing surrounding the copper pipes (suction & liquid discharge separate sleeve), rainwater taping of approved material and standard make as per instruction of Engineer-In-Charge with complete safety of worker. Nitrile rubber Thickness- 9mm. Approved Nitrile rubber Insulation make: Acoflex/ Armaflex/ K-	Per Unit Per Unit	05.00 02.00
8. 0 99. 0 0. 0. 0	(Universal/Duplicate) SITC of Corded original (OEM) wired Remote Control of existing unit make and model as per direction of EIC. 2.00 Tr. Hitachi make 17.00 Tr. Voltas make To replace damaged Insulation sleeves whenever the copper pipes is exposed or found damaged sleeves due to weather conditions/birds/ monkey nuisance etc. to avoid any leakages at all heights including its cutting, fixing surrounding the copper pipes (suction & liquid discharge separate sleeve), rainwater taping of approved material and standard make as per instruction of Engineer-In-Charge with complete safety of worker. Nitrile rubber Thickness-9mm. Approved Nitrile rubber Insulation make: Acoflex/ Armaflex/ K-Flex/Super lone. approved equivalent.	Per Unit Per Unit	05.00 02.00

		1
etc. Complete.		
43. SITC Replacement of existing damaged Magnet Rubber strip		
Gasket Refrigerator & Deep freezer as directed by EIC, including	Per meter	40.00
labour, materials, tools, accessories etc. Complete.	1 et illetet	10.00
*		
of Sile Replacement of Existing Water Cooler Base tray making		
Instead of M.S. to S.S. with S.S. Legs Including Refrigeration System		
properly remove and refixing the same as directed by EIC, including		
labour, materials, tools, accessories etc. Complete.		
Water Cooler model – SDLX-4-80		
80 Ltrs.	D. II.	5.00
Tray size- 30"x 22" Legs Height- 4"	Per Unit	5.00
S.S. Gauge require- 18 Gauge thickness.		
b. Water Cooler model – SBLX240PC 2-40		
40 Ltrs.		
Tray size- 20"x 20"	Per Unit	5.00
Legs Height- 4"	1 ci Omi	3.00
S.S. Gauge require- 18 Gauge thickness		
5. Replacement of existing damaged Copper Condenser Coil and fins including its removal, shifting, transportation, and its replacement with making NEW Finns and tube type Copper condenser coil with Venturi of same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer In Charge		
o fins including its removal, shifting, transportation, and its		
condenser coil with Venturi of same specifications and its fixing &		
installation with all connections with required spares, tools,		
directions of Engineer-In-Charge.		
NOTE: The Copper Coil should be made as per satisfaction of		
Engineer-In- Charge.		
a. Water Cooler model – SDLX-4-80	D. II.'	5.00
80 Ltrs.	Per Unit	5.00
b. Water Cooler model – SBLX240PC 2-40	Per Unit	5.00
40 Ltrs.	rei Ollit	3.00
Water Cooler Replacement of existing damaged Fan with Motor including its		
removal, its fixing & installation with all connections with required		
spares, tools, equipment's, accessories etc. complete as per the		
instructions and directions of Engineer-In-Charge. (SITC of New Aluminum fan blade with Motor)		
NOTE: The Copper Coil must as per satisfaction of Engineer-In-		
Charge.		
a. New Sealed type fan motor Details- Rexnord, REC 83-1305 AZ 220/230v, 50/60Hz 0.2A, 5/30W, RPM 1300/1550.	Per Unit	5.00
	T CI CIIII	2.00
Replacement of existing damaged air filter for the 17 Ton Voltas make ductable type IDU unit		
including its removal, fixing & installation with all connections	D	4.00
with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge.	Per unit	4.00
as per the instructions and directions of Engineer in Charge.		
8. Replacement of existing damaged Motorized Motor(Actuator)		
o for the Supply Air damper including its removal, fixing &		
installation with all connections with required spares, tools,		
equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge.		
NOTE: The Copper Coil must as per satisfaction of Engineer-In-		
Charge. a. Belimo Open/Close Damper Actuator		
LM 230A	Per Unit	2.00
6401 5Nm, AC100-240v, 50/60Hz	1 CI OIIIt	2.00
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	150 s 3.5 VA 1.5 W.		_
49. 0	Supply, fixing of Stainless-Steel Screw for the IDU & ODU AC units	Nos	500.00
50.	Fully Automatic LG make 7 kg Washing Machine Repairing Replacement of existing following damaged parts including its removal, transportation, and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In- Charge. Note: Warranty- 03 months		
a.	Gear box with belt	Per Unit	4.00
b.	Motor with belt	Per Unit	4.00
c.	PCB	Per Unit	4.00
d.	PCB (Inverter type)	Per Unit	2.00
e.	Drain motor	Per Unit	5.00
f.	Pulsator	Per Unit	5.00
g.	Pressure Sensor	Per Unit	5.00
h.	Water inlet Solenoid coil	Per Unit	5.00

SECTION 9: LIST OF AMC ITEMS

List of Refrigerators, Air Conditioners and water coolers at HBCSE

Sr. No.	Acc. No	Year	Name of the Items	Building	Location	Status
1	HBC 1470	1994-95	AC: 1.5 Ton Window (C&S Group)	Main Building	213	Working
2	HBC 1474	1994-95	AC: 1.5 Ton Window (C&S Group)	Main Building	Audit Room	Working
3	HBC 2913	1998-99	AC: 1.5 Ton Window	Old Hostel	201	Working
4	HBC 2914	1998-99	AC: 1.5 Ton Window	Old Hostel	202	Working
5	HBC 2915	1998-99	AC: 1.5 Ton Window	Old Hostel	204	Working
6	HBC 2916	1998-99	AC: 1.5 Ton Window	Old Hostel	203	Working
7	HBC 2917	1998-99	AC: 1.5 Ton Window	Old Hostel	205	Working
8	HBC 2918	1998-99	AC: 1.5 Ton Window	Old Hostel	206	Working
9	HBC 2919	1998-99	AC: 1.5 Ton Window	Old Hostel	207	Working
10	HBC 2920	1998-99	AC: 1.5 Ton Window	Old Hostel	208	Working
11	HBC 3361	1999-2000	AC: 1.5 Ton Split	Main Building	G3	Working
12	HBC 4084	2004-05	AC: 2.0 TR High wall split A.C. HWE 241B	Olympiad Building	107	Working
13	HBC 4085	2004-05	AC: 2.0 TR High wall split A.C. HWE 241B	Olympiad Building	107	Working
14	HBC 4769	2005-06	AC: 2.0 Ton Split: Carrier	Main Building	107	Working
15	HBC 4810	2006-07	AC: 2.0 TR High Wall Split Air Model: HWE	Main Building	114	Working
16	HBC 4837	2006-07	AC: 2.0 TR High Wall Split Air Model: HWE	Olympiad Building	G1	Working
17	HBC 4942	2006-07	AC: 2.0 TR High Wall Split Air Model: HWE	Main Building	119	Working
18	HBC 4943	2006-07	AC: 2.0 TR High Wall Split Air Model: HWE	Main Building	119	Working
19	HBC 5102	2007-08	AC: 2.0 Ton Split Carrier	Main Building	221	Working
20	HBC 5196	2007-08	AC: 2.0 Ton Split Carrier	NIUS Facility	G 7 Cabin	Working
21	HBC 5248	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	211	Working
22	HBC 5249	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	222	Working
23	HBC 5250	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Old Hostel	302	Working
24	HBC 5251	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	115	Working
25	HBC 5252	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	Ground FL Publication	Working
26	HBC 5253	2007-08	AC: 2.0 Ton Split HWM	Main Building	108	Working

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			Model: VERTIS			
27	HBC 5255	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	109	Working
28	HBC 5256	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Old Hostel	Flatlets 301	Working
29	HBC 5258	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Old Hostel	Flatlets 301	Working
30	HBC 5259	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	Ground FL Publication	Working
31	HBC 5260	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	108	Working
32	HBC 5261	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Nius Hostel	1st Floor	Working
33	HBC 5262	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Old Hostel	Flatlets 302	Working
34	HBC 5263	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	NIUS Facility	Workshop Store	Standby
35	HBC 5397	2007-08	AC: 2.0 Ton Split HWM Model: VERTIS	Main Building	218	Working
36	HBC 5763	2008-09	AC: 2.0 Ton Split Carrier	Main Building	G 3	Working
37	HBC 5779	2008-09	AC: 2.0 Ton Split Carrier	Main Building	222	Working
38	HBC 6370	2009-10	AC: 2.0 Ton Split Carrier (Hawall)	Main Building	223	Working
39	HBC 6371	2009-10	AC: 2.0 Ton Split Carrier (Hawall)	Main Building	223	Working
40	HBC 6373	2009-10	AC: 2.0 Ton Split Carrier (Hawall)	Main Building	219	Working
41	HBC 6375	2009-10	AC: 2.0 Ton Split Carrier (Hawall)	Main Building	220	Working
42	HBC 6423	2009-10	AC: 2.0 Ton Split Carrier Durakool	Main Building	108	Working
43	HBC 6424	2009-10	AC: 2.0 Ton Split Carrier Durakool	NIUS Facility	G 7	Working
44	HBC 6463	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G15	Working
45	HBC 6464	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G16	Working
46	HBC 6465	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G17	Working
47	HBC 6466	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G18	Working
48	HBC 6467	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G19	Working
49	HBC 6468	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G20	Working
50	HBC 6469	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G21	Working
51	HBC 6470	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	G22	Working
52	HBC 6471	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	113	Working
53	HBC 6472	2009-10	AC: 1.5 Ton Split S118TFL3	NIUS Hostel	114	Working
54	HBC 6473	2009-10	AC: 2.0 Ton Split S124TFL3	NIUS Hostel	115	Working

0	HBC 6474	2009-10	AC: 2.0 Ton Split S124TFL3	NIUS Hostel	116	Working
56	HBC 6475	2009-10	AC: 2.0 Ton Split S124TFL3	NIUS Hostel	215	Working
57	HBC 6476	2009-10	AC: 2.0 Ton Split S124TFL3	NIUS Hostel	216	Working
58	HBC 6477	2009-10	AC: 2.0 Ton Split S124TFL3	NIUS Hostel	315	Working
59	HBC 6517	2009-10	AC: 2.0-ton Model S124TFL3	Main Building	Workshop	Working
60	HBC 6518	2009-10	AC: 2.0-ton Model S124TFL3	NIUS Hostel	316	Working
61	HBC 6667	2009-10	AC: 2.0 Ton Split Hi Wall Star Rating	Main Building	215	Working
62	HBC 6668	2009-10	AC: 2.0 Ton Split Hi Wall Star Rating	NIUS Facility	G7 A	Working
63	HBC 6669	2009-10	AC: 2.0 Ton Split Hi Wall Star Rating	Main Building	Director Office	Working
64	HBC 6670	2009-10	AC: 2.0 Ton Split Hi Wall Star Rating	Main Building	212	Working
65	HBC 6671	2009-10	AC: 2.0 Ton Split Hi Wall Star Rating	Main Building	Director Office	Working
66	HBC 6831	2010-11	AC: 1.0 Ton (3 Star) Bluestar Make Split Mo. 3HW121YC	NIUS Facility	101	Working
67	HBC 6832	2010-11	AC: 1.0 Ton (3 Star) Bluestar Make Split Mo. 3HW121YC	NIUS Facility	101	Working
68	HBC 6833	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	Gl	Working
69	HBC 6834	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	G2	Working
70	HBC 6835	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	Main Building	217	Working
71	HBC 6836	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	JSO Lab.	Working
72	HBC 6837	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	107	Working
73	HBC 6838	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	104	Working
74	HBC 6839	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	206	Working
75	HBC 6840	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	206	Working
76	HBC 6841	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	206	Working
77	HBC 6842	2010-11	AC: 1.5 Ton Split (3 Star)	NIUS Facility	207	Working

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			Bluestar Make Mo. 3HW181YC			
78	HBC 6844	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	NIUS Facility	Physics Lab.	Working
79	HBC 6845	2010-11	AC: 1.5 Ton Split (3 Star) Bluestar Make Mo. 3HW181YC	Main Building	225	Working
80	HBC 6846	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G2	Working
81	HBC 6847	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G2	Working
82	HBC 6848	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G2	Working
83	HBC 6849	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G3	Working
84	HBC 6850	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G3	Working
85	HBC 6851	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G3	Working
86	HBC 6852	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G3	Working
87	HBC 6853	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G3	Working
88	HBC 6854	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G3	Working
89	HBC 6855	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G4	Working
90	HBC 6856	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G4	Working
91	HBC 6857	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G4	Working
92	HBC 6858	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G4	Working
93	HBC 6859	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	G4	Working
94	HBC 6860	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	Main Building	217	Working
95	HBC 6861	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	101	Working
96	HBC 6862	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	101	Working
97	HBC 6863	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	101	Working
98	HBC 6864	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	103	Working
99	HBC 6865	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	102	Working
100	HBC 6866	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	102	Working
101	HBC 6867	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	102	Working

102	HBC 6868	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	102	Working
103	HBC 6869	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	103	Working
104	HBC 6870	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	103	Working
105	HBC 6871	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	103	Working
106	HBC 6872	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	103	Working
107	HBC 6873	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	104	Working
108	HBC 6874	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	104	Working
109	HBC 6875	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	104	Working
110	HBC 6876	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	104	Standby
111	HBC 6877	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	JSO Lab.	Working
112	HBC 6878	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	JSO Lab.	Working
113	HBC 6879	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	JSO Lab.	Working
114	HBC 6880	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	JSO Lab.	Working
115	HBC 6881	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	JSO Lab.	Working
116	HBC 6882	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	201	Working
117	HBC 6883	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	201	Working
118	HBC 6884	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	202	Working
119	HBC 6885	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	202	Working
120	HBC 6886	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	202	Working
121	HBC 6887	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	202	Working
122	HBC 6888	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	202	Working
123	HBC 7047	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working
124	HBC 7048	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working
125	HBC 7049	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	Main Building	222	Working
126	HBC 7050	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	Main Building	217	Working
127	HBC 7051	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working

128	HBC 7052	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working
129	HBC 7053	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working
130	HBC 7054	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working
131	HBC 7055	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	Physics Lab.	Working
132	HBC 7056	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	205	Working
133	HBC 7057	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	205	Working
134	HBC 7058	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	205	Working
135	HBC 7059	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	205	Working
136	HBC 7060	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	206	Working
137	HBC 7061	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split Mo. 3HW241YC	NIUS Facility	206	Working
138	HBC 7062	2010-11	AC: 2.0 Ton (3 Star) Bluestar Make Split AC Mo. 3HW241YC	Main Building	224	Working
139	HBC 7455	2011-12	AC: 1.5 Ton Window Hitachi	NIUS Facility	JSO Lab.	Working
140	HBC 7599	2011-12	AC: 1.5 Ton Split Daikin Hiwall FTE50LV16	Main Building	201	Working
141	HBC 7600	2011-12	AC: 1.5 Ton Split Daikin Hiwall FTE50LV16	Main Building	101	Working
142	HBC 7887	2012-13	AC: 1.5 Ton Split Carrier Make	Old Hostel	306	Working
143	HBC 7888	2012-13	AC: 1.5 Ton Split Carrier Make	Old Hostel	305	Working
144	HBC 7889	2012-13	AC: 1.5 Ton Split Carrier Make	NIUS Hostel	217	Working
145	HBC 7890	2012-13	AC: 1.5 Ton Split Carrier Make	Main Building	101	Working
146	HBC 7892	2012-13	AC: 2.0 Ton Split Carrier Make	Main Building	102	Working
147	HBC 7893	2012-13	AC: 2.0 Ton Split Carrier Make	Main Building	109	Working
148	HBC 7894	2012-13	AC: 2.0 Ton Split Carrier Make	Main Building	Director Office	Working
149	HBC 7895	2012-13	AC: 2.0 Ton Split Carrier Make	Main Building	Director Office	Working
150	HBC 8058	2013-14	AC: 2.0 Ton Split Carrier Make Sr.500284107149000780	Main Building	202	Working
151	HBC 8059	2013-14	AC: 2.0 Ton Split Carrier Make Sr.500284107149000781	Main Building	202	Working
152	HBC 8060	2013-14	AC: 2.0 Ton Split Carrier Make	Olympiad Building	G1	Working

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			Sr.500284107149000782			
153	HBC 8061	2013-14	AC: 2.0 Ton Split Carrier Make Sr.500284107149000783	Olympiad Building	G2	Working
154	HBC 8062	2013-14	AC: 2.0 Ton Split Carrier Make Sr.500284107149000784	Olympiad Building	G2	Working
155	HBC 8063	2013-14	AC: 2.0 Ton Split Carrier Make Sr.500284107149000785	Olympiad Building	G3	Working
156	HBC 8064	2013-14	AC: 2.0 Ton Split Carrier Make Sr.500284107149000786	Olympiad Building	G4	Working
157	HBC 8076	2013-14	AC: 2.0 Ton Split Carrier Make Sr. No. 500284111149001304	Olympiad Building	G4	Working
158	HBC 8077	2013-14	AC: 2.0 Ton Split Carrier Make Sr. No. 500284111149001305	NIUS Facility	101	Working
159	HBC 8078	2013-14	AC: 2.0 Ton Split Carrier Make Sr. No. 500284111149001309	NIUS Facility	101	Working
160	HBC 8079	2013-14	AC: 2.0 Ton Split Carrier MakeSr. No. 500284111149001315	NIUS Facility	101	Working
161	HBC 8080	2013-14	AC: 2.0 Ton Split Carrier Make Sr. No. 500284111149001316	NIUS Facility	101	Working
162	HBC 8099	2014-15	AC: 2.0 Ton Split Carrier Model: Superia	Main Building	G6	Working
163	HBC 8100	2014-15	AC: 2.0 Ton Split Carrier Model: Superia	Main Building	G6	Working
164	HBC 8185	2014-15	AC: 1.5 Ton Split Carrier Make Sr. 500301332- 149018754	NIUS Hostel	G13	Working
165	HBC 8186	2014-15	AC: 1.5 Ton Split Carrier Make Sr. 500301332- 149018758	NIUS Hostel	G14	Working
166	HBC 8187	2014-15	AC: 1.5 Ton Split Carrier Make Sr. 500301332- 149018771	NIUS Hostel	111	Working
167	HBC 8188	2014-15	AC: 1.5 Ton Split Carrier Make Sr. 500301332- 149018776	NIUS Hostel	112	Working
168	HBC 8190	2014-15	AC: 2.0 Ton Split Carrier Make Sr. 500284136149005416	NIUS Facility	101	Working
169	HBC 8457	2015-16	AC: 1.5 Ton Split Carrier Make Model: Superia	NIUS Hostel	G10	Working
170	HBC 8458	2015-16	AC: 1.5 Ton Split Carrier Make Model: Superia	NIUS Hostel	G12	Working

HBC 8459	2015-16	AC: 1.5 Ton Split Carrier Make Model: Superia	NIUS Hostel	108	Working
HBC 8460	2015-16	AC: 1.5 Ton Split Carrier Make Model: Superia	NIUS Hostel	110	Working
HBC 8498	2015-16	AC: 1.5 Ton Split Carrier	Olympiad Building	Biology Lab.	Working
HBC 8499	2015-16	AC: 1.5 Ton Split Carrier	Olympiad	Biology Lab.	Working
HBC 8500	2015-16	AC: 1.5 Ton Split Carrier	Olympiad	Biology Lab.	Working
HBC 8501	2015-16	AC: 1.5 Ton Split Carrier	Olympiad	Biology Lab.	Working
HBC 8512	2015-16	AC: 1.5 Ton Split Carrier	NIUS Facility	102	Working
HBC 8513	2015-16	AC: 1.5 Ton Split Carrier	NIUS Facility	104	Working
HBC 8514	2015-16	AC: 1.5 Ton Split Carrier	NIUS Facility	106	Working
HBC 8515	2015-16	AC: 1.5 Ton Split Carrier	NIUS Facility	109	Working
HBC 8593	2016-17	AC: 2.0 Ton Split Carrier	Main Building	108	Working
HBC 8594	2016-17	AC: 2.0 Ton Split Carrier	Main Building	108	Working
HBC 8595	2016-17	AC: 1.5 Ton Split Carrier	Main Building	216	Working
HBC 8596	2016-17	AC: 1.5 Ton Split Carrier	Main Building	210	Working
HBC 8710	2019-20	AC: 1.5 Ton Split Carrier	Olympiad Building	204	Working
HBC 8711	2019-20	AC: 1.5 Ton Split Carrier	Olympiad	204	Working
HBC 8712	2019-20	AC: 2.0 Ton Split Carrier Make Model Durafresh Neo	Main Building	G 1	Working
HBC 8713	2019-20	AC: 2.0 Ton Split Carrier Make Model Durafresh Neo	Main Building	G 1	Working
HBC 8714	2019-20	AC: 2.0 Ton Split Carrier	Main Building	G 2	Working
HBC 8715	2019-20	AC: 2.0 Ton Split Carrier Make Model Durafresh Neo	Main Building	G 2	Working
HBC 8716	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	Main Building	230	Working
HBC 8717	2019-20	AC: 2.0 Ton Split Carrier Make Model Durafresh Neo	Main Building	230	Working
HBC 8718	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	Main Building	228	Working
HBC 8719	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	Main Building	214	Working
HBC 8720	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	Main Building	121	Working
HBC 8750	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	NIUS Hostel	G 11	Working
	HBC 8460 HBC 8498 HBC 8499 HBC 8500 HBC 8501 HBC 8512 HBC 8513 HBC 8514 HBC 8515 HBC 8593 HBC 8593 HBC 8594 HBC 8595 HBC 8710 HBC 8710 HBC 8711 HBC 8711 HBC 8712 HBC 8713 HBC 8714 HBC 8715 HBC 8716 HBC 8717 HBC 8717 HBC 8719 HBC 8720	HBC 8460 2015-16 HBC 8498 2015-16 HBC 8499 2015-16 HBC 8500 2015-16 HBC 8501 2015-16 HBC 8512 2015-16 HBC 8513 2015-16 HBC 8514 2015-16 HBC 8515 2015-16 HBC 8593 2016-17 HBC 8594 2016-17 HBC 8595 2016-17 HBC 8596 2016-17 HBC 8710 2019-20 HBC 8711 2019-20 HBC 8711 2019-20 HBC 8713 2019-20 HBC 8714 2019-20 HBC 8715 2019-20 HBC 8716 2019-20 HBC 8717 2019-20 HBC 8717 2019-20 HBC 8718 2019-20 HBC 8719 2019-20 HBC 8719 2019-20 HBC 8719 2019-20 HBC 8719 2019-20	HBC 8460 2015-16 Make Model: Superia	HBC 8460 2015-16	HBC 8460 2015-16

197	HBC 8751	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	NIUS Hostel	101	Working
198	HBC 8752	2019-20	AC: 1.5 Ton Split Carrier Make Model Durafresh Neo	Nius Hostel	103	Working
199	HBC 8753	2019-20	AC 1.5 Ton Split Carrier Make Model Durafresh Neo	Nius Hostel	105	Working
200	HBC 8754	2019-20	AC 1.5 Ton Split Carrier Make Model Durafresh Neo	Nius Hostel	107	Working
201	HBC 8766	2020-21	AC: 2.0 Ton Split Toshiba Make Model RAS-24J2KG- IN	Main Building	108 Server	Working
202	HBC 8767	2020-21	AC: 2.0 Ton Split Toshiba Make Model RAS-24J2KG- IN	Main Building	108 Server	Working
203	HBC 8768	2020-21	AC: 1.5 Ton Split Toshiba Make Model RAS-18J2KG- IN	Main Building	229	Working
204	HBC 8855	2021-22	AC: 1.5 Ton Split Haier Make 5 Star (Inverter type)	Old Hostel	Child Care	Working
205	HBC 8862	2022-23	AC: 4.0 Ton Cassette AC Voltas Non-Inverter type	Main Building	Library	Working
206	HBC 8863	2022-23	AC: 4.0 Ton Cassette AC Voltas Non-Inverter type	Main Building	Library	Working
207	HBC 8868	2022-23	AC: 17 Ton Ducted Split Air Conditioners Voltas make	Main Building	Library	Working
208	HBC 8869	2022-23	AC: 17 Ton Ducted Split Air Conditioners Voltas make	Main Building	Library	Working
209	HBC 8880	2022-23	AC: 2.0 Ton Cassette AC Hitachi Model- RAG122HYDA	NIUS Facility	G 4	Working
210	HBC 8881	2022-23	AC: 2.0 Ton Cassette AC Hitachi Model- RAG122HYDA	NIUS Facility	G 4	Working
211	HBC 8882	2022-23	AC: 2.0 Ton Cassette AC Hitachi Model- RAG122HYDA	NIUS Facility	G 4	Working
212	HBC 8883	2022-23	AC: 2.0 Ton Cassette AC Hitachi Model- RAG122HYDA	NIUS Facility	G 4	Working
213	HBC 8891	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
214	HBC 8892	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
215	HBC 8893	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
216	HBC 8894	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
217	HBC 8895	2022-23	AC: 2.0 Ton Wired	Olympiad	Biology Lab.	Working

Page **45** of **66**

			Concealed Split AC Hitachi - PAH024KVDA	Building		
218	HBC 8896	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
219	HBC 8897	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
220	HBC 8898	2022-23	AC: 2.0 Ton Wired Concealed Split AC Hitachi - PAH024KVDA	Olympiad Building	Biology Lab.	Working
221	HBC 8928	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
222	HBC 8929	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
223	HBC 8930	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
224	HBC 8931	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
225	HBC 8932	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
226	HBC 8933	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
227	HBC 8934	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
228	HBC 8935	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
229	HBC 8936	2022-23	AC: 4.0 Ton 5 Star Inverter Cassette Ceiling mounted Daikin	Main Building	Auditorium	Working
230	HBC 8972	2022-23	AC: 2.0 Ton 5 Star Inverter Split AC Carrier Media	Main Building	207	Working
231	TFR/2023/89 76/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Carrier	NIUS Facility	Server Room 101	Working
232	TFR/2023/89 77/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Carrier	NIUS Facility	Server Room 101	Working
233	TFR/2023/89 83/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Voltas	Olympiad Building	Chemistry cell G 6	Working
234	TFR/2023/89 84/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Voltas	Olympiad Building	Chemistry Cell G 7	Working
235	TFR/2023/89 85/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Voltas	Olympiad Building	Chemistry Cell G 7	Working
236	TFR/2023/89 86/HBCS	2023-24	AC: 1.5 Ton 5 Star Inverter Split AC Voltas	Olympiad Building	Chemistry Cell 203	Working

1	1				1	1
237	TFR/2023/89 87/HBCS	2023-24	AC: 1.5 Ton 5 Star Inverter Split AC Voltas	Olympiad Building	Chemistry Cell 203	Working
238	TFR/2023/90 07/HBCS	2023-24	AC: 1.5 Ton 5 Star Inverter Split AC Voltas	Main Building	119	Working
239	TFR/2023/90 08/HBCS	2023-24	AC: 1.5 Ton 5 Star Inverter Split AC Voltas	Main Building	110	Working
240	TFR/2023/90 05/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Voltas	Main Building	108	Working
241	TFR/2023/90 06/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Voltas	Main Building	203	Working
242	TFR/2023/90 04/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Voltas	Main Building	209	Working
243	TFR/2023/90 02/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Carrier	Main Building	Purchase Section 118	Working
244	TFR/2023/90 03/HBCS	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Carrier	Main Building	Purchase Section 118	Working
245	HBC 9265	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Ogeneral	Main Building	Studio Room	Working
246	HBC 9266	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Ogeneral	Main Building	Studio Room	Working
247	HBC 9267	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Ogeneral	Main Building	Studio Room	Working
248	HBC 9268	2023-24	AC: 2.0 Ton 5 Star Inverter Split AC Ogeneral	Main Building	Studio Room	Working
249	HBC 7063	2010-11	Refrigerator: Godrej GDC110s (100 Ltrs.)	NIUS Hostel	216	Working
250	HBC 7064	2010-11	Refrigerator: Godrej GDC110s (100 Ltrs.)	NIUS Hostel	215	Working
251	HBC 7065	2010-11	Refrigerator: Godrej GDC110s (100 Ltrs.)	NIUS Hostel	316	Working
252	HBC 7066	2010-11	Refrigerator: Godrej GDC110s (100 Ltrs.)	NIUS Hostel	315	Working
253	HBC 7067	2010-11	Refrigerator : Godrej GDE 19B1 (183 Ltrs.)	Main Building	Pantry	Working
254	HBC 7813	2012-13	Refrigerator: Samsung RT72KBSL (541 Ltrs.)	NIUS Facility	Canteen	Working
255	HBC 9269	2023-24	Refrigerator: Whirlpool Model-DAS19253ITAUE (192 Ltrs.)	NIUS Hostel	115	Working
256	HBC 9270	2023-24	Refrigerator: Whirlpool Model-DAS19253ITAUE (192 Ltrs.)	NIUS Hostel	116	Working
257	HBC 4454	2004-05	Refrigerator: LG make Model- GL-T292GP (280 Ltrs.) Double door	Old Hostel	Pantry	Working
258	HBC 2728	1998-99	Refrigerator: Godrej (100 Ltrs.)	Old Hostel	Pantry	Working
259	HBC 5264	2007-08	Refrigerator: LG make Model- GL-T292GP (310 Ltrs.) Double door	Olympiad Building	Chemistry Lab	Working
260	HBC 8836	2020-21	Refrigerator: 5 Star smart Inverter (190 Ltrs)	Old Hostel	Child Care	Working

	· ·		T	ı	T	ı
261	HBC 6809	2010-11	Refrigerator: 5 Star LG make Direct cool (185 Ltrs.)	NIUS Facility	106 IJSO Lab	Working
262	HBC 4457	2004-05	Refrigerator: Godrej (165 Ltrs.)	NIUS Facility	201 Physics Lab	Working
263	HBC 8778	2021-22	Refrigerator: LG make Inverter LINEAR (547Ltrs.)	Olympiad Building	102 Biolab	Working
264	HBC 8532	2016-17	Refrigerator: Whirlpool Inverter Frost free (480 Ltrs)	Olympiad Building	105 Biolab	Working
265	HBC 8778	2020-21	Combi Refrigerator: Hoshizaki double door (563 Ltrs.)	NIUS Facility	Canteen	Working
266	HBC 7013	2010-11	Deep Freezer: Assemble 3 door vertical (551 Ltrs.)	NIUS Facility	Canteen	Working
267	HBC 8098	2014-15	Deep Freezer: Bluestar Model CHF500A (500 Ltrs.)	NIUS Facility	Canteen	Working
268	HBC 5279	2007-08	Deep Freezer: REMI QUICK Freezer MODEL- SC18CL (336 Ltrs.)	Olympiad Building	Chemistry Lab	Working
269	HBC 6390	2009-10	Water Cooler: SDLX - 4 -80	NIUS Facility	Ground Fl. Corridor	Working
270	HBC 6391	2009-10	Water Cooler: SDLX - 4 -80	NIUS Facility	TV Room	Working
271	HBC 6392	2009-10	Water Cooler: SDLX - 4 -80	NIUS Hostel	Third Floor	Working
272	HBC 6393	2009-10	Water Cooler: SDLX - 4 -80	NIUS Facility	Canteen	Working
273	HBC 6459	2009-10	Water Cooler: SDLX - 4 -80	NIUS Hostel	Ground Fl. Corridor	Working
274	HBC 6460	2009-10	Water Cooler: SDLX - 4 -80	NIUS Hostel	1st Corridor	Working
275	HBC 6461	2009-10	Water Cooler: SDLX - 4 -80	NIUS Hostel	2nd Corridor	Working
276	HBC 6462	2009-10	Water Cooler: SDLX - 4 -80	Olympiad Building	Ground FL Corridor	Working
277	HBC 5623	2008-09	Water Cooler: SDLX - 4 -80	Main Building	2nd Corridor	Working
278	HBC 5624	2008-09	Water Cooler: SDLX - 4 -80	Old Hostel	G4 Ground Floor	Working
279	HBC 4219	2008-09	Water Cooler: SDLX - 4 -80	Main Building	Canteen	Working
280	HBC 4220	2004-05	Water Cooler: Model PC 2- 40	Olympiad Bldg	1st Corridor	Working
281	HBC 4221	2004-05	Water Cooler: Model PC 2- 40	Olympiad Building	2nd Corridor	Working
282	HBC 4687	2004-05	Water Cooler: Model PC 2- 40	Main Building	1st Corridor West Side	Working
283	HBC 8095	2014-15	Water Cooler: Model SBLX240PC 2-40	NIUS Facility	2nd Corridor	Working

SECTION 10: ANNEXURES

ANNEXURE I <u>APPLICATION FORM</u> (On Company's Letterhead)

	(On Company's Lette	<u>erhead)</u>
		Date:
To,		
The Centre Dire		as Dood Montaland Manufai 400000
Sir,	Centre for Science Education, TIFR, V. N. Pura	iv Koad Mankhurd, Mumbai – 400088.
,	uthorized to represent and act on behalf of	
		red to as "the Applicant") and having reviewed
		vided, the undersigned hereby applies to be pre-
		nnual Maintenance Contract (Comprehensive)
	* *	stalled at Homi Bhabha Centre for Science
Education - T	IFR for the year 2025-2027' as per specification	attached.
	this letter are copies or original documents defi	ining:
(a) the applican		
	l place of business	
` /	1 \ 11	ns) or the place of registration and the nationality
(d) Annexure no	for applicants who are partnerships or individuall	y owned firms)
` '		reby authorized to conduct any inquiries or
_	-	ion submitted in connection with this application,
-	•	g any financial and technical aspects. This letter of
application will	also serve as authorization to any individual or at	athorized representative or any institution referred
* *		eemed necessary and requested by you to verify
		with regard to the resources, experience, and
competence of t	**	
	*	tact the following persons for further information
on general, pers	sonnel, technical and financial enquiries.	
Details	Contact 1	Contact 2
Name		
Contact No.		
E-mail		
	tion is made with the full understanding that:	C 11: C 1 1 C1:11:
		f all information submitted at the time of bidding luded in this contract document; I accept to abide
		satisfy the above the contract may lead to the
	of this contract and forfeiture of the Performance	•
	ment reserves the right to:	Guarantee with security Bepositi
· /	scope and value of the contract / bid under this p	roject; in such event, bids will only be called
from pre-qua	alified bidders who meet the revised requirements	s; and
ii. Reject or ac	ecept any application, cancel the pre-qualification	on process, and reject all applications without
	asons or incurring any liability thereof; and	
(d) Your departr	nent shall not be liable for any such actions and s	shall be under no obligation to inform the applicant.
	gned declares that statements made and the inform rect in every detail.	nation provided in the duly completed application
Signed and	sealed, Name	
For and on l	behalf of	

ANNEXURE II

TECHNICAL BID-COMPANY PROFILE BASIC TECHNICAL DETAILS OF THE BIDDER

Sr. No		Remarks (mentioned page numbers)
1.	Name of business	
2.	Type of firm: Proprietary / Partnership / Pvt. Ltd. / Ltd./	
	Single Person Company / LLP	
3.	Incorporation date: Name of Directors/ Partners	
4.	Full particulars of office	
(a)	Registered/ Head Office address	
(4)	registered fred office address	
(b)	Telephone no.	
(c)	E-mail address	
5.	Bank details	
	(a) Bank name and Address:	
	4)	
	(b) Account type:	
	(c) Account no:	
	(d) IFSC code:	
6.	Registration details:	
	(a) PAN no. (attach copy of proof)	
	(b) GST registration no. (attach copy of proof)	
7.	Details of Bid Security Declaration/ Earnest Money Deposit	
(a)	Amount (Rs.)	
(b)	Demand Draft No. and Date	
(c)	Drawn on bank	
	The tenderer should have the registered office in zonal	
	office in Mumbai Metropolitan Region and nearby areas.	
10	(attach copy of proof)	
12	Any other information	

Company Seal	(Signature of the bidder)
Date:	Name and Designation

ANNEXURE –III EXPERIENCE OF COMPLETION OF PROJECTS OF SIMILAR NATURE & COMPLEXITY

(During last **Three** years ending last day of month previous to the one in which applications are invited)

Sl. No.	Name of work / project and location	Owner or sponsoring organization	Date of commencement as per contract	Date of completion	Name and address/ telephone number of officers to whom reference may be made	Remarks

NOTE : Please attach information.	supporting docume	ents (complet	tion certificates alor	ng with ord	er copies) for the abov	e
			Signature and se bidder	eal of the Au	nthorized Signatory of	the

ANNEXURE - IV

LIST OF WORKS IN HAND

Name of work	Name & address of the establishment under whom the work is being executed	Value of the work in Lakhs	Completion time as per the contract	Position of the works in progress	Remarks
1	2	3	4	5	6

Signature and seal of the Authorized Signatory of the bidder

ANNEXURE - V

FINANCIAL CAPABILITIES

Financial Year	Annual Turn Over in Indian Rupees (or equivalent to Indian Rupees) as per Audited Balance Sheet
2022-2023	Rs.
2023-2024	Rs.
2024-2025	Rs.

NOTE: The above data is to be supported by audited balance sheets and to be submitted with tender documents.

(Attach copies of audited balance sheets duly certified by the chartered accountant for all three years. Audited Balance sheet should mention the membership number of chartered accountant issued by ICAI along with full address.)

Signature and seal of the Authorized Signatory of the bidder

ANNEXURE - VI

LITIGATION DETAILS (COURT CASES/ARBITRATION)

Year	Name of the work	Name of the Client, with Address	Title of the court Case/Arbitration	Status Pending/ Decided	Disputed Amount (Current Value, the equivalent) in case of Court Cases/arbitration	Actual Awarded Amount (Rs) in decided Court Cases/arbitration

Signature and seal of the Authorized Signatory of the bidder

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ANNEXURE-VII

CERTIFICATE OF SITE VISIT

Tender No:	
To, Head Administration Operations HBCSE-TIFR, Mankhurd Mumbai-400 088, India.	
Dear Sir/Madam,	
With reference to your tender mentioned above, we have atternation and have understood the scope of	
HOMI BHABHA CENTRE FOR SCIENCE ED Tata Institute of Fundamental Research V.N. Purva Marg, Mankhurd Mumbai-400 088, India	UCATION
Where the tendered work is to be carried out.	
Name & Signature of Bidder:	
Designation :	
Company Seal & Phone No.:	
	Name & Signature of Centre's Representative:
	Date:

ANNEXURE -VIII

BID SECURITY DECLARATION (EMD) (To be submitted on Company's Letterhead)

	Date:
То,	
Centre Director,	
Homi Bhabha Centre for Science Education – TIFR,	
V. N. Purav Marg,	
Mankhurd, Mumbai - 400088.	
Tender No	
I/we have gone through the tendering conditions pertaining to th Special Conditions of Contract and Additional Conditions of Contract, We, the undersigned, declare that:	
I / We understand that, as per terms and conditions of tender, bids mus In lieu of Earnest Money Deposit.	t be supported by a Bid Security Declaration
I / We hereby accept that I / We may be disqualified from bidding for an Three years from the date of disqualification as may be notified by you	- · · · · · · · · · · · · · · · · · · ·
I. I am /We are in a breach of any of the obligations under the bid co	onditions, or
II. I/We have withdrawn or unilaterally modified/amended/revised, specified in the form of Bid or extended period, if any.	my/our Bid during the bid validity period
III. On acceptance of our bid by HBCSE, I/we failed to deposit the pre to execute the agreement or fails to commence the execution of conditions and within the specified time.	
Name & designation of the authorized person signing the Bid-Securing	Signature of bidder with Seal & Date Declaration Form:
Duly authorized to sign the bid for and on behalf of:Bidder firm)	(complete name of
Dated on day of month, year.	
(Note: In case of a Joint Venture, the Bid Security Declaration must Venture that submits the bid).	t be in the name of all partners to the Joint

ANNEXURE-IX

FORM OF AGREEMENT (To be submitted after issue of WO on Rs.100 Stamp paper)

This Agreement is made on the Institute Of Fundamental Research Maintenance Contract (Comprehat Homi Bhabha Centre for Science Maharashtra, India' as per the doct the one part and M/s the other part	h (HBCSE-TIFR), Mumbai ensive) Of Refrigeration, A ee Education (HBCSE), V. N ument (hereinafter called "Th	i for the entering into ir Conditioning And W N. Purav Marg, Mankhone Employer") who enter	work(s) for 'Annual Vater Coolers Installed urd, Mumbai - 400088, rs into this Agreement of
Whereas the Employer is desired by the Contractor for the execution		("the Works")	and has accepted a Bid
Now this Agreement witnessed as for 1. In this Agreement words and expectation that the Conditions of Contract herein 2. The following documents shall be (a) The Letter of Award; (b) The said Bid; (c) The General and Special Condition (d) Prequalification document (e) Instructions to Bidders and Special Condition (g) Scope of Work (h) The Price Bid (i) Annexures (j) Any other relevant documents recontractor hereby covenants with the in conformity in all respects with the 4. The Employer hereby covenants Works and the remedying of defect under the provisions of the Contract In Witness whereof the parties her written. Signed, Sealed, and Deliver	ressions shall have the same after referred to. e deemed to form and be read ons of Contract; fic Conditions of Contract; fic Conditions of Contract; ferred to in this Agreement or to be made by the Employer to execute and context exprovisions of this work. To pay the Contractor in consist therein the Contract Price of at the times and in the manner to have caused this Agreement.	in the aforementioned do to the Contractor as he implete the Works and remainder to only such other sums are prescribed by the Contractor.	ocuments creinafter mentioned, the medy any defects therein on and completion of the as may become payable tract.
Binding Signature for and on behalf	of HBCSE-TIFR-Mumbai		
	Binding Signature of Contract In the presence of Witness (1): (Name & Signature) Witness (2): (Name & Signature)	ctor	

ANNEXURE -X

PROFORMA FOR PERFORMANCE BANK GURANTEE

(On a stamp paper of appropriate value from any Nationalized Bank or Scheduled Bank)

(To be submitted after issue of WO)

(To be submitted after issue of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute of Fundamental Research (but the first Spinger Education Tata Institute Office Ins

Signed and sealed Dated the day of
is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee, all our liability under this guarantee shall stand discharged.
8. This guarantee shall be valid up to, unless extended on demand by HBCSE-TIFR. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs (Rupees only) and unless a claim in writing
7. We,
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
5. We
4. We
3. We, the said bank, further undertake to pay to the HBCSE-TIFR any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment somade by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s)shall have no claim against us for making such payment.
2. We
the said Work Order, we
bank Guarantee for Rs
called "the said Contractor{s}") for the work
"The HBCSE-TIFR") having agreed under the terms and conditions of Work Order No. Dated
1. In consideration of the Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research (hereinafter called

Annexure-XI

Financial Bid PART A

Schedule of Quantities for Annual Maintenance Contract (Comprehensive) of Refrigeration, Air Conditioning and water coolers installed Work for FY 2025—27
(To be submitted on Company's Letterhead)

NAME OF T	THE BIDDER:		
THE OF I	THE DIDDER.		

	(Part-A)				
	Regular requi	red work			
Sr. No	Particulars Particulars	Capacity	Qty	Rate	Amount
1.0	Window ACs	1.5 Ton	11 Nos.		
2.0	Split ACs (non-inverter type)	1.0 Ton	02 Nos.		
3.0	Split ACs (non-inverter type)	1.5 Ton	60 Nos.		
4.0	Split ACs (non-inverter type)	2.0 Ton	131 Nos.		
5.0	Split ACs (inverter type)	1.0 Ton	0 Nos.		
6.0	Split ACs (inverter type)	1.5 Ton	04 Nos.		
7.0	Split ACs (inverter type)	2.0 Ton	15 Nos.		
8.0	Cassette ACs (non-inverter type)	2.0 Ton	04 Nos.		
9.0	Cassette ACs (non-inverter type)	4.0 Ton	02 Nos.		
10.0	Cassette Acs (inverter type)	4.0 Ton	09 Nos.		
11.0	Wired Concealed duct ACs (FCU)	2.0 Ton	08 Nos.		
12.0	Ducted Split ACs	17.0 Ton	02 Nos.		
13.0	Refrigerator (non-inverter type)	100 to 192 Ltr.	08 Nos.		
14.0	Refrigerator (inverter type)	100 to 192 Ltr.	03 Nos.		
15.0	Deep Freezer (non-inverter type)	280 to 563 Ltr.	07 Nos.		
16.0	Deep Freezer (inverter type)	280 to 563 Ltr.	02 Nos.		
17.0	Water cooler	80 Ltr.	11 Nos.		
18.0	Water cooler	40 Ltr.	04 Nos.		
			'A' Tota	al Amount	
	(Part The below items are required as per act	-B) tual requirement	ts and mea	asurements	
19.0	Standard Installation Fixing, installation, testing and commissioning of up to 2.0 TR Hi-wall mounted Split Air Conditioning systems at proper position and height as per manufacturer's specifications, including refrigerant gas top up if required. All as per instructions and directions of Engineer-In-Charge.	Per Unit	30.00		
20.0	Gas Top up New Air Conditioners unit up to 2.0 Tr. Refrigerant gas top up if required.	Per Unit	30.00		

	21.0	Refrigerant Copper piping (Thermal			
4	21.0	Insulated)			
		Supplying, installing, fixing & testing of hard 100% copper refrigerant piping between indoor and outdoor for gas (suction and liquid). complete with bends if any, using proper tools without any brazing between indoor to outdoor unit connection and as per AC unit manufacturer specifications. All the copper piping should be covered with the insulation of 9mm thick Nitrile rubber casing and white monsoon taping. The piping system should be supported at every 1.75 M. distance with non-rust GI clamp or as per site conditions. Including all material, wastage, labour, tools, etc. All as per instructions and directions of Engineer-In-Charge. Copper piping make: Mandev/ Mexflow/ Total line/ approved equivalent. Nitrile rubber Insulation make: Acoflex/ Armaflex/ K-Flex/approved equivalent.	Per Meter	200.00	
2	22.0	Core Cutting If required Providing & making size of 4" dia core cutting on RCC/ Masonry surfaces using Core cutting machine, including labour, tools and accessories necessary, at all heights including scaffolding wherever required. Complete. All as per instructions and directions of Engineer-In-Charge.	Per Unit	30.00	
2	23.0	Drain Pipe (Thermal Insulated) Supply, Fixing & Installation of Drain water pipe line UPVC of approved make with all necessary fitting's accessories, Coupler, Elbows, Tees, Solvent cement, proper Clamping etc. Including material, wastage, tools, Insulation with Super lone/Nitrile rubber 9mm. thick to the drain etc. Complete. All as per instructions & directions of Engineer-In-Charge. Pipe Make: Supreme/ Ashirvad/Astral/prince approved equivalent.			
	a.	Hard PVC pipe 25 mm.	Per Meter	200.00	
	b.	Hard PVC pipe 32 mm.	Per Meter	200.00	
	24.0	Control Cabling (Communication Cable) Supply, Fixing and Installation of 4 Core 2.5 Sq.mm ISI standard Copper connection cable of approved make to communicate from Outdoor Condensing unit to Indoor Control Panel & 3 Core 2.5 Sq.mm. copper connection cable of approved make for power supply from Indoor switch to outdoor unit with proper terminations on both sides using approved standard lugs. Cables should be carried through PVC conduits, flexible conduits as per suitable conditions on site. Complete. All as per instructions & directions of Engineer-In-Charge. Make: - Polycab/Havells/Finolex or approve equivalent.	Per Meter	300.00	

25.0	MS Fabricated Table Top Supply, Installation and Commissioning of the Heavy-duty MS using 50X50X5 mm thick L- angle for outdoor unit duly painted with primer and two coats of black epoxy paint, fabricated table top making stand size (H x W x D) (15"x 36"x 16") with Rubber pad as per site requirement/design. Fixing. Complete. all as per instructions & directions of Engineer-In-Charge. Make: -TATA/JSW/Jindal or approved standard equivalent.	Per Unit	25.00	
26.0	MS Fabricated Stand Supply, Installation and fixing of the Heavy-duty MS stand L-angle for outdoor unit duly painted with one coat of epoxy primer and two coats of epoxy paint of approved colour, welding, fabrication, finishing should be done as per site requirement/ design, including all labour, transport, etc. Complete. All as per instructions & directions of Engineer- In-Charge. Make: -TATA/JSW/Jindal or approved standard equivalent.	Per Kg.	60.00	
27.0	L Bracket Jumbo Stand Supply, Installation and fixing of the Heavy- Duty Jumbo wall mounted L bracket stand. High Quality Powder Coating for long life. Suitable for 9K-24K BTU units. Make: Cruise/ D max/ Knape & Vogt or approve equivalent.	Per Unit	25.00	
28.0	SITC of flushing of all copper piping installations with Nitrogen for leakage testing. Complete leak testing the system with pressurized for 24 hrs. and check for any drop and proper evacuation is must for non-condensable gases, and moisture in the systems has to be removed to avoid ill effect on the systems. Complete. all as per instructions & directions of Engineer-In-Charge.	Per Unit	30.00	
29.0	Removal of AC Unit Removal of Old Existing Split AC IDU & ODU with stand Fasteners & Copper pipe, drain pipe, electric wires & other necessary and keeping the same at approved location within Campus area lead approved by the EIC and carting away all the debris out of the Campus and its disposal at nearest Municipal	Per Unit	20.00	

	dumping ground. All Complete as per EIC.			
30.0	Replacement of existing damaged only Indoor Unit (IDU) 3 star including its removal, shifting, transportation, and its replacement with same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge. NOTE: The model of unit must be same or approved equivalent as per satisfaction of Engineer-In-Charge.			
a.	For New Unit 1.0 Tr	Per Unit	2.00	
b.	For New Unit 1.5 Tr.	Per Unit	3.00	
c.	For New Unit 2.0 Tr.	Per Unit	3.00	
d.	For Refurnish 1.0 Tr.	Per Unit	1.00	
e.	For Refurnish 1.5 Tr.	Per Unit	3.00	
f.	For Refurnish 2.0 Tr.	Per Unit	3.00	
31.0	Replacement of existing (IDU) Cooling Coil including its removal, shifting, transportation, and its replacement with NEW making Cooling Coil of same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge. NOTE: The model of unit must be same or approved equivalent as per satisfaction of Engineer-In-Charge.			
a.	For AC Unit 1.0 Tr.	Per Unit	03.00	
b.	For AC Unit 1.5 Tr.	Per Unit	05.00	
c.	For AC Unit 2.0 Tr.	Per Unit	05.00	
32.0	Replacement of existing damaged Copper Condenser Coil and fins including its removal, shifting, transportation, and its replacement with NEW condenser coil and fins of same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge.			
	NOTE: The Copper Coil should be made as			
	per satisfaction of Engineer-In- Charge.			
a.	For AC Unit 1.0 Tr.	Per Unit	3.00	
b.	For AC Unit 1.5 Tr.	Per Unit	5.00	
c.	For AC Unit 2.0 Tr.	Per Unit	8.00	
33.0	Replacement of existing damaged only Outdoor Unit (ODU) 3 star of same model with same capacity, including its removal, shifting, transportation and fixing &			
	installation of new unit/Refurnished with all			
	connections with required spares, tools,			
	Daga (1)			

	equipment's, accessories'. complete as per				
	the instructions and directions of Engineer-In-				
	Charge.				
a.	For AC Unit 1.0 Tr.	Per Unit	05.00		
b.	For AC Unit 1.5 Tr.	Per Unit	05.00		
c.	For AC Unit 2.0 Tr.	Per Unit	05.00		
34.0	Full Gas Charging in existing Split AC including labour, transportation, tools, materials etc. Complete.				
	NOTE: Min. warranty - 03 months				
a.	For AC Unit 1.0 Tr.	Per Unit	03.00		
b.	For AC Unit 1.5 Tr.	Per Unit	07.00		
c.	For AC Unit 2.0 Tr.	Per Unit	8.00		
35.0	To pump down existing Split ACs up to 2.0				
	Tr. unit and remove only Indoor unit and re-				
	install the same unit at another location with				
	all connections and with existing pipes and				
	cable (If new cables or pipes installed, will be				
	paid separately) including removal of IDU at	Per Unit 10.00	10.00		
	new location and keeping it at approved				
	location within Campus lead as directed by				
	EIC, including labour, materials, tools,				
	accessories etc. Complete.				
36.0	To pump down existing Split ACs up to 2.0				
	Tr. unit and remove only Outdoor unit and				
	re-install the same unit at another location				
	with all connections and with existing pipes	Per Unit			
	and cable (If new cables or pipes installed,				
	will be paid separately) including removal of		10.00		
	IDU at new location and keeping it at				
	approved location within Campus lead as				
	directed by EIC, including labour, materials,				
	tools, accessories etc. Complete.				
37.0	Supply up to 2.0 Tr. AC unit wireless Remote				
	Control (OEM make).	Per Unit	20.00		
38.0	Supply up to 2.00 Tr. and type AC unit				
	wireless Remote Control	Per Unit	18.00		
	(Universal/Duplicate)				
39.0	SITC of Cowled original (OEM)				
22.0	SITC of Corded original (OEM) wired				
	Remote Control of existing unit make and				
	model as per direction of EIC.	D ** '	05.00		
a.	2.00 Tr. Hitachi make	Per Unit	05.00		
b.	17.00 Tr. Voltas make	Per Unit	02.00		
40.0	To replace damaged Insulation sleeves whenever the copper pipes is exposed or found damaged sleeves due to weather conditions/ birds/ monkey nuisance etc. to avoid any leakages at all heights including	Per Meter	120.00		

41.0	its cutting, fixing surrounding the copper pipes (suction & liquid discharge separate sleeve), rainwater taping of approved material and standard make as per instruction of Engineer-In- Charge with complete safety of worker. Nitrile rubber Thickness- 9mm. Approved Nitrile rubber Insulation make: Acoflex/ Armaflex/ K- Flex/Super lone. approved equivalent. Providing, fixing and installation of PVC			
	swing (louvers) Patti (1-2 per unit) to the existing Split AC units for matching size, colour and model at any heights, complete including transportation, labour, etc. Complete.	Per Unit	5.00	
42.0	Removal of existing 1.5 Tr. Old Carrier Cosmo model window AC unit including removal of casing, wooden frame and closing of the same opening with tinted 6mm thick glass panes in approved colour and size to cover opening and its fixing with standard rubber gaskets etc. Complete.	Per Unit	18.00	
43.0	SITC Replacement of existing damaged Magnet Rubber strip Gasket Refrigerator & Deep freezer as directed by EIC, including labour, materials, tools, accessories etc. Complete.	Per meter	40.00	
44.0	SITC Replacement of Existing Water Cooler Base tray making Instead of M.S. to S.S. with S.S. Legs Including Refrigeration System properly remove and refixing the same as directed by EIC, including labour, materials, tools, accessories etc. Complete.			
a.	Water Cooler model – SDLX-4-80 80 Ltrs. Tray size- 30"x 22" Legs Height- 4" S.S. Gauge require- 18 Gauge thickness.	Per Unit	5.00	
b.	Water Cooler model – SBLX240PC 2-40 40 Ltrs. Tray size- 20"x 20" Legs Height- 4" S.S. Gauge require- 18 Gauge thickness.	Per Unit	5.00	
45.0	Replacement of existing damaged Copper Condenser Coil and fins including its removal, shifting, transportation, and its replacement with making NEW Finns and tube type Copper condenser coil with Venturi of same specifications and its fixing & installation with all connections with required spares, tools, equipment's, accessories etc. complete as per the instructions and directions of Engineer-In-Charge.			

	NOTE TI C C'I I III I			
	NOTE: The Copper Coil should be made as			
	per satisfaction of Engineer-In- Charge.			
a.	Water Cooler model – SDLX-4-80	Per Unit	5.00	
	80 Ltrs.	1 Ci Oilit	3.00	
b.	Water Cooler model – SBLX240PC 2-40	Dan I Julia	5.00	
	40 Ltrs.	Per Unit	3.00	
46.0	Water Cooler			
	Replacement of existing damaged Fan with			
	Môtor including its removal, its fixing & installation with all connections with			
	required spares, tools, equipment's,			
	accessories etc. complete as per the			
	instructions and directions of Engineer-In- Charge. (SITC of New Aluminum fan blade			
	with Motor)			
	NOTE: The Copper Coil must as per			
	satisfaction of Engineer-In- Charge.			
a.	New Sealed type fan motor Details-			
	Rexnord, REC 83-1305 AZ 220/230v, 50/60Hz 0.2A, 5/30W, RPM	Per Unit	5.00	
	1300/1550.			
47.0	Replacement of existing damaged air filter			
	for the 17 Ton Voltas make ductable type IDU unit			
	including its removal, fixing & installation			
	with all connections with required spares,	Per unit	4.00	
	tools, equipment's, accessories etc. complete as per the instructions and			
	directions of Engineer-In-Charge.			
40.0	Danlagament of evicting demand			
48.0	Replacement of existing damaged Motorized Motor(Actuator)			
	for the Supply Air damper including its			
	removal, fixing & installation with all connections with required spares, tools,			
	equipment's, accessories etc. complete as			
	per the instructions and directions of			
	Engineer-In-Charge. NOTE: The Copper Coil must as per			
	satisfaction of Engineer-In- Charge.			
a.	satisfaction of Engineer-In- Charge. Belimo Open/Close Damper Actuator			
	LM 230A 6401			
	5Nm, AC100-240v, 50/60Hz	Per Unit	2.00	
	150 s			
	3.5 VA 1.5 W.			
49.0	Supply, fixing of Stainless-Steel Screw for	Nos	500.00	
50.0	the IDÚ & ODU AC units Fully Automatic LC make 7 kg Washing	1103	200.00	
50.0	Fully Automatic LG make 7 kg Washing Machine Repairing			
	Replacement of existing following			
	damaged parts including its removal, transportation, and its fixing & installation			
	transportation, and its fixing & installation			
	with all connections with required spares, tools, equipment's, accessories etc.			
	complete as per the instructions and directions of Engineer-In-Charge.			
	directions of Engineer-In-Charge.			
a.	Note: Warranty- 03 months Gear box with belt	Per Unit	4.00	
b.	Motor with belt		4.00	
	PCB	Per Unit		
d.	PCB (Inverter type)	Per Unit Per Unit	4.00 2.00	
e.	Drain motor	Per Unit	5.00	
f.	Pulsator	Per Unit		
1.	1 uisatui	rer unit	5.00	

g.	Pressure Sensor	Per Unit	5.00		
h.	Water inlet Solenoid coil	Per Unit	5.00		
	'B' Total Amount				
	Total (A+B)				
	GST@18%				
	Grand Total				

The list of Air Conditioners, Refrigerators, Deep Freezer and Water Cooler indicated in the enclosed.

The rates quoted above should be only the unit price (i.e., inclusive of basic price, packing, transportation and any other charges) and exclusive of GST and any cess on GST.

We/I have read the terms & conditions, specifications & quantities of the work and agreed to abide by them. We/I agree to carry out the above work at the rate mentioned against the item.

'Part-A': -The above quantity of AC units is on tentative basis and it may vary +/-10% at the time of issuing a Work order.

'Part- B': - The execution of the work is uncertain at this stage. If the work is undertaken, technician should be sent separately and payment shall be made as per actuals.

The spare materials / spare parts of units used for replacement of old/ damaged parts must be of standard approved make (Genuine spare parts) only by the EIC. The material brought on site as a spare for replacement should be used post approval of EIC/ Supervisor only. If any material used and found to be of inferior quality at any point of contract period or of non-approved, make & model should be replaced with the new approved spare by the contractor at its own cost. Otherwise, the same will be replaced by HBCSE and the cost for the same will be deducted as a penalty from bills.

Amount (in Words) – Rupees :	
only.	
	Seal & Signature of the Bidder
Place:	
Date:	