

CENTRAL UNIVERSITY OF RAJASTHAN

NH-8, Bandarsindri, Kishangarh, Dist. Ajmer



Tender Document

For

**Supply, Installation, Testing and Commissioning of Split
Type Inverter based Air Conditioners at Central
University of Rajasthan.**

Notice Inviting Tender

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh-305817 invites sealed **Item Rate Tender** from the reputed manufacturers or their authorized dealers to supply in the University (as per detailed terms & conditions of the tender document).

S. No.	Name of Work	NIT No.	Estimated Cost	Earnest money	Duration of contract	Time & Date of submission of Bid	Time & Date of Opening of Technical Bid
1	Supply, Installation, Testing and Commissioning of Split Type Inverter based Air Conditioners at Central University of Rajasthan.	CURAJ/R/F.135/2022/3658 dated 14.03.2022	Rs. 62,60,000/-	Rs. 1,25,200/-	2 months	21.03.2022 till 02.00 PM	21.03.2022 at 03.00 PM

The tender form and other details can be obtained from the O/o The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh -305817 or can be downloaded from the University website www.curaj.ac.in and CPP Portal.

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INFORMATION AND INSTRUCTIONS FOR BIDDERS

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh-305817 invites sealed **Item Rate Tender** from the contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government registered in appropriate class or manufacturer/ authorized dealers **for following work:**

S. No.	Name of Work	NIT No.	Estimated Cost	Earnest money	Duration of contract	Time & Date of submission of Bid	Time & Date of Opening of Technical Bid
1	Supply, Installation, Testing and Commissioning of Split Type Inverter based Air Conditioners at Central University of Rajasthan.	CURAJ/R/F.135/2022/3658 dated 14.03.2022	Rs. 62,60,000/-	Rs. 1,25,200/-	2 months	21.03.2022 till 02.00 PM	21.03.2022 at 03.00 PM

1. The contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government have to submit copy of enlistment in appropriate class valid up to date. They are also required to submit the authorization letter from the manufacturer whose product is quoted, which valid up to date.
2. The original manufacturer has to submit the upto date valid registration certificate in make of which product is quoted or authorized dealer has to submit the dealership letter from their manufacturer whose product is quoted, which valid up to date.
3. The intending bidder must read the terms and conditions carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required. Information and Instructions for bidders shall form part of bid document.
4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from University website www.curaj.ac.in and [CPP portal](#) free of cost.

5. The bidder shall quote his rates keeping in mind the specifications, terms and conditions, additional / particular and special conditions etc. and nothing shall be payable extra whatsoever, unless otherwise specified.
6. The bidder must ensure to quote rate of each item. Rates must be filled in words and figures. Amount should be worked out for all items. Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as “0” (ZERO).
7. The tenderer(s) should also read the General Conditions of Contract for CPWD works 2014 (or latest publication), which will be a part of the agreement with amendments upto the date of receipt of tenders including the special conditions and particular specifications etc.
8. The tenderer(s) shall have to make his/her own arrangement for housing facilities for staff at his own cost. No labour huts will be allowed to be constructed in University campus. Any decision in this regard shall rest with the Central University of Rajasthan.
9. The tenderer(s) may quote his rebate if he/she wishes, mentioning specifically on what component it is applicable otherwise it shall be considered general rebate on total quoted rates.
10. The work is required to be executed in occupied buildings. The tenderer(s) shall take precaution to ensure quality of workmanship as well as the progress of the work. He shall regulate the labour accordingly. The tenderer(s) shall make arrangements for disposal of dismantled materials and other trash properly in an environmental friendly manner.
11. Earnest Money Deposit in the form of Demand Draft/FDR (drawn in favour of Central University of Rajasthan) of any Scheduled Bank payable at Bandarsindri/Kishangarh, District-Ajmer.
12. The Contractor whose tender is accepted will be required to furnish performance guarantee of 3% (Five Percent) of the tendered amount within 10 days of issue of letter of award. This guarantee shall be in the form banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank or Government Securities or Fixed Deposit Receipt or Guarantee Bonds of any Scheduled bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the 10 days from date of issue of letter of acceptance, including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
13. Goods and service tax turn over tax, Excise duty, work contract tax or any other tax on materials as applicable shall be paid by the contractor himself. **The contractor shall quote his rates considering all such taxes.**
14. The tender should be submitted in two parts i.e. Technical Bid and Financial Bid. Both the bids shall be placed in two separate envelope with due mentioning of name of work and bid type. Both Sealed Envelopes should be kept in a main/ bigger envelope with due mention of Name of work date & time of opening of bids. This is to be submitted in the Tender Box, Dispatch Section Room No 101, Ground Floor, Administrative Building, Central University of Rajasthan within the period mentioned above. The University will not be responsible for any postal or other delay whatsoever. The offers submitted by Telegram/Fax/e-Mail shall not be considered. No correspondence will be entertained in this matter.

DETAILED NOTICE INVITING TENDER

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh-305817 invites sealed Item Rate Tender from the contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government registered in appropriate class or manufacturer/ authorized dealers for following work:

1. **Name of Work:** Supply, Installation, Testing and Commissioning of Split Type Inverter based Air Conditioners at Central University of Rajasthan.
 - 1.1 The work is estimated to cost Rs. 62,60,000/- This estimate, however, is given merely as a rough guide.
2. **Minimum Eligibility Criteria**
 - 2.1 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works as defined here under and of magnitude specified below: -

Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one which application are invited should be either of the following:-

 - a) Three similar completed works costing not less than 40% of estimated cost, for each work.
 - b) Two similar completed works costing not less than 60% of estimated cost, for each work.
 - c) One similar completed works costing not less than 80% of estimated cost, for each work.

(Documentary evidence to substantiate above fact must be submitted along with Annexure-I with technical bid).

Similar Nature of works means “Supply, Installation, Testing and Commissioning of Air Conditioners”.- 2.2 The contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government have to submit copy of enlistment in appropriate class valid up to date. They are also required to submit the authorization letter from the manufacturer whose product is quoted, which valid up to date.

Or The original manufacturer has to submit the upto date valid registration certificate in make of which product is quoted or authorized dealer has to submit the dealership letter from their manufacturer whose product is quoted, which valid up to date.
- 2.3 The bidder should have had **average annual financial gross turnover not less than Rs. 63 Lakhs** on works during the last three financial years. Attested copy of audited balance sheets by chartered accountant along with audit report for the completed last three consecutive financial years should be submitted along with the bid document.

However, in support of FY 2021-22, an attested and signed copy of provisional balance sheet will be acceptable. Year in which no turnover is shown would also be considered for working out the average.(Annexure-II)
- 2.4 The bidder should have positive net worth and should not have incurred loss in more than two years during last five financial years, duly certified by Chartered Accountant should

be submitted along with the bid document. (Annexure-II)

3. The bidders have to submit a list of jobs in progress. Brief details of the units scope of work, names and address (postal mail) of present clients. (Annexure-III)
5. The track record of the contracting manufacturer/dealer/firm/contractor should be clean and should not be blacklisted or not have any involvement in illegal activities or financial misappropriation / frauds etc. by any Central/State Government/Public Undertaking/Institute on any account. **A self-certificate on the Non-Judicial Stamp paper shall be attached.** (Annexure-IV)
6. **Preparation & Submission of bids :**
 - 6.1 The tender should be submitted in two parts i.e. Technical Bid and Financial Bid. The Technical Bid and the Financial Bid should be sealed by the bidder in two separate covers super-scribed name of work and bid type.
Both Sealed Envelopes should be kept in a main/ bigger envelope super-scribed name of work, time and date of opening of bids.
 - 6.2 The duly completed sealed envelope, superscripting the name of work will be received in the Tender Box, Rom-101 Dispatch Section, Administrative Building, Central University of Rajasthan, Bandarsindri, Kishangarh, District- Ajmer, (Raj) Pin-305817 only up to 02:00 pm on date 21.03.2022 The technical bid will be opened on the same day at 03:00 pm Bidder's representative may be present with their ID proof at the time of bid opening. Any tender received after the prescribed time may not be accepted/ considered for opening. The University will not be responsible for any postal or other delay whatsoever. The offers submitted by Telegram/Fax/e-Mail shall not be considered. No correspondence will be entertained in this matter.
7. **Earnest Money Deposit:** The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of Rs. **1,25,200/-** (Rupees One lakh twenty five thousand two hundred only) by way of demand draft/Fixed Deposit Receipt drawn in favour of **“Central University of Rajasthan”**. The EMD must be enclosed in the envelope containing the technical bid. The EMD of the successful bidder shall become part of performance Guarantee and for unsuccessful bidder(s) it would be returned after award of the contract. Bid(s) received without EMD will be rejected.
Note: The firm who are registered with Medium Small and Micro Enterprise Management (MSME)/Small Scale Industries (SSI) are exempted to submit the EMD (copy of registration must be provided along with technical bid). No other relaxation will be allowed.
8. **Performance Guarantee:**
 - The Contractor whose tender is accepted will be required to furnish performance guarantee of 3% (Three Percent) of the tendered amount within 10 days of issue of letter of award. This guarantee shall be in the form banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank or Government Securities or Fixed Deposit Receipt or Guarantee Bonds of any Scheduled bank or the State Bank of India in accordance with the prescribed form favoring Central University of Rajasthan payable at Bandarsindri/ Kishangarh, District-Ajmer, Rajasthan.
 - The performance Guarantee shall be valid upto the stipulated completion period of work plus 90 days beyond that. The same shall be released after completion of work.
 - In case the contractor fails to deposit the said performance guarantee within the 10 days from date of issue of letter of acceptance/work award, including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically

without any notice to the contractor and the said performance guarantee may be deducted from the bill.

- This EMD/Performance guarantee shall be forfeited if he/they fails to comply with any of the conditions of the contract. No interest shall be paid on the EMD/Performance guarantee.

9.. **Security Deposit:**

- 2.5% of the tendered amount shall be deducted from the bill.
- The said security deposit shall be returned after satisfactorily completion of defect liability period.
- This security deposit shall be forfeited if he/they fails to comply with any of the conditions of the contract. No interest shall be paid on the security deposit.

10. **Liquidity Damage:**

0.5% per week of delay subject to maximum of 10% of contract value.

11. **Payment Clause:**

A) Payment will be made as under duly certified by the Engineer-In-Charge or authorized representative of the University:

- 70% of tendered amount towards of BOQ for supply part of materials at site.
- 20% of tendered amount of BOQ towards installation.
- 10% of tendered amount of BOQ towards successful commissioning and handing over with all test reports to Engineer-In-Charge of CURaj.

B) certified by Engineer-In-Charge or authorized representative of the University.

No advance payment will be made. Income tax and all other statutory tax deduction will be made as per Govt. of India norms.

GST: The amount of GST (if any) charged by the Contractor from the University on account of the services rendered by him, will be paid only after submission of copy of challan of GST with necessary supporting documents.

12. **Warranties:**

The plant (complete Air Conditioning system) and associated accessories are to be guaranteed for trouble free operation, maintenance and service. The warranty should cover defects due to faulty manufacture, workmanship or material for 1 year from the date of commissioning and handed over with the requisite documentation. In case the testing of the plant/equipment is delayed for any reason, beyond 6 months the defects liability shall extend for a minimum period of 6months from the date the test readings are accepted. Any manufacturing defect found during this period shall be repaired/replaced by the supplier free of charge as per terms and conditions embodied in the tender papers and agreement executed with CURaj.

13. The bid submitted shall also become/considered invalid if a bidder quotes nil rates against any or all item in the tender.

14. The tender for the works shall remain open for acceptance for a period of **Ninety Days (90) days** from the date of opening of tenders. If any bidder withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further, the bidder shall not be allowed to participate in the re-tendering process of the work.

15. Before tendering, the bidder shall inspect the site to fully acquaint himself about the conditions

in regard to accessibility of site, nature and extent of ground working conditions of site and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such accounts shall be entertained by the University in any circumstances after award of tender.

16. Except writing rates and amount, the bidder should not write any conditions or make any changes, additions, alterations and modifications in the printed/downloaded form of tenders. If any changes, additions, alterations, modifications are detected in the submitted bid even at a later date when contract has been awarded, the contract will be liable to be void. The decision of Registrar, Central University of Rajasthan will be final & binding to the Contractor in this regard.
17. The authorized person of the bidding firm/ contractor must put his/her signature on all the pages of the tender documents invariably in having accepted all the terms and conditions in respect of this tender work.
18. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his/her retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
19. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and 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 bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Electricity will be provided by the University free of cost. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work

Equipment data shall be submitted as per format attached. Tenderers not submitting data in full will do so at the risk of the tenders being evaluated with such information as may be available with the client.

Mere becoming the lowest bidder, prior to financial bid scrutiny will not give any right to the lowest bidder to claim that he is successful in the bidding process. The successful bidder (L1) shall be decided only after following due procedure.

The Bidder meeting the minimum eligibility criteria and with the overall lowest bid price shall be deemed as the successful Bidder and shall be considered eligible L-1 Bidder for further processing.

20. The University does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional

rebate is put forth by the bidder shall be summarily rejected.

21. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
22. The University reserves the right of accepting the whole or any part of the tender and the bidder shall be bound to perform the same at the rate quoted.
23. Agreement shall be drawn with the successful bidder on prescribed Tender Form. The bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
24. The time allowed for carrying out the work will be **02 months** from the date of award of work.
25. The contractor(s) should also read the General conditions of Contract for CPWD works 2014, which will be a part of the agreement with amendments upto the date of receipt of tenders including the special conditions and particular specifications etc.
26. The Specifications to be followed for execution of work: CPWD General specifications for electrical works Part-I (Internal) 2013 & HVAC-2017, GCC as amended upto date and additional conditions Specifications.
27. **Documents to be enclosed with Technical bid:**
 - i Earnest Money Deposit (EMD) of Rs. **1,25,200/-** drawn in favor of Central University of Rajasthan.
 - ii Copy of GST Registration Certificate.
 - iii Copy of PAN card.
 - iv Copy of Experience/work completion certificates from the clients regarding the quality and duration of services rendered during last seven years as described above (Annexure-I)
 - v Copy of work orders from the client regarding the work awarded during last Seven years. (Annexure-I)
 - vi Copy of registration certificate in appropriate class of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government along with authorization letter from respective manufacturer or registration certificate/letter with respective make for original equipment manufacturer/authorized service agent, which should be valid upto date.
 - vii Copy of audited balance sheets of last three financial years.(Annexure-II)
 - viii Copy of document showing net-worth certified by CA.(Annexure-II)
 - ix Copy of work orders of on-going work at other sites. (Annexure-IV)
 - x A self-certificate showing the track record of contracting firm/Contractor on the non-judicial stamp paper. (Annexure-V)

Note:

1. **Tenders received without EMD will not be accepted.**
 2. Each and every page of all the tender documents, annexures, corrigendum/addendum (if any) and their annexures should be duly seal & signed and submitted with technical bid.
28. **Financial bid** should contain only the Bidder's/Contractor's quoted rates in the given format (Annexure-XI) enclosed in **Envelope-II** with due mentioning name of work and bid type. Financial bid shall be opened only of those who have submitted proper EMD and have qualified in the Technical Bid as per eligibility criteria and on submission of all the required documents.

29. This Notice Inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
 - a) The Notice Inviting Bid, all the documents including additional or special conditions, specifications and drawings, if any, forming part of the bid as uploaded online at the time of invitation of bid and rate quoted at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b) Tender Form
 - c) Form of Agreement
 - d) Integrity Pact.
30. The tender documents can be seen/ downloaded from the University website www.curaj.ac.in & CPP Portal and all future Corrigendum/Corrigenda will be uploaded on our website.
31. Before submitting the tender, please go through complete tender document and terms and conditions on which the work will be awarded and shall be executed by the successful bidder.
32. Any dispute unless resolved amicable shall be settled by a court of law having jurisdiction over Jaipur/Ajmer.

CPWD - 8

Central University of Rajasthan

STATE RAJASTHAN

BRANCH ESTATE

Item Rate Tender & Contract for Works

Tender for the work of: Supply, Installation, Testing and Commissioning of Split Type Inverter based Air Conditioners at Central University of Rajasthan.

- (i) Tender to be submitted by 02.00 PM on 21.03.2022 at office of Registrar, Central University of Rajasthan.
- (ii) To be opened in presence of tenderers/contractors who may be present at 03.00PM on 21.03.2022 by the authorized representative of Central University of Rajasthan.

Issued to: - M/s _____

Signature of officer issuing the documents

Designation:

Date of Issue:

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rate & other documents and Rules referred to in the condition of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the University within the time specified in Schedule "F", viz., schedule of quantities and in accordance with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such condition so far as applicable.

I/We agree to keep the tender open for sixty (60) days from the due date of opening and not to make any modification in its terms and conditions.

A sum of Rs. 1,20,000/- is hereby forwarded in demand draft in favour of Registrar, Central University of Rajasthan as earnest money. If I/We fail to furnish the prescribed performance guarantee of tender form within prescribed period. I/We agree that the University, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence work as specified, I/we agree that University shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in clause 12.2 and 12.3 of the tender form.

Further I/We agree that in case of forfeiture of earnest money or both earnest money and performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

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

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated _____

Signature of Tenderer/Contractors

Postal Address* _____

Telephone No.* _____

Fax _____

E-Mail _____

Witness** : _____

Address** : _____

Occupation** : _____

(*) To be filled in by the Tenderer/Contractors.

(**) To be filled in by the Witness.

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me on behalf of Central University of Rajasthan for a sum of Rs. _____).

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

a)

b)

c)

Signature.....

Dated

Registrar ,
Central University of Rajasthan.

FORM OF AGREEMENT

(To be executed on non-judicial stamp paper of Rs.500/-)

Agreement No: _____

Dated: _____

CONTRACT FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SPLIT TYPE INVERTER BASED AIR CONDITIONERS AT CENTRAL UNIVERSITY OF RAJASTHAN, KISHANGARH, DISTRICT- AJMER

THIS AGREEMENT is made on _____ day of _____ (month), _____ (year) between **Central University of Rajasthan, NH-8 Bandarsindri, Tehsil-Kishangarh, District-Ajmer , Rajasthan, Pin-305817**, hereinafter called University, (which expression shall, wherever the context so demands or requires, include their successors in office and assigns) on the one part and hereinafter called the Contractor (which expression shall wherever the context so demands or requires, include his/their successors and assigns) on the other part.

WHEREAS the University is desirous that certain works should be executed viz. Supply, Installation, Testing and Commissioning of Split Type Inverter Based Air Conditioners at Central University of Rajasthan and has by Letter of acceptance/awarddatedaccepted the quotation/offer submitted by the contractor for the execution, maintenance and completion of such works at a total contract price of Rs..... (Rupees only).

Now THIS AGREEMENT WITNESSETH as follows:

1. In this agreement, words and expressions shall have the same meaning as are respectively assigned to them in the conditions of contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of the agreement viz:
 - a) This Form of Agreement
 - b) The Letter of Award dated _____
 - c) NIT document
 - d) Priced Schedule/ Schedule of Quantities.
 - e) Scope of work and conditions of contract.
 - f) All Annexures to NIT
 - g) CPWD GCC with up-to-date correction slips.The aforesaid documents shall be taken as complementary and mutually explanatory of one another, but in the case of ambiguities or discrepancies, shall take precedence in the order set out above.
3. In consideration of the payment to be made by the University to the contractor as hereinafter mentioned, the contractor hereby covenants with the University to execute, complete and maintain the works in conformity in all respects within the provisions of the contract.
4. The University thereby covenants to pay to the contractor in consideration of the execution, completion and maintenance of the works at contract price at the time and in the manner prescribed by the contract.

In WITNESS whereof the parties hereto have caused their respective common seals to be here into affixed (or have herewith set their respective hands and seals) the day and year first above written.

Signed, Sealed And Delivered By

Signed, Sealed And Delivered By

For and on behalf of

For and on behalf of

Central University of Rajasthan
Bandarsindri, Kishangarh
Ajmer, Rajasthan

By:

By:

Name

Designation

In the presence of

In the presence of

WITNESS

WITNESS

1.

1.

2.

2.

To be signed by the tenderer and same signatory competent / authorised to sign the relevant contract on behalf of Central University of Rajasthan

INTEGRITY PACT

This Integrity Agreement is made at on thisday of20.....

BETWEEN

Central University of Rajasthan through Registrar, Central University of Rajasthan, Bandersindri, Dist-Ajmer. (Hereinafter referred to as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

.....

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

Through

(Details of duly authorized signatory)

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

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.) (hereinafter referred to as "Tender/Bid") and intends toward, under laid down organizational procedure, contract for -
.....

Here in after referred to the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Tenderer(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

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

Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal/Owner will, during the Tender process, treat all Tenderer(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Tenderer(s) the same information and will not provide to any Tenderer(s) confidential/ additional information through which the Tenderer(s) could obtain an advantage in relation to the tender process or the contract execution.
 - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code(IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Tenderer(s)/Contractor(s)

- 1) It is required that each Tenderer/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the Negotiation or award of a contract.
- 2) The Tenderer(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Tenderer(s)/Contractor(s) will not enter with other Tenderer(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or on-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c) The Tenderer(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Tenderer(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Tenderer(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Tenderer(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
 - e) The Tenderer(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Tenderer(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a wilful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

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

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

Article 4: Previous Transgression

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

Article 5: Equal Treatment of all Tenderers/Contractors/SubContractors

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

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the

continuation of defect liability period, whichever is more and for all other tenderers, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CPWD.

Article 7- Other Provisions

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

Article 8- LEGAL AND PRIOR RIGHTS

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

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

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

.....
(For and on behalf of

WITNESSES:

1.
(signature, name and address)

2.
(signature, name and address)

Place:

Dated :

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities (Enclosed)

As per sheet attached

SCHEDULE 'B'

Schedule of materials to be issued to the tenderer/contractor.

Sr.No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of Issue
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1	2	3	4	5
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-----NIL-----

(Material required for the work shall be arranged by the Tenderer/Contractor)

SCHEDULE 'C'

Tools and plants to be hired to the tenderer/contractor

Sl. No.	Description	Hire charges per day	Place of issue
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1	2	3	4
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-----NIL-----

SCHEDULE 'D'

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

-----NIL-----

SCHEDULE 'E'

Reference to General Conditions of Contract.

Name of work:- Supply, Installation, Testing and Commissioning of Split Type Inverter based Air Conditioners at Central University of Rajasthan..

Estimated cost of work : Rs. **62,60,000/-**

- (i) **Earnest Money** : Rs. 1,25,200/- (To be returned without interest or to be adjusted in performance guarantee for successful bidders or the case may be)
- (ii) **Performance guarantee** : 3% of bided amount.
(For successful bidder EMD amount may be adjusted in PG)
- (iii) **Security Deposit** : 2.5% of bided value
~~Or~~
~~2.5% of bid value plus 50% PG for contracts involving maintenance of the building and services / other work after construction of the same building and services/other work.~~ (Modified vide OM DG/CON/273 dt. 01.10.2013)

SCHEDULE 'F'

General Rules & Directions:

Officer inviting bid -

**Registrar
Central University of Rajasthan**

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3.

See below**Clause 1**

- (i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance,

10 Days

- (ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided

5 Days**Clause 2**

Authority for fixing compensation under clause 2

**Registrar
Central University of Rajasthan****Clause 2**

Whether Clause 2A shall be applicable.

No**Clause 5**

Number of days from the date of issue of letter of acceptance for reckoning date of start.

15 Days**Milestone(s) as per table given below**

S.No.	Description of Milestone (Physical)	Time Allowed in Days (from date of start)	Amount to be withheld in case of non-achievement of mile stone.
1	Placing of order for 100% material.	0.5 Month	0.5%
2	Installation of 50% material received	1.0 Month	0.5%
3	Supply of 100% material & Installation of 50% of the material	1.5 Month	0.5%
4	Installation of 100% material Testing and commissioning of all installation	2.0 Month	1.0%.

Time allowed for execution of work

2 (Two) Months**Authority to decide:-**

- (i) Extension of time
- (ii) Rescheduling of Mile Stones
- (iii) Shifting of date of start in case of delay in handing over of site
(Modified vide OM DG/CON/267 dt. 14.05.2013)

**Registrar, CURaj
Bandar Sindri, KSG
Registrar, CURaj
Bandar Sindri, KSG
Registrar, CURaj
Bandar Sindri, KSG**

Clause 6, 6A

Clause applicable –(6 or 6A)

Clause 6**Clause 7**

Gross work to be done together with net payment/. adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment

NA

Clause 10 A

List of testing equipment to be provided.
by the tenderer/contractor at site lab

-----NIL-----

Clause 10 B(ii)- Whether Clause 10 B(ii) shall be applicable:

NA

Clause 10CA

Materials covered under this clause	Nearest Materials (other than cement, reinforcement bars and structural steel) for which All India Wholesale Price Index to be followed	Base Price and its corresponding period of all Materials covered under clause 10 CA**
-----Not applicable-----		

Clause 10CC-

Clause 10CC to be applicable in contracts
with stipulated period of completion exceeding
the period shown in the next column.

NA

Schedule of component of other Materials, Labour, POL etc. for price escalation.

Component of Civil (Except material covered under
clause 10CA)/Electrical construction materials expressed
as percent of total value of work

Xm

.....NIL.....%

Component of Labour expressed as percent of total
value of work

Y

.....NIL.....%

Component of POL expressed as percent of total
value of work

Z

.....NIL..... %

Note- Xm.....% should be equal to (100) - (materials covered under clause 10CA i.e. Cement, Steel and other material specified in clause 10CA+ Component of Labour + Component of P.O.L) (Modified vide OM DG/CON/268 dt. 28.05.2013)

Clause 11

Specifications to be followed for execution of work:-

**CPWD General specifications for
electrical works Part-I (Internal)
2013 & HVAC-2017 , as amended
upto date and additional conditions
Specifications.**

Clause 12

	Type of Work (Modified vide OM DG/CON/270 dt. 11.06.2013)	Project & Original Work.
12.2 & 12.3	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building/electrical work.	100%
12.5 I.	Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation work. (except earth work)	100%
II	Deviation Limit for items in earth work subhead of DSR or related items (Modified vide OM DG/CON/272 dt. 21.08.2013)	30%

Clause 16

Competent Authority for deciding reduced rates.
List of mandatory machinery, tools & plants
to be deployed by the tenderer/contractor at site:

**Registrar, CURAJ Clause 18
To be arranged by the
tenderer/contractor at site.**

Clause 25

Constitution of Dispute Redressal Committee (DRC)	Competent Authority to appoint DRC
DRC shall constitute one Chairman and two Members	H'ble VC, CURAJ

(Modified vide OM DG/CON/255 dt. 23.5.2011)

Clause 42**RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION**

Sl No. item	Description of Which recovery shall be made	Rates in figures and words at permissible variation the permissible from the Tenderer/Contractor	Excess beyond Less use beyond the permissible variation
			NIL

Commercial and Additional Conditions

General

This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, final testing, commissioning, for the following work:-

Name of Work: Supply, Installation, Testing and Commissioning of Split Type Inverter based Air Conditioners at Central University of Rajasthan.

The tenderer is advised to visit the site of the work i.e. “Campus of Central University of Rajasthan, Bandarsindri, Kishangarh, Distt. – Ajmer, Rajasthan.” to have an idea of the execution of the work; failure to do so shall not absolve their responsibility to do the work as specified in agreement.

1. The work shall be executed as per CPWD’s general specification for Electrical Works Part-I Internal 2013 & HVAC-2017 IE rules, Indian Standards, as per Rules of NBC 2005 & all the amendment issued upto date and as per directions of Engineer-in-Charge. These additional specifications are to be read in conjunction with above and in case of variations; specifications given in this Additional conditions shall apply. However, nothing extra shall be paid on account of these additional specifications & conditions as the same are to be read alongwith schedule of quantities for the work.
2. **Rates:**
The work shall be treated as on works contract basis and the rates tendered shall be for complete items of work (except the materials, if any, stipulated for supply by the department) inclusive of all taxes (including works contract tax, if any), duties, and levies etc. and all charges for items contingent to the work, such as packing, forwarding, insurance, freight and delivery at site for the materials to be supplied by the tenderer/contractor, watch and ward of all materials (including those supplied by the department, if any) for the work at site etc. and prices quoted shall be final.
3. **Taxes and Duties:**
 - 4.1. Being an indivisible works contract, GST or any other taxes are not payable separately.
 - 4.2. The works contract tax shall be deducted from the bills of the contractor as applicable in the State in which the work is carried out, at the time of payments.
4. **Mobilization Advance:**
No mobilization advance shall be paid for the work, unless otherwise stipulated in tender papers for any individual works/ composite work.
5. **Completeness of Tender:**
All sundry equipment’s, fittings, assemblies, accessories, hardware items, termination lugs for electrical connections as required, and all other sundry items which are useful and necessary for proper assembly and efficient working of the

various components of the work shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.

6. **Storage and Custody of Materials:**

The contractor has to make his own arrangement for the storage of the material at site & necessary watch and ward of the electrical installation during the execution of work till the same is handed over to the department. No extra payment will be made on this account. The storage space shall however be arranged by the department at site, if available. The contractor shall however be responsible for proper storage and safe custody of the same till their installation and handing over to the department.

7. **Electric Power Supply and Water Supply:**

3 Phase, 415 volts, 50 Hz power supply (upto 5KW) and Water Supply shall be provided by the department free of charge to the contractor at one point for installation at site. Termination switchgear however, shall be provided by the contractor. Further extension if required shall be done by the contractor.

8. **MACHINERY FOR ERECTION**

- (i) All tools and tackles required for unloading/handling of equipments and materials at site, their assembling, erection, testing and commissioning shall be the responsibility of the contractor.
- (ii) No T & P shall be issued by the Department and nothing extra shall be paid on account of this.

09. **Care of the building and other structures / installations**

Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building and its surrounding roads, pavements, horticulture work, boundary wall, sewer and water lines etc. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.

10. **Structural Alterations to Buildings:**

- (i) No structural member in the building shall be damaged/altered, without prior approval from the competent authority through the Engineer-In-charge.
- (ii) Structural provisions like openings, cutouts, if any, provided by the department for the work, shall be used. Where these required modifications or fresh provisions are required to be made, such contingent works shall be carried out by the contract at his cost.
- (i) All such openings in floors provided by the department shall be closed by the contractor after installing the cables/conduits/rising mains/GI&MS Pipe etc. as the case may be, by any suitable means as approved by the Engineer-In-charge without any extra payment.

11. **Data Manual and Drawings to be furnished by the Tenderers:**

With Tender: The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance data for appraisal and evaluation of the offer.

After Award of work: - The contractor shall prepare & submit three sets of following drawings and get them approved from the Engineer-In-Charge before the start of the work. The approval of drawings however does not absolve the contractor not to supply the equipments/ materials as per agreement, if there is any contradiction between the approved drawings and agreement.

- 1) General arrangement drawings of the equipments in the building with complete dimensions.
- 2) Any other drawings relevant to the work.

12. **Inspection and Testing**

All major equipments shall be offered for initial inspection by the Engineer-In-Charge or officer authorized by him at manufacturer's works in India. The department may or may not inspect the material at its discretion. The contractor will intimate the date of testing of equipments at the manufacturer's works before dispatch. Contractor shall make all arrangements for inspection of material at works. The department reserves the right to get the equipment inspected by third party inspection also. Such inspection shall be of following categories:

- A. Inspection of materials/ equipments to be witnessed at the manufacturer's premises/ at its authorized works in India, in accordance with relevant BIS/ Agreement Inspection Procedure.
- B. To receive material at site with manufacturer's Routine & Type Test certificates.
- C. To inspect material at the authorized dealer's go-down to ensure delivery of genuine material at site.
- D. To receive material after physical inspection at site.
- E. Relevant Indian Standards including amendments or revisions thereof up to the date of tender acceptance shall be applicable in the respective contracts for respective items, firm to ensure its compliance.

13. **Workmanship:**

14.1 Good workmanship is an essential requirement to be complied with. The entire work of manufacture/fabrication, assembly and installation shall conform to sound engineering practice.

14.2 Proper supervision/skilled workmen: The contractor shall be a licensed electrical contractor of appropriate class suitable for execution of the electrical work. He shall engage suitably/skilled/licensed workmen of various categories for execution of work supervised by super visors Engineer of appropriate qualification and experience to ensure proper execution of work. They will carry out instruction of Engineer-In-Charge and other senior officers of the Department during the progress of work.

14.3 Use of quality materials: Only quality materials of reputed make as specified in the tender will be used in work.

15. **Testing:**
All testes prescribed in this General Specification, to be done before, during and after installation, shall be carried out, and the test results shall be submitted to the Engineer-In Charge in prescribed Performa, forming part of the Completion Certificate.
16. **Commissioning on completion:**
After the work is completed, it shall be ensured that the installation is tested and commissioned.
17. **Drawings/Documents to be furnished on completion of installation:-**
Three sets of the following laminated drawings shall be submitted by the contractor while handing over the installation to the Department. Out of these three, one set shall be laminated on a hard base for display in the control room/room. One set shall be displayed in Junior Engineer's room and one set for a designated area.
1. Manufacturer's technical catalogues of all equipments and accessories.
 2. Operation and maintenance manual of all major equipments, detailing all adjustments, operation and maintenance procedure.
18. **GUARANTEE**
All equipments shall be guaranteed, against unsatisfactory performance and/or breakdown due to defective design, workmanship or material, for a period of 12 months from the date taking over the installation by the department. The equipments or components, or any part thereof so found defective during the guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-Charge. In case it is felt by the department that undue delay is being caused by the contractor in attending the defect/fault removed, the same will be got done by the department at the risk and cost of the contractor. The decision of Engineer-In-Charge in this regard shall be final.
19. **SAFETY CODE & LABOUR REGULATIONS**
- A. In respect of all labour employed directly or indirectly on the work for the performance of the contractor's part of work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provisions, B.I.S. Recommendations, Factory Act, workmen's compensation act, CPWD code and instructions issued from time to time. Failure to provide such safety requirements would make the tenderer liable for penalty for Rs. 200/- for each violation. In addition the Engineer-In-Charge, shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost from the contractor.
 - B. The contractor shall provide necessary barriers, warning signals and other safety measures wherever necessary so as to avoid accident. He shall also indemnify CPWD against claims for compensation arising out of negligence in this respect. Contractor shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause. The department shall not be responsible for any accident occurred or damage incurred or claims arising there from during the execution of work.

The contractor shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

20. COMPLETION PERIOD

The completion period of 02 (two) Months indicated in the tender documents is for the entire work of planning, designing, etc., arrangement of materials & equipment's, delivery at site including transportation, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-In-Charge.

21. EXTENT OF WORK

The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning, as may be required by the department. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been specifically mentioned in bill of quantity in the tender document. However, major equipment not covered in the scope of the work and required subsequently as an additional feature, not covered in the contract specifications, shall be paid extra. The decision of the Engineer-In-Charge in the matter shall be final and binding upon the contractor.

22. VALIDITY

The bid shall remain valid for 90 days from the date of opening of Price Bid.

23. COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS

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

Factories Act.

a. Indian Electricity Rules.

b. B.I.S. & other standards as applicable.

c. Workmen's Compensation Act.

d. Statutory norms prescribed by local bodies like CEA, Power Supply Co., etc.

23.2 Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

23.3 Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the tenderer liable for penalty as decided by the University authority. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

24. **Insurance and Storage**
All consignments are to be duly insured upto the destination from warehouse to warehouse at the cost of the contractor. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.
25. **Verification of correctness of equipments at destination**
The contractor shall have to produce all the relevant records to certify that the genuine equipments from the manufacturers has been supplied and erected.
26. **Painting**
The major equipments shall be factory final finish painted. The agency shall be required to do only touching to the damages caused to the painting during transportation, handling & installation at site, if there is no major damage to the painting. However hangers, supports etc. shall be painted with required shade including painting with two coats of anticorrosive primer paint at site as per the instructions of the engineer-in-charge.
27. **INTERPRETING SPECIFICATIONS**
In interpreting the specifications, the following order of decreasing importance shall be followed in case of contradictions:
- a. Schedule of quantities
 - b. Technical specifications
 - c. Drawing (If any)
 - d. General Specifications
 - e. Relevant BIS or other international code in case BIS code is not available.
28. As per Govt. of India, Ministry of Finance, Department of Revenue notification No. 12/2012 service tax dated: 17.03.2012 under Para 12(a) service tax on Govt. works is exempted.
29. **INDEMNITY**
The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian law and regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk in his own interest. No extra payment would be made to the successful tenderer on account of the above.
30. **Safety Measures**
All equipments shall incorporate suitable safety provisions to ensure safety of the operating personnel as per manufacturer's standard practice.

Work is to be carried out in such a manner that existing working of the building is not hindered. No payment on A/c of idle labour for this reason shall be made to contractor.

INTERNAL AND EXTERNAL EI WORKS

Additional Conditions

1. All repairs & patch work shall be neatly carried out to match with the original finish & all damages caused to the building installation during the execution of work shall have to be made good by the contractor immediately at his own cost to the entire satisfaction of Engineer-In charge. In case contractor fails to comply with the instructions of the Engineer-In-charge, Engineer-In-Charge shall be at liberty to get the work done by any other agency and recover such amount as paid to the other agency from the bill(s) of the contractor. Contractor shall have no claim, whatsoever, on the extent of such amount.
2. Contractor shall provide polythene/PVC plastic cover for all Electrical Panels etc. to protect them from rust/damages, during execution of work till the work is actually completed and handed over to the department.
3. All debris/malba resulting due to electrical work shall be removed on daily basis and completion of the work shall only be accepted after the site has been cleaned of all malba. In case, contractor fails to comply, the same shall be got removed by the other agency and the payment so made shall be recovered from the bill(s) of the contractor.
4. The contractor shall have to make arrangements, at his own risk and cost, for transportation of materials from the point of issue of stores to site of work, if any.
5. Makes of all items that are not covered in the schedule of work/additional specifications shall be got approved from the Engineer-in-charge and shall conform to relevant Indian Standard as applicable.
6. The contractor shall ensure that the staff employed by him for execution of the electrical work, possess the valid electrical license issued by competent authority. Consequences arising due to the default of the contractor in not complying with the above condition shall be the responsibility of the contractor.
7. Copper lugs shall be provided for terminating copper wires and aluminum lugs to be provided with aluminum conductor. GI earth wire/cable to all terminating places for which nothing extra shall be paid. All multi-stranded/ stranded wires shall be terminated through copper lugs.
8. All concealed work and earthing shall be done in the presence of the Engineer-In-Charge or his authorized representative.
9. Contractor shall have to check the Site Order Book for any instructions of the Engineer-in charge or his authorized representative and sign the site order book. He shall be bound to ensure compliance with the instructions recorded therein.

TECHNICAL SPECIFICATIONS

Inverter Split Type A.C. Unit

1.1 COMPRESSOR

Compressor shall be rotary type using refrigerant R-410/green gas complete with safety controls oil heater and other accessories, main bearings shall be of generous size and self-aligning type with lining of anti-friction bearing metal complete with forced feed type lubrication system, filters with by-pass relief valves, pressure and control valves as required. Compressor shall be installed in outdoor condenser housing.

1.2 EVAPORATOR

Evaporator coils shall have 10 to 15 mm dia. copper tubes with aluminum fins firmly bonded to copper tubes assembled in zinc coated steel frame. Fan section shall be made from heavy gauge steel with wheels of forward-curved multi-blade type to ensure smooth air flow into the fan. Housing shall be provided of die-formed side sheets with streamlined inlet and guide vanes.

1.3 CONDENSER

Condenser coil shall have 10 to 15mm dia. copper tubes with aluminum fins bonded to copper tubes assembled in zinc coated steel frame. Condenser shall be complete with propeller fan and weather proof totally enclosed motor and other accessories as required. Condensate drain piping may be left over condenser if possible at site.

1.4 FILTERS

Filters shall be washable of synthetic woven mesh having an efficiency of not less than 90% for particles down to 5 microns. Velocity across filters shall not exceed 2 meters per second.

1.5 REFRIGERANT PIPING

Piping shall be of type 'L' hard drawn copper tubing of seamless variety with back seated type brass valves. Brass strainer shall be provided with bronze screen and permanent magnet on upstream of controls and valves, with isolating valves. Expansion valves located with indoor unit, shall be provided with remote bulb external equalizer port and external super-heat adjustment with sight glass and liquid line solenoid valve (if required) in piping preceding expansion valve. Small capacity units shall be provided with Capillary tube expansion device. In such case, Suction line shall be connected to capillary tube inside evaporator unit only. Expansion device shall not be installed in condensing unit. Liquid line shall be clamped with Suction line or condensate drain pipe, duly insulated, to provide an effective heat exchanger.

1.6 CONTROLS

Safety controls shall consist of compressor high-low pressure stat and oil pressure safety switch suitable for manual resetting. Thermostat with tolerance of +1 deg.C. shall be provided. Crank case heater shall switch on when compressor stops.

1.7 MISCELLANEOUS

Each split unit shall include suitably designed housing in heavy gauge sheet steel and angle frame work treated for rust prevention and painted, to mount the components.

Exposed indoor units shall be provided with factory made supply air grill to distribute the air evenly across large areas, if required.

Full charge of refrigerant gas, as required to obtain and maintain design conditions and the required quantity of suitable grade lubrication oil shall be provided.

Sheet steel control panel for housing the controls and other operated items.

Ribbed rubber vibration isolator pads or springs of 90% efficiency in preventing transmission of vibration.

Each unit shall include but not be limited to all the items listed in foregoing paragraphs and shall be complete as required.

The refrigerant copper piping of the split unit shall be insulated with closed cell polyflex insulation (tubular type).

Winter Heating: Heating shall be provided by either of following methods:

HEAT Pump: Split type air-conditioning units shall be provided with Heat pump.

1.8 INSTALLATION AND TESTING

The outdoor unit shall be mounted on floor/foundation. Necessary mild steel frame work for condenser unit, foundation bolts, leveling shims etc. if required for mounting of the same shall be provided by the vendor. M.S. frame work shall be designed to support the condensing units rigidly under all conditions and shall be painted with two coats of anti-rust paint and two coats of enamel paint.

The interconnecting refrigerant piping shall be mounted on ladder type galvanized steel saddles with nuts and bolts. Cabling & wiring shall be enclosed in MS conduit fixed to saddle. Ladder type saddles shall be fixed firmly on walls/structure.

On installation, the refrigerant circuits and the connected equipment and parts shall be thoroughly pressure tested for leaks. The system pressure shall be reduced by a vacuum pump to within an absolute pressure of 7.5mm Hg and maintained at this level for four (04) hours. Thereafter the vacuum pumps shall be stopped and vacuum maintained for 24 hours with a pressure drop not exceeding 2.5mm gas absolute.

All instruments and switchgear shall be tested for proper functioning and set of design values.

On completion of the installation and the above sets, unit shall be tested for performance. The capacity on tons shall be calculated from measurements of temperature difference and air flow rate. The power consumption shall be checked from current measurements of the motor.

1.9 REFRIGERANT PIPING INSULATION

1.9.1 All refrigerant and condensate drain piping shall be insulated in the manner specified herein. Before applying insulation all pipes shall be brushed and cleaned. The thermal insulation thickness shall be

Refrigerant Piping : 19mm

Condensate Drain Piping : 6mm

1.9.2 Insulating material in tube form shall be sleeved on the pipes. On piping, slit opened tube from insulating material shall be placed over the pipe and adhesive shall be applied as suggested by the manufacture adhesive must be allowed to tack dry and then press surface firmly together starting from butt end and working towards centre. Wherever flat sheet shall be used it shall be cut out in correct dimension using correct tools. Scissors or Hacksaw blade shall not be allowed. All longitudinal and transverse joints shall be sealed as per sealed by providing 6mm thick, 50mm wide nitrile rubber tape. The adhesive shall be strictly as recommended by the manufacturer. The insulation shall be continuous over the entire run of piping, fittings and valves.

1.9.3 Protective Coating over Insulation in area exposed to atmosphere.

1.9.4 To provide mechanical strength and protection from damage all pipes insulated with nitrile rubber / polyethylene foam in exposed area shall be covered with aluminum foil of 0.05 mm thickness.

CHECKLIST OF DOCUMENTS REQUIRED WITH TECHNICAL BID.
(Should be submitted on the letter head of Tenderer with Technical Bid)

Name of the Contractor/Agency/Firm/Dealer	
Address & Contact number	
Name of person, who has signed the tender	
Phone No./Mobile No.	
Email Id	

S.No.	Documents Required	Compliance (to be ticked as attached)
1.	Details of EMD (DD no. and Amount)	Yes / No
2.	Copy of Permanent Account Number	Yes / No
3.	Copy of TIN number/ GST Registration Certificate	Yes / No
4.	Copy of Service Tax Registration number	Yes / No
5.	Copy of experience certificates from clients regarding the quality and duration of services rendered during last seven years.	Yes / No
6.	Copy of work orders from clients regarding the work awarded during last seven years	Yes / No
7.	Copy of work orders of on-going works at other sites/ Present Clients	Yes / No
8.	Copy of audited balance sheets for last three financial years.	Yes / No
9.	Copy of documents for proof of registration with Govt./Semi Govt. Organization or Dealership Certificate	Yes / No
10.	Each and every page of all the tender documents, annexures, corrigendum/addendum (if any) and their annexures should be duly seal & signed and submitted with technical bid.	Yes / No
11.	Bank Details	Yes/ No
12.	Technical Specifications as per tender documents: a) Type of AC: High wall split AC b) Technology of AC: Inverter type c) BEE star rating: 5 Star d) Make for which quoted e) Coil material: Copper f) Eco-friendly refrigerant: g) Minimum length of copper pipe and suitable connecting electrical cable for installation & commissioning: 03 meters h) Type of Compressor: Rotary i) Remote Control: Included	Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No

Authorized Signatory of Bidder(s) with Seal

ANNEXURE – I
(to be submitted with Technical Bid)

Details of works of similar type executed by the bidder

S.No	Name of Company/ Organization with full address, phone, email and name of contact person	Work Descripti on	Cost of work in crores	Date of commencem ent as per contract	Stipul ated date of compl etion	Actual date of comple tion	Ref. & Date of the Order	No. & Date of completion certificate attached.	Remark s
1	2	3	4	5	6	7	8	9	10

Signature of Bidder(s) with Seal

- Indicate gross amount claimed and amount awarded by the Arbitrator.
- Work order & Completion certificate to be attached.
- Supporting documents like notice of award, schedule of qualifying works shall also be attached.

ANNEXURE – II
(to be submitted with Technical Bid)

FINANCIAL INFORMATION

Financial Analysis - Details to be furnished duly supported by figures in balance sheet/profit & loss account duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

S.No.	Descriptions	Figure
1.	Average Gross Annual Turn Over of last three financial years	
2.	Net Profit/Loss of last three financial years	

Signature of Bidder(s) with Seal

Signature of Chartered Accountant with Seal

ANNEXURE – III
(to be submitted with Technical Bid)

LIST OF WORKS WHICH ARE IN HAND (PROGRESS)

S.No	Name of Work	Name & particulars of Dept. where work is being executed	Value of Work	Position of works in progress (Date of start & completion)	Remarks
1	2	3	4	5	6

Seal & Signature of Bidder

ANNEXURE – IV
(to be submitted with Technical Bid)

SELF DECLARATION CERTIFICATE
(To be submitted on Non-Judicial Stamp Paper)

I hereby certify that the firm has not been ever blacklisted by any Central / State Government / Public Undertaking / Institute on any account.

I also certify that firm will execute the work as per the specification given by Institute and also abide all the terms and conditions stipulated in tender.

I also certify that the information given in the bid is true and correct in all aspects and if in any case at a later date it is found that any detail/s provided are false and incorrect, any contract given to the concern firm or participation may be summarily terminated at any stage, the firm will be blacklisted and Institute may imposed any action as per rules.

Date:

Name :

Place:

Business Address :

Signature of Bidder :

Seal of the Bidder :

ANNEXURE – V

FORM OF PERFORMANCE SECURITY (GUARANTEE) BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called " The Government") having offered to accept the terms and conditions of the proposed agreement between.....and(hereinafter called "the said Contractor(s)") for the work.....(hereafter called "the said agreement") having agreed to production of a irrevocable Bank Guarantee for Rs.....(Rupees.....only) as a security/guarantee from the Contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

We.....(hereinafter referred to as "the Bank") hereby (indicate the name of the Bank) undertake to pay to the Government in amount not exceeding Rs.....(Rupees.....Only) on demand by the Government.

2) We do hereby undertake to pay the amounts due and payable (indicate the name of the Bank) under this Guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....
.....(Rupees.....only).

3) We, the said bank further undertake to pay to the Government 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 so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4). We further agree that the guarantee herein contained(indicate the name of the Bank) shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5) We further agree with the Government that(indicate the name of the Bank) the Government shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said Contractor (s) and to for bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability

by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6) This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7) We lastly undertake not to revoke this (indicate the name of the Bank) guarantee except with the previous consent of the Government in writing.

8) This guarantee shall be valid upto _____. Unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. _____ (Rs. _____ only) and unless a claim in writing is lodged with us within 6 Months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged. Dated the _____ day of _____ for _____ (indicate the name of Bank)

LIST OF APPROVED MAKES FOR EQUIPMENT & MATERIALS

S. No.	Details of Materials / Equipments	Manufacturer's Name / Make
A.	Internal EI	
1.	MCB, Isolator, Industrial Plug Socket, RCCB, RCBO's	Schneider Electric ACTI-9 (N) / Legrand (DX3) / Hager/ L&T (Exora) / C&S (Win Trip 1/2) / ABB (S200M) / Siemens (Betaguard) /MK(Honeywell)
2.	MCBDB & Loose Wire Box	Legrand (EKINOX-3) / L&T (EXORA) / C&S (Win Class)/ Hager (Novello) / Schneider (ACTI-9) / ABB (Elegance) / Siemens / MK(Honeywell) (Note : MCBs Make shall be same as DBs Make)
3.	Change Over Switches	L&T / Havells / HPL / Hager / C&S / Socomac / ABB / ASCO
4.	Automatic Transfer Switch (ATS)	Asco (Schneider) / Russel / Socomac / Hager / ABB / Legrand / L&T / Havells
5.	FRLS PVC insulated copper conductor single core cable for wiring. (ISI marked)	Finolex / RR Kabel / KEI /Havells / Polycab / Bonton / Grandlay
6.	Armoured/Unarmoured telephone cable, Coaxial Cable/LAN Cable	Delton / Finolex / RR Kabel / Polycab/Havells / Bonton / Grandlay / KEI
7.	MS Conduit (ISI Marked) with heavy duty MS conduit pipe accessories	BEC / NIC / AKG / RMCON (Note : The make of accessories will be same that of conduit pipe & will comply to IS / 4768 part 2 2003)
8.	PVC Conduit (ISI Marked) with heavy duty PVC conduit pipe accessories	AKG / Norpack / BEC / Polycab / Precision / Astral / Finolex / Pressfit
9.	Modular Switch, Socket/Telephone Socket/ Cable TV Socket/ Data outlet Socket / Fan Regulator/ G.I. Boxes Etc.	Legrand (Arteor) / Schneider Electric (Zencelo) / Honeywell- MK (Elements)
10.	Modular MCB	Legrand / Schneider Electric /MK-Honeywell
11.	Selector Switch & Toggle switch	Salzer (Larsen & Toubro) / Siemens / Kaycee / C&S /Schneider
12.	PVC Trunking	Mk (Honeywell)/ Legrand / Schneider
13.	GI pipe (ISI Marked)	Tata / Jindal (Hissar) / SAIL
14.	Paints	Asian / Berger /Dulux
15.	Terminal Blocks and Connectors	Elmax / Wago / Hensel / Connectwell

16.	Phenolic Laminated Sheet / Bakelite Sheet	Hylam / Formica (P-I Grade) / Mylam / Greenlam
17.	Cat-6/Cat-6A Cable, Wires & Fiber Optic Cable	Amp / Beldon / Legrand / Krone Communication / Molex
18.	Indoor and Outdoor LED fittings /LED Lamp/ LED Tube	Wipro / Philips / Trilux / Regent / Osram / Lighting Technology (LT)
19.	Decorative Indoor/Outdoor LED fitting	Wipro / Philips / Trilux / Regent / Osram / Lighting Technology (LT)/Bajaj/Havells/Crompton
20.	Exhaust Fan/Fresher Fan	Havells / Crompton Greaves / USHA / Almonard / Alstom
21.	BLDC Ceiling Fan	Havells / Crompton Greaves / Atombarg Gorilla / Superfan / Usha
22.	Wall Bracket Fitting	Havells / Wipro / Decon / Jaquar / Philips / Bajaj / Trilux
23.	Geysers	Racold / CG / Havells / Jaquar / AOSmith / Usha / Venus
24.	Air circulator / Wall Fan	Havells / Usha / Almonard / Crompton / Orient
25.	LED Street Lights with inbuilt Solar Panel & Controller	Havells / Crompton / Philips / Wipro / Bajaj
26.	Ornamental Pole (Factory Finish)/ Hot Dipped Galvanized Octagonal Pole /High Mast	Valmont / Philips / Crompton / Wipro / Bajaj / Keselec / Singh profile /Transrail
27.	Hot Dipped Galvanized Octagonal Pole /High Mast	Valmont / Philips / Crompton / Wipro / Bajaj / Keselec / Singh profile /Transrail/Utkarsh
28.	Polycarbonate Junction Box / Enclosure / Pole box	Hensel / Spelsberg / Naptune-Bals / Sintex/Standard
B.	POWER CABLE	
1.	XLPE insulated PVC sheathed Alum. / Copper Conductor Armored cable of 1.1 KV grade	Finolex / Polycab / KEI / Havells / Grandlay / RR Kabel /Bonton/LAPP/RPG
C.	HT Cable	
1.	H.T. cable (ISI marked)	Finolex / CCI / Polycab / KEI / Havells / RR Kabel / Grandlay / LAPP/RPG
D.	Sub Station Equipments	
1.	LT Panel / Meter Panel Board/Outdoor Feeder Pillar / APFC Panels (Above 200 Amp Incomer)	Tricolite Electrical Industries / Control & Switchgears Electrical Ltd. / Sterling & Wilson / Milestone / Adlec Control System Pvt. Ltd. / Advance Panels & Switchgear Pvt. Ltd. Haridwar / BSPL (Bhopal)/ Engineers & Engineers (Electricals) Pvt. Ltd. / Peaton Electrical Co. Ltd. /Dynamic Electropower Pvt. Ltd./ Pristine/ Neptune /Pyrotech India Electronic pvt Ltd.Udaipur

2.	LT Panel / Meter Panel Board/Outdoor Feeder Pillar / APFC Panels (Upto 200 Amp Incomer)	Tricolite Electrical Industries / Control & Switchgears Electrical Ltd. / Sterling & Wilson / Milestone / Adlec Control System Pvt. Ltd. / Advance Panels & Switchgear Pvt. Ltd. Haridwar / BSPL (Bhopal)/ Engineers & Engineers (Electricals) Pvt. Ltd. / Peaton Electrical Co. Ltd. /Dynamic Electropower Pvt. Ltd./ ASPL (Associated Switchgears & Projects Ltd.) / Pristine / Neptune /Allied engineers/ Pyrotech India Electronic pvt Ltd.Udaipur/Johns electric co.pvt Ltd Jaipur
3.	Rising main / Bus Trunking	C&S / L&T / Schneider / Legrand / Godrej
4.	Moulded Case Circuit Breaker (MCCB) Thermal Release / Microprocessor based (Ics=Icu=100%)	Schneider Electric (CVS Series) / Siemens (VL Series) / L&T (D-Sine) / Legrand (DPX3) / C&S (Winbreak 1/2) / ABB (TMax) / Hager
5.	Contactor/Relay /Timer	Schneider Electric / L&T / BCH / Siemens / Legrand / ABB / C&S / Hager/
6.	Potential Transformers / Current Transformer	Automatic Electric / Matrix / Precise / L&T / Kappa /Procom
7.	LED type indicating lamps / Push Button	Schneider Electric / L&T / Siemens / Vaishno
8.	Digital Meters (A/V/PF/Hz/KW/KWH)	Conzerv / Larsen & Toubro / Secure / AE / Socomac / Neptune /Hager
9.	Fasteners / GI Clamps	Hilti / Fisher / Chilli /OBO
10.	D.W. Corrugated HDPE Pipe (ISI marked)	REX / Dura plast / Zenduct / Gemini(Tripiti)/ Duraline / Keshav Kripa Polyplast (LLP)
11.	Transformer (Oil / Dry type) Upto 250 KVA	Crompton / ABB / Raychem / Schneider / Voltamp / Uttam Bharat / United / Bharat Bijlee/RTS-Jaipur
12.	Transformer (Oil / Dry type) Above 250 KVA	Crompton / ABB / Schneider / Sterling & Wilson / Raychem / Bharat Bijlee /Voltamp
13.	HT Panel / Ring Main Unit	Siemens / ABB / L&T / Schneider / C&S
14.	HT End Termination / Cable Jointing Kit	Reychem / Denson / Cap Seal / Safekei / 3M
15.	ACBs	Siemens (3WL–ETU45B) / L&T (U-Power-OMEGA MTX 4.0) / ABB (Emax)PR122 / Legrand (DMX ³ MP4) / Schneider (MVS Series) / C&S (Winmaster 2/3)
16.	Rubber Mat (MV / HT)	Jyoti / Deep Jyoti / Premier (duly ISI marked)
17.	Fire Extinguishers	Minimax / Safex / Life Guard / Kanex / Omex / Firequip (ISI Mark)
18.	Capacitors & Reactors / APFC Relay	EPCOS/ L&T / DUCATI / ABB / Siemens / Schneider / Neptune
19.	Cable Glands /lugs .	Baliga lighting / Comet / Cosmos / Dowells / Lapp / Gripwell

20.	Perforated Cable Tray	Pilco / Slotco /RMCON/ BEC / Steelways / OBO
21.	SS Wire mesh cable Tray /Raceways	Legrand / OBO / MK
22.	Programmable Logic Controller (PLC)	Siemens / Woodward / Allen / Bradley/ Legrand / OBO / MK-Honeywell
E.	DG Set	
1.	Diesel operated Power Generating Engine Upto 200 KVA	Cummins India / Caterpillar / Ashok Leyland / KOEL
2.	Diesel operated Power Generating Engine Above 200 KVA	Cummins India / Caterpillar / KOEL / Volvo Penta
3.	Alternator	Stamford / Lerroy Sommer / Kirloskar Electric / Caterpillar / Crompton Greaves
4.	DG Set Canopy / Enclosure & AMF Panel	As per OEM / OEA of respective DG Set manufacturer
5.	Alarm Annunciator	Advani Oralikon / Larsen & Toubro / Minilec
F.	Fire Fighting Equipments	
1.	MS Pipe/GI Pipe	Tata / Jindal Hisar / SAIL
2.	Forged Steel Fittings / Flanges	Johnson Industries / VS Forge / JK Forging / Trueforge
3.	Pipe Hangers	Chilli / Hilti / OBO / Fisher
4.	Gun Metal / Brass / NRV/ Gate Valve/Check Valve/Foot Valve (ISI marked)	Sant / Leader / Advance / Audco / Zoloto/Honeywell
5.	CI Sluice Valve/ Butterfly Valve/ NRV/ Y - Stainer (ISI marked)	Audco / Advance / Kirloskar / Zoloto/Honeywell/Kartar/Kalpna
6.	Fire pump/Jockey pump	Kirloskar/KSB/Matherplatt(Wilo)/Crompton
7.	Electrical Motor	ABB / Siemens / Kirloskar / Grundfos / Crompton / Bharat Bijli/ Matherplatt(Wilo)
8.	Diesel Engine for Fire Pump	KOEL / Ashok Leyland / Cummins
9.	Couplings (Tyre – Type)	Lovejoy / Fenner
10.	Anti Vibration Mountings / Neoprene Gasket	Kanwal Industrial Corporation / Dunlop / GERB / Resistoflex
11.	Pressure Switch (ISI marked)	System Sensor / Indfoss / Danfoss / Switzer
12.	Pressure Gauge (ISI marked)	H Guru / Fiebig / Dwyer/ Hebig/Honeywell
13.	Landing Valve/Fire Hose coupling /First Aid Hose Reel and Drum /Shut of Nozzle /Branch Pipe/Fire Brigade inlet / RRL Hose Pipe / Thermoplastic Pipe (ISI marked)	New Age / Safeguard / Lifeguard / Padmini / Omex / Minimax/Safex
14.	Water Flow Switch (FM / UL listed)	System Sensor / Switzer / Rapid Control / Honeywell/ Danfoss
15.	Pipe coat	Pypcoat / Makphalt / Rustech

16.	Level Controller & Indicator (Water) (ISI Marked)	Auto Pump / Cirrus Engineering / Techtrol
17.	Fire Sealent	Promat / Birla / 3M / Hilti
18.	Single Phase Preventer / Water level guard	Schneider Electric / L&T / Siemens / ABB / Minilec
19.	LT Jointing Kit / Termination	Reychem / Denson / Cap Seal / Safekei / 3M
20.	Batteries	Exide / Rocket / HBL / Pulse / Amco / Amaraja
21.	Battery Charger	Statcon / Amarraja / CDC / AE / Expofyn / Thycon India/ Procom/Microtek
22.	Epoxy Paint	Dulux / Berger / Asian / Nerolac
23.	Air Release Valve	Rb / Tbs / Cimbrio / Zoloto
24.	Solenoid Valve / Spray Nozzle	Parker / HD / Tyco / Emersion / Honey Well
25.	Sprinkler Head	HD / Tyco / Viking / Omex / Easy Flex
26.	SS Flexible Drop	HD / Omex / Newage / Tyco / Lifeguard / Easy Flex
27.	Deluge Valve	Tyco / Viking / HD
G.	Fire Alarm System	
1.	Addressable Fire alarm control panel / Repeater panel / multi sensing detector / Fault isolator / Strobe light / Hooter / Manual call box / Response indicator	Johnson Control / Notifier / Siemens / Bosch make
2.	Cat-6 /Cat-6A Cable, Wires & Fiber Optic Cable	Amp / Beldon / Legrand / Krone Communication / Molex
3.	HDMI cable	Lightware/AMx/crestron/Extron
4.	Fire retardant cable	Finolex / Polycab / KEI / Havells / Grandlay/ RR Kabel //Bonton/RPG/LAPP
5.	Amplifire/Speaker	Bosch/Honeywell/Yamaha/JBL/Shure
H.	Water Supply Pump Sets	
1.	Mono Submersible/ Submersible pump Set	KSB / CG / Kirloskar / Grundfos / Mather & Platt (Wilo)
2.	DOL / Star Delta Starter	L&T / BCH / Havells / C&S / Siemens / Schneider
3.	Submersible Cable	Finolex / RR kabel / Polycab / Havells / KEI/ Bonton
I.	EPABX System	
1.	EPABX System / Master Console Phone/	Siemens / Cisco / Alcatel / Coral / Panasonic / AVAYA/ Matrix
2.	Analog Telephone instrument	Beetal / Tata / Panasonic/ Seimens
3.	18 SWG Sheet (Chrono Box)	Topaz / Coral / Crown
4.	Constant Voltage Transformer	Topaz / Bhurji / Delta / Servokon
J.	Air Conditioner & Water Purifier	
1.	Split Air Conditioner	Mitshubshi Electric / Mitshubshi Heavy Industries / O General / Daikin / Hitachi
2.	Window Type Air Conditioner	O General / Voltas / Carrier / Blue Star
3.	Voltage Stabilizer	V Guard / Blue Bird / Voltas / Servocon
4.	RO / Water Purifier	Kent / Ion Exchange / Aquaguard (Eureka Forbes)/ Havells
5.	Drinking Water cooler	Voltas / Blue Star / Usha

K.	Solar Water Heating System	
	Solar Water Heating System	Inter solar / Racold / BHEL / Electrotherm / Rashmi/V-guard/Emmvee Solar
L.	CCTV System	
1.	IP based Camera (All type) / NVR / Server	Bosch / Pelco / Axis / Sony / Tyco / Honeywell
2.	Conventional Camera/Connect (Dome / PTZ / Bullet / C-mount type)	Bosch / Honeywell / Pelco / Axis / Tyco / Sony
3.	Managed Networking layer Switch	Cisco / DLink / Extreme / Fortinet / Ruckus/HP/Netgear
4.	U Rack	Valrack(LeGrand) / EOM Rack / Belchem /Comrack/ Vertiv
M.	Uninterrupted Power Supply (UPS)	
1.	Online / Offline UPS	Vertiv / Numeric / Peaguses (Auto Meter)/ Socomac/Eaton/Schneider
2.	SMF Batteries	Exide/Amron/Rocket/HBL/Pulse/Amco/ Amaraja
N.	Solar Power Generation System	
1	Solar Power Generation System	REIL / BHEL / BEL / CEL / REC / SOLON / VIKRAM / ABB / Havells
2	Junction Box	VNT / SUN GARNER / OEM of SPV Modules
3	SPV Inverter	Sungrow / Delta / SMA / ABB
4	Module Mounting Structure	As per MNRE / Manufactures Standards
5	XLPE Aluminium / Copper Cable	Finolex / Universal / Nicco / RPG Cables / KEI / Grandlay/LAPP / Polycab
6	Solar Cable XLPO Insulated (DC)	RR Kabel / Polycab / Havells / Finolex / Lapp
O.	LED TV	LG / Samsung / Panasonic / Toshiba / Sony
P.	VRV/VRF System	
1	Indoor/Outdoor Unit	O-General/Mitsubishi Heavy/Mitsubishi Electric / Hitachi/ Daikin
2	Copper Pipe	Total line/Mandev/Rajko/Diamond/Star/Camipro
3	CPVC pipe	Ashirwad/Supreme/Astral/Prayag
4	GSS Sheet (For site fabricated duct)	SAIL/Jindal/Tata
5	Aluminium Sheet	Hindalco/Balco/Nalco
6	Flexible duct/Company fabricated duct	Waves/Zeco/Ductofab/Airflow/Caryaire/ Atco
7	Supply/Return Grill/diffuser	Airflow/Trox/Dynacraft/ Caryaire/Matejoints

Note- Any item of make other than above said will be got approved by Engineer-in-charge before brought at site.