# **Tender Document**

# For

Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan.

NIT No. : CURAJ/R/F. 144/2023/4051

NIT Issue Date : 13.01.2023

Estimated Cost : Rs. 83,00,000/-

(Electrical - Rs. 65,70,000 + Civil = Rs. 17,30,000/-

Last Date of Submission : 27.01.2023 upto 2.00 PM Technical Bid Opening : 27.01.2023 at 3.00 PM



CENTRAL UNIVERSITY OF RAJASTHAN NH-8, Bandarsindri, Kishangarh, Dist.- Ajmer, Rajasthan – 305817 www.curaj.ac.in

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Design, Supply, Installation, Testing and Commissioning of HVAC Work Name of Work:

(VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation

Building, Central University of Rajasthan

NIT No. CURAJ/R/F. 144/2023/4051 dated 13.01.2023

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# CENTRAL UNIVERSITY OF RAJASTHAN NOTICE INVITING TENDER

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh-305817 invites sealed **Item Rate bids** from approved and eligible contractors of CPWD and those of appropriate list of MES, BRO, BSNL, Railway and State PWD or Public sector undertakings set up by the central or state government for following work(s):

S.	Name of Work	NIT No.	Estim	Earnest	Stipulated	Last date &	Date & Tine
No.			ated	money	Period of	time of	of Opening
			Cost		Completi	submission	of Technical
					on of	of Bid	Bid
					work (in		
					months)		
	Design, Supply,						
	Installation,						
	Testing and	pa					
	Commissioning of	dat				4	Į
	HVAC Work	51				PI	PIV
1	(VRV/VRF Air	/40	<b>-</b> /0	-/		8.	00
1	Conditioning) and	144/2023/4051 dated	83,00,000/-	Rs. 1,66,000/-	ths	till 02.00 PM	at 03.00 PM
	False Ceiling	1,26	00	9,9	03 months	<del>[</del> ]	at
	Work at Central	f. 144, 13.01.	83,	1,6	3 m	23	23
			Rs.	S.	0.0	200	.20
	Instrumentation	<u>&amp;</u>				01.	27.01.2023
	Building, Central	A.				27.01.2023	27.
	University of	CURAJ/R/F.					
	Rajasthan	Ö					

The tender document, forms 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 <a href="https://www.curaj.ac.in">www.curaj.ac.in</a> and CPP Portal.

Registrar Central University of Rajasthan

# PART- A

# CHECK LIST FOR CONTRACTORS FOR SUBMISSION OF BIDS

- 1. The tenderer should read all the instructions, terms & Conditions, contract clause, nomenclature of items, specifications etc. contained in the tender documents very carefully, before quoting the rates. The tenderer should also read the General Conditions of Contract 2020 for construction works in lines with schedule F, with upto date correction slips upto date of submission of bids.
- 2. The agency shall quote the item rate for complete scope of work in both words and figures in the financial bid.
- 3. The bidders shall quote his rates keeping in mind the scope of work, specifications, terms & conditions, additional conditions and special conditions etc. and nothing shall be payable extra what so ever unless otherwise specified.
- 4. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must be disclosed that the firm is duly registered under the Indian partnership act, 1952.
- 5. GST, Labour Cess etc. as applicable shall be paid by the contractor himself. The department shall deduct from the R/A bills, the TDS as applicable. The contractor shall quote his rates considering all such Taxes.
- 6. The bidder shall quote their rates considering all prevalent taxes/ cess like GST, Workers Cess or any other tax on material /work as applicable on the last date of bid submission and nothing extra shall be paid to the contractor on this account.
- 7. Power/ electricity supply DG sets of required capacity required for construction; testing & commissioning shall have to be provided to the contractor on payment basis as per the University norms. Water required for testing of equipment is also in the scope of agency.
- 8. The Contractor shall note that DLP period for this work is Three years from the date of completion of work and handing over to client department.
- 9. Damages to existing infrastructure/equipment done by executing agency due to carelessness/poor quality work shall be compensated by Contractor to Central University of Rajasthan.

### 10. Scope of Drawings:

The Contractor shall have to provide the design including heat load, electrical load etc calculation. The bidder shall quote their rates considering the cost incurred on the same and nothing extra shall be paid to the contractor on this account. If any modification In Design/drawings is needed as per site conditions, or subsequent to proof checking, the contractor shall do/redo the design without any extra cost. The Contractor shall prepare and supply all the coordinated 'Good for Construction" drawings duly proof checked and approved. The decision of the Engineer- in-charge in this regard shall be final and binding. No claim whatsoever on this account will be entertained on this account.

# INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR TENDERING FORMING PART OF BID DOCUMENT

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh-305817 invites sealed **Item Rate bids** from approved and eligible contractors of CPWD and those of appropriate list of MES, BRO, BSNL, Railway and State PWD or Public sector undertakings set up by the central or state government for following work(s):

S. No	Name of Work	NIT No.	Estim ated Cost	Earnest money	Stipulated Period of Completi on of	Defect Liability Period	Last date & time of submiss	Date & Tine of Opening of
					work (in months)		ion of Bid	Technic al Bid
1	Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan.	CURAJ/R/F. 144/2023/4051 dated 13.01.2023	Rs. 83,00,000/-	Rs. 1,66,000/-	03 months	One Year from the date of record of completion certificate by Engineer-In-Charge	27.01.2023 till 02.00 PM	27.01.2023 at 03.00 PM

- 1. The intending bidder must read the terms and conditions of **CPWD-6** 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 posted on website shall form part of bid document.
- 2. 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 <a href="www.curaj.ac.in">www.curaj.ac.in</a> and CPP portal free of cost.
- 3. 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.
- 4. The bidder must ensure to quote rate of each item. 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). However, If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 5. Tenders with any condition including that of conditional rebates in the tender document shall be rejected forthwith.

- 6. The tenderer should also read the General Conditions of Contract for Construction works 2020 with latest amendments upto date of submission of bid (available on CPWD website), which is available as Govt. of India Publications, which will be a part of the agreement including the special conditions and particular specifications etc.
- 7. GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of service (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.
- 8. 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.
- 9. 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.
- 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 of Rs. 1,66,000/-** 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 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.
- 13. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- 14. All needful statutory provisions to be adopted at site to tackle epidemic/pandemic or similar situation of COVID-19 shall be done by the agency and expenditure on the same shall be borne by the contractor unless statutory orders direct for the reimbursement of the same.

# LIST OF DOCUMENTS TO BE ATTACHED WITH THE TECHNICAL BID

- 1. **Earnest Money Deposit of Rs. 1,66,000/-** 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.
- 2. Copy of Experience/work completion certificates from the clients regarding the quality and duration of services rendered during last seven years (Form C)
- 3. Copy of Enlistment Order of the Contractor in appropriate class in CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government having validity atleast till last date of bid submission.
- 4. Authorization letter from respective make original equipment manufacturer, which should be valid upto date.
- 5. Copy of GST Registration Certificate.
- 6. Photo copy of PAN Card.
- 7. Certificate of Financial Turnover from CA or Copy of audited balance sheets of last three financial years.(Form A)
- 8. Banker's Certificate or Net Worth Certificate (Form B/ B-1)
- 9. A self-certificate showing the track record of contracting firm/Contractor on the non-judicial stamp paper. (Annexure-III)
- 10. Undertaking for supply of genuine spare parts (Annexure –IV)
- 11. Letter of Transmittal (Annexure –I)

### Note:

- Tenders received without EMD will not be accepted.
- 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.

Registrar Central University of Rajasthan

# SECTION – I (Brief Particulars of Work)

1. Salient details of the work for which bids are invited are as under:

Sl. No.	Name of Work	Estimated Cost	Period of Completion
01	Design, Supply, Installation,	Rs. 83,00,000/-	
	Testing and Commissioning of		
	HVAC Work (VRV/VRF Air	(Electrical Rs. 65,70,000/-	03 Months
	Conditioning) and False Ceiling	+	
	Work at Central Instrumentation	Civil Rs. 17,30,000/-)	
	Building, Central University of		
	Rajasthan.		

- 2. Work shall be executed according to General Conditions of Contract 2020 available separately at printer's outlets and online including amendments issued there in upto last date of bid. The General Conditions of Contract for Central Public Works Department is also available on website <a href="https://www.cpwd.gov.in">www.cpwd.gov.in</a>.
- 3. The scope of work includes Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan. The scope of work in this contract shall include all Civil, Electrical/HVAC works including services.
- 4. General features & major components of the scope of this work to be executed by the contractor are as under:
  - i) Electrical/HVAC Works:
    - a) Complete Internal and External Electrical and Mechanical works in the buildings.
    - b) All E&M works including water supplies, external electric supplies, plumbing, insulation, piping, ducting, etc.
    - c) SITC of VRV/VRF Air Conditioning Plants as per BOQ
  - ii) Civil Works:
    - a) Scope of work also includes masonry work, plaster work, all external and internal finishing works, internal and external water supply, drainage, false ceiling work as per BOQ etc.
    - b) Any other work as detailed in BOQ, specified elsewhere in tender documents and even incidental works not defined in this document but essential for completion of work.
  - iii) The work shall be executed according to BOQ items, specifications and conditions specified in tender document, approved architectural, structural and service drawings and directions of Engineer-in-charge or his authorized representative.
  - iv) The above-mentioned scope of work of the contractor which is only indicative and not exhaustive. The contractor shall be responsible for executing all items required for completing the buildings and allied works in all respects to make it habitable and ready for occupation, as per direction of Engineer-in-charge.
  - v) The scope of work includes cost of all materials, manpower, equipment's, T&P, fixtures, accessories, royalties, taxes, watch & ward and all other essential elements for completion and maintenance of works whatsoever, under the scope of this contract. Any changes, modifications, revisions etc. required to be done by University, client, local bodies, design consultants etc. in accordance with applicable standards will have to be executed by the contractor as per provisions of the contract specified elsewhere in this bid document.

# SECTION – II (INFORMATION & INSTRUCTIONS FOR BIDDERS)

### 1 General:

### INFORMATION & INSTRUCTIONS FOR BIDDERS

- 1.1 Letter of transmittal and forms for deciding eligibility are given in Annexure -I.
  - All information called for in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a "nil" or "no such case" entry should be made in that column. If any particulars/query is not applicable in case of the bidder, it should be stated as "not applicable". The bidders are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the bid being summarily disqualified. Bids made by telegram or e-mailed or telex and those received late will not be entertained.
- 1.2 References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder should be signed by an officer not below the rank of Executive Engineer or equivalent.
- 1.3 The bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after submission of eligibility criteria document unless it is called for by the Employer.

### 2 Definitions:

- 2.1 In this document the following words and expressions have the meaning hereby assigned to them.
- 2.2 Employer: Means the Central University of Rajasthan, acting through the Registrar, Central University of Rajasthan.
- 2.3 Bidder: Means the individual, proprietary firm, firm in partnership, limited company private or public or corporation
- 2.4 "Year" means "Financial Year" unless stated otherwise.

# **3** Method of application:

- 3.1 If the bidder is an individual, the application shall be signed by him above his full type written name and current address.
- 3.2 If the bidder is a proprietary firm, the application shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.
- 3.3 If the bidder is a firm in partnership, the application shall be signed by all the partners of the firm above their full typewritten names and current addresses, or, alternatively, by a partner holding power of attorney for the firm. In the latter case a certified copy of the power of attorney should accompany the application. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application. If the bidder is a limited company or a corporation, the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The bidder should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

# 4 Final decision making authority

The employer reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders.

### 5 Particulars provisional

The particulars of the work given in Section I are provisional. They are liable to change and must be

considered only as advance information to assist the bidder.

# 6 Site visit

The bidder is advised to visit the site of work, at his own cost, and examine it and its surroundings to himself collect all information that he considers necessary for proper assessment of the prospective assignment.

# 7 Minimum Criteria for Technical Eligibility:

- 7.1 The Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted. Should have satisfactorily completed the works as mentioned below during the last Seven years ending last day of the month previous to the one in which tenders are invited.
  - Three similar works each costing not less than 40% of estimated bid value or two similar works each costing not less than 60% of estimated bid value or one similar work costing not less than 80% of estimated bid value.
  - Similar work shall mean works of SITC of VRV/VRF Type Air Conditioning System.
  - The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to previous day of last day of submission of tenders. (**Documentary evidence to substantiate above fact must be submitted along with Form C of Annexure-II with technical bid).**
- 7.2 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 OEM** whose product is quoted, which valid up to date
- 7.2 Should have had **Average Annual Financial Turnover of Rs.** <u>24.9 lakhs</u> during the last three years ending <u>31st March 2022</u> (Scanned copy of Certificate from CA with Unique Document Identification Number (UDIN) to be attached). Year in which no turnover is shown would also be considered for working out the average.(Form A of Annexure-II)
- 7.3 The bidder should not have incurred any loss (profit after tax should be positive) in more than two years during available last five consecutive balance sheets, duly certified and audited by the Chartered Accountant. (The balance sheet in case of Pvt./ Public Ltd. company means its standalone financial statement and consolidated financial statement both).
- 7.4 The bidder should have a Banker's certificate from a Commercial Bank for amount equal to 40% of the Estimated Cost put to tender (ECPT) or the bidder should submit Networth Certificate of minimum 10% of ECPT issued by the certified Chartered Accountant (on the format prescribed in form B-1).
- 7.5 The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the contract. The bidder shall have to submit a list of these employees stating clearly how these would be involved in this work within 15 days of award of work.
- **8** 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. (Form C-1 of Annexure-II)
- 9 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-III)

### 10 Financial information

Bidder should furnish the Annual financial statement for the last five years in (Form"A"). Banker's Certificate in (Form "B") or Networth Certificate in (Form"B-1"). Please refer Annexure- II for forms.

### 11 Experience of similar works

Bidder should furnish the List of eligible similar nature of works successfully completed during the last seven years in (Form "C") and ongoing works as well (Form C-1). Please refer Annexure- II for forms.

# 12 Organization information

Bidder is required to submit the information in respect of his organization in Forms "E" Please refer APPENDIX- II for forms.

# 13 Letter of transmittal

The bidder should submit the Letter of Transmittal attached with the document. Please refer Annexure-I for format of letter.

# 14 Preparation & Submission of bids :

- 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.
- 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 mentioned in Notice Inviting Tender. 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.
- **15 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

### 16 Opening of Price bid

After evaluation of technical bids, a list of short listed bidders will be prepared. Thereafter the financial bids of only the qualified and technically acceptable bidders shall be opened.

# 17 Award Criteria

- 17.1 The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:
  - (a) Amend the scope of work and value of contract.
  - (b) Reject any or all the applications without assigning any reason.
- 17.2 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.

# CENTRAL UNIVERSITY OF RAJASTHAN NOTICE INVITING TENDER

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh-305817 invites sealed **Item Rate bids** from approved and eligible contractors of CPWD and those of appropriate list of MES, BRO, BSNL, Railway and State PWD or Public sector undertakings set up by the central or state government for following work(s):

Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan.

The work **Estimated Cost: Rs. 83,00,000/-** (Electrical Rs. 65,70,000/- + Civil Rs. 17,30,000/-) This estimate, however, is given merely as a rough guide.

The contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government having enlistment in appropriate class valid up to date and fulfilling the eligibility criteria of NIT are invited to apply.

- 1. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD-7/8 of GCC 2020 duly amended upto last date of submission of bid, which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 2. The time allowed for carrying out the work will be 03 Months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 3. The site for the work is mostly available.
- 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 & conditions of contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from website <a href="https://etender.cpwd.gov.in">https://etender.cpwd.gov.in</a>, from Estate Office of Central University of Rajasthan, free of cost.
- 5. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified. While submitting the revised bid, contractor can revise the quoted percentage rates but before last time and date of submission of tender as notified.
- 6. The bid submitted shall become invalid, if
  - (i) The bidder is found ineligible.
  - (ii) The bidder does not deposit original EMD with technical bid envelope.
  - (iii) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above / below on the total amount of the tender or any section/ sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
  - (iv) If any discrepancy is noticed in the documents / details as submitted by bidder.
- 7. **Earnest Money Deposit:** The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of Rs. **1,66,000**/- (Rupees One Lakhs Sixty Six Thousand 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. Bid(s) received without EMD will be rejected.

<u>Note:</u> 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 bid is accepted will be required to furnish performance guarantee of 3% (Three Percent) of the tender accepted amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/ Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts 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 period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No, if applicable and also ensure the compliance of aforesaid provisions by the sub contractors, if any, engaged by the contractor for the said work within the period specified in Schedule F.

# 9. **Security Deposit:**

- The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 2.5% of the tender accepted amount of the work. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rates mentioned above. The Security amount will also be accepted in cash or in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or will also be accepted for this purpose provided confirmatory advice is enclosed.
- 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. Payment Clause:

- A) Running Account bill payment will be made as per execution of work duly certified by the Engineer-In-Charge or authorized representative of the University.
- B) 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.
- 11. The description of the work is as follows: Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan. 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 bidders shall be responsible for arranging and maintaining at his own cost all materials, tools &

plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. 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.

- 12. The competent authority on behalf of the Central University of Rajasthan does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All bidders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 13. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
- 14. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.

19. The Specifications to be followed for execution of work: CPWD General specifications for electrical works Part-I (Internal) 2013, HVAC-2017 and DSR Civil Vol-I &II (2019) as modified and Correction Slips/amendments issued upto previous day to last date of bid submission or any other relevant CPWD manual/guideline or IS.

# 20. Signing of Contract

The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of

- (i) the notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- (ii) Standard C.P.W.D. Form as mentioned in Schedule 'F' consisting of:
  - (a) Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto.
  - (b) C.P.W.D. Safety Code.
  - (c) Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD or its contractors.
  - (d) CPWD Contractor's Labour Regulations.
  - (e) List of Acts and omissions for which fines can be imposed.
  - (f) Integrity Pact
- (iii) No payment for the work done will be made unless contract is signed by the contractor.
- 21. The bid document will include following two components:-
  - Part A: CPWD-6, CPWD-8 including schedule A to F for the both the components of the work, Standard General Conditions of Contract for CPWD 2020 as amended/ modified up to last date of submission of bid.
  - Part B: General/specific conditions, specifications and schedule of quantities applicable to the work. In case of any discrepancy between part A and part B of the contract agreement, the provision of Part A shall prevail.
- 22. Entire work under the scope of composite bid including major and all minor components shall be executed under one agreement.
- 23. Any dispute unless resolved amicable shall be settled by a court of law having jurisdiction over Jaipur/Ajmer.

# **Central University of Rajasthan**

STATE RAJASTHAN

BRANCH ESTATE

### **Item Rate Tender & Contract for Works**

**Tender for the work of:** Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioners) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan.

- (i) Tender to be submitted by 02.00 PM on 27.01.2023 at Room 101, Admin Building, Central University of Rajasthan.
- (ii) To be opened in presence of tenderers/contractors who may be present at 03.00PM on ........... by the authorized representative of Central University of Rajasthan.

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 **ninety** (90) days from the due date of opening and not to make any modification in its terms and conditions.

A sum of Rs. **1,66,000/-** 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*	
Witness**:Address**:Occupation**:  (*) To be filled in by the Tenderer/Con(**) To be filled in by the Witness.	Telephone No.* Fax E-Mail  tractors.	
	ACCEPTANCE	
accepted by me on behalf	a as provided in the letters mentioned hereunder) is of Central University of Rajasthan for a sum of the company of the compan	of
The letter referred to below shall form	n 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 DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF H	VAC
WORK (VRV/VRF AIR CONDITIONERS) AND FALSE CEILING WORK AT CENTRAL	
INSTRUMENTATION BUILDING, CENTRAL UNIVERSITY OF RAJASTHAN,.	
THIS AGREEMENT is made on day of (month),(year) between Cen	
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 requ	ires,
includes their successors in office and assigns) on the one part and	••••
hereinafter called the Contractor (which expression shall wherever the context so demands or requ	ires,
include his/their successors and assigns) on the other part.	
WHEREAS the University is desirous that certain works should be executed	
and has by Letter of acceptance/award	
accepted the quotation/offer submitted by the contractor for the execution, maintenance	
completion of such works at a total contract price of Rs (R	upees
only).	
Now THIS AGREEMENT WITNESSETH as follows:	
1. In this agreement, words and expressions shall have the same meaning as are respectively assi	aned
to them in the conditions of contract hereinafter referred to.	znea
2. The following documents shall be deemed to form and be read and construed as part or	tha
agreement viz:	tiic
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 ar	other
but in the case of ambiguities or discrepancies, shall take precedence in the order set out above.	ouici,
and the case of annoignment of aborepaneles, shall take proceeding in the order bet 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:	Ву:
Name	
Designation	
In the presence of	In the presence of
WITNESS	WITNESS
1.	1.
2.	2.

# PROFORMA OF SCHEDULES A to F

### SCHEDULE 'A'

Schedule of quantities (Enclosed)

As per Financial Bid

### **SCHEDULE 'B'**

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

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

### **SCHEDULE 'C'**

Tools and plants to be hired to the tenderer/contractor

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

### SCHEDULE 'D'

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

### SCHEDULE 'E'

- 1. Reference to General Conditions of contract: General Conditions of contract for Central PWD Works: GCC 2020, Form-8 for CPWD works as amended upto last date of submission of bid.
- 2. **Name of work:-** Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioners) and False Ceiling Work at Central Instrumentation Building, Central University of Rajasthan.

(i) The work is estimated to the cost : Rs. 83,00,000/-

(Electrical Rs. 65,70,000/- + Civil Rs. 17,30,000/-)

(ii) Earnest Money : Rs. 1,66,000/-

(to be returned after receiving performance guarantee without interest)

(iii) Performance guarantee : 3% of tender accepted value.

(to be returned after completion of work without interest)

(iv) Security Deposit : 2.5% of accepted value plus 50% of PG

(to be returned without interest after completion of defect liability period)

### SCHEDULE 'F'

General Rules & Directions

Officer Inviting Tender Registrar

Central University of Rajasthan, Bandarsindri,

NH-8.

See Below

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined

be executed beyond which rates are to be determine

in accordance with Clauses 12.2 & 12.3

**Definitions:** 

2(v) Engineer-in-Charge Executive Engineer, Central University of

Rajasthan, Bandarsindri, NH-8.

2(vii) Accepting Authority Registrar, Central University of Rajasthan,

Bandarsindri, NH-8.

2(x) Percentage on cost of materials and labor to cover 15%

all overhead & profits 2(xi) Standard Schedule of Rates

DSR 2022 (E&M), DSR Civil 2021, DSR VRV 2019 with correction slips up to last date of submission of bid.

Central University of Rajasthan

GCC 2020 or latest, CPWD Form 8 as modified and Correction Slips/amendments issued upto previous day to last date of bid submission.

2(xii) Department

9(ii) Standard CPWD contract Form GCC 2020, CPWD Form 7/8 as modified & corrected upto

**Clause 1 (Performance Guarantee)** 

- Time allowed for submission of Performance guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. or proof of applying thereof from date of issue of letter of acceptance.
- ii) Maximum allowable extension with late fee @ 0.1% per day of performance guarantee amount **07 days** beyond the period provided in (i) above

14 days

Applicable

Clause 2 (Compensation for Delay)

Authority for fixing compensation under clause 2.

Registrar, Central University of Rajasthan.

Clause 2 (A).

Whether clause 2 (A) shall applicable

Yes

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as 14 days per table given below:-

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	Submitting of drawing for approval	7 Days	0.25% of accepted Tender amount
2	Placing of order for 100% material.	20 Days	0.25% of accepted Tender amount
3	Supply of 30% material & Installation of 30% material received	30 Days	0.50% of accepted Tender amount
4	Supply of 50% material & Installation of 50% of the material	45 Days	0.50% of accepted Tender amount
5	Supply of 100% material & Installation of 70% of the material	60 Days	1.0 % of accepted Tender amount
6	Installation of 100% material, Testing and commissioning of all installation	90 Days	0.50% of accepted Tender amount

# Time allowed for execution of work **Authority to decide:**

Extension of time (i)

(ii) Rescheduling of milestones

Shifting of date of start in case of delay in (iii) handing over of site

Three (03) Months

Registrar, Central University of Rajasthan Registrar, Central University of Rajasthan Registrar, Central University of Rajasthan Clause 6 : Clause 7 :

Clause 7A:

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.

Clause 8A

Clause 10A

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

Clause 10 B (ii)

Clause 10 C

Component of labour expressed as percent of value of work:

Clause 10 CA

Payment due to variation in prices of materials after receipt of tender

Clause 10 CC

Payment due to Increase / Decrease in Prices/ Wages (excluding materials covered under clause 10 CA) after Receipt of Tender for Works

Clause 11 Specifications to be followed for

execution of work

Clause 12

Authority to decide deviation upto 1.5 times of tendered amount

12.2 & 12.3: Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building/electrical work.

12.5 :

(i) Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except work).

(ii) Deviation Limit for items in earth work subhead of DSR or related items

Clause 16

Competent Authority for deciding reduced rates

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site

Clause 19

Authority to decide penalty for each default

Clause 25

Constitution of Dispute Redressal Committee (DRC)
DRC shall constitute one Chairman and two members

Computerized Measurement Book Applicable

As per decision of the University

NA

Not Applicable

As per site requirement

Not Applicable

NA

NA

NA

**CPWD General specifications for electrical** works Part-I (Internal) 2013, HVAC-2017 and DSR Civil Vol-I &II (2019), other relevant CPWD Manual/guidelines or IS norms as modified and Correction Slips/amendments issued upto previous day to last date of bid submission.

Registrar, Central University of Rajasthan

100%

NA

NA

Registrar, Central University of Rajasthan

As applicable to be arranged by the contractor

Registrar, Central University of Rajasthan

Competent Authority to appoint DRC Honorable Vice Chancellor Central University of Rajasthan

Clause 32

Requirement of Technical Representative(s) and recovery Rate

S.No	Min	Discipline	Designation	Minimum	Number	Rate at which recovery	
	Qualification of			Experience		shall be made from the	
	Technical					contractor in the event	
	Representative					of not fulfilling	
						provision of clause 36(i)	
						Figures	Words

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

# Clause 38

- (i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates
- (ii) Variations permissible on theoretical quantities:
  - (a) Cement

For works with estimated cost put to tender not more than Rs. 25 lakh. For works with estimated cost put to tender more than Rs. 25 lakh.

(b) Bitumen All Works

(c) Steel Reinforcement and structural steel sections for each diameter, section and category

(d) All other materials

3% plus/minus

2% plus/minus

2.5% plus & only & nil on minus side

2% plus/minus

Nil

# **INTEGRITY PACT**

To, Executive Engineer,
Sub: Submission of Tender for the work of.
Dear Sir, I/We acknowledge that CPWD is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.
I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process.
I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.
I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by CPWD. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.
I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, CPWD shall have unqualified, absolute and unfettered right to disqualify the tender/bidder and reject the tender/bid is accordance with terms and conditions of the tender/ bid.
Yours faithfully
(Duly authorized signatory of the Bidder)

# 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 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
AND WHEDEAC the Dringing!/Owner values full conglished with all relevant laws of the land rules

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)/Contract(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 offake/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 2above 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 bed is qualified 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 intensions.
- 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)	(For and on behalf of Tenderer/Contractor)
WITNESSES:	
1(signature, name and address)	2(signature, name and address)
Place:	

# PART -B

# **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: Design, Supply, Installation, Testing and Commissioning of HVAC Work (VRV/VRF Air Conditioning) and False Ceiling Work at Central Instrumentation Building, 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. **Mobilization Advance:**

No mobilization advance shall be paid for the work, unless otherwise stipulated in tender papers for any individual works/ composite work.

# 3. 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.

# 4. 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.

### 5. MACHINERY FOR ERECTION

- (i) All tools and tackles required for unloading/handling of equipmentss 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.

# 6. 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.

# 7. 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.
- (iii) 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.

# 8. 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.

# 9. **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. Nothing Extra Shall be paid on this account. 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.

# 10. Workmanship:

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

### 11. **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.

# 12. **Commissioning on completion**:

After the work is completed, it shall be ensured that the installation is tested and commissioned.

# 13. 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.

### 14. WARRANTIES/GUARANTEE:

- The Air Conditioners plant with all associated accessories (both electrical & civil) and work executed under said contract 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 in the equipments or components, or any part thereof so found
  defective during this period shall be repaired/ replaced by the Contractor free of charge to the
  satisfaction of the Engineer-in-Charge and as per terms and conditions of NIT/ agreement
  executed with CURaj.
- Any breakdown call under this contract, the agency shall address the issue on site immediately within maximum 24 Hours of the email/message through any medium. In case of failure due to any unavoidable reasons/circumstances, the contractor has to address the issue with in next 24 hrs with consent of the Engineer-in-Charge. Failing to which, penalty of Rs. 500/- per day shall be imposed against the agency & recovered from the security deposit.
- A record of such service should be duly acknowledged by the person in charge/user of the location and copy of the same has to be submitted to the Engineer-In-Charge.
- In case it is felt by the University 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.
- The Contractor has to carry out two preventive maintenance / service (half yearly) during the defect liability period failing which penalty shall be imposed as per decision of the University.

### 15. 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.

### 16. **COMPLETION PERIOD**

The completion period of 03 (three) 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.

### 17. **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.

# 18 COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS

- 18.1 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.
- 18.2 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.
- 18.3 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.

### 19. **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.

# 20. 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.

# 21. 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.

# 22. 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.

# 23. **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.

### 24. **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.
- 10. If the main contractor does not have authorization/ electrical license for carrying out the electrical work as per Govt of India norms then may main contractor have to associate or carry out the same from authorized electrical licensed contractor.

## ANNEXURE – I

(to be submitted with technical bid)

## INFORMATION REGARDING ELIGIBILITY LETTER OF TRANSMITTAL

From:

То		
The Ex	ecutive Engineer	
• • • • • • • • • • • • • • • • • • • •		
Subject	: Submission of bids for the work of	
Sir,		
Having informa		or the above work, I/we hereby submit the relevant
1.	I/we hereby certify that all the statement made and and accompanying statement are true and correct.	information supplied in the enclosed forms A to E
2.	1 1 0	cessary for eligibility and have no further pertinent
	I/we submit the requisite certified solvency communication control in the solvency communication is a solvency communication of the solv	our suitability, technical knowledge and capability
Ī	Name of work	Certificate from
certifie		the enclosed eligibility bid are correct. It is also qualified / cancellation of enlistment in case any
Enclosu	nres:	
Date of	submission:	
		Seal of bidder
		Signature(s) of Bidder(s)

(to be submitted with technical bid)

## FORM 'A' FINANCIAL INFORMATION

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

Financial			
years			

- (i) Gross Annual Turn Over on construction works.
- (ii) Profit/Loss(standalone financial statement and consolidated financial statement both).
- II. Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal

Signature of Bidder(s)

(to be submitted with technical bid)

# FORM "B" BANKER'S CERTIFICATE FROM A COMMERCIAL BANK (OM No. DG/SOP 2022/07 dated 09.11.2022)

This is to certify that to the best of our knowledge and information that $M/s./Sh.$ having marginally noted address,as a Customer of our bank are/ is respectable and can be treated as good for any engagement upto a limit of Rs
This certificate is issued without any guarantee or responsibility on the bank or any of the officers.
(Signature) For the Bank
NOTE  1. Banker's Certificates should be on letter head of the Bank, addressed to tendering authority.
2. In case of Partnership firm, certificate should include names of all partners as recorded with the Bank.
FORM "B-1"
FORM "B-1" FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT "

(to be submitted with technical bid)

### FORM 'C'

## DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF TENDERS

S.	Name	Owner or	Cost	Date of	Stipulated	Actual	Litigation/	Name	Whether
No.	of	sponsoring	of	commen	date of	date of	arbitration	and	the
	work/	organization	work	cement	completion	completion	cases	address/	work
	project		in	as per			pending/	telephone	was
	and		crores	contract			in	number	done on
	location		of				progress	of officer	back to
			rupees				with	to whom	back
							details*	reference	basis
								may be	Yes/ No
								made	
1	2	3	4	5	6	7	8	9	10

<sup>\*</sup> Indicate gross amount claimed and amount awarded by the Arbitration Tribunal.

Signature of Bidder(s)

## FORM 'C'-1 PROJECTS UNDER EXECUTION

S.	Name of	Owner or	Cost	Date of	Stipulated	Upto date	Slow	Name and	Remarks
No.	work/	sponsoring	of	commen	date of	percentage	progress if	address/	
	project	organization	work	cement	completion	progress of	any and	telephone	
	and		in	as per		work	reasons	number of	
	location		crores	contract			thereof	officer to	
			of					whom	
			rupees					reference	
								may be	
								made	
1	2	3	4	5	6	7	8	9	10

Signature of Bidder(s)

(to be submitted with technical bid)

## FORM "E" STRUCTURE & ORGANISATION

- 1. Name & address of the bidder
- 2. Telephone no./Telex no./Fax no.
- 3. Legal status of the bidder (Scan & upload copies of original document defining the legal status)
  - (a) An Individual
  - (b) A proprietary firm
  - (c) A firm in partnership
  - (d) A limited Company or Corporation
- 4. Particulars of registration with various Government Bodies (Scan & upload attested photocopy)

Organization/Place of registration	Registration No
1.	
2.	
3.	

- 5. Names and titles of Directors & Officers with designation to be concerned with this work
- 6. Designation of individuals authorized to act for the organization
- 7. Has the bidder, or any constituent partner in case of partnership firm, limited company / Joint Venture, ever been convicted by the court of Law? If so, give details
- 8. In which field of Civil Engineering construction the bidder has specialization and interest?
- 9. Any other information considered necessary but not included above.

Signature of Bidder(s)

(to be submitted with technical bid)

# SELF DECLARATION CERTIFICATE (To be submitted on Non-Judicial Stamp Paper of Rs. 100/-)

I hereby certify that the					
also certify that firm will execute the work as per the specification given by Institute and also abide all he terms and conditions stipulated in tender.					
I also certify that the information given in the bid is true and later date it is found that any detail/s provided are false and firm or participation may be summarily terminated at any sta may imposed any action as per rules.	incorrect, any contract given to the concern				
Date:	Name:				
Place:	Business Address:				
	Signature of Bidder:				
	Seal of the Bidder:				

(to be submitted with technical bid)

## UNDERTAKING FOR SUPPLY OF GENUINE PARTS (on letter head of firm)

I hereby certify that the	et liability period/AMC period, etc or as and
I also certify that the firm will execute the work as per the given by department and also abide all the terms and condition	•
Date:	Name:
Place:	Business Address:
	Signature of Bidder:
	Seal of the Bidder:

(to be submitted with technical bid)

## 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 betweenand
work(hereafter called "the said agreement") having agreed to production of a irrevocable Bank Guarantee for
Rs(Rupeesonly) as a security/guarantee from the Contractor(s) for compliance of this obligations in
accordance with the terms and conditions in the said agreement.
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(RupeesOnly) on demand by the Government.
Testimient.
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
(Rupeesonly).
•
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
Tribual 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.
() This ground to will not be discharged due to the share in the constitution of the Doub on the Contractor(s)
6) This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

					(ind	icate th	ne name	of Bar	ık)			
				for								
this	guarantee	shall	stand o	discharged.	Dated	the					day	of
withi	n 6 Months	of the da	te of expi	ry or the ext	ended da	ite of e	expiry of	f this g	uarantee	all our li	abilities ı	under
		_ (Rs			on	ly) and	d unless	a clai	m in wri	ting is lo	odged wi	th us
	_	•	•	ned above,		•	_		_			
	_			apto						•		
this (i	indicate the	name of t	he Bank)	guarantee ex	xcept wit	h the p	revious	conser	it of the C	Governme	ent in wri	ting.
7) W	e								lastly ui	idertake	not to re	evoke

## (to be submitted with technical bid) PROFORMA FOR SCHEDULE OF TECHNICAL PARTICULARS

### **Air Cooled VRF/VRV System**

#### **Outdoor units**

- a. Make and model
- b. HP of Outdoor Unit
- c. Capacity in TR (Nominal)
- d. Quantity
- e. Type
- f. Permissible length of refrigerant piping fromODU to farthest IDU.
- g. Type of compressor
- h. No. of compressors (Each Outdoor unit)
- i. No. of inverter driven compressors (Each Outdoor unit)
- j. Air entering temp. condenser in deg C
- k. Dimension of ODU in mm (H x W x D)
- Are bigger ODUs, above 14 HP, provided with 2 separate inverter compressors for proper duty cycling and higher reliability as specified.
- m. Confirm whether dedicated Intelligent touch controller with colored graphic LED display provided to act as BAS forVRF system.
- n. Confirm whether inverter driven scroll compressor is DC inverter? Also provide following information:

External static pressure available in ODU. Type of anticorrosion treatment on fins of ODU .

Type of Heat exchanger in ODU

Set up availability for Night time db relaxation Confirm availability of features for reduction in fan noise and pressure loss on ODU Is it possible to incorporate automatic address setting of each IDU & ODU? Otherwise specify alternate function available.

Indoor Units Hi-wall Ductable

- a. Manufacturer
- b. Type
- c. Capacity (TR)
- d. Airflow Min/Max. (Cfm)
- e. Sound level (Hi/Lo)
- f. Overall Dimensions(L xW x H)
- g. Unit weight (Kg)
- h. Is remote controller (corded) provided foreach indoor unit (Yes/No)

## Centralized Remote Controller - (1 Nos. For complete VRF System)

Detail of operation Wired/Wireless Touch Yes/No

#### **Local Remote Controller**

Detail of operation

### **Inline Fans**

- a. Manufacturer
- b. Motor Characteristics
- c. Whether speed regulator provided for single phase fans
- d. Whether Bird Screen provided

### **Propeller Fans**

- a. Manufacturer
- b. Motor Characteristics
- c. Capacitors Provided
- d. Speed Regulator
- e. Gravity Louvers
- f. Single

Phase

Preventorg

**Back Draft** 

Damper

h. Bird Screen

i. Wire guard.

#### **GI Drain Piping**

- a. Make
- b. Material for pipes.

#### **Ducting**

Type

of

Mate

rial

Manu

#### factu

rer

#### **Class of GSS**

- a. "K" value at 10 degree C mean temp.
- b. Thickness

## Grilles, Diffusers and Dampers (as applicable)

Make, Material and Gauge of following items:

a. Grilles: i. Extruded aluminium

ii. Mild Steel

b. Diffusers: i. Extruded aluminium

ii. Mild Steel

- c. Duct Dampers
- d. Grille Dampers Insulation

### A. Duct Acoustic Lining

- a. Material
- b. Manufacturer
- c. Density
- d. Thermal

Conductivity

e Thickness

#### **B.** Thermal Insulation of Ducts

- a. Material
- b. Manufacturer
- c. Density
- d. Thermal Conductivity
- e. Thickness

### **C. Exposed Duct Thermal Insulation**

- a. Material
- b. Manufacturer
- c. Density
- d. Thermal

Conductivity

e Thickness

### **D.** Drain Pipe Insulation

- a. Material
- b. Manufacturer
- c. Density
- d. Thermal

Conductivity

e Thickness

# ANNEXURE-VII PREFERRED MAKES OF EQUIPMENT & MATERIALS

S. No.	Details of Materials / Equipments	Manufacturer's Name / Make
Α.	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
В.	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/Dalay /Timor	Sahnaidar Elastria / L &T / DCII / Siamons /
5.	Contactor/Relay /Timer	Schneider Electric / L&T / BCH / Siemens / Legrand / ABB / C&S / Hager/
6.	Potential Transformers / Current	Automatic Electric / Matrix / Precise / L&T / Kappa
٥.	Transformer	/Procom
7.	LED type indicating lamps / Push Button	Schneider Electric / L&T / Siemens / Vaishno
8.	Digital Meters	Conzery / Larsen & Toubro / Secure / AE / Socomac /
9.	(A/V/PF/Hz/KW/KWH) Fasteners / GI Clamps	Neptune /Hager Hilti / Fisher / Chilli /OBO
10.	D.W. Corrugated HDPE Pipe (ISI	REX / Dura plast / Zenduct / Gemini(Triputi )/
	marked)	Duraline / Keshav Kripa Polyplast (LLP)
11.	Transformer (Oil / Dry type) <b>Upto 250 KVA</b>	Crompton / ABB / Raychem / Schneider / Voltamp / Uttam Bharat / United / Bharat Bijlee/RTS-Jaipur
12.	Transformer (Oil / Dry type) Above <b>250 KVA</b>	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 <sup>3</sup> 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
Ε.	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	Sant / Leader / Advance / Audco / Zoloto/Honeywell
	Valve/Check Valve/Foot Valve	·
	(ISI marked)	
5.	CI Sluice Valve/ Butterfly Valve/	Audco / Advance / Kirloskar /
	NRV/ Y - Stainer (ISI marked)	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 /	Kanwal Industrial Corporation / Dunlop / GERB /
	Neoprene Gasket	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	New Age / Safeguard / Lifeguard / Padmini / Omex /
	/First Aid Hose Reel and Drum	Minimax/Safex
	/Shut of Nozzle /Branch Pipe/Fire	
	Brigade inlet / RRL Hose Pipe /	
1.4	Thermoplastic Pipe (ISI marked)	0 . 0 . (0 : . /B : : 0
14.	Water Flow Switch (FM / UL	System Sensor / Switzer / Rapid Control /
1.7	listed)	Honeywell/ Danfoss
15.	Pipe coat	Pypcoat / Makphalt / Rustech
16.	Level Controller & Indicator (Water)	Auto Pump / Cirrus Engineering / Techtrol
17	(ISI Marked) Fire Sealent	Promat / Birla / 3M / Hilti
17.		
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 /	Johnson Control / Notifier / Siemens / Bosch
	Repeater panel / multi sensing detector /	make
	Fault isolator / Strobe light / Hooter /	
	Manual call box / Response indicator	
2.	Cat-6/Cat-6A Cable, Wires & Fiber	Amp / Beldon / Legrand / Krone Communication /
	Optic Cable	Molex
3.	HDMI cable	Lightware/AMx/crestron/Extron
4	Fire retardant cable	Finolex / Polycab / KEI / Havells / Grandlay/ RR
	1:6 (0 1	Kabel //Bonton/RPG/LAPP
5	Amplifire/Speaker	Bosch/Honeywell/Yamaha/JBL/Shure

H.	Water Supply Pump Sets	
1.	Mono Submersible/ Submersible pump	KSB / CG / Kirloskar / Grundfos / Mather & Platt
	Set	(Wilo)
2.	DOL / Star Delta Starter	L&T / BCH / Havells / C&S / Siemens / Schneider
3.	Submersible Cable	Finolex / RR kabel / Polycab / Havells / KEI/ Bonton
T	EDADY Condens	
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 (Chrone Box)	Topaz / Coral / Crown
4.	Constant Voltage Transformer	Topaz / Bhurji / Delta / Servokon
J.	Water Purifier	
1.	Valet Fuffici Voltage Stablizer	V Guard / Blue Bird / Voltas / Servocon
2.	RO / Water Purifier	Kent / Aquaguard (Eureka Forbes)
3.		Voltas / Blue Star / Usha/ Sidwal
3.	Drinking Water cooler	voitas / Diue Stai / Usiia/ Siuwai
K.	Solar Water Heating System	
	Solar Water Heating System	Inter solar / Racold / BHEL / Electrotherm /
	0 7	Rashmi/V-guard/Emmvee Solar
L.	CCTV System	
1.	IP based Camera (All type) / NVR /	Bosch / Pelco / Axis / Sony / Tyco / Honeywell
1.	Server	Bosen, Leico, Linis, Bond, Ligeo, Lioned men
2.	Conventional Camera/Connect (Dome /	Bosch / Honeywell / Pelco / Axis / Tyco / Sony
2	PTZ / Bullet / C-mount type)	G: /DI:1/E: /D::/
3.	Managed Networking layer Switch	Cisco / DLink / Extreme / Fortinet / Ruckus/HP/Netgear
4.	U Rack	Valrack(Legrand) / EOM Rack / Belchem /Comrack/
		Vertiv
N	II	
	Uninterrupted Power Supply (UPS)	Vertical Newsonia / December (Australia Metana)
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	DEW (DATE) (DET (DES (SEE ))
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
0.	LED TV	LG / Samsung / Panasonic / Toshiba / Sony
<u> </u>		20 / Samsang / Tanasome / Toshiou / Sony
P.	Air Conditioning System	
1.	Split Air Conditioner	Hitachi/ Daikin/ O-General/ Mitshubshi / Carrier/

		Bluestar
2.	Window Type Air Conditioner	Hitachi/ Daikin/ O-General/ Mitshubshi / Carrier/
		Bluestar
1	VRV/VRF	Hitachi/ Daikin/ O-General/ Mitshubshi / Carrier/
		Bluestar
2	Copper Pipe	OEM or Daikin/Total line/Maxflow/ Papriwal/
3	CPVC pipe	Ashirwad/Supreme/Astral/Prayag
4	GSS Sheet (For site fabricated duct)	SAIL/Jindal/Tata
5	Aluminium Sheet	Hindalco/Balco/Nalco/Tata/Aditya Birla
6	Flexible duct/Company fabricated duct	Waves/Zeco/Ductofab/Airflow/Caryaire/ Atco
7	Supply/Return Grill/diffuser	Airflow/Trox/Dynacfaft/ Caryaire/Matejoints
	False Ceiling	Armstrong

Note- Any item of make other then above said will be got approved by Engineer-inchargebefore brought at site.