

Eligibility Criteria CHECK LIST

Description	To be submitted	Please mention the submitted document
EMD (Rs 95,320.00/-) (If claiming exemption please upload necessary GEM GTC certificates)	Demand Draft /Bank Guarantee or MSME/NSIC certificate/startup	
Minimum Average Annual Turnover of the bidder (Rs 15 Lakhs) (For last 3 financial years)	Audited profit & loss a/c or CA certificate turn over certificate	
Documentary evidence regarding local office at Bhubaneswar, Odisha Incase no office is located at the time of participating in the bid, bidder shall submit an undertaking that within 15 days of issue of work order, an office shall be established at Bhubaneswar, Odisha, and documentary evidence regarding this shall be submitted	Lease/rent agreement or any other Government document showing the address OR Undertaking	
Experience like Work order and Completion certificate from any Govt Organization as per GEM ATC Condition	Completion certificate or CRAC Certificate and Contract or sanction order from GEM.	
Valid ISO 9001	ISO 9001	
Valid Electrical License certificate	Electrical License upto 650 V.	
EPF registration certificate	EPF registration certificate	
GST Registration Certificate	GST Registration Certificate	
Authorization letter along with tie-up arrangement made with OEM for HVAC System And Warranty declaration undertaking letter for at-least one year for all Furniture items and Two Years for HVAC System.	Authorization letter along with tie-up arrangement made with OEM of HVAC system and Warranty Declaration undertaking letter.	

General Conditions of Contract (GCC)

1. Definitions

In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires :

- (i) “Employer” or “Client” or “Regional office” means the ESIC and its administrators, successors and permitted assigns.
- (ii) “Engineer” means the ESIC engineering personnel appointed for supervising this work under this Contract.
- (iii) “Contractor” / bidders / Tenderer means an individual or firms (proprietary or partnership) whether incorporated or not, that has entered into contract (with the employer) and shall include his / its heirs, legal representatives, successors and assigns. Changes in the constitution of the firm, if any shall be immediately notified to the employer, in writing and approval obtained for continued performance of the contract.

2. Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

3. Contractor’s Employees

The Contractor shall provide on the Site qualified and experienced technical staff in connection with the Repair and Maintenance of the Works and the remedying of any defects therein. The minimum staff shall be as per description of work mentioned in BOQ.

4. Engineer at Liberty to Object

The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any Person so removed from the Works shall be replaced as soon as possible.

5. Discrepancies and Adjustment of Errors

The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

In the case of discrepancy between the schedule of Quantities, the Specifications and / or the

Drawings, the following order of preference shall be observed:

- (i) Description of Schedule of Quantities.
- (ii) Particular Specification and Special Condition, if any.
- (iii) Drawings.
- (iv) CPWD Specifications.
- (v) Bureau of Indian Standards

If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

6. Safety, Security and Protection of the Environment

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects there in :

- (i) Have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons, and
- (ii) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the engineer or by any duly constituted authority for the protection of the Works or for the safety and convenience of the public or others, and
- (iii) Take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods or Repair.

7. Insurance of work by the contractor for his liability

- (i) During the Repair and Maintenance period for loss of damage to property and life arising from a cause for which contractor is responsible.
- (ii) For loss or damage occasioned by the Contractor in the Course of any repairs carried out by him for the purpose of complying with his obligations.

It shall be the responsibility of contractor to notify the Insurance Company of any change in the nature and extent of the works and to ensure the adequacy of the Insurance cover at all times during the period of contract.

8. Damage to Persons and Property

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of :

- a) Death of or injury to any person, or

b) Loss or damage to any property (other than the Works) :

Which may arise out of or in consequence of the Repair and Maintenance of the works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof.

9. Accident or injury to Workmen

The Employer shall not be liable for or in respect of any damages or compensation payable to any workman for death or injury resulting from any act or default of the contractor. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation and expenses whatsoever in respect thereof or in relation thereto.

10. Compliance with Statutes, Regulations

The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provision of :

- a) Any National or State Statute, Ordinance, or other Law, or any regulation, or bye – law of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and
- b) The rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provision.
- c) Any changes required for approval due to revision of the local laws.

11. Default of contractor in Compliance

In case of default on the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, be determined by the Engineer and shall be recoverable from the Contractor by the employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly.

12. Defect Identification and it's rectifications

Agency shall immediately attend the defects and complaints noticed at site. The agency shall provide and develop a system for regular Repair and Maintenance of all the services which includes defects identifications and it's immediate rectification so, that services are not effected. It shall be the sole responsibility of the Repair and Maintenance agency that all the services are kept in functional condition round the clock during the currency of the contract.

Defect Liability period shall be as per warranty declaration letter under BOQ measurable works. The contractor shall rectify at his own expenses any defect in the work carried out by him during the period. On failure of the contractor to do so, the same shall be completed by the employer at the risk and cost of the contractor.

13. Penalty for Delay

If the Contractor fails to attend any complaint or defect in due course of time and if in the opinion of engineer delay is on the part of Repair and Maintenance agency, the employer can impose liquidated damages on the contractor as detailed in the particular conditions.

14. Contractor's Failure to Carry out Instructions

In case of default on the part of the Contractor in carrying out defect rectification works, the Employer / Engineer shall be entitled to employ and pay other persons to carry out the same and if such work, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the contract, then all costs consequent thereon or incidental thereto shall be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor.

15. Quarterly Payments

After submission of quarterly bill complete in all respects by the contractor, Engineer shall check the bill and certify for payment. The payment shall be made through **NEFT/RTGS transfer only**.

16. Performance Guarantee

Within two weeks of award of work, the contractor shall submit a Performance Guarantee for proper performance of the Contract in the format given in the bid document in the form of **Bank Guarantee for 3 % of the bid / accepted amount**. The performance guarantee shall be valid for the duration of the contract period (including extended period) plus 60 days. The performance security can be encashed by the Employer to recover any amount which is payable by the contractor to the Employer on any account for a cause arising out of the contract.

17. Default of Contractor & Termination of Contract

If the performance of the contract and is not satisfactory and not corrected within 15 days of receiving notice, then Employer shall be at liberty to terminate the contract and get the work executed through other means at the risk and cost of the Contractor.

18. Dispute Resolution

Amicable Settlement of Dispute

The party shall use their best efforts to settle amicably all disputed arising out of or in connection this contract or the interpretation thereof.

Arbitration

Any dispute and differences relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship of materials used in the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions or these conditions or otherwise concerning the works or the execution or failure to execute the same whether

arising during the progress of the work or after the completion or abandonment thereof in respect of which amicable settlement has not been reached, shall be referred to the Sole Arbitration of the Regional Director, ESIC Regional Office, BBSR who shall proceed as per the Reconciliation Arbitration Act, 1996.

The work under the contract shall continue, during the Arbitration proceedings.

The award of the Arbitrator shall be final, conclusive and binding on both the parties.

In the event of termination of the contract, employer shall be at liberty to get balance work done at the risk and cost of the contractor and due payment of the contractor, if any, shall be released after the completion of whole of the works after due adjustment.

26. Labour Laws to be complied by the Contractor

The contractor shall obtain a valid license under the Contract Labour (R & A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996. Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non – execution of the work.

27. Health and Safety

The Contractor shall at all times take all required precautions to maintain the health and safety of their personnel as well as Hospital / Dispensary users by observing due diligence. Supervisory personnel of the Contractor shall be skilled / experienced to ensure that site is maintained safely and protected against any accidents.

28. Contractor's Superintendence

Throughout the currency of works and as long thereafter as is necessary to fulfill the Contractor's obligations, the Contractor shall provide all necessary superintendence and assistance to plan, arrange, direct, manage, inspect and test the works. The operations to be carried out by the Contractor in connection with MAINTENANCE work shall be such as not to cause any kinds of accidents in the building and the campus and inconvenience to hospital users in any manner.

The workmen including supervisory personnel deployed by the Contractor shall be appropriately qualified, skilled and experienced in their respective trades or occupations. ESIC may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including Contractor's Representative, if applicable, who :

- a) persists in any misconduct or lack of care or unruly / inhuman behavior
 - b) carried out duties incompetently or negligently,
 - c) fails to conform with any provisions of the Contract, or
 - d) persists in any conduct which is prejudicial to safety, health, or the protection of environment
- Upon such requirement, the Contractor shall appoint (or cause to be appointed) a suitable

replacement person.

30. Disorderly Conduct

The Contractor shall at all times take all required reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's personnel, and to preserve peace and protection of persons and property on and near the site or even adjacent to it.

31. Manner of Execution

The Contractor shall carry out the work:

- a) In the manner (if any) specified in the Contract
- b) Efficiently, diligently and in a proper workmanlike and careful manner, in accordance with generally accepted professional techniques and good practices.
- c) Observe sound management practices, and employ advanced technology and safe and effective equipment, materials and methods ; and
- d) With properly equipped facilities and non – hazardous Materials, except as otherwise specified in the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor under this Contract.

The Contract Price shall be adjusted to take account of any increase or decrease in cost resulting from a change in the Laws of the country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official government interpretation of such Laws, made after the Base Date (the date on which tender is received in ESIC) which affect the Contractor in the performance of obligations under the Contract.

33. Insurance against injury to Persons and Damage to Property

- (i) The Contractor shall effect and maintain in full force insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's personnel.
- (ii) The Employer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect to the Employer or of the Employer's Personnel.

34. Other Terms & Conditions :

- 1. The contractor shall provide necessary barriers, warning signals and other safety measures while executing the work wherever necessary so as to avoid accident. He shall also indemnify ESIC 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 executions 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.

2. Safe custody including watch and ward of the plant/ system, all the fixtures and other machinery will be entire responsibility of the contractor.
3. Cleaning of entire system/ units/ room/ machinery and other equipment will be the responsibility of the contractor. If the room is not found satisfactory at any time by the department recovery of Rs.500/- per day shall be made from the contractor's bill.
4. The contractor shall provide first aid/ box facilities for his staff at site.
5. The firm must pay Minimum Wages along with other allowances etc and fulfill all statutory obligations like ESI, EPF etc to All his employees covered under this contract. For Holidays/ Sundays no extra payment will be made. It is the contractor's duty to arrange weekly off Or Holidays to the workers, as per extent laws.
6. The ESIC will not be a party in event of any dispute between contractor and his staff. The contractor is fully responsible for any dispute between him and his labourer. Whenever any major defects occur in the system the firm will inform immediately to department for taking proper action.
7. The contractor shall provide and maintain attendance register for the maintenance staff at site which shall be checked by Engineer-in-charge.
8. Contractor has to maintain compliant register at his own cost. A complete record of all the complaints is to be entered in the register, the register is to be get checked by JE in-charge of the work.
9. Any damage made by the contractor or the staff of the contractor deployed at the site of work during contract period shall be made good by the contractor at his own cost.
10. The contractor shall submit the attested copies of credentials of all manpower to Engineer-in-Charge before start of the work and as and when demanded
11. The Contractor shall provides adequate nos. of mobile phone to their staff at site to enable the JE(E)or Engineer-in-charge to have easy and quick communication. Nothing extra shall be paid to the contractor on this account and his quoted rates for various items under this contract will be inclusive of this obligation also.
12. If the OEM agency itself participates in the bid and if he gets the work then he will have to do the work himself or cannot get the work done by the third party or other agency or subletting to other vendor, if he gets the work done by the third party then his bill will not be paid. If the OEM authorized agency participates in this bid, they will have to take OEM authorization and can participate in the bid.

Particular Conditions of Contract (PCC)

1. Definition

Unless repugnant to the context or meaning thereof or defined in the Contract Agreement, the following expressions shall have the meaning in these PCCs:

- (i) "CPWD" means the Central Public Works Department of the Government of India.
 - (ii) "DSR" means the Delhi Schedule of Rates of CPWD.
 - (iii) "Cost Index" means Cost Index of particular place as declared by CPWD from time to time to be applicable on DSR items.
 - (iv) "Base Date" means date on which tender for this work has been received in ESIC.
 - (v) "NDSR Items" means Non – DSR or Non – schedule items which are not based on any DSR and as such rates for these items are to be determined based on prevailing Market Rates.
2. The Chiller and AHU, FCU and High Side Equipment's installed at site of Carrier Make so for carried out the maintenance work for this High Side Equipment's only OEM i.e., M/s Carrier Air Conditioning & Refrigeration Limited and Their Authorized Bidders/Vendor is only eligible to participate in this Bid with fulfilling tender criteria or experience criteria or Manpower compliance.
 3. The works shall be carried out in accordance with CPWD specifications wherever CPWD specifications are not available / applicable, such items / piece of works will be carried out as per BIS / NBC / manufacturers specifications & operation manuals and sound engineering practices etc. and as per direction of engineer.
 4. The Contractor shall put all out efforts to address the complaints as immediately as possible. However, a tentative timeline for various natures of complaints are given within which the complaints are supposed to be attended by the Contractor without fail so as to maintain the hospital services smoothly.
 5. All required registers will be issued by Engineer-in-charge duly marked in chronological order but the contractor will have to arrange all such registers/stationery etc. nothing extra shall be paid on this account. The contractor will have to arrange all the required Computer, furniture etc. at his own cost pertaining to his job and he will take all these things back only after the expiry of the agreement for which nothing extra shall be paid.
 6. Workmen employed by the contractor should be well behaved, polite & courteous and the worker will clean the place where he has worked while attending the complaints . Any complaint against staff for bad behavior shall be taken very seriously and such staff shall be removed by the contractor within five days from the site and arrangement of suitable substitute for the same shall be done by contractor failing which the Engineer-in-Charge shall make recovery from contractor's bill as per corresponding condition.
 7. Safety of the staff employed will be the responsibility of the contractor, ESIC shall not be responsible

for any mishap, injury/accident or death of the staff. No claim in this regard shall be entertained/ accepted by the department.

8. Operations in which assistance shall be provided by the maintenance agency / contractor to ESIC
 - (i) Contractor or his authorized representatives / nodal officials shall ensure connectivity on mobile round the clock so that they can be contacted by the ESIC officials / authorities so as to make them aware about the urgency of the situation in connection with the maintenance of the essential services in the hospital. Contractor shall provide alternate mobile / telephone nos. for ease of communication. Nothing extra shall be paid to the contractor on this account and his quoted rates for various items under this contract will be inclusive of this obligation.
9. All T&P including ladders, wire drawing equipment, chase cutting equipment, drilling machine megger insulation, earth resistance testing equipment etc. required for the work shall have to be arranged by the contractor No T&P shall be issued by the Department.
10. Unless otherwise specified, the agreement rates for all items of work of the schedule of quantities are for all heights, depths, leads and lifts involved in the execution of work.
11. The contractor shall take all precautions to avoid accidents by exhibiting caution boards, red flags, red lights and providing necessary barriers and all other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
12. Other agencies may also be simultaneously executing some other work entrusted to them by the Engineer-in-charge and the contractor shall offer necessary cooperation wherever required to these agencies so as not to interfere with or hinder the progress or completion of the work being performed by other contractor (s). He shall as far as possible arrange his work and shall place and dispose off the materials being used or removed, so as not to interfere with the operations of other contractors, or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of Engineer-in- charge.
13. On account of security consideration, there could be some restrictions on the working hours, movement of vehicles for transportation of materials, the contractor shall be bound to follow all such restrictions and adjust the programme for execution accordingly. Nothing extra shall be paid for idle labour due to such construction.
14. The work shall be carried out in a manner complying in all respects with the requirements of relevant bye laws of the local bodies, labour laws, minimum wages act, workmen compensation act and other statutory laws enacted by Central Govt. as well as State Govt.
15. All the malba or rubbish obtained from dismantling or otherwise during the execution of work shall be collected in the mobile container arranged by contractor free of cost of suitable size placed near the working place. The malba or building rubbish so collected shall be disposed off to the specified common disposal point as decided by the Engineer-in charge, where from the contractor will finally disposed off the collected malba or rubbish to the authorized municipal dhalao/dumping ground. In

no case the malba / building rubbish shall be allowed to dump at ground near the working place. A recovery of **Rs.1000/-** shall be made by engineer-in-charge for every default per day till the final disposal of malba only after issuing a notice in writing by engineer-in-charge of work. No residential accommodation shall be provided to any of the staff engaged by the contractor. The contractor shall also not be allowed to erect any temporary set up for staff in the campus.

The contractor shall depute required technical and non – technical / supporting personnel for carrying out civil and electro – mechanical maintenance works as per manpower deployment schedule vide Form (FB) – 1 so that the essential services should not get hampered in any manner for hospital and dispensaries & also for residential accommodations.

16. Contractor shall be fully responsible for any damages caused to Hospital property by his or his labour in carrying out the work and same shall be rectified by the contractor at his own cost.
17. The Contractor shall follow, observe and comply with all applicable laws, rules, regulations and procedure including all Govt. of India and concerned Local Authority rules, procedures and regulations while performing Work under the Contract including planning, designing, detailing, executing, supervising etc. and obey instructions, rules and regulations of Agencies having jurisdiction as issued or applicable from time to time. The contract price and the rates under the Contract shall be deemed to be inclusive of all expenses required for complying with all such applicable laws, rules, regulations and procedures. The Contractor shall at all times safeguard the interests of the employer in performing the work under his scope.
18. The contractor shall maintain sufficient quantity of materials and spares at site to meet the requirement of attending the complaints as per direction of the Engineer-in-charge. Stores / bins, if available, shall be handed over to the contractor for storing the material.
19. The contractor shall have to carry out the work other than day to day maintenance according to programme given by the Executive Engineer / Assistant Engineer / Junior Engineer-in-charge. The contractor shall have to adhere to this programme failing which he shall be wholly responsible if or any inconvenience caused to the occupants. No claim for idle labour on any account shall be entertained. The contractor shall depute his representative daily to the site of work. His / her name and Signature shall be attested by the contractor for record in the department.
20. No special repairs and addition/ alteration work shall be carried out in any building without the approval of the representative of the Engineer-in-charge. Any work carried out without approval of the representative of the Engineer-in-charge at the site, the work shall be rejected and shall not be measured and paid for.
21. All dismantled material shall remain the property of the ESIC and shall be taken away by the contractor after taking approval of Engineer-in-charge of ESIC in writing for dismantled materials for which deduction will be made accordingly from contractor bills.
Chases, holes & drilling works etc. shall be done using power operated tools by observing due diligence so that the existing structure / facilities should not get unduly disturbed / maintenance / disfigured. In case of any accident during the operation / Maintenance of the equipment leading to injuries/damages to human being equipment or loss of life, the contractor shall be fully responsible for settling all claims & indemnify the department against any claims arising out of such accidents.

22. The quoted rate shall be inclusive of any prevailing taxes, duties, levies imposed by the Central /State government/Local bodies. Any new taxes levied after opening of financial bid shall be considered by ESIC for reimbursement (in case of additional burden / increase in financial implications) or recovery in case of decrease in financial implications due to such changes. Income Tax as applicable shall be deducted from the payments of the contract as per extant Rule.
23. The contractor shall comply with proper and legal orders and directions of the local or public authority or Municipality / local body / administration and abide by their rules and regulations and pay all fees, cess and charges of which he may be liable as per statutes / orders. This contract includes providing the emergency services whenever required after normal working hours; no extra charge will be entertained for attending any numbers of complaints.

The contractor shall also give due notices to Municipality, Police and/ or other authorities under intimation to the Engineer in Charge that may be required under the law/ rules under force and obtain all requisite licenses for temporary obstructions/ enclosures and pay all charges which may be liveable on account of his execution of the work under the agreement. Nothing extra shall be payable on this account.

24. The contractor will carry out preventive maintenance / Checks as per CPWD Specification/ respective standard trade practice and as per details attached. The result of such exercise will be recorded in proforma as decided by the Engineer-in-charge.

Materials used shall be in order of preferences as under:-

- (i) Under the Nomenclature of the item
 - (ii) Particular specifications and special conditions.
 - (iii) CPWD specifications.
 - (iv) ISI marked / conforming to BIS.
 - (v) Approved by ESIC engineer.
25. The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such properties from pollutants like smoke, dust, noise. The contractor shall use such methodology and equipment so as to cause minimum environmental pollution of any kind during construction and minimum hindrance to road users and to occupants of the adjacent properties or other services running adjacent/near vicinity. The contractor shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross drainage works or public or private property whatsoever caused due to the execution of the work or by traffic brought thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor, without any reservation, entirely to the satisfaction of the Engineer-in- Charge.

Subject : Submission of Estimate SITC of VRF/VRV AC with Ventilation and kitchen Exhaust System and Light at Cafeteria of ESI Hospital Chandrasekherpur, Bhubaneswar

S.N.	ITEM DESCRIPTION	UNIT	QTY
	INDOOR UNIT-DUCTABLE TYPE		
1	Supply, installation, testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/dynamically balanced blower, multi speed motor, coil section withDX copper coil, electronic expansion valve, corded remote control, outercabinet, vibrationisolators, drainpan, other necessary supportsetc., suitable for operation on single phase AC supply 230V ±10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature.		
1.1	High Static Ductable units (minimum 110 pascal external static pressure)		
1.1.1	5.5 TR	each	5
	COPPER REFRIGERANT PIPE		
2	Supply, Installation, testing and commissioning including vacuumization and Nitrogen testing of following nominal sizes of soft/hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquidlines, all accessories as per specifications etc. as required :		
2.1	6.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	mtr	25
2.2	28.58 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	mtr	50
2.3	15.86 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	mtr	40
2.4	9.5 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	mtr	40
2.5	19 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	mtr	70
2.6	22.2 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	mtr	40
2.7	12.7 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19mm thick insulation	mtr	50
3	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.		
3.1	2 x 1.5 sq. mm	mtr	900
3.2	3 x 1.5 sq. mm	mtr	300
3.3	2 x 2.5 sq. mm	mtr	300
4.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.		
4.3	20 mm nominal outer dia Pipes	mtr	50

5	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including		
5.1	25 mm	mtr	500
6	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63A	each	2
7	Supplying, installation, testing & commissioning of following capacity Plug In/ tap off box on the existing Air Insulated Compact Type bus trunking/ rising mains for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply made with 1.6mm thick sheet steel enclosure (IP54) duly powder coated with provision of MCCB/ACB (but without MCCB/ACB) complete etc. as required. 125 A 15kA SC for 1 sec	each	2
8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.		
8.1	300 mm width X 50 mm depth X 1.6 mm thickness	Rm	150
9	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	each	4
10	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	Rm	100
11	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	each	10
12	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 3½ X 35 sq. mm (32mm)	each	4
13			
13	Supply, Installation in PCC Pad, Testing & Commissioning of modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s), minimum two compressors for above 14 HP modules, microprocessor based Controller, top discharge type condensing unit(s), with vibrationisolators, with suitable foundation etc. complete as required. The unit shall deliver the rated capacity at AHRI Conditions and work even at 55°C ambient temperature with out tripping. The unit shall be suitable to work on 400V+/-10%, 3 Phase, 50Hz AC power supply. The unit shall be filled with refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5 .	20 HP	1
13.1	Gas Charging with r-410 fresh refrigerant	KG	12
14	Supply and laying of following size PVC/XLPE insulated and PVC sheathed 1.1 KV G Solid Aluminium conductor up to 10 sq mm balance stranded conductor, XLPE Insulated, cores laid up, PVC tape inner sheathed, Armour (Aluminium for single core up to 70 sq mm balance Aluminium strip, Galvanised for cables up to 2x10 sq mm. 3x10 sq mm, 4x6 sq mm balance all galvanised steel strip) , extruded PVC Type ST2 sheathed, 650/1100V grade as per IS 7908(Part 1) 1988 armoured U.G. cable U.G. cable laid in ground/partially in air (as required for termination over ground including excavation of cable trench up to depth of 75cm, refilling, protective brick covering, Sand cushioning etc complete handling of surplus spoil, debris et to proper place as specified and directed by the deptt. (Nicco/ Havells/ RPG/CCI/Polycab/Gloster/ Finolex make) .		

14.1	3 & 1/2 Core A2XFY		
14.1.1	35.00 Sq. mm.3 & 1/2 Core armoured U.G. cable	mtr	100
15	SITC of Rafnet	each	10
16	Wired Remote	each	5
17	SITC of Kitchen Chimney with 1300m ³ /hr air suction capacity.	each	2
18	SITC of Inline/outline Fan	each	4
19	SS Flexible Rigid pipe and stainless steel outer size 6" dia	sqm	100
20	150 mm PVC Pipe	Rm	100
21	Light Concepts 60W 6000K Cool White Linear Hanging LED Light	each	20

Estimate for cafeteria at ESI Hospital Bhubaneswar

Sl. No.	Description	Unit	Qty
1	Supply and installation of Techno rectangular cafeteria table with seating capacity of 6 persons cafeteria table, 6 set 18 mm granite top 1800x900x750 and under structure material SS 202 natural colour with 1 year warranty, all completed as per direction of Engineer in charge.	No.	10.00
2	Supply and installation of Fabrico furniture blackout roller blind 4.2 mm plastic bead moulded on 2.2 mm thick polyester coat . Side winders (that lock the manually adjustable blinds at different levels with the internal ratchet and tension adjusted by spring inside the tube. protect and hide the front and bottom of the fabric on the tube , installation bracket mild steel with white powder coated L size. 4.2 mm plastic bead moulded on 2.2 mm thick polyester coat pitch of the beads 6mm all completed as per direction of Engineer in charge.	Sqm	171.00
3	HP S Rectangular cafeteria chair without armrest material of chair is rubber wood and Upholstery Material of Seat Fabric height of chair from ground 950 mm with warranty 1 year all completed as per direction of engineer in charge.	No.	32.00
4	Supply and installation of rectangular Stainless steel (304) electric Hot brain Marie With glass top and rectangular pan design (1000x500x800) , 4 no. of legs and five pan which individual pan capacity is 10 liter with warranty one year. All completed as per direction of Engineer in charge.	No.	2.00

5	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble. Area of slab upto 0.50 sqm	sqm	12.40
6	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	Cum	0.24
7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.		
8	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	17.62
9	Half brick masonry with non modular fly ash bricks with class designation 7.5, conforming to IS 12894, in super structure above plinth and upto floor V level		
10	cement mortar 1:4 (1 cement : 4 coarse sand)	Sqm	1.40
11	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	1.40
12	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:	No.	2.00

13	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	Each	2.00
14	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.40 mm dia	Each	3.00
15	Providing and fixing 100 mm sand cast Iron grating for gully trap.	Each	3.00
16	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :510x1040 mm bowl depth 225 mm	Each	1.00
17	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Each	2.00
18	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	2.00
19	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology. 15 mm nominal bore	Each	2.00
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. 15 mm nominal bore	Each	1.00
21	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931	Each	3.00

22	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour. Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.	Each	3.00
23	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 20 mm	Rm	25.00
24	supply and installation of Aquaguard Potable water purification system with inbuilt water cooler. UV	Each	1.00