

केन्द्रीय विनिर्माणकारी प्रौद्योगिकी संस्थान CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE Tumkur Road, Bangalore - 560 022

Two Bid e-Tender
for
"Establishment of Material Testing lab, renovation of
existing labs and other minor works (Electrical Works)"
Part A- Technical Bid
Part B- Price Bid

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केन्द्रीय विनिर्माणकारी प्रौद्योगिकी संस्थान, तुमकुर रोड़, बेंगलूरु-560022 CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE

Tumkur Road, Bangalore - 560 022

Telephone: 080 22188247 / 71 / 262

Date: 26-02-2024

E-Tender Notice No. CMTI /ESD/11/2023-24

1. Item –rate Tenders are invited through e-tendering for the following Civil Work in two bid system:

SI. No.	Description	Details			
I	Title of work	Establishment of Material Testing lab, renovation of existing labs and other minor works (Electrical works)			
ii	Estimated cost	Rs.19,66,112 /-			
lii	Period of completion in months reckoned from the 15 th day of date of issue of work order.	120 days			
iv	Earnest Money Deposit	Rs 39322/-			
٧	Tender processing Fee (Non refundable)	Rs. 2320/- incl GST			
vi	Period during which the tender documents can be downloaded	From: 26-2-2024 - 10:00 hrs To: 06-3-2024 - 13:00 hrs			
vii	Last date and time for uploading of tenders	Upto 06-3-2024 - 14.00 hrs			
viii	Due date and time of opening of a) technical bids.				
	b) Price bid	will be intimated later after technical eligibility evaluation.			
ix	Performance Guarantee				
Х	Security Deposit	A sum @ 5% of gross amount of bill shall be deducted from each running bill, till the sum along with the sum already deposited as Earnest Money, amounts to security deposit @ 5% of the tendered amount of the work			
xi	Tender documents	Can be down loaded and to be submitted thru the website www.tenderwizard.com/CMTI as			

	per date mentioned above

Intending bidders should submit their proposals on or before the time and date specified in the Notice Inviting Tender to the e-tendering portal mentioned below

The proposal shall be opened at Central Manufacturing Technology Institute, Bangalore on the date and time mentioned above in the presence of the bidders / their representatives if they wish to attend the same.

The tendering process is online and tender details are available in the website www.tenderwizard.com/CMTL. All interested bidders are requested to visit this tendering portal and submit their bids online. The details of tender are also available in www.cmti-india.net&www.eprocure.gov.in

If any of the dates mentioned above happens to be a holiday, the actual dates for the same will be the next working day. No separate intimation in this regard will be issued.

The bidding authority/ Director, CMTI reserves the right to modify /cancel any or all proposals without assigning any reasons. CMTI will not be responsible for any errors like missing of schedule data while downloading by the bidder/non receipt of document / delay if any.

Further details can be had from

 Executive Engineer /Scientist-C Engineering Services, CMTI, Bangalore aruncj@cmti.res.in/ 080-22188262/271

Sd/-

Executive Engineer & Section In charge

(Engineering Services)

2. Eligibility Criteria and General Guidelines

1. Eligibility requirement for contractors / firms:

SI. No.	Eligibility Criteria	Documentary proof for eligibility		
A	Appropriate CPWD class and above accredited electrical contractors or its equivalent who have satisfactorily completed the similar works as mentioned below during the last Seven years in any Govt. department such as Central or state PWD, MES, ISRO, DRDO, Central/ State Public Sector Undertakings, Central /State autonomous institutes. i. Three similar works each costing not less than 40% of the estimated cost of Rs. 19,66,112/-i.e Rs.7,86,444/-or ii. Two similar works each costing not less than 60% of the estimated cost of Rs.19,66,112/- i.e Rs.11,79,667/- or iii. One similar work costing not less than 80% of the estimated cost of Rs.19,66,112/-i.e Rs.15,72,889/-	Certified copy of work orders and completion certificates issued by the authority concerned to establish work experience		
	Similar nature of work shall mean experience in executing Gene Electrical works involved in buildings and infrastructure etc			
	 iii. Contractors who are associating any specialized agency for works has to get the agency approved by CMTI. iv. The Major/ Lead contractor will be responsible for timely completion of the project. In this case the electrical Contractor will be the major contractor. v. 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 last date of closing of tender. 			

Copies of following documents to be scanned and uploaded along with technical bid:

- 1. Work orders issued by the authority concerned to establish work on hand.
- 2. Completion certificates to establish work experience.
- 3. Documentary proof for having executed the work of similar nature and comparable magnitude as per the eligibility criteria.
- 4. Registration certificate of CPWD / KPWD/ any other recognized public sector organization/ Govt. R&D organization.
- 5. PAN Card details.
- 6. **GST registration.**
- 7. Earnest Money deposit.
- 8. EMD exemption will be given to MSME/NISC registered vendors in relevant field.
- 9. Audited financial statement for last three years
- 10. Solvency certificate certified by banker for minimum value of 50 % of estimated value having validity of 1 year on date of closing of tender.
- 11. Additional Documents, if any.
- 12. Signed copy of the tender document as acceptance of all the condition of the tender.
- 13. Signed copy of Integrity pact agreement attached with tender
- 2. The tendering process is online at URL address "www.tenderwizard.com/CMTI". Interested tenderers may go through the tender available in the website.
- 3. Tenderers are advised to register themselves in the above portal, with Digital signature key. Those who have already registered can participate in the tender by logging into the portal.
- 4. Downloading tender documents from "www.tenderwizard.com/CMTI" alone will not make a tenderer eligible for participation in the bidding process. The documents furnished by the tenderers will be subjected to verification subsequently by the Department. If found not meeting the requirements, such offers will be rejected.
- 5. The Price bid format (Schedule of Quantities) shall be downloaded from the **Bid** documents tab.
- 6. On the due date of online opening, the bids of those tenders who have furnished valid EMD only will be opened. On opening of technical bid, further detailed scrutiny / evaluation will be carried out. During the evaluation of technical bids, the documents furnished by the tenderers will be scrutinized in detail. Any tender, found as not fulfilling the eligibility criteria will be rejected at this stage and such offers will not be considered for further processing. All the detailed asked thru this tender to establish the capability &eligibility of bidder to

- participate in this tender should be uploaded along with the technical bid of etender. Only filled schedule of Quantities details should be in price bid part.
- 7. The tender accepting authority, Director reserves the option to give preferences to the offers in accordance with the policies of the Government from time to time.
- 8. All interested vendors are requested to visit the site prior to submission of quotes. The vendor should get acquainted with themselves the conditions under which the work need to be executed and no claims against site familiarization will be entertained.
- 9. Tenders should be accompanied with Earnest Money Deposit for the value specified in Para1 above, in the form of Demand Draft / BG/could be deposited through e-payment. The scanned copy of the same to be uploaded while submitting the tender online.
- NOTE: The original EMD shall reach 'Section In charge (Engineering Services), CMTI' on or before the date and time of opening as stipulated in Para 1 (vii) above. The tender closing date will be considered for all purpose related for calculating eligibility of bidders.
- 10. The Price bid format (Schedule of Quantities) shall be downloaded from the Bid documents tab. The rates are to be quoted in specified column of bid sheet and the same shall be uploaded as Price bid before due date and time as mentioned in Para 1 above. The rate should include all expenses to meet the work complete to the full extent, subjected to the satisfaction of CMTI.
- 11. The tender submission should be made **only through online mode** as described above. No other mode of submission is acceptable. **Filenames** of any downloaded excel files **shall not be changed** while uploading.
- 12. Tenders will be opened online on the stipulated date and time specified in Para 1 above. The offer of those tenderers who had furnished valid EMD (in original) and suitable documentary evidence as mentioned in Para 2, only will be opened.
- 13. The tender should be valid for **minimum period of 90 days** from the due date of uploading of tender specified in Para 1 above. If any tenderer withdraws the offer within the validity period or makes any modifications in the terms and conditions of the tender, which are not acceptable to Institute, 50% (Fifty Percent) of the Earnest Money Deposit will be forfeited. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work or from participating in any of the tender at CMTI for a period decided by CMTI or both.
- 14. Intending tenderers may inspect the site before submitting the tenders, with the prior permission of Section In charge (Engineering Services), CMTI Ph.080 22188271 / 262.

- 15. The tender accepting authority, Director is not bound to accept the lowest or any other tender and reserves the authority to reject any or all the tenders received without assigning any reason. Any tender in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
- 16. The tender accepting authority, Director also reserves the right to alter the scope/ or reduce quantum of work before issue of work order and the tenderer shall not have any claim what so ever on this account.
- 17. The tender accepting authority, Director reserves the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the quoted rates.
- 18. Canvassing directly or indirectly, in connection with tender is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.
- 19. The Tenderer shall not be permitted to tender for works in the Institute, where his/her near relative is working. He/she shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officers of CMTI. Any breach of this condition by the contractor would render him liable for rejection of tender or cancellation of contract.
- 20. Tenderers are requested to go through the General Conditions of Contract (CMTI GCC) available in tender notification. Contract document consisting of draft of the Articles of Agreement, General Conditions of Contract Schedule-A, Specifications Schedule-B Schedule of Quantities -Schedule-C, Payment& Penalty Schedule-E, Approved makes- Schedule-F, Letter of Transmittal Schedule-G, are attached herewith. The bidders should read the specifications and study the drawings carefully before submitting tender. They should acquaint themselves with the work and working conditions of the site and locality and no claim will be entertained on this issue.
- 21. The quoted rates shall be deemed to be for the finished work (including, material and labour) to be measured at site. The rates shall also be firm and shall not be subjected to exchange variations, labour conditions, fluctuations in freights or any conditions whatsoever. Tenderers must include in their rates all applicable and any other tax and duty or other levy levied by the Central Government or any State Government or Local Authority, if applicable. No claim in respect of GST, sales tax, excise duty, octroi or other tax, duty or levy shall be entertained by the employer.
- 22. Earnest Money is liable to be forfeited if the contractor selected for the work fails to sign the formal agreement or fails to start the work within seven days of order to commence the work.

- 23. The acceptance of the tender will rest with the Central Manufacturing Technology Institute which does not bind itself to accept the lowest tender and reserves to itself the authority to partially accept or reject any or all the tenders received without assigning any reasons. It will rest with the accepting authority to split up the whole work between the two or more contractors or accept it in parts if considered expedient.
- 24. Applicants are advised to keep visiting the above mentioned web-sites from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection
- 25. No Escalation will be applicable for this Contract and prices will hold good for the entire period of completion of work.
- 26. The tenders submitted by the bidder who doesn't sign the declaration part and not accepting the integrity pact agreement will be rejected.

Sd/-

Section -in -charge (Engineering Services)

3. Scope of Work

Briefing about Work:

The location of work to be executed is at CMTI, Tumkur road, Bangalore-560013

Major Scope of works are

- 1) Providing raw power DB's and cabling works with terminations
- 2) Point wiring works for lights, fans, power points etc
- 3) Supply and fixing LED lights with Internal wiring works
- 4) Industrial plug sockets and Modular switches and panels
- 5) UPS DB's and cabling works
- 6) GI and copper plate earthing works
- 7) CMS and cable trays
- 8) Any other work mentioned in schedule of quantities or as directed by the Engineer- in- Charge.

4.DECLARATION BY THE TENDERER

- I / We hereby declare that I / We have gone through clearly and understood the General Conditions of Contract for all works along with the Schedules A, B, C, D, E, F, &G.
- 2. My / Our offer submission for the tender is after fully considering the above and also the other documents issued along with the tender.
- 3. I / We also confirm that the offer now submitted is totally in agreement with the General Conditions of Contract read in conjunction with the documents, drawings and specifications issued for this particular tender, except for commercial & technical deviation, if any, specifically brought out in my Techno-Commercial offer, submitted herewith.
- 4. I fully accept the Integrity pact of CMTI and Integrity pact agreement will be signed by me in the standard format of CMTI.

(Signature of the Bidder/Tenderer)

5.SCHEDULE"A "

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Definitions:

In ensuring these conditions, the specifications, Schedule of quantities and Contract Agreement, the following words shall have the meanings herein except where the context otherwise requires:

EMPLOYER : shall include its successors and assigns and all

the persons for the time being in the

management of the Institute.

ENGINEER IN CHARGE : The Engineer designated by employer on behalf

of him for this work.

CONTRACTOR: shall mean and shall include his/their legal

representative, assigns or successors.

SITE : shall mean the site of the contract works

including any building and erection therein and any other land (inclusively) as aforesaid allotted

by the Employer for the contractors use.

THIS CONTRACT: shall mean invitation to Tender, General

Conditions of Contract, Letter of Acceptance, Agreement and Conditions of Contract, the Appendix, Specifications, the Schedule of Quantities attached hereto and duly signed.

NOTICE IN WRITING: shall mean a notice in writing typed or printed

characters sent (unless delivered personally or otherwise proved to have been received) by Registered post to the last known private or business address or registered office of the addresses and shall be deemed to have been received when in the ordinary course of post it

would have been deliver.

ACT OF INSOLVENCY : shall mean any Act of Insolvency defined by the

Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any act amending

such original.

THIS WORKS : shall mean the construction/ modification of

building/ infrastructure for the employer on its

plot or plots.

2. SCOPE OF WORK

The contractor shall carry out and complete the said work in every respect in accordance with this contract and with the directions of and to the satisfaction of the employer. The employer from time to time issue further drawings and or written instructions, details, directions and explanations which are hereafter collectively referred to as employers in regard to:

- a) The variation or modification of the design, quality or quantity of works, or the addition or omission or substitution of any work. The detailed scope of work is described in chapter 3 of this tender.
- b) Any discrepancy in the drawings or between the schedule of quantities and or drawings and or specifications.
- c) The removal and/or re-execution of any works executed by the contractor.
- d) The removal from the site of any materials brought thereon by the contractor and the substitution of any other material therefore.
- e) The dismissal from the works of any persons by employer thereupon.
- f) The opening up for inspection of any work covered up.
- g) The amending and making good of any defects under Clause -17.

The contractor shall forthwith comply with and duly execute any work comprised in such employers instructions provided always that verbal instructions, directions and explanations given to the contractor or his representatives upon the works by the employer shall involving a variation, be confirmed in writing by the contractor to the employer and the employer within seven days if not dissented from writing within further seven days by the employer, such shall be deemed to be employers instructions within the scope of the contract.

3. EXTRA WORK TO BE APPROVED BY THE EMPLOYER:

Notwithstanding anything herein contained, the contractor or their representative shall not, without the prior concurrence in writing of the employer, issue any instructions, verbal or in writing for extra work. The contractor shall submit to employer a statement of such extra work giving quantities and rates duly supported by an analysis of such rates, vouchers etc., The employer shall not be liable for payment for such extra work until such work is sanctioned by him. Payments for such extra work shall be made as per clause -14 of these conditions.

5. AGREEMENT:

The successful contractor shall be bound to implement the contract by signing agreement in accordance with draft agreement provided in Rs.100 stamp paper. Contractor to sign the Tender Contract Document before commencement of work.

A certified copy of the contract shall remain in the custody of the employer and shall be produced by them at their officer as and when required by the contractor. The contractor on signing hereof shall be furnished by the employer free of cost with a certified copy of the agreement, one copy of the specifications, two copies of the said drawings and two copies of all further drawings issued during the progress of the works. Any further copies of such drawings required by the contractor shall be paid for by him. The contractor shall keep one copy of all the drawings on the works and the employer, or their representative shall at all reasonable times have access to the same. Before the issue of final certificate to the contractor, he shall forthwith return to the employer all drawings and specifications.

5. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY:

- a) The contractor shall supply, fix and maintain at his cost during the execution of any works, all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, hoarding, watching and lighting up nights as well as by day, required not only for the proper execution and portion of the said works, but also for the protection of the public and the safety of any adjacent road, buildings, street, cellars, vaults, pavements, walls, houses and all other erections, matters or things. The contractor shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring etc., as occasion shall require or when ordered to do so and shall fully reinstate and made good all matters and things disturbed during the execution of the works, to the satisfaction of the employer.
- b) The contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, schedule of quantities and specifications taken together, whether the same may or may not be particularly shown or described therein, provided that the same can reasonably be inferred there from and if the contractor finds any discrepancy in the drawings or between the drawings, schedule of quantities and specifications he shall immediately and in writing refer the same to the employer who shall decide which is to be followed. Figure dimensions shall be followed in preference to scale.

6. CONTRACTOR TO CONFORM TO LOCAL REGULATIONS:

The contractor shall conform to the provisions of any Act of the legislature relating to the works and to the regulations and bye-laws of any authority and of any water, lighting and other companies and or authorities with whose systems structure is proposed to be connected and shall before making any variations from the

drawings or specifications that may be necessitated by so conforming give to the employer written notice, specifying the variations proposed to be made and the reasons for its, and apply for instructions thereon. In case the contractor shall not, within ten days, receive such instruction, he shall proceed with the work conforming to the provisions, regulation, or Bye-laws in question and any variation so necessitated shall be dealt with under Clause No.14.

The contractor shall bring to the attention of the employer all notices required by the said Act, Regulations, or Bye-laws to be given to any authority and pay to such authority, or to any public office all fee that may be properly chargeable in respect of the works, and lodge the receipts with the employer. The contractor shall indemnify the employer against all the claims in respect of patent rights and shall himself pay all royalties, license fees, damages, costs and charges of all and every sort that my be legally incurred in respect thereof.

7. CONTRACTOR RESPONSIBLE FOR SETTING OUT WORKS AND FOR RECTIFYING BAD WORKS:

The contractor shall set out the works and shall be responsible for the true and perfect setting of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time any error in this respect shall appear during the progress of the works, the contractor shall at his own expense rectify such error to the satisfaction of the employer.

8. MATERIALS AND WORKMANSHIP TO CONFORM TO DESCRIPTION:

All materials and workmanship shall be of the respective kinds described in the schedule of quantities and or specifications and in accordance with the employers instructions and the contractor shall upon the request of the employer furnish them with all invoices, accounts, receipts and other vouchers, accounts to prove that the materials comply therewith. The contractors shall at his own cost arrange for and or carryout any test of any materials which the employer may require.

9. CONTRACTORS SUPERINTENDENCE:

The contractor shall give all necessary personal superintendence during the execution of the works, and as along thereafter as the employer may consider necessary until the expiration of the "Defects Liability Period" stated in Schedule 'E'. The contractor shall also during the whole time; the works are in progress, employ a competent and qualified representative who shall be constantly in attendance at the works, while the men are at work. Any directions, explanations, instructions or notices given by the employer to such representative shall be held to be given to the contractor.

If the Head Quarters of the successful tenderer are elsewhere than in Bangalore, then he should already have a duly registered office in Bangalore from the

commencement of the work until the building is occupied by the employer and is a mandatory requirement for technical eligibility. Such office shall be authorised to act on behalf of the successful tenderer to accept service of notices of contract and to agree to extras, omissions and varied items of work and rates for the same. Such office shall maintain his staff and qualified engineer approved by the employers and such other office personnel as may be required for the efficient execution of works. Any notice under the contract shall be deemed to have been served on the successful tenderer if served upon such agent or sent by registered letter to his address in Bangalore. Such office shall not be changed and shall not leave during the duration of the contract unless the consent of the employer shall have been previously obtained. If the employer shall require the successful tenderer to carryout any rectifications under the terms of the contract after the building is completed, the successful tenderer shall have the same or another duly authorised agent in Bangalore while such rectifications are being carried out.

10. ENGINEER- IN -CHARGE:

The term 'Engineer-in -Charge' shall mean the person or persons appointed and paid by the employer and acting under the orders of the employer to inspect the works in the absence of the employer. The contractor shall afford the Engineer-in - Charge every facility and assistance for inspecting the works and materials and for checking the measurements and materials. Engineer-in -Charge shall have power to set out works or to revoke, alter, enlarge or relax any requirements of the contract, or to sanction any work, additions, alterations, deviations or omissions, or any extra work whatever except in so far as such authority may be specially conferred by a written order of the employer.

If any work or materials is not approved by the Engineer-in -Charge, such work shall be suspended for the use of such materials shall be discontinued, until the decision of the employer is obtained. The work will from time to time be examined by the employer, Engineer-in -Charge or the employers representatives, but such examination shall not in any way exonerate the contractor from the obligation to remedy any defects which may be found to exist at any stage of the works or after the same is completed.

11. ASSIGNMENT AND SUBLETTING:

The whole of the works included in the contract, shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or sublet the contract or any part share thereof or interest therein without the written consent of the employer, and no undertaking shall relieve the contractor from the full and entire responsibility of the contractor or from active superintendence of the works during their progress.

12. VARIATIONS NOT TO VITIATE THE CONTRACT:

No alteration, omission or variation shall vitiate this contract but in case the employer think proper at any time during the progress of the works to make any alteration, or additions to or omissions from the works or any alteration in the kind or quality of the materials to be used therein and shall give notice thereof in writing under their hand to the contractor, the contractor shall alter, add to or omit from the works, as the case may require, in accordance with such notice, but the contractor shall not do any work extra or make any alterations or additions or to omit from the works or any deviations from any of the provisions of the contract, stipulations, specification of contract drawings without the previous consent in writing of the employer and the value of such extras, alterations, additions or omissions shall in all cases be determined by the employer with the prior approval in writing of the employer in accordance with the provisions of clause 14 hereof and the same shall be added to or deducted from the contract amount accordingly.

13.SUFFICIENCY OF SCHEDULE OF QUANTITIES:

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 prices stated in the schedule of quantities and or the schedule of rates and prices shall cover all his obligations under the contract, and all matters and things necessary for the proper completion of the works.

14. PRICES FOR EXTRA WORK:

Should it be found after the completion of the works from measurements taken (in accordance with the previous paragraph) that any of the quantities or amounts or works thus ascertained are less or greater than the quantities or amounts specified for the works in the priced schedule of quantities and / or tender or that any variation is made, the valuation of such quantities, amounts or variations, unless previously or otherwise agreed upon, shall be made in accordance with the following rules:

- a) The net rates or prices in the original tender shall determine the valuation of the extra works, where such extra work is of similar character and executed under similar conditions as the work priced therein.
- b) The net prices of the original tender shall determine the value of items omitted provided if omissions vary the conditions under which any remaining items of the works are carried out the prices for the same shall be valued under sub-clause (c) hereof.
- c) Where the extra works are not of similar character and / or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of any omissions or additions relative to the amount of the whole of the contract works or to any part

thereof shall be such that in the opinion of the employer the net rate or price contained in the priced schedule of quantities or Tender for any item of the works involved loss or expense beyond that reasonably contemplated by the contractor is by reason of such omissions or additions rendered unreasonable or inapplicable, the employer shall fix such other rate or price as in the circumstances they shall think reasonable and proper, with the prior approval in writing of the employer. The payment will be made on

a) At actual quantities and rates worked out by the Engineer in charge, on actual cost of materials and labour with allowance of 15% as overhead and contractor's profit if it's not a scheduled item in Delhi Schedule of Rates.

Or

b) At actual quantities and DSR rates+ Cost index+ tender percentage(+/-) for items in Delhi schedule of rates.

The measurement and valuation in respect of the contract shall be completed within the "period of final measurements" stated in the Schedule 'E'.

15. NOTICE TO BE GIVEN BEFORE WORK IS COVERED UP:

The contractor shall give not less than seven (7) days' notice in writing to the employer before covering up or otherwise placing beyond the reach of measurement any works in order that the same may be measured and correct dimensions thereof taken and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or employer's consent being obtained, the same shall uncovered at the contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

16. <u>RETURN OR SURPLUS MATERIALS:</u>

Not-withstanding anything contained to the contrary in any of the clauses of this contract, where any materials for the execution of the contract, are procured under the assistance of the Employer, by purchase made under orders or permits or licenses issued or arranged by the Employer, the contractor shall hold the said materials safely and shall not dispose them off without the prior permission of the Employer. The contractor shall return, if required by the Employer, all surplus or serviceable materials that may be left with him after completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as shall be determined by the employer. The price allowed to the contractor shall, however, not exceed the price at which the materials were acquired. The decision so taken shall be final and conclusive. In the event of a breach of these conditions, the contractor in addition to subjecting himself open to action for contravention of the items of the licenses or permits and / or for criminal breach of trust, be liable to the employer for moneys, advantages or profits resulting from such breach.

17. REMOVAL OF IMPROPER WORK:

The employer shall during the progress of the works, have power to order in writing from time to time removal from the works within such reasonable time or times as may be specified in the order, of any materials which in the opinion of the employer are not in accordance with specifications or instructions and the contractors shall forthwith carryout such order at his own cost. In case of default on the part of the contractor to carry out such order, the employer shall have the power to employ and pay other persons to carry out the same, and all expenses consequent or incidental thereto as certified by the employer shall be borne by the contractor, or may be deducted by the employer from any moneys due or that may become due to the contractor.

18. **DEFECTS LIABILITY PERIOD:**

Any defect, shrinkage, settlement or other faults which may appear within the "Defects Liability Period" stated in the Schedule 'E' after the virtual completion of the work, arising in the opinion of the employer from materials or workmanship not in accordance with the contract, shall upon the directions in writing of the employer, and within such reasonable times as shall be specified therein, be amended and made good by the contractor, at his own cost and in case of default, the employer may employ and pay other persons to amend and made good such defects, shrinkage, settlements or other faults, and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damage, loss and expenses shall be recoverable from him by the employer or may be deducted by the employer from any moneys due or that may become due to the contractor.

19. COMPLETION CERTIFICATE:

The works shall not be considered as complete until the employer have certified in writing that they have been virtually completed and the defects liability period shall commence from the date of such certificate.

20. OTHER CONTRACTORS ENGAGED BY EMPLOYER:

The employer reserves the right to use the premises and any portion of the site for the execution of any work not included in this contract which he may desire to have carried out by other persons, and the contractor is to allow all reasonable facilities for the execution of such work but is not required to provide any plant or materials for the execution of such work, except by special arrangement with the employer, such work shall be carried out in such manner as not to impede the progress of the works included in the contract.

The successful tenderer must co-operate and co-ordinate his work with the work of all other contractors appointed by the employer so that the work shall proceed with the least possible delay and to the satisfaction of the employer.

The contractor's co-ordination with other contractors appointed by the employer is essential to maintain smooth progress of the work and any delays which in the opinion of the employer is due to non-co-ordination and inefficient management of the contractor will not be entertained for any extension of time.

21. LIABILITY FOR ACCIDENTS AND DAMAGE AND INSURANCE:

- i) The contractor shall, during the execution of the work, properly cover up and protect any part of the work liable to damage by exposure to the weather, and shall take every reasonable precaution against damage to the work from any cause.
- ii) All contractors' equipment shall be at the sole risk of the contractor.
- iii) The contractor will insure all his personnel employed for the execution of the work, against any personal injure may be sustained by them as a result of the execution of the works and present satisfactory evidence, that such insurance is in force. The Contractor alone will be responsible for the safety of the labours engaged by him, in any case of mishap/accident. No claim against CMTI will be entertained.

The contractor shall be responsible for workman's compensation insurance and all other statutory requirement in regard to the personnel in the contractor's employment.

21.1 RECOVERY OF COMPENSATION PAID TO WORKMEN

In every case which by virtue of the provisions of section 12 sub-section (i) of the workman's compensation act, 1923, Institute is obliged to pay compensation to workmen employed by the Contractor in execution of the work. Institute will recover from the Contractor the amount of the compensation so paid and without prejudice to the rights of Institute under the said act, Institute shall be at liberty to recover such amounts or any part thereof by deducting it from the security Deposit or from any sum due by the Institute to the contract whether under this contract or otherwise. Institute shall not be bound to contest any claim made against it under the said act except on the written request of the Contractor and upon his giving to Institute, full security for all costs for which Institute might become liable in Consequence of contesting such claim.

22. DATE OF COMMENCEMENT:

The contractor shall be allowed admittance to the site on the 'Date of commencement' stated in the Schedule 'E' and he shall thereupon and forthwith

begin the works and shall regularly proceed with and complete the same on or before the 'Day of Completion' stated in the Schedule 'E' subjected to the provisions for extension of time hereinafter contained.

23. LIQUIDATED DAMAGES FOR NON-COMPLETION:

If the contractor fails to complete the works by the date stated in the Schedule 'E' or within any extended time under clause 25 hereof and the employer certifies that in his opinion the same ought to have been reasonably completed, the contractor shall pay or allow the employer the sum named in the Schedule 'E' as 'Liquidated Damages' for the period during which the said works shall so remain incomplete and the employer may deduct such damages from any moneys due to the contractor.

24. FORCE MAJEURE:

The right of the contractor to proceed with the work shall not be terminated because of any delay in the completion of the work due to unforeseen causes beyond the control and without the fault or negligence of the contractor, including but not limited to acts of God, or the public enemy, restraints of the Sovereign State, fires, floods, unusually severe weather and acts of the employer.

If the contractor is wholly prevented from performance of the contract, for a period in excess of thirty (30) consecutive days because of a Force Majeure, the employer may terminate this contract by thirty (30) days written notice delivered to the contractor and if the period of the Force Majeure exceeds ninety (90) consecutive days, the contractor may terminate this contract by thirty (30) days written notice to the employer. In the event, this contract is so terminated, the contractor shall be paid all costs actually incurred (which costs shall not include any other expenses of the contractor such as loss or profits, salaries of contractor's employees, expenses of contractor towards maintenance of his establishment etc.,) for the work executed up to the date of termination. Failure to agree on an equitable adjustment shall be deemed to be dispute.

25. DELAY AND EXTENSION OF TIME;

If in the opinion of the employer the works to be delayed:

- a) by force majeure; or
- b) by reason of any exceptionally inclement weather of;
- c) by reason of proceedings taken or threatened by or dispute with adjoining owners or public authorities arising otherwise then through the contractor's own default.
- d) by the works or unavoidable delays of other contractors or tradesmen engaged or nominated by the employer and not referred to in the schedule of quantities and / specifications,

- e) by reasons of employers instructions as per Clause 2 or,
- f) by reasons of civil commotion, local combination of workmen of strike or lock out affecting any of the building traders.
- g) in consequence of the contractor not having received or in due time necessary instructions from the employer for which he shall have specifically applied in writing.

The employer may make a fair and reasonable extension of time for completion of the contract works; in case of such strike or lockout, the contractor shall as soon as may be, give written notice thereof to the employer, but the contractor shall nevertheless constantly use his endeavour to prevent delay and shall do all that may reasonably be required to the satisfaction of the employer to proceed with the work.

The contractor need to keep a hindrance register at site and enter all the hindrance he has faced and clearance got with counter signature of Engineer in Charge.

26. FAILURE BY CONTRACTOR TO COMPLY WITH EMPLOYER'S INSTRUCTIONS:

If the contractor after receipt of written notice from the employer requiring compliance within ten days and if he fails to comply with such further drawings and/or employers instructions, the employer may employ and pay other persons to execute any such work whatsoever they may be necessary to give effect thereto, all costs incurred in connection therewith shall be recoverable from the contractor bythe employer as a debt or may be deducted by him from any moneys due or to become due to the contractor.

27. SUSPENSION:

If the contractor suspends the works, or in the opinion of the employer, neglects or fails to proceed with due diligence in the performance of his part of the contract or if he shall make default in respect of Clause 2 (entitled scope of contract) the employer, shall have power to give notice in writing to the contractor requiring him to proceed with the work within a reasonable period of time and such notice shall have been given, the contractor shall not be at liberty to remove from the site of the works any plant or materials belonging to him which shall have been placed thereon and the employer shall have claim upon all such plant and materials from the date of such notice. If the contractor shall fail for seven (7) days after such notice has been given to proceed with the work as therein prescribed, the employer shall have the right to proceed as provided for in clause 30 (entitled Termination).

28. TERMINATION FOR DEFAULT:

If the contractor fails to fulfil the terms of contract and or, where employer is satisfied that it is not in the interest of the employer to persists with the contract with the defaulting contractor, the employer is at liberty to rescind the contract where upon **Security Deposit** & **Performance Guarantee** amount of the contractor stands forfeited.

Further the employer is at liberty:

- a) to employ labour paid by the employer and supply the materials to carry out the work for and on behalf of the contractor and
- b) to measure up the work of the contractor and to take such part there of as shall be unexecuted out of his hand and to give to another contractor at the risk and cost of the original contractor.

29. TERMINATION FOR CONVENIENCE:

The employer may at any time terminate this contract for convenience upon 30 days written notice to the contractor. Upon issuance of termination notice by the employer, the contractor shall, unless the notice provides otherwise, immediately discontinue all work and the placing of all orders for commodities and shall terminate all existing employment contracts, orders and sub-contractors. If the contract is terminated for convenience, the contractor shall be compensated as if the contract had been terminated because of Force Majeure.

30. TERMINATION:

- i) The employer may, for any reason whatsoever at any time by notice in writing to the contractor terminate the contract.
- ii) In the event of a termination pursuant to paragraph (i) of this Article:
 - (a) The contractor shall carry out instructions of the owner in connection with such termination including the cancellation of orders and the termination of contracts which the contractor may have placed with order, and
 - (b) The employer shall pay the contractor for all materials used and work executed pursuant to the contract, but unpaid at the date of such termination together with any costs necessarily incurred by the contractor in connection with the work as a result of such termination, provided that the employer shall not be liable for any business loss or damage suffered by the contractor as a result of such termination.
- iii) The contractor shall upon receiving notice from the employer in accordance with paragraph (i) of this Article, notify the employer within a reasonable time, of the sums of materials used and work executed as mentioned in paragraph (ii) (b) of this Article. These sums and all terms and conditions of termination pursuant to this article shall be agreed in writing between the employer and the contractor.
- iv) Upon termination of the contract pursuant to this Article all obligations of the parties hereto shall cease except as to the liabilities of either party to the other for obligations accrued prior to the date of such termination.

31. WATER AND POWER REQUIRED FOR THE WORK:

Water and Electricity for construction will be made available at site from a delivery point which may be seen by the contractor. Piping or leads from the point, to where the contractor requires the supply shall be provided and Electric meter shall be installed by the contractor. The charges for consumption of water and electricity will be at the rates to be specified by the employer.

Water charges shall be **Rs.87/- per 1000 litres** and electricity charges based on the current BESCOM Regulations.

Where the water meter is not installed, the charges for water shall be recovered on the basis of 2.50% (Two point five percent) of the total cost of work, excluding for the cost of items where cement is not used. If supply of water and electricity cannot be supplied by the employer, the contractor shall make his own arrangements for procuring water and power supply that may be required for the execution of the work. No extra payment will be made on this account. No Institute plant, materials or labour will be lent or issued to the contractor.

32. DAMAGES THROUGH NATURAL CALAMITIES:

No compensation for any damage caused to the works or materials by rain, floods or other natural calamities shall be paid to the contractor. The contractor shall have to make good all such damages himself and at his own cost.

33. TESTING OF CEMENT CONCRETE AND MORTAR:

- a) The contractor has to carryout cube testing as per IS 456 for concreting works or at such intervals as required by the employer.
- b) The mortar used in brick work may also be subjected to laboratory test by taking out samples as and when required by the employer.
- c) The arrangements for testing of test cubes and mortar shall have to be made by the contractor at his own cost and nothing extra shall be paid on this account, or alternatively the test may be arranged by the employer, the expenditure involved in doing so being paid by the contractor in cash or by deduction from his bills.

34. CLEARANCE OF SITE:

The contractor shall have to remove all materials from the site of work, dirt and dust from floors and woodwork and white wash or colour wash, distemper or paint splashes from doors, windows, glass panels etc., before handing over the building to

the employer. The work shall not be treated as complete in all aspects unless these requirements are fulfilled by him.

In the event of the contractor failing to do so, the employer shall have the right to get the site cleared, dust and dirt removed and doors and windows etc. cleaned of splashes etc., at the contractors risk and cost without prejudice to the right of the employer to take action to recover damages under clause 23 of the contract.

35. ARBITRATION:

- i) If at any time, question, dispute, or difference shall arise between the employer and the contractor under or in connection with the contract, either party shall as soon as reasonably practicable give to the other, notice in writing of the existence of such question, dispute or difference specifying its nature and the point of issue and the same shall be referred to arbitration in accordance with the provisions of the Indian Arbitration Act 1940. The award of such arbitration shall be final and binding on the parties hereto.
- ii) Performance of the contract shall continue during arbitration and any subsequent proceedings.
- iii) The venue of all arbitration shall be in Bangalore.

36. RIGHT OF TECHNICAL SCRUTINY OF FINAL BILL:

The employer shall have a right to cause a technical examination of the works and the final bill of the contractor including all supporting vouchers, abstracts etc, to be made at the time of payment of the final bill. If as a result of this examination or otherwise, any sum is found to have been overpaid or over-certified it shall be lawful for the employer to recover such overpayment

37. COMPENSATION:

- (a) In any case under any clause or clauses of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit &Performance Guarantee amount (whether paid in one sum or deducted by instalments) the employer shall have power:
 - i) to rescind the contract (of which rescission notice in writing to the contractor in the hand of the employer shall be conclusive evidence) and in which case, the **security deposit** & **Performance Guarantee** amount of the contractor shall stand forfeited and absolutely at the disposal of the employer.
 - ii) To employ labour paid by the employer and to supply materials to carry out the work of any part of the work, debiting the contractor with the cost of labour, supervision and the price of the materials (of the amount of which cost and price, a certificate of the employers officer shall be final and conclusive against the contractors) in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The

certificate of the employer as to the value of the work done shall be final and conclusive against the contractor.

- iii) To measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete, in which case any expenses which may be incurred in excess of the sum which has already been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess, the certificate in writing of the employer shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him under the contract or otherwise, or from his **security deposit** or **Performance Guarantee** amount or the proceeds of sale thereof or a sufficient part thereof.
- (b) In the event of any of the above courses being adopted by the employer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements or made any advance on account of or with a view to the execution of work or the preference of the contract and in case the contract shall be rescinded under the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for the any work therefore actually performed under this contract unless and until the employer will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.
- (c) In the event the employer enforces either of the powers (i), (ii) or (iii) of (a) above vested in him under the preceding clause, he may if he so desires take possession of all or any tools, plant, materials and stores, in or upon the works, or the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in the account at the contract rates or in case of these not being applicable, at current market rates, to be certified by the employer whose certificates by notice in writing to the contractor, or his Engineer, foreman or other authorised agent require him to remove such tools, plants, materials or stores from the premises (within a time to be specified in such notice) and in the event of the contractor failing to comply with any such requisition, the employer may remove them at the contractors risk and expenses or sell them by auction or private sale on account of the contractor and at his risk in all respects, and the certificate of the employer as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale, shall be final and conclusive against the contractor.

38. CERTIFICATE OF PAYMENT:

(a) The contractor shall attend or send a qualified agent to assist the CMTI's Engineer or his subordinates in taking such measurements and calculations and to furnish all particulars and to give all assistance required by the Engineer or his subordinates Should the contractor not attend or neglect or omit to send such

agent, then the measurements taken by the Engineer or his subordinates shall be taken to be correct measurement of the work, unless objected to within one month of their being recorded in the measurement book or books.

- (b) The employer and the contractor or their agents may at the time of measurement take such notes of measurements as they may require. Payments will be made as running account bills (RA bills) and work will be closed with final bill, there after no claim will be entertained.
- (c) All intermediate payments (RA bills) shall be regarded as payments by way of advance against the final payment only and not as payment for work actually done and completed. The final bill shall be submitted by the contractor within two months after completion of the work. The measurement of the work taken by the Engineer or his subordinates after one week's notice to each party shall be final and binding on all parties unless objected to within one month of their being recorded in the measurement books.
- (d) No advance payment will be made at any stage of this contract except for secured advance for materials supplied (Secured advance shall be 75% of the material part supplied).
- (e) Advances for materials brought to site: The contractor shall execute an indenture bond in favour of the employer in the prescribed form for each advance or intermediate payment received by him. If the contractor commits any default in the terms of the said bond and he fails to pay the bond amount, the employer shall have the power to:
- i) seize and utilise the materials or any part thereof for the completion of the works.
- ii) remove and sell by public auction the materials seized or any part thereof and out of the proceeds of the sale, retain all sums repayable or payable to the employer together with interest thereon at the rate prescribed by the government of India from time to time for Capital Outlays.
- iii) deduct all or any part of moneys owing from contractor or out of the security deposit or any other sum or sums due to the contractor under this agreement.
- (f) The contractor agrees that before final payments shall be made on the contract, they will sign and deliver to the employer, either in the measurement books or otherwise, as required a valid release and discharge from any and all claims and demands whatsoever from the employer for all matters arising out of or connected with the contract.
- (g) If the weight of Aluminium, reinforcement and structural steel provided in the work differs from standard tables the following procedure shall be followed for arriving the quantity.

- a. If the actual weight is more than standard weight only standard weight shall be considered for payment.
- b. If the actual weight is less than standard weight but within the permissible variation only actual weight shall be considered for payment.

39. SITE WORKING CONDITIONS& SAFETY

1. <u>SITE ESTABLISHMENT& PROJECT PROGRAMME CHART:</u>

1.1 The contractor shall provide all sheds for stores, tarpaulin and other covers for the materials. All materials likely to deteriorate in the open shall be stored under suitable cover. Space shall be allowed to the contractor for erection of sheds and storage of materials, only after getting sanction from employer.

The security of the contractor's equipment and material is his own responsibility. He will ascertain the security arrangements that are made on site by the employer and take any further precautions he may think necessary. The employer accepts no liability for loss or damage to the contractor's plant, tools, or materials, unless caused by the proven negligence of the employer staff. When the work has been taken over by the employer, responsibility is accepted for the permanent work.

The contractor shall make it a point to hand over to Security Staff at gate a list of their tools and equipment while bringing them to the site of work. While taking out such tools and equipment after the completion of the jobs, the same will be checked by the Security Staff with the list given at the time of taking them in. If such a list is not given. The burden of proof that such tools and equipment belong to the contractor will be on the contractor and without such proof such tools and plants will not be allowed to be taken out.

1.2 Lavatories:

The contractor shall provide his own lavatory and washing facilities to comply with the local and Government regulations in the space allotted by the employer.

1.3 First Aid:

The contractor may make use of the owner's qualified first-aid personnel and ambulance where such facilities are available. An agreed charge will be made for each service rendered from date of commencement of contract.

2.0 **SUPERVISION OF WORKS:**

The contractor is required to have on site during all working hours a competent full time Engineer who will be responsible to the Employer for the conduct of the work and who has authority to receive and act on such instructions as the owner may give.

The Contractor shall depute Site Engineer & skilled workers as required for the work. He shall submit organization chart along with details of Engineers and supervisory staff. It shall be ensured that all decision making powers shall be available to the representatives of the Contractor at Bangalore itself to avoid any likely delays on this

account. The Contractor shall also furnish list of persons for specialized works to be executed for various items of work. The Contractor shall identify and deploy key persons having qualifications and experience in the similar and other major works, as per the field of their expertise.

If during the course of execution of work, the Engineer-in-Charge is of the opinion that the deployed staffs is not sufficient or not well experienced; the Contractor shall deploy more staff or better-experienced staff at site to complete the work with quality and in stipulated time limit. Project planning/quality/billing Engineer of the Contractor having experience in similar nature of work as mentioned in this tender shall always be available at the site during the actual execution of the work.

3.0 INSPECTION

The work of the contractor is subject to inspection by the employer at all times.

4.0 EMPLOYMENT OF LABOUR

- 4.1 The contractor will be expected to employ on the work only his regular skilled employees with experience of work. The permission of the Employer must be obtained before tradesmen are recruited locally for the work. This rule does not apply to unskilled labour.
- 4.2 All travelling expenses including provisions of all necessary transport to and from site, lodging allowances and other payments to the contractor's employees are his own responsibility.
- 4.3 The hours of work on the side are at the contractor's discretion but must be sufficient to enable the program of work to be maintained. However, specific permission of the employer shall be taken for working any time between dusk & dawn and holidays.
- 4.4 If required by the employer all contractor's employees will wear identification badges while on site.
- 4.5 All notices displayed on the site and any instructions issued by the employer must be strictly adhered to by the contractor's employees.
- 4.6 The contractor shall be responsible for hiring the space required for his labour colony at his own expense. None of his staff or workmen will be allowed to remain at site except when they are on duty.
- 4.7 ESI and PF w.r.t to the labours employed by the Contractor has follow the prevailing rules and regulation of government .The rate quoted should be good enough to cover all these expenses related to ESI & PF.

5.0 REPORTING

The contractor must report the following information to the employer in writing any actual or potential delay in program caused by the action or inaction of the Employer and other contractors working on site.

6.0 COMPLETION OF WORK

Before finally leaving site all the contractor's sheds, plants, tools and rubbish must be removed and the site left clean and tidy.

7.0 WORKING AND SAFETY REGULATIONS

- 7.1 The contractor will observe all statutory and legal requirement by Central and State Governments applying to the work as well as any local regulations applying to the site issued by the employer or other authority.
- 7.2 Particular attention is drawn to the following:
 - i) In case of accident, the employer will be informed in writing forthwith. The contractor will strictly follow regulations laid down by factory inspector, Government and State authorities in this regard.
 - ii) Fencing all contractor's plant, platforms, excavations etc.,
 - iii) Compliance with all electricity regulations.
 - iv) Compliance with statutory requirements for inspection and test of all lifting appliances and auxiliary lifting gear.
- 7.3 Staircase, doors or gangways must not be obstructed in any way that will interfere with means of access or escape.
- 7.4 No excavation will be started without the permission of employer who will inform the contractor of the position of any pipes or cables know to be buried in the area. All excavations must be effectively relied off at all times, or completely boarded over and properly marked during the hours of darkness by red warning lamps, using flame proof warning lamps in non-smoking areas. During the hours of darkness, heaps of debris or material which cannot be immediately removed must be heaped in such a way as to leave adequate passage way.
- 7.5 The contractor will notify the employer of his intention to bring on to the site any equipment such as space heating or welding apparatus, or any container holding liquid or gaseous fuel or other substance which might create a hazard. The employer will have the right to prohibit the use of such equipment or to prescribe the conditions under which such equipment may be used.

The employer will have the right to inspect any construction plant, and to forbid its use, if in his opinion it is unsuitable or unsafe. No claim arising thereofcannot be made by the contractor.

The contractor or anyone acting on his instructions will not bring on to the site any radio-active substance or any apparatus using such substance or any x-ray apparatus until written permission and direction regarding the use of such equipment has been received from employer.

- 7.6 The contractor will meet all requirements and act on the instructions of the employer where it is necessary to operate a 'Permit-to-work 'system.
- 7.7 Where it is necessary to provide and or store petroleum products or petroleum mixtures and explosives, the contractor shall be responsible for carrying out such provision and / or storage in accordance with the rules and regulations laid down in petroleum act, 1934, Explosive Act 1948 and petroleum and Carbide of Calcium Manual published by the Chief Inspector of Explosives of India. All such storage shall have prior approval of the employer. In case any approvals are necessary from the Chief Inspector of Explosives or any statutory authorities, the contractor shall be responsible for obtaining the same.
- 7.8 The contractor shall have his own Fire Fighting Extinguishers and Equipment.
- 7.9 The contractor shall be responsible for the provision of all safety notices and safety equipment required by both the relevant legislation and such as the owner may deem necessary.

7.10 SAFETY PROVISIONS/ CONTRACTOR TO BEAR THE EXPENSES IN

CONNECTION WITH ACCIDENTS, IF ANY

The Contractor shall provide all necessary fencing lights required to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings which may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such actions or proceedings to any such persons or which may with the consent of the Contractor be paid to compromise-any claim by any such person.

7.11General Safety guidelines

For the safety of all labour directly or indirectly employed in the work for the performance of the contractor's part of this agreement, the contractors shall, in addition to the provision of CPWD safety code and directions of the Engineer – in – charge, make all arrangements to provide facility as per the provision of Indian Standard Specifications (Codes) listed below & nothing extra shall be paid on this account.

- a. IS 3696 Part I Safety Code for scaffolds &ladders
- b. IS 3696 Part II Safety Code for scaffolds and ladders Part II

- c. IS 764 Safety Code for excavation work.
- d. IS 4138 Safety Code for working in compressed air.
- e. IS7293 Safety Code for working with construction machinery.
- f. IS 7969 Safety Code for storage and handling of building materials.
- g. IS 4130 Safety code for demolition of buildings.
- 7.12 The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards and by providing red flags, red lights and barriers. The contractor shall be responsible for any accident at the site of work and consequences there of

8.0 ELECTRICAL SAFETY REGULATION

- 8.1 In no circumstances will the contractor interfere with electrical equipment belonging to the employer.
- 8.2 Before the contractor connects any electrical appliances to any plug or socket belonging to the employer he will:
 - i) Satisfy employer that the appliance is in good condition.
 - ii) Inform the employer of the maximum current required and the voltage and phase of the appliance,
 - iii) Obtain permission of the employer detailing the sockets to which the appliance may be connected.
- 8.3 The employer will not grant permission to plug in until he is satisfied that:
 - i) The appliances are in good condition and is fitted with a suitable plug.
 - ii) The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.
- 8.4 No electric cable in use by the employer will be disturbed without prior permission of the employer. No weight of any description will be imposed on any such cable and no staging, ladder or similar equipment will rest against or be attached to it.
- 8.5 No work must be carried out on any live equipment. The equipment must be made safe by the employer and a 'permit to work' issued before any work is carried out.

- 8.6 No cable should be laid on ground surface in an unsafe condition. They should be taken above ground in such a way that they do not obstruct the movement of vehicles, cranes etc., and the work of other contractors in the area.
- 8.7 The employer has the right to discontinue supply, if any equipment or installation is considered unsafe. The contractor must replace or rectify the equipment installation at his own cost and satisfy the employer.

6. SCHEDULE "B"

Specifications

- 1.For Civil works as per CPWD Specifications, 2019 Vol. I & II with up to date correction slips.
- 2. For Electrical works as per CPWD General Specification for Electrical works
 2013 . with up to date correction slips
- 3. The work shall be carried out strictly in accordance with the attached specifications and wherever items are not covered by these specifications, in accordance with the relevant specifications laid down in ISI standards and to the entire satisfaction of the Director, Central Manufacturing Technology Institute. The wording as per specifications' in the Schedule items shall mean CPWD Specification.

7. SCHEDULE "C "

SCHEDULE OF QUANTITIES- Price Bid (attached separately)

GENERAL NOTES:

The contractor is required to examine carefully the drawings, the form of tender, draft of Articles of Agreement, the General Conditions of Contract and the specifications before pricing:-

- The rates quoted by the contractor in the following Schedule of quantities shall include for supplying all materials, labour, transportation, loading unloading, and scaffoldings necessary for completing the work in the best and most workmanlike manner and for maintaining the same all in accordance with the provisions of the specifications and conditions of contract, for the erection and removal of all necessary scaffolding, shed, water tanks, Site Engineer's office, latrines for use of work people etc., providing water for the work in consultation with the employer including payment of charges for the same, for all fencing required to enclose the site to prevent people trespassing and for all other purposes, as required by the employer, for carting away all debris and rubbish, for leaving the premises in a clean and most satisfactory state on completion and for working in conjunction with on all other contractors employed on the building. The rates quoted shall include for all load and lift charges encountered in the works.
- 2. Other agencies will be working in the building during construction and the general contractor must allow these contractors the use of scaffolding and water and render them general assistance. No addition to the completion time will be allowed on this account unless special delays caused by the other agencies can be shown. The general contractor must make good all holes in the building made by the electrical, sanitary and water supply contractors and will submit their charges to the firms responsible.
- 3. The quantities set out below are only approximate. All works will be paid on measurements taken during the progress of or after the completion of the work.
- 4. All works shall be measured net as finished and the rates quoted by the contractor shall include for all curing, waste, breakage's etc.,
- 5. No allowance shall be made to the contractor on account of any claim which is based on the circumstances that work may be described in the General Conditions of Contract or specifications to which apparently there is no corresponding items given in the bills of quantities.
- 6. The employer reserve the right to purchase any material required for the construction. The contractors will be paid only for labour and any other sundry materials required in connection with the particular item or items.

- 7. The contractor shall first prepare a sample piece and the same shall be got approved from the employer to their entire satisfaction. The contractor will be expected to do all the modifications to the sample for which no claim will be entertained.
- 8. The tentative schedule of quantities is attached as below

SI	Description of items		Qty
	RAW Power Distribution (PART - A)		
1	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections from existing bus bar using univin cables/ bus bars, etc. as required., spreaders, modifications etc. as required. Make: L&T/ABB/ Schneider		
1.1	4 Pole MCCB, 125A, 25 KA	each	1.00
2	Supply, Fixing, installation and commissioning of DB with adaptor box on both top and bottom on the wall surface/recessed having the following: 125 Amps Ish: 25kATPN MCCB: 1 No and earth link of suitable size. 40 Amps, 3 pole MCB, Type - C: 03 Nos. 22 Amps, 3 pole MCB, Type - C: 02 Nos. 16 Amps, 3 pole MCB, Type - C: 02 Nos. 10 Amps 1 Pole MCB, Type - C: 05 Nos. 20 Amps 1 Pole MCB, Type - C: 06 Nos. MAKE:LEGRAND/SCHNEIDER	each	1.00
3	Supply of 1.1 KV grade, 3/3.5/4C, Havells/Polycab/UnistarMake or as approved by EIC, XLPE insulated, and overall sheathed, stranded aluminium conductor, flat steel strip/ wire armoured cables conforming to IS:7098/ Part I (with latest amendments) and of following size. The cable shall bear ISI certification mark.		
3.1	3.5C X 70 Sq.mm Aluminium armoured conductor cable	metres	30.00
3.2	3.5C X 95 Sq.mm Aluminium armoured conductor cable	metres	162.00
3.3	4C X 10 Sq.mm Aluminium armoured conductor cable	metres	45.00
4	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1KV grade of the following size in the existing masonry open duct as required		
4.1	3.5C X 70 Sq.mm Aluminium armoured conductor	metres	27.00
4.2	3.5C X 95 Sq.mm Aluminium armoured conductor	metres	122.00
5	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1KV grade of the following size on the wall surface as required		
5.1	3.5C X 70 Sq.mm Aluminium armoured conductor	metres	3.00
5.2	4C X 10 Sq.mm Aluminium armoured conductor	metres	45.00

6	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as		
6.1	required. 3.5C X 95 Sq.mm Aluminium armoured conductor (Clamped with		40.00
7	25X3mm MS flat clamp) End termination: 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.		
7.1			2.00
7.2	3.5C X 95 Sq.mm Aluminium armoured conductor (45mm)	each	4.00
7.3	4C X 10 Sq.mm Aluminium armoured conductor (25mm)	each	2.00
8	Providing and fixing 6 SWG GI wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	metres	222.00
9	Supply, fixing of cable management system (CMS) along the wall using necessary bends, T-joints, end plates and fixing arrangements with dividers seperating power circuit and data circuit. Make: MK/ Legrand		
9.1	100x50mm	metres	2.00
9.2	100x100mm	metres	43.00
10	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit/casing and capping as required.		
10.1	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	metres	442.00
10.2	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	metres	144.00
10.3	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	metres	43.00
10.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	metres	40.00
10.5	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	metres	173.50
10.6	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	metres	74.00
11	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	each	66.00
12	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.	each	26.00
13	Supply of recessed LED light fittings complete with Electronic drivers and all other accessories prewired including electronic drivers, fittings conforming to IS-10322 with latest amendments of the following types. Installation of light fittings with flexible hose, suspension rod/chain.clamps etc. required for such installation and complete as per specifications including painting with approved shade paint and necessary interconnections.		

13.1	Supply of LED Light fittings in Recessed 2'x2'Size. Make: Wipro, Type No: CRCO10R038HP57/ equivalent,	each	51.00
14	Supply of Batten type LED Light Fittings Make: Philips, 36 watts, or Equivalent	each	24.00
15	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting/ LED fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	each	75.00
16	Removing of old fans, Distribution boards, light fittings, wirings, power points and shifting the same to scrap yard and closing power points with hylem/ PVC sheets or as directed by the EIC.	Job	1.00
17	Supply, fixing and Installation of exhaust fan , including making nessary arrangements for mounting, making good the damage, connection, testing, commissioning etc. as required. of exhaust fan with louvers of the following sizes		
17.1	Heavy Duty Exhaust Fan Make : Almonard Size : 230mm RPM : 900 Rating : 220-240V, 50 Hz	each	4.00
17.2	Heavy Duty Exhaust Fan Make : Almonard Size : 380mm RPM : 900 Rating : 220-240V, 50 Hz	each	1.00
18	Supply, Fixing, wiring and Termination of modular Switch Socket combination Box on the surface/recessed having: Switch: 15 Amps: 1 No, Indication lamp: 01 No Universal Socket: 16/6 Amps: 5 Nos	each	5.00
19	Supply, Fixing and Termination of 3 Module Box and front plate in surface / recess having : Switch with indicator: 16 Amps : 1 No., Universal Socket : 15/6 Amps : 1 No	each	3.00
20	Supply, Fixing, wiring and Termination of modular Switch Socket combination Box on the surface/recessed having: Switch: 15 Amps: 1 No, Indication lamp: 01 No Universal Socket: 16/6 Amps: 3 Nos	each	2.00
21	Supply, fixing and wiring of 40A,4 Pole, Type-C,MCB in metal enclosure. Make: Legrand.	each	2.00
22	Supply, fixing and wiring of 63A,4 Pole, Type-C,MCB in metal enclosure in surface / recessed as directed by EIC. Make: Legrand/ equivalent	each	3.00
23	Supply, fixing and wiring of 40A,4 Pole, Type-C,MCB in metal enclosure in surface / recessed as directed by EIC. Make: Legrand/ equivalent	each	5.00

24	Supply, fixing and wiring of 32A,4 Pole, Type-C,MCB in metal enclosure in surface / recessed as directed by EIC. Make: Legrand/ equivalent	each	2.00
25	Supply, fixing and wiring of 40A,2 Pole, Type-C,MCB in metal enclosure in surface / recessed as directed by EIC. Make: Legrand/ equivalent	each	1.00
26	Supply, fixing and wiring of 20A,2 Pole, Type-C,MCB in metal enclosure in surface / recessed as directed by EIC. Make: Legrand/ equivalent	each	1.00
27	Supply ,fixing & wiring of 2-pole 20 Amps MCB in suitable enclosure with Industrial Socket and Plug mounted on the wall or panel for providing power to split AC. , Make: Legrand	each	5.00
28	Supply ,fixing and wiring for 32A 4 Pole MCB with 5-pin Industrial plug and socket with metal enclosure on the wall surface/recessed . Make: Legrand/ equivalent as directed by EIC	each	1.00
29	Supply ,fixing and wiring for 16A 4 Pole MCB 5-pin Industrial plug and socket with metal enclosure on the wall surface/recessed . Make: Legrand/ equivalent as direced by EIC	each	2.00
30	Supply,Fixing and installation of wall mount fan Rating: 60W,1350rpm,CMM: 85 Sweep: 400mm, Colour: White Model: High Flo wave plus WM Make: Crompton	each	2.00
31	Providing and fixing following rating and breaking capacity TPN pole MCCB with microprocessor release and terminal spreaders in existing cubicle panel board including providing enclosure, drilling holes in enclosure, cubicle panel, spreader, making connections from existing bus bar using univin cables/ bus bars, etc. as required. Make: L&T/ABB/Schneider		
31.1	TPN MCCB, In: 400 Amps, Current Range setting: 160-400 Amps, 36 KA with LSI protection	each	1.00
32	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, cable tray cover etc. as required.		
32.1	150 mm width X 50 mm depth X 1.6 mm thickness	metres	16.00
33	Floor Mounting RAW Power Panel : (Floor mounted with stand)	each	1.00

	Fabrication, Supply and fixing of floor mounting cubicle type indoor, RAW Distribution Panel suitable for operation on 415V,3ph,4wire 50Hz AC. The panel made out of 14/16 gauge CRCA sheet steel free standing,floor mounting,front hinged doors of indoor use,rear removable,drilled bottom /top plates with suitable holes for incoming and outgoing connections, using terminals of required capacity,dust and vermin proof, with TPN bus bars and bus bar chamber, complete with internal wiring ,ferrules,name plates,powder coated to approved shade etc. Rubber mats to be provided. The drawing needs to be provided and will be approved by EIC. Panel Make: ISI approved make as required and directed by engineer in charge.All MCCB's to have Rotary type On and off switch with knob with ON, OFF and TRIP indications. R,Y,B indication lamp, INCOMING: In:400 Amps, Current range variable from160-400 Amps Ish: 36kA TPN Micro processor MCCB with shunt: 1 No. BUSBARS: 500A TPN Al busbar of suitable size: 1 Set Al Earth bar of suitable size: 1 No. Energy Monitoring system.(L&T 4410/ equivalent): 01 No. Outgoings: 125A 4P MCCB Ish: 25kA: 01 No. 63A 4P MCB Type: C: 06 Nos. 40A 4P MCB Type: C: 04 Nos. 40A 4P MCB Type: C: 04 Nos. 20A 4P MCB Type: C: 03 Nos. 20A 2P MCB Type: C: 14 Nos. All switchgears make must be as per CPWD make list attached.		
34	Supply of ceiling fan and speed regulator. Make : Crompton Greaves / orient/ equivalent Color : White Blades : 3 (Anti dust) Sweep: 1200 mm, Rating: 5 star,	each	8.00
35	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing S Hook phenolic laminated sheet cover on the fan box etc. as required.	each	8.00
36	Supply ,fixing and wiring for 16A 5-pin Industrial plug and socket with metal enclosure on the wall surface/recessed . Make: Legrand/equivalent as direced by EIC	each	1.00
37	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	5.00

38	Earthing with G.I earth plate 600 mm X 600 mm X 6 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	2.00
39	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	metres	48.00
40	Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing.	metres	397.00
	UPS Power Distribution (PART - B)		
41	Supply, fixing and wiring of 32A,4 Pole, Type-C,MCB in metal enclosure. Make: Legrand or equivalent	each	1.00
42	Supply of 1.1 KV grade, 4/5C,Finolex Make/Polycab make or as approved by EIC, insulated, and overall sheathed, stranded copperconductor, flexible cables conforming to IS:7098/ Part I (with latest amendments) and of following sizes. The cable shall bear ISI certification mark.		
42.1	5C X 10 Sq.mm XLPE insulated flexible copper conductor cable (From 30 KVA UPS O/G to proposed MCB)	metres	5.00
43	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface/panel as required.		
43.1	5C X 10 Sq mm XLPE insulated flexible copper conductor cable with steel reinforced metal flexible conduit	metres	5.00
44	End termination Providing end termination for the1.1 KV grade,4C/5C, PVC overall sheathed, stranded copper conductor,flexible cables including supply of all materials like cable glands,lugs, neoprene bushes, and interconnections, earthing, complete as required and as directed by EIC.		
44.1	5C X 10 Sq.mm XLPE insulated flexible copper conductor cable	each	2.00
45	Supply of 1.1 KV grade, 3/3.5/ 4C, Havells/Polycab/UnistarMake or as approved by EIC, XLPE insulated, and overall sheathed, stranded aluminium conductor, flat steel strip/ wire armoured cables conforming to IS:7098/ Part I (with latest amendments) and of following size. The cable shall bear ISI certification mark.		
45.1	4C X 16 Sq.mm Aluminium armoured conductor cable	metres	75.00
46	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1KV grade of the following size on the wall surface as required		
46.1	4C X 16 Sq.mm Aluminium armoured conductor (Clamped with 1mm thick saddle)	metres	50.00

47	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1KV grade of the following size in the existing masonry open		
	duct as required		
47.1	4C X 16 Sq.mm Aluminium armoured conductor cable		19.00
48	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.		
48.1	4C X 16 Sq.mm Aluminium armoured conductor (Clamped with 1mm thick saddle)	metres	11.00
49	End termination: 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.		
49.1	4C X 16 Sq.mm Aluminium armoured conductor (28mm)	each	4.00
50	Supply, Fixing, installation and commissioning of UPS DB on the wall surface/recessed having the following: Incomer 32 Amps, 4-Pole MCB, Type: C: 1 No. Neutral and earth link of suitable size. Outgoings: 16 Amps, 1 Pole MCB, Type - C: 09 Nos.	each	2.00
51	Supply, fixing of cable management system (CMS) along the wall using necessary bends, T-joints, end plates and fixing arrangements with dividers seperating power circuit and data circuit. Make: MK/ Legrand		
51.1	100x50mm		80.00
52	Supply, fixing and wiring for power points on CMS having the following: 15 Amps Switch: 1 No, Indicator: 01 No. 15 Amps Universal Sockets: 03 Nos. Make: MK/ Legrand		14.00
53	Supply, fixing and wiring for telephone points on CMS having the following: Telephone Point: 01 No Make: MK/Legrand	each	8.00
54	Supplying, drawing and termination of following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit/CMS as required including termination with the telephone point. Make: Finolex		
54.1	2 Pair	metres	160.00
55	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit/CMS as required.		
55.1	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	metres	105.00
56	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit/casing and capping as required.		
56.1	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	metres	71.00
56.2	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	metres	168.00

56.3	4 X 6 sq. mm + 2 X 6 sq. mm earth wire		6.00
57	Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	metres	150.00
58	Supply, Fixing, wiring and Termination of modular Switch Socket combination Box on the surface/recessed having: Switch: 15 Amps: 1 No, Indication lamp: 01 No Universal Socket: 16/6 Amps: 1 No	each	3.00
59	Supply, Fixing, wiring and Termination of modular Switch Socket combination Box on the surface/recessed having: Switch: 15 Amps: 1 No, Indication lamp: 01 No Universal Socket: 16/6 Amps: 5 Nos	each	19.00
60	Supply, Fixing, wiring and Termination of modular Switch Socket combination Box on the surface/recessed having: Switch: 15 Amps: 1 No, Indication lamp: 01 No Universal Socket: 16/6 Amps: 2 Nos	each	1.00
61	Supply, Fixing, wiring and Termination of modular Switch Socket combination Box on the surface/recessed having: Switch with indicator: 15 Amps: 2 Nos, Universal Socket: 16/6 Amps: 2 Nos	each	3.00
62	Supply, fixing ,installation and termination of telephone termination box for 20 pair cable with enclosure, khrone modules etc, including termination of existing telephone cable.	each	1.00
63	Supply, fixing ,installation and termination of telephone termination box for 40 pair cable with enclosure including termination of existing telephone cable.	each	1.00
64	Supply, wiring and termination of telephone instruments. Make : Beetel Model : C-51/ equivalent	each	11.00
65	Supply and drawing of the following pair 0.5mm dia FRLS PVC insulated annealed copper conductor, unarmoured telephone cable in surface/recessed PVC conduit/casing and capping as required		
65.1	2 Pair	metres	47.00
66	Supplying and fixing of the following modular switch/socket on the modular plate in surface/recessed including connections, modular plate etc. as required		
66.1	Telephone socket outlet	each	3.00
67	Supply, fixing and installation of TPN termination box of 32 Amps rating in metal enclosure including terminal blocks, din rail etc as required.	each	1.00

8. SCHEDULE "D"

MATERIAL ISSUE

<u>For Civil Works</u>: No material will be issued to the contractor. All required materials for executing the work to be procured by the contractor

For Electrical Works: No material will be issued to the contractor. All required materials for executing the work to be procured by the contractor

9. SCHEDULE "E"

PAYMENT AND PENALTY

1	Name of work	Establishment of Material Testing lab, renovation of existing labs and other minor works(Electrical works)
2	Date of commencement of work	15 th day of date of issue of work order/Lol.
3	Date of completion	120 days reckoned from the 15 th day of date of issue of work order/Lol.
4	Defects liability period	12 (Twelve) months from the actual date of completion of work.
5	Minimum value of work for interim Certificate (RA bill) for payment	Rs. 6,00,000/- (Rs. Six Lakhs only)
6	Security Deposit	A sum @ 5% of gross amount of bill shall be deducted from each running bill, till the sum along with the sum already deposited as earnest money, amounts to security deposit @ 5% of the tendered amount of the work.
7	Release of Security Deposit	At the expiry of defects liability period of 12 months from actual date of completion
8	Refund of Performance Guarantee Deposit	The Performance Guarantee Deposit shall be refunded soon after completion of work, along with final bill.
9	Compensation for delay of work	1% (one percent) of tender value per week limited to 10% (Ten percent) of contract value.
10	Period of submitting the final bill by the contractors.	TWO months from the date of actual completion.

Contractors Signature

10 SCHEDULE-"F"

Preferred MAKES FOR CIVIL & ELECTRCIAL MATERIALS

Preferred make of materials

SL NO	MATERIAL	APPROVED MAKE
1	WHITE CEMENT	J.K. WHITE, BIRLA WHITE, ASIAN PAINTS
2	CHEMICAL ADMIXTURES	ARDEX ,ENDURA, FOSROC, MC, BAUCHEMIE, SIKA, BASF, PIDILITE, CHOKSEY CHEMICALS, BOSTIK
3	EXPANSION JOINT BOARD	SUPREME INDUSTRIES, SIL FILL OR EQUIVALENT, STP LTD, JOLLY BOARD
4	DAMP PROOF MATERIAL	ARDEX ENDURA, IMPERMO, DURASEAL, ACCO-PROOF
5	NON METALIC SURFACE HARDNER	ARDEX ENDURA, FOSROC, SIKA, PIDLITE,BOSTIK
6	INJECTION GROUTING	ARDEX ENDURA, FOSROC, SIKA, BASF, coco
7	CEMENT(IN 50 KG BAGS)	Ultratech/Zuari/ACC/Dalmia/Sankar
8	RMC / DMC	ULTRATECH, LAFARGE, ACC, RMC INDIA, PRISM OR EQUIVALAENT APPROVED BY ENGINEER in CHARGE.
9	BITUMEN	INDIAN OIL, HINDUSTAN PETROLEUM, MANGALORE REFINERIES, BHARAT PETROLIUM
10	STEEL WORK /TMT BARS	IS MARKED TMT BARS OF SAIL, TATA, JSW, RINL OR THEIR AUTHORIZED DEALERS
11	STRUCTURAL STEEL	STRUCTURAL STEEL SECTIONS OF SAIL, TATA, JSPL, JSW, RINL, APPOLO OR THEIR AUTHORIZED DEALERS
12	AAC BLOCKS	XTRALITE FROM ULTRATECH, AEROCON FROM HIL, SIPOREX INDIA LIMITED, NCL
13	EPOXY MORTAR	ARDEX ENDURA, FOSROC, SIKA, BASF, ULTRATECH, BOSTIK, PIDILITE
14	CC BLOCKS/ FLYASH BLOCKS	SIPOREX, SUNVIK, HIL
15	FRP DOOR FRAME	MEENA, RAWJI, FIBERTECH, ASTRALWIN DOORS
16	FRP DOOR SHUTTERS	MEENA, RAWJI, FIBERTECH, ASTRALWIN DOORS
17	PVC DOOR SHUTTER AND DRAME	RAJASHREE, SINTEX DUROPLAST
18	WOODEN FLUSH DOORS	KITPLY, CENTURY, GREENPLY, ARCHID PLY, KUTTY, DURIAN, MWP
19	WATER PROOF PLY	DURO, KITPLY, CENTURY, ARCHID PLY, GREENPLY, DURIAN, MWP
20	COMMERCIAL PLY.	DURO, KITPLY, CENTURY, ARCHID PLY, GREENPLY, DURIAN, MWP

21 LAMINATE FORMICA, DECOLAM, TOUCH, GREENLAM, DECOLAM, TOUCH, GREENLAM, DECOLAM, TOUCH, GREENLAM, DECOLAM, DEC	DURIAN DECOLAM, CHE, DURIAN RCHID PLY, CENTURY URAN, KITPLY, SA KZONOBEL, ASIAN RGE, BORAL BOARD,
PRELAMINATED PARTICLE BOARD NOVOPAN, KITLAM, A PRELAMINATED PARTICLE BOARD NOVOPAN, KITLAM, A ARCHID, ANCHOR, D NATIONAL ACTION TES POLYSTER POWDER COATED SHADES SAINT GORAIN LAFAR	CHE, DURIAN RCHID PLY, CENTURY URAN, KITPLY, SA KZONOBEL, ASIAN RGE, BORAL BOARD,
23 PRELAMINATED PARTICLE BOARD NOVOPAN, KITLAM, A 24 NATURAL WOOD VENEER ARCHID, ANCHOR, D NATIONAL ACTION TES 25 POLYSTER POWDER COATED SHADES NEROLAC, BERGER, AI 26	RCHID PLY, CENTURY URAN, KITPLY, SA KZONOBEL, ASIAN RGE, BORAL BOARD,
24 NATURAL WOOD VENEER ARCHID, ANCHOR, D NATIONAL ACTION TES 25 POLYSTER POWDER COATED NEROLAC, BERGER, AI SAINT GORAIN LAFAR	URAN, KITPLY, SA KZONOBEL, ASIAN RGE, BORAL BOARD,
SHADES NEROLAC, BERGER, AI	CGE, BORAL BOARD,
26 SAINT GOBAIN, LAFAR	
GYPSUM BOARD SAINT COBAIN, EXTRACT ARMSTRONG	
FALSE CEILING CALCIUM SILICATE ARMSTRONG, AEROLI	IE, RAMCO
28 FALSE CEILING MINERAL FIBRE SAINT GOBAIN, ARMST	TRONG, ANUTONE
29 MELAMINE POLISH ASIAN PAINTS, MALAN OF PIDILITE INDUSTRIES	
30 DOOR HARDWARE DORMA, HAFELE, KICH BACKERS FS, GODREJ	H, OZONE, DORSET,
31 HYDRAULIC DOOR CLOSERS / DORMA, KICH, GODR FLOOR SPRINGS DORSET	
32 LOCKS / LATCHES GODREJ, DORMA HAF	rrison, link,
FIRE CHECK DOOR BANGALORE PROTECT KENWOOD, VEROTECT	
34 SMOKE SEAL STRIP IMPROTED PROMAT / A	ASTRO FLAME
FIRE RATED HARDWARE DORMA, INGERSOL RABACKERS FS	and, geze, dorset
36 STAINLESS STEELSCREWS FORFABRICATIONANDFIXING OF KUNDAN, PUJA, ATUL, C WINDOWS.	GRIPWELL,NAKODA
37 BUTT / BALL BEARING HINGES HAFFLE, DORMA, DOR	RSET, GODREJ
38 PIANO HINGES JOLLY, GARG, AMT, J	YOTI
NUTS BOLTS/ SCREWS KUNDAN, PUJA, ATUL, GRIPWELL, NAKODA	IT, BOLT MASTER,
40 ACOUSTIC INSULATION U.P. TWIGA LTD, LLOYE GOBAIN, ARMSTRONG	·
41 GLASS/ REFLECTIVEGLASS MODI FLOAT, SAINT C	GOBAIN, ASAHI,
42 UPVC WINDOWS / VENTILATION DUROPLAST WINTECH LG	
43 SOURCE FORTEMPERING REFL. FUSO, SAINT GOBAIN, GLASS / CLEAR SAFETY	GURIND, IMPACT
44 FIRE RATED GLASS PYOSWISS OF SAINT G SCHOTT, PILKINGTON	OBAIN, PYRAN OF
45 KÄJARIA , JOHNSON. S VITRIFIED TILES ORIENT, BELL, RAK CER	
46 JOHNSON. SOMANY, I GLAZED CERAMIC TILES ORIENT BELL ,RAK CER	AMICS
47 HESWTSÖN, UNIPLOOF PINNACLE	
48 ENGINEEREDVOOD/LAMINATE ARMSTRONG, WERNEL FLOORING TESA, WELSPUN	L, PERGO, ACTION
49 CEMENT CONCRETE PARKING TILES NITCO, NTC, HINDUSTA	AN, PODDAR

		EUROCON, DAZZLE ULTRA
50		NITCO - (ROCKARD), BHARAT - (NILSAN)
50	INTERLOCKING CONCRETE BLOCKS	REGENCY, BESANT BEATONS
51	INTERES SKINS SOMERE BESSINS	KENJAI, JOHNSON, COMMON WEALTH
0.1	CLAY TILES ON ROOF	TRUST (IND) LTD, ST.ANTONYS
52	OEXT NEED OFFICE OF	ARDEX ENDURA, CICO, PIDILITE, PERROUS,
02	TILE ADHESIVE	FOSROC, SIKA
53	CHEQUERED TERRAZO TILES	NITCO, BHARAT, PODDAR
54	0.1124021125 121110 123 1123	TOLI, HOLLITEX, STANDARD CARPETS,
.	SYNTHETIC CARPET TILES	WELSPUN
55		
		ITALIA DALIADIO DICATTA
56	GLASS MOSAIC TILES PAINT/PRIMER/OILBOUND	ITALIA, PALLADIO, BISAZZA ASIAN PAINTS, ICI DULUX, NEROL-ACY
36	DISTEMPERACRYLIC PAINT	BERGER
57	DISTEMPERACRICLE FAINT	SNOWCEM INDIA LTD, ASIAN PAINTS, ICI
37	WATER PROOF CEMENT PAINT	DULUX, NIPPON PAINTS
58	SYNTHETIC ENAMEL PAINT	BERGER, NEROLAC, ASIAN, ICI DULUX
59	STIMILETO EIN WILL I MINI	ASIAN PAINTS, ICI DULUXI NEROLAC,
37	ACRYLIC TEXTURED PLASTER	BERGER
60	FIRE RETARDANT PAINT	JOTUN, HILTI, AKZONOBEL, NIPPON
61		MODI GUARD, SAINT GOBAIN, ASAHI,
	MIRROR GLASS	ATUL, GOLDENFISH
62	ANTI CORROSIVEBITUMASTIC PAINT	ASIAN / BERGER / SHALIMAR
63		BERGER PAINTS, ASIAN PAINTS, MRF,
	EPOXY PAINT	ARDEX ENDURA, NIPPON
64		ARDEX, ENDURA, BASF, FORSOC
	EPOXY COATING	LATICRETE, MRF, BOSTIK , SIKA
65	STRUCTURAL SILICON/ WEATHER	
	SILICON	DOW CORNING / WACKER / GE
66	ACRYLIC EXTERIOR PAI NT	ASIAN PAINTS, BERGER, NEROLAC
67	ALUMINIUM SYSTEMS /	
	ANODIZED ALUMINUM FITTINGS	
	FOR DOORS WINDOWS /	hardima, everite, sigma (isi
	WINDOWS	MARKED) JYOTHI, Ozone, Dorma
68	STAINLESS STEEL FITTINGS	DORSET, GODREJ, DORMA, OZONE, KITCH
69	ALUMINUM SECTIONS	JINDAL, HINDALCO, INDALCO
70	FRICTION STAY HINGES	EBCO, HAFELE, SEVAX
71	ALUMINUM COMPOSITE PANEL	
	(ACP)	ALUCOBOND, EUROBOND, DURABUILD
72		ANAND / ROOP / BOHRA / HANU / AMEE
	E.P.D.M. GASKETS	RUBBER
73		SIKA, ACCOPROOF, IMPERMO, FOSROC
	WATER PROOFING COMPOUND	PIDILITE, ARDEX ENDURA, BOSTIK, BERGER
74		BASF, TEXSA, WR GRACE, PIDILITE, HYDRO
	MEMBRANE WATERPROOFING	TECH LTD. ARDEX ENDURA, BOSTIK,
	SYSTEM	FOSROC.
75	POLYMER BASEDCONTENTIOUS	ARDEX ENDURA, BASF, MC-BAUCHEMIE,
75	WATERPROOF COATINGS	SIKA, FORSOLOC, PIDILITE, BERGER
7/	VALATED STODS	ARDEX ENDURA, HYDROTITE, BASF,
76	WATER STOPS	HYDROSWELL, PIDILITE, BOSTIK
77	DVC DEDECTORATED DIDES	REX POLYEXTRUSION LTD, AKASH
77	PVC PERFORATED PIPES	ENTERPRISES, ZENPLAS PIPES PVT. LTD
78 79	MS PIPES POLYSULPHIDE SEALANT	SAIL , TATA, JINDAL, APOLLO
17	LOFIZOFLUIDE SEVEVINI	PIDILITE, CHEMETALL-RAJ, FOSROC,

		CHOKSEY CHEMICALS, TUFF SEAL
90	DITUMEN IMPORTANTED DOD	•
80	BITUMEN IMPREGNATED ROD	SHALITEX OR EQUIVALENT
81	POLYETHYLENE BACKER ROD	SUPREME IND. LTD. OR EQUIVALENT
82	FALSE CEILINGMEMBERS	
	(PERIMETER, CEILING SECTION,	
	INTERMEDIATES, ANGLES ETC.)	ARMSTRONG, GYP. ROCK (SAINT GOBAIN)
83	WELDING ROD	ADVANI, ESAB
84	METAL DECK SHEET	TATA, JINDAL, ALFA, KAI-ASH ROOFIN
85	SHEAR STUD / CONNECTOR	KOCO OR EQUIVALENT
86	CLAMP. REBAR, CHEMICAL	
	FASTENER	HILTI, FISCHER, WURTH, AXEL
87	ANCHOR FASTENERS / BOLTS	HILTI, FISHER, CANON, BOSCH, AXEL
88	MASKING TAPES	3M, SUN CONTROL, WONDER POLYMER
89	DASH FASTENERS	HILTI, FISHER, CANON, BOSCH, AXEL
90	STAINLESS STEELBOLTS, WASHERS	, , , , , , , , , , , , , , , , , , , ,
, 0	AND NUTS	ATUL / HILTI / GRIPWELL / NAKODA
91	7.1.13.1.10.10	TERRAFIRMA, ECOVISION, BIRLA WHITE
, i	GRC JALI	GRC, EVEREST GRC
92	STAINLESS STEEL	SALEM, JINDAL, SAIL v.A.
93	317 (1142233 31222	DANPALON, ALCOX, POLYGAL,
73	POLYCARBONATE SHEET	CORPORATION, ALFA, GE, LEXON, TUFLITE
94	PT STRANDS	DP WIRES, TATA, USHA MARTIN
95	FISIKANDS	
73	A DUIESIVE (AAAANUEA CTUDE SDECS)	ARDEX ENDURA, DUNLOP, VAMORGANIC,
0.4	ADHESIVE (MANUFACTURE SPECS)	SIKA, FOSROC, PIDLITE, BOSTIK
96	NON CURING CROUTS	KERAKOLL, WEBER, ARDEX ENDURA,
0.7	NON SHRINK -GROUTS	BOSTIK, FOSROCK, PIDILITE
97	SOLAR STUDS / MEDIAN MARKERS	3M, AVERY DENNISON, NIKKALITE
98	POLYCARBONATECONVEX	
	MIRRORS,	
	RUBBERISED ROADHUMP	UNIQUE SAFETY SOLUTIONS
99	AIR TRANSFER GRILLS	COOL GRILLS PUNE, SYSTEMAIR INDIA
100	THERMAL INSULATION TREATMENT	PIDILITE, BASF, BERGER, ARDEX ENDURA
101		
	VITREOUS WC / WASH BASIN	PARRYWARE, HINDWARE, CERA, JAQUAR
102	GULLYTRAPS	PERFECT, PARRY
103		NILKANTH, AMC, COBRA, NIRALI,
	STAINLESS STEEL SINKS	DIAMOND, HINDWARE
104		JAQUAR, PARKO, MARC, HINDWARE,
	C. P. BRASS FITTINGS	PARRYWARE, KINGSTON
105	GI PIPES	TATA. JINDAL, HISSAR
106	GI PIPE FITTINGS	ZOLOTO, UNIK, HB, ICS
107		INDIAN HUME PIPE, MOHAN HUME PIPE,
	RCC PIPES	BANGALORE CEMENT PIPES
108	SPUN CAST IRON COVERS &	-
	GRATINGS	NECO, SKF/ BENGAL IRON CORPORATION
109	SPUN CAST IRON PIPES	NECO, SKF/ BENGAL IRON CORPORATION
110	SPUN CAST IRON FITTINGS	NECO, SKF/ BENGAL IRON ORPORATION
111	SWR PVC PIPES AND FITTINGS	SUPREME, FINOLEX, PRINCE, ASTRAL
112	511111111111111111111111111111111111111	SUPREME, ASHRIVAD, FINOLEX,
114	CPVC PIPE AND FITTINGS	FLOWGARD, ASTRAL
113	UPVC PIPES	SUPREME, FINOLEX, ASHIRWAD, ASTRAL
113		
	WATER SUPPLY VALVES	ZOLOTO, LEADER, ARCO
115	CI MANHOLE COVER	NECO, BIC
116	CERC COVER AND COLUMN	TULSHI CONCRETE, KK,
	SFRC COVER AND GRATING	ADVENT, NEWTECH

117	AIR RELEASE VALVES	KIRLOSKAR, RBM, KARTAR
118	CI DOUBLE FLANGE SLUICE VALVE	KIRLOSKAR, RBM, KARTAR
119	PLASTIC ENCAPSULATED FOOT REST	KK INDIA, KGM, ACCURATE BUILDCON
120	GUN METAL VALVES	ZOLTO, LEADER, SANT, ANDCO INDIA
121	CI DOUBLE F LANGED SLUICE	
	VALVES	KIRLOSKAR, tvs, BURN, ZOLOTO, LEADER
122	CI DOUBLE FLANGED NON-RETURN	
	VALVES	KIRLOSKAR, FLUIDTEH, ZOLOTO
123	SANDWICH PU PANELLED ROOFING	LLOYD INSULATION (INDIA) LTD, JINDAL,
	SHEETS	MECTEC PVT LTD., TATA
		LLOYD (INDIA) LTD., JSW, TATA
124	GALVALUME SHEET	BLUESCOPE
125	STREET LIGHT POSTS	BAJAJ/ TRANSLIGHTING/ PHILIPS
126	SWITCH GEARS	L & T/ SIEMENS
		POLYCAB/ FINOLEX/ LAPP/HAVELLS/
127	WIRES AND CABLES	ANCHOR/ UNISTAR
128	LIGHT FITTINGS	PHILIPS/WIPRO/C&G/ OSRAM/HAVELLS

Note: Any deviation from the above makes require prior approval of Engineer- in charge and the bidder need to give justification for non-availability of the above preferred makes to the entire satisfaction of Engineer- in- charge.

11 SCHEDULE-"G"

<u>LETTER OF TRANSMITTAL</u> (To be submitted along while uploading tender)

From:

Shri/M/s
To,
The Executive Engineer cum Section In charge.
Engineering services Central Manufacturing Technology Institute,
Tumkur road, Bangalore-560022.
Sub: Establishment of Material Testing lab, renovation of existing labs and other minor works(Electrical works). Sir,
Having examined the details given in Press – Notice /Bid document for the above work, I / we hereby submit the relevant information.
1. I/We hereby certify that all the statement made and information supplied as enclosed with the tender and accompanying statement are true and correct.
2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/We submit the requisite certified solvency certificate and authorize the Section In charge, Engineering Services, CMTI, Bengaluru to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/We also authorize CMTI, Bengaluru to approach individuals, employers, firms and corporation to verify our

Sl.no	Name of Works	Completion Certificate issued by
1		

4. I/We submit the following certificates in support of our suitability, technical

knowledge and capability for having successfully completed the following eligible

competence and general reputation.

similar works:-

2	
3	

It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I/We shall be liable to be debarred, disqualified/ cancellation of enlistment in case any information furnished by me/us found to be incorrect.

Enclosures:

Seal of bidder

Date of submission SIGNATURE(S) OF BIDDER(S)

12 DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED DURING THE LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DATE OF SUBMISSION OF BIDS

(use separate sheet if space is not sufficient)

Name of the firm /	contractor

SI. N O	Name of work / project and locatio n	Owner or Client organizati on	Cost of work in Lakh s	Date of commenc e ment as per contract	Stipulated Date of completi on	Actual date of completi on	Litigation / arbitratio n cases pending / in progress with details*	Name and Address (Postal & E- mail) / telephon e number of officer to contact
1	2	3	4	5	6	7	8	9

Certified that the above list of works is complete and no work has been left out and that the information given is correct to my / our knowledge and belief.

SIGNATURE OF BIDDER(S) WITH STAMP

^{*}indicate gross amount claimed and amount awarded by the Arbitrator.

13 FORMAT FOR SOLVENCY CERTIFICATE

FORM OF BANKERS' SOLVENCY CERTIFICATE FROM A SCHEDULED BANK

inis is to certify th	at to the pest of a	our knowleage	ana intormati	on that	
customer of our engagement	bank are / is re up (Rupees	spectable and to	can be tred	ated as g limit	ood for any of
This certificate is the officers.	issued without ar	ny guarantee or	responsibility	on the bo	nk or any of
					(Signature) For the Bank

NOTE: 1) Banker's certificate should be on letter head of the Bank, addressed to Director, CMTI, Bangalore,.

- 2) In case of partnership firm, certificate should include names of all partners as recorded with the Bank.
- 3) The certificate should not be more than 12 months old from the original date of submission

14 Form of Performance Security (Guarantee)

Bank Guarantee Bond

In consideration of the Director, CMTI (hereinafter called "The Employer")
having offered to accept the terms and conditions of the proposed agreement
between Group Head, Engineering services, CMTI, Bengaluru and
Contractor(s)") for the work "Establishment of Material Testing lab, renovation of
existing labs and other minor works(Electrical works)" (here in after called "the
said agreement") having agreed to production of an irrevocable Bank Guarantee
for Rs
Manufacturing Technology Institute(CMTI), Bengaluru as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms
and conditions in the said agreement.
and conditions in the said agreement.
1. We, (hereinafter referred to as "the Bank")
hereby undertake to pay to CMTI an amount not exceeding Rs
(RupeesOnly) on demand by CMTI.
2. We,(indicate the name of the Bank) do hereby
undertake to pay the amounts due and payable under this guarantee without any
demure, merely on a demand from CMTI stating that the amount claimed as
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 CMTI any money so demanded
notwithstanding any dispute or disputes raised by the contractor(s) in any suit or
proceeding pending before any court or Tribunal relating thereto, our liability under
this present being absolute and unequivocal. The payment so made by us under this
bond shall be a valid discharge of our liability for payment there under and the
Contractor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree
that the guarantee herein contained 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 CMTI under or by virtue of the said
agreement have been fully paid and its claims satisfied or discharged or till Group
Head, CMTI on behalf of CMTI 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, (indicate the name of the Bank) further agree

CMTI Page 56

with CMTI that the CMTI shall have the fullest liberty without our consent and without

affecting in any manner our obligation 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 CMTI against the said contractor(s) and to forbear 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 CMTI or any indulgence by CMTI 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.

thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of CMTI in writing.
8. This guarantee shall be valid up to
Dated theday offorfor(indicate the name of the Bank)

15. ARTICLES OF AGREEMENT

AR1	TICLES OF AGREEMENT made at Bangalore this day of
offi	BETWEEN THE CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE, gistered under the Karnataka Societies Registration Act, 1960 having its Registered ce at Tumkur Road, Bangalore (hereinafter referred to as the EMPLOYER which pression shall include its successors and assigns and all the persons for the time ng in management of the Institute) of the ONE PART and having its registered office at
•	reinafter referred to as the CONTRACTOR which expression shall include its their respective heirs, executors, administrators and assigns) of the OTHER RT.
WH	EREAS the employer is desirous of getting the work of
on Cor Sch of 1 Der em	D WHEREAS the contractor /s has /have agreed to execute the aforesaid works terms and conditions mentioned herein and subject to General Conditions of ntract – Schedule-A, Specifications - Schedule-B Schedule of Quantities - nedule-C, Payment& Penalty – Schedule-E, Approved makes- Schedule-F, Letter Transmittal Schedule-G and WHEREAS the contractor / s has / have deposited in mand Draft /BG a sum of Rs
	In consideration of the payment to be made to them as hereinafter, provided the contractor / s shall subject to the terms and conditions, specifications, bill of quantities, drawings etc., more particularly stated in the Schedule aforesaid, execute and complete the works within from the 15 th day of date of issue of work order.
2.	The employer shall pay to the contractor / s such sums as shall become payable hereunder at the time and in the manner specified in the conditions contained in Schedule - A, Schedule - C and Schedule - E aforesaid.
3.	Time is the essence of this Agreement and the contractor / s shall pay or allow

CMTI Page 58

the employer a sum of 1.0% (one percent) of Tender value per week limited to 10% (Ten percent) of tender value as liquidated damages for the period during

- which the said works shall remain incomplete beyond the time allowed in clause (1) above or beyond the time duly extended in writing as per conditions in aforesaid Schedule A. The employer may deduct such damages from any moneys due to contractors under this Agreement or any other agreement that may be subsequently entered into between the parties.
- 4. The schedule above mentioned shall form an integral part of this Agreement and the decision of the employer in reference to all matters of dispute as to materials and workmanship shall be final and binding on both the parties.
- 5. The employer reserves to himself the right of altering the drawings of the works and of adding to or omitting any item of work from or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall not vitiate this Agreement.
- 6. This Agreement comprised the works above and all subsidiary works connected therewith, even though such works may not be shown on the Schedules appended therewith.
- 7. Notwithstanding anything contained in the tender submitted by the contractor / s, all the clauses of this Agreement shall be binding on both the parties.
- 8. If any dispute shall arise between the parties touching there presents or any of the matter covered by the schedule A to G herewith appended or the construction of operation thereof or the rights, duties or liabilities of either party hereunder, such dispute shall be referred to two arbitrators, one to be appointed by each party or in the event of their not agreeing, then to award of an Umpire to be appointed by them in writing before entering on the reference and the decision of the arbitrators or the Umpire as the case may be and shall be final and binding on both the parties. Such arbitration shall be governed in all respects by the Provisions of the Indian Arbitration Act 1940 and the Rules thereunder and any statutory modification or re-enactment thereof.

IN WITNESS parties hereto have set their respective hands the day and the year herein before written.

In the presence of: Signed for and on behalf of the employer.
2. Signed for and on behalf of the contractor
1.
2.
2.

16. INTEGRITY PACT

The bidder needs to enter into an integrity pact agreement with CMTI for which the format is given below. The scope covered under the integrity pact will be monitored by CMTI appointed independent external monitors as mentioned below.

1) Shri.Arvind Kumar Arora, IDSE(rtd) Mob:8130588577, 9868236340 email- arvindarora333@gmail.com

2) Shri. Mukundan R Mob: 9790344575

email -r.mukundan29@gmail.com

INTEGRITY PACT

Tender Ref. No. & Date:.....

2. Preamble

WHEREAS the Owner/ Buyer has floated the Tender under organizational (hereinafter referred to as "Tender/Bid") and intends to procure/ procedures award contract for hereinafter referred to as the Goods/ Services/ works/ Contract. AND WHEREAS the 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 Bidder(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:

3. Commitment of the Buyer/ Owner

- 3.1 The Buyer/ Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Buyer/ 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 Buyer/ Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Buyer/ Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- c. The Buyer/ Owner shall endeavour to exclude from the Tender process all known prejudiced persons or any person, whose conduct in the past has been of biased nature.
- 3.2 If the Buyer/ 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 if there be a substantive suspicion in this regard, the Buyer/ Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

4. Commitment of the Bidder(s)/ seller(s)/ Contractor(s)

- 4.1 It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to CMTI 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.
- 4.2 The Bidder(s)/Contractor(s) commits 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 Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Buyer/ 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 Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act Indian Legislation, Prevention of Corruption Act 1988 as amended from time to time. Further the Bidder(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 Buyer/ Owner as part of the

- business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/ representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign principals/ 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 participates 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 Bidder(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.
- f. The Bidder(s)/Contractor(s) have not sold and will not sell the same material/equipment at prices lower than the bid price.
- 4.3 The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4.4 The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice (means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of CMTI's t interests).
- 4.5 The Bidder(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).
- 4.6 The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
 - a. The Buyer/ Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
 - b. The Buyer/ Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Buyer/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process

5. Previous Transgression

a. The Bidder declares that no previous transgressions occurred in the last 3 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. The date of such transgression, for the purpose of disclosure by bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The Transgression(s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.

- b. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Buyer/ Owner.
- c. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Buyer/ Owner may, at its own discretion, revoke the exclusion prematurely.

6. Consequences of Breach

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

- a. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Clause 4 & Clause 5 above, or in any other form such as to put his reliability or credibility in question, the Buyer/ Owner-after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/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 Buyer/ Owner. Such exclusion may be forever or for a limited period as decided by the Buyer/ Owner.
- b. Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Buyer/ Owner has disqualified the Bidder(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 Bidder/Contractor.
- c. Criminal Liability: If the Buyer/ Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Buyer/ Owner has substantive suspicion in this regard, the Buyer/ Owner will inform the same to law enforcing agencies for further investigation.

7. Compensation for Damages

- a. If the Buyer/ Owner has disqualified the Bidder(s) / Seller(s) from the tender process prior to the award according to Clause 8, the Buyer/ Owner is entitled to demand and recover the damages equivalent to Earnest Money Deposit in case of open tendering.
- b. If the Buyer/ Owner has terminated the contract according to Clause 6, or if the Buyer/ Owner is entitled to terminate the contract according to Clause 6, the Buyer/ Owner shall be entitled to encash the advance bank guarantee and performance bond/ warranty bond, if furnished by the Bidder(s)/Seller(s), in order to recover the payments, already made by the Buyer/ Owner for undelivered Goods and / or Services and / or Works.
- c. The Bidder(s)/Seller(s) shall also be liable to refund to the Buyer/ Owner, the Agency Commission / payments made by the Seller(s) / Bidder(s) along with interest at the rate of 2% per annum above LIBOR (London Inter Bank Offer Rate) (for foreign vendors) and Base Rate of SBI (State Bank of India) plus 2% (for Indian vendors).

8. Independent External Monitor(s)

- a. The Buyer/ Owner has appointed Independent External Monitor(s) for this Integrity Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- b. For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- c. The IEM is not subject to instructions by the representatives of the parties and performs his/ her functions neutrally and independently. The IEM would be provided access to all documents/ records pertaining to the contract for which a complaint or issue is raised before them, as and when warranted. However, the documents/ records/ information having national Security Implications and those documents which have been classified as Secret/Top Secret are not to be disclosed. He/ she reports to the Director, CMTI.
- d. If any complaint with regard to violation of the IP is received by the Buyer/ Owner in a procurement case, the Buyer/ Owner shall refer the complaint to the Independent External Monitor(s) for their report. Contact details of IEMs are given in the bid/ tender documents as well as in the website of CMTI https://cmti.res.in
- e. The Bidder(s)/Contractor(s) accepts that the IEM has the right to access without restriction to all Project documentation of the Buyer/ Owner including that provided by the Contractor. The Contractor will also grant the IEM, upon his/ her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
- f. The IEM is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/ Sub-contractor(s) with confidentiality. The IEM has also signed declarations on 'Non-Disclosure of Confidential Information' and of 'Absence of Conflict of Interest'. In case of

- any conflict of interest arising at a later date, the IEM shall inform Director, CMTI and recuse himself / herself from that case.
- g. The Buyer/ Owner will provide to the IEM sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Buyer/ Owner and the Contractor. The parties offer to the IEM the option to participate in such meetings.
- h. As soon as the IEM notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Buyer/ Owner and request the Management to discontinue or take corrective action, or to take other relevant action. The IEM can in this regard submit non-binding recommendations. Beyond this, the IEM has no right to demand from the parties that they act in a specific manner, retrain from action or tolerate action.
- i. The IEM will submit a written report to the Director, CMTI, within 4 weeks from the date of reference or intimation to him by the Buyer/ Owner and, should the occasion arise, submit proposals for correcting problematic situations
- j. If the IEM has reported to the Director, CMTI, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the Director, CMTI has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the IEM may also transmit this information directly to the Central Vigilance Commissioner.
- k. The word 'Monitor' would include both singular and plural.

9. Duration of the Pact

- a. This Pact will be effective from the date of issue of tender (NIT). 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 unsuccessful bidders, within 6 months from date of placement of order / finalization of contract against this tender till the Contract has been awarded.
- b. 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 Director, CMTI.
- c. Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10. Other Provisions

- a. Changes and supplements need to be made in writing. Side agreements have not been made.
- b. After award of work, the IEMs shall look into any issues relating to execution of contract, if specifically raised before them.
- c. The Bidder(s)/Seller(s) signing this IP shall not initiate any Legal action or approach any court of law during the examination of any allegations/complaint by IEM and until the IEM delivers the report.
- d. In the event of any dispute between the management and the Bidder(s)/Seller(s), relating to those contracts where Integrity Pact is applicable, the same will be settled through mediation before the panel of

- IEMs within 4 weeks. In case the dispute remains unsolved even after mediation by the panel of IEMs, CMTI will take further action as per the terms and conditions of the contract in respect of dispute resolution/ arbitration.
- e. Nothing contained in this Integrity Pact shall be deemed to assure the Bidder(s)/Seller(s) of any success or otherwise in the tendering process.
- f. 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.
- g. 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.
- h. This Integrity pact is subject to Indian Laws, and exclusive Jurisdiction of Courts at Bangalore, India.
- i. The Parties hereby sign this Integrity Pact at _____ on ____ (Bidder(s)/contractor) and at _____on___(Buyer/ Owner)

11. LEGAL AND PRIOR RIGHTS

Date

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

17.NON-BLACK LISTED SELF DECLARATION

[To be provided on the letterhead of the Bidd with the proper authority to sign documer	, ,
This is to certify that M/sBidder] has not been blacklisted by any Ir Department /PSU/ any other Purchasing au	ndian Central / State Government
	Authorized Signatory with seal