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PROJECT INFORMATION

1. Owner : M/s. Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO)
2. Project Title : Electrification of Existing Manufacturing Unit of Homoeo Medicines as per cGMP Norms
3. Project Location : Pathirappally, Alappuzha, Kerala.
4. Project Office : Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO)
(Sponsored by Govt. Of Kerala & Aided by Govt. of India. Kalavoor, Alappuzha - 688522 Kerala State, India)
5. Consultants Office : M/s. T&T Associates
Valayil Building, 2nd Floor
Kalathipady, Vadavathoor P.O
Kottayam – 686010
6. Nearest Railway Station : Alappuzha, Kerala
7. Nearest Airport : Cochin
8. Climatic Condition : Tropical
9. Ambient Air Temperature
 - a. Maximum : 35 degree Celsius
 - b. Minimum : 17 degree Celsius
10. Relative Humidity
 - c. Maximum : 92
 - d. Minimum : 60
11. Approx. cost of project : Rs. 30 Lakh (Approx.)
12. Time allotted for completion : 6 Months.

INSTRUCTIONS TO TENDERERS

1. The tenders / bids shall be accepted through online mode on the website and no manual submission shall be entertained. Those tenderers who wish to take part in the tender process should get **certified digital signature**. *Hard copies of the uploaded tender documents should be submitted physically also to.*

The Managing Director

Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO)

(Sponsored by Govt. of Kerala & Aided by Govt. of India).

Pathirappally P.O., Alappuzha - 688522 Kerala State, India

On or before the penultimate day of opening of the tender. The tenders without the documents mentioned therein will be summarily rejected.

2. The tenders received after the due date and time shall not be accepted under any circumstances whatsoever.
3. The tender should be submitted in two covers through online as detailed below:

A Cover 1. TECHNICAL (hard copies)

This shall contain Scanned copy of the following

- 1) Copy of Valid A Class License.
- 2) Latest Income Tax Certificate.
- 3) Annual Turnover, P & L statement for the last three years,
- 4) Details of similar works executed by the tenderer during the last three years (Minimum) giving the names and addresses of clients, consultants and the value of individual work executed including the time taken for the completion of individual project.
- 5) And any other relevant documents necessary for evaluation.
- 6) Letter of submission - in the format attached.
- 7) Techno-commercial deviation statement.
- 8) User Requirement Specifications of the equipment's.

Similar Work Mean: Electrification of Pharma Buildings / Operation Theatres of Hospitals having more than 200 beds.

B Cover 2: Finance. (To be submitted in a separate sealed cover)

BOQ: Financial bid for supply, installation & commissioning of The Electrical works to the Manufacturing Unit of Homoeo Medicines as per cGMP norms.

- C** Financial bid will be opened only of those tenderers who are technically qualified.

4. The prices for individual items shall be quoted in the original BOQ given in the tender document.
5. Tenderers must visit the site and the website www.etenders.kerala.gov.in and see the means of access to the site, study the drawings and specifications and acquaint fully about the works to be carried out and all other factors governing the works before quoting his rates.
6. Earnest money of unsuccessful bidder will be returned within one month of finalization of the contract. Earnest money of successful bidder shall be returned only after submitting the security deposit mentioned therein. No interest shall be paid on the EMD.
7. Tenderer should quote the rates for all the items.
8. The rate quoted by the tenderer shall be the total landed value of any item inclusive of royalties, rents and octroi, excise duty, sales tax, service tax, GST or any other duties / taxes / levies applicable on the material obtained.
9. If any discrepancy / misprint are noticed in any drawing / specification or B.O.Q., it should be clarified from the Client/Consultant before quoting the rates.
10. Following procedures shall be adopted in case of difference in quoted rates in figures and words and extensions :
 - A. Where there is difference between rates in figures and in words, the rates quoted in words shall be considered as correct.
 - B. Where the amount of an item is not worked out or it does not correspond to the rate either in figure or in words, the rates quoted in words shall be considered as correct and necessary extension made.
 - C. Where the rates quoted by the tenderer in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the tenderer shall be considered as correct and amount will be corrected accordingly.
11. The tender inviting authority/owner/consultant, do not bind themselves to accept the lowest or any other tender and reserves the right to accept or reject any or all the tenders either in full or in part without assigning any reason.
12. The drawings given in annexure, if any, with the Tender Document are as per our present requirement. The working drawing which shall be issued after the award of the contract may vary in shape, size and quantity from the tender drawings and BOQ and no claim shall be entertained later on this behalf.
13. The tenders shall be opened and evaluated by the Purchase Committee and the successful bidder shall be informed.

14. The contractor/supplier whose tender is accepted shall be required to deposit an amount equal to 5% of the tendered value of work/supply as performance guarantee where, 2.5% in the form of **Treasury Fixed Deposit** and the remaining in the form of an irrevocable **Bank guarantee** from a Nationalized Bank or Scheduled Bank in favour of the Managing Director, The Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO) in accordance with the form as per the format attached. The successful tenderer shall also execute an agreement in a non-judicial stamp paper worth Rs.200/- as per the format attached.
15. Jobs to be carried out in phases according to the client's requirement.

LETTER FOR SUBMISSION OF TENDER (FORMAT)

To,

The Managing Director,

Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO)

Pathirappally P.O.,

Alappuzha, Kerala.

Dear Sirs,

Having examined the tender document relating to the works comprising of the tender notice, conditions of contract, specification, schedule of quantities etc. and having understood the provision and requirements relating to the Electrification works of the proposed Manufacturing Unit of Homoeo Medicines as per cGMP norms, having conducted a thorough study of the job, location of site, soil strata, climatic conditions, transportation and communication facilities, availability and accessibility of materials and all other factors governing the project, I/we hereby submit our offer for the execution of the proposed work, in accordance with the terms and conditions and within the time period specified, in the tender document at the rates quoted by me/us in the accompanying schedule of quantities.

I/We undertake to do all extra works which may be assigned to us as a part of this contract at rates quoted in tender document.

If after tender document is accepted I/we fail to commence the execution of the works within 15 days, I/we agree that M/s. HOMCO shall have full authority to forfeit the earnest money and re-arrange the work at our risk & cost.

I /We confirm having deposited earnest money of **Rs. 50,000/-** (Rupees Fifty Thousand Only) **online via e-tender website on -----**

I/We further confirm that:-

- i) I/We have successfully carried out various project of similar nature and I/We have vast experience in handling large project of this nature.
- ii) I/We have sufficient qualified manpower and necessary materials and equipment's to execute the project efficiently.
- iii) The quoted rates shall be firm & valid till the completion of the project.
- iv) I/We further confirm that all chapters of the tender documents have been read understood and signed and there is no deviation/ discrepancy except that specifically mentioned in the deviation sheet enclosed with the tender.

Signature of Tenderer

Name of firm :

Seal of firm :

BANK GUARANTEE (PROFORMA)

Bank Guarantee No.

Date:-

This GUARANTEE BOND made on this _____ day of _____ 2018 by the _____ and having its registered office at _____ (hereinafter called the 'Bank' which expression shall include its successors and/or assignees in favour of M/S. Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO), Pathirappally, Alappuzha, Kerala, (Hereinafter called the 'Owner' which expression shall include its successors and/ or assignees in pursuance of an Agreement entered into (hereinafter called 'The Agreement') between the owner and the _____ (hereinafter called 'The Contractor') for completion of works as specified and as per terms of agreement , the bank agrees to the following:-

1. We _____ (Herein after referred to as bank) do hereby undertake to pay the owner an amount not exceeding Rs. _____ (Rs.in words _____) against any loss or damage caused to or suffered or would be caused to or suffered by M/s. _____ by reasons of any breach by said contractor of any of terms of conditions contained in said agreement.
2. We _____ do at the request of said contractor (s) hereby undertake to pay the amount due and payable under this guarantee, without any demur, merely on demand from the owner stating that the amount claimed is due by way of loss or damage caused to or suffered or would be caused to or suffered by owner by reason of any breach by the said contractor(s) of any of terms or conditions contained in said agreement or by reasons of contractor's failure to perform said agreement. Any such demand made on the bank shall be conclusive as regards the amounts due and payable by and liability of bank under the guarantee and we _____ do hereby undertake to pay the owner the amount demanded notwithstanding any dispute or disputes raised by the said contractor (s) on any grounds whatsoever and not notwithstanding any proceedings pending in any court or tribunal relating to the said agreement or this Guarantee. The liability of the Bank under this Guarantee being absolute and unconditional. However our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ Rs. In words _____).
3. We _____ further agree that the guarantee herein contained shall be remain in full force and effect during the period that would be taken for the performance of said agreement and it shall continue to be enforceable till all the dues of the owner under or by virtue of said agreement have been fully paid and its claim satisfied or

discharged or till owner certifies that the terms and conditions of said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharge from all liabilities under this Guarantee thereafter.

4. We _____ further agree with owner that the owner has fullest liberty, without our consent and without affecting in any manner our obligations, hereunder to vary any of the terms and conditions of , 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 any time to time any of the powers exercisable by the owner against the said contractors and to forbear or enforce any of the terms and conditions relating to said agreement and we shall not be relieved from our liabilities by reason of any such variation or extension being granted to the contractors or for any forbearance act or omission on the part of the owner or any indulgence by the owner to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this position have effect of so relieving us.

5. We _____ lastly undertake not to revoke this guarantee during its currency without the prior consent of the owner in writing and that our liability under this guarantee shall not be impaired or extinguished on account of any change in the constitution of the said contractors. Dated the _____ day of _____ 2018 for _____ Bank Ltd.

Signature of Banker

AGREEMENT (STAMP PAPER)

An agreement is executed this the _____ day of _____ 2018 between M/S _____ here in after called the contractor/s which expression shall include its executors, administrators, legal representative and assigns of the first part and M/S. Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO), Pathirappally, Alappuzha, Kerala, (Here in after called the owner) of the second part.

Whereas the owner is desirous of Electrification of the existing Manufacturing Unit of Homoeo Medicines as per cGMP norms at Pathirappally, Alappuzha as per the drawings & specification prepared by **M/s. T&T Associates**, the consultants and the contractor/s has/have by his/their tender dated _____ as amended by the contractor's – contractor's letter no. _____ dated _____ offered to execute and fully complete the above work in the owner's premises for the owner as set forth in the tender or as amended and the schedule of quantities, particular specifications, ISI specifications, drawings special conditions of the contract, scope & performance schedule and general conditions of the contract, according to the terms and conditions contained therein for an approximate total sum of Rs. _____ Rs. _____) and the owner has accepted such item rate/percentage rate/ Lump sum tender in terms of its letter no. dated. _____

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS

1. The contractor/s covenant/s agree/s with the owner that the contractor/s with in the time of Six months from the date stipulated in the acceptance letter shall execute and fully complete all the works specified described or referred to in and by the said tender or as amended according to the true intent and meaning of the said tender or as amended and as per the schedule bill of quantities particular specifications ISI specification drawings & Instructions issued from time to time special conditions of the contract scope & performance schedule general conditions of the contract.

The contractor/s covenant/s agree/s with the owner to truly observe, perform, fulfill & submit to the said terms obligations and conditions referred above. In case the contractor fails to execute the work in the manner described in the condition of contract or stop the execution of work or fails to carry out the works to the fullest satisfaction of the consultant with respect to quantity quality and time schedule or abandons the work or becomes bankrupt then the owner will have the right to terminate the contract and get the remaining works executed at the risk and cost of the contractor. It is agreed that time is the essence of this contract.

In case the work is not completed in the manner mentioned above to the complete satisfaction of the owner in every respect within the aforesaid time limit of months from the date stipulated in the work order the contractor/s agree/s to pay compensation of ½% of the value of the contract sum for each week of delay beyond the date stipulated for completion subject however to a maximum of 5% of the value of the

contract sum.

2. In consideration of the satisfactory work executed by the contractor/s with the provisions as stated above the owner covenant/s with the contractor/s that it will pay to the contractor/s from time to time in accordance with the schedule bill of quantities and various terms/ conditions as contained in general conditions of the contract and special conditions of the contract, provided always that whether or not a work is satisfactory shall be decided by the consultant and its decision in this behalf shall be final and binding.
3. The rates for items whether termed as extra items or deviations or by whatever name called and which are not covered by the tendered rates will be worked out in accordance with clause 4.7 of the general conditions of the contract only.
4. Sales tax by whatever name and in whatever form it may be in all cases shall be the contractor's /contractor's responsibility. Income tax, work contract tax & taxes in pursuance of U.T. sales tax amendment and validation ordinances and or the Act thereof and or other amendments as may be made from time to time or taxes as results of subsequent orders/ ordinances/acts as issued by the state or central govt. from time to time shall be borne by the contractor/s.
5. The contractor shall abide and shall be responsible for all statutory provisions of the law such as labour laws & safety regulations etc.
6. This agreement further witnesseth that the contractor/s hereby covenant/s with the owner that in the event of the non-fulfillment in any respect by the contractor/s of the said covenant/s terms, agreements, obligations and conditions on the part of the contractor/s, the contractor shall pay on demand to the owner all losses, damages, costs, charges and expenses as the owner may be directly or indirectly put to in consequence of such non fulfillment of contract by the contractor/s.
7. In the event of any dispute arising out of or in connection with arbitration proceedings, or any proceedings being taken subsequent to the arbitration proceedings, it is further agreed that only the courts in Alappuzhashall have the sole jurisdiction in the matter.
8. The following documents are deemed to form part of the agreement, namely the tender, the price bill of quantities, the drawings issued for the work, schedule 'B' particular specifications, special conditions of the contract and general scope, performance, schedule conditions of the contract, all of which for the purpose of identification have been signed on behalf of the owner and by the contractor/s. The relevant ISI will also form part of this agreement. The letter of acceptance and their amendment etc. shall also form part of the agreement.
9. The agreement further witnesseth that the contractor/s is/are responsible for any accident or other compensations payable to the workmen employed by and working under the control of contractors, that the owner has no liability in the matter and that if any payment would have to be made by the owner, the same shall be reimbursed by the contractors on demand and or recovered from the dues of the contractor/s. In witnesses

whereof the said parties here to have here unto set their hands.

For & On behalf of

Owner/Employer

SIGN OF THE CONTRACTOR

Date:-

Witnesses:-

1)

2)

PROJECT SITE RULES

GENERAL

DEFINITION

Contractor: The Person or Party who has entered into a contract for undertaking certain jobs or work as may have been specified in relation to the bounds of the project or in connection there with & includes their sub-contractors, if any.

Engineer: The Construction Manager of the Project or his nominee.

1. GENERAL CONDITIONS

The Contractor shall start work on the site only after obtaining permission / clearance certificate from the Engineer. The Engineer will issue a Clearance Certificate for all jobs, its duration & the specific precautions necessary will be made known to the Contractor. The Contractor shall comply with the Clearance Certificate & will signify his acceptance by signing the same. He shall inform all the employees & sub-contractors, if any, regarding the content of the clearance Certificate, and ensure compliance.

2. LOCATION OF TEMPORARY SHEDS / STRUCTURE

No temporary shed / structure, as workshop or stores otherwise, shall be put up by the Contractor without obtaining permission from the Engineer regarding the location of the shed & the type of construction of the shed, and the purpose for which it is to be used.

3. EXCAVATION

No excavation shall be started without the written permission of the Engineer.

The contractor should check with Client / Engineer on any information of running underground utilities if any & shall also explore for the same on his own so as to avoid any damage to the utility and mishap.

4. INSPECTION OF CONSTRUCTION PLANT

The Engineer shall have the right to inspect any construction plant & to forbid its use if, in his opinion, it is unsafe or dangerous to use, no claim arising there from shall be made by the Contractor. Any such rejected constructional plant shall be removed forthwith from the site by the Contractor if directed to do so by the Engineer.

Lifting Gear

Lifting Machines, chains, ropes & lifting tackles used by the Contractor on site must conform to the following

- a. All parts must be of good construction, sound material & adequate strength & free from defects.
- b. Must be properly maintained, thoroughly examined & load tested and certified by the Contractor's competent person regularly. The same shall be submitted to the Engineer.

- c. No lifting machine & no chain, rope or lifting tackle should, except for the purpose of test, be loaded beyond safe working load, and this safe working load must be plainly marked on the gear concerned.

5. WORK ON ROOFS

The Contractor shall not have access to existing roofs, if any, without the written permission of the Engineer. Work on roof shall be carried out by observing necessary safety precaution including using safety belts & catwalks.

6. SUSPENSION OF WORK

If the Contractor is found by the Engineer / Owner not complying and / or persisting in non-compliance with safety requirements or with statutory obligations, the Engineer may suspend his work at any time by notice in writing, and the work shall not be resumed unless and until the Engineer shall have cancelled in writing his suspension order. The Engineer / Owner decision in this matter shall be final. No claims arising from such suspension shall be made by the Contractor

7. FIRE

7.1, The Contractor shall take every precaution and use all reasonable means to prevent an outbreak of fire and shall tender immediate assistance in case of fire.

7.2. All inflammable & combustible materials shall be stored at site strictly as directed by the Engineer.

7.3, No fires shall be lit nor welding done in respect of specified areas without the written permission of the Engineer.

7.4, The Contractor shall report immediately to the Engineer any outbreak of fire in or near the Contract site after ensuring use of firefighting equipment.

7.5, Smoking on site is strictly prohibited.

7.6. There should be reasonable number & appropriate types of, working / operable fire extinguishers available at the site.

7.7. The contractors must have adequate number of firefighting trained staff on site.

8. ACCIDENTAL DROPPING OF MATERIAL

8.1, The Contractor shall take all reasonable steps to safeguard all persons and plant from the accidental dropping of tools or materials.

8.2, No material shall be dropped deliberately from a height except with the permission of the Engineer, who will direct the contractor to rail off the area and display suitable notices and post a man whose sole duty is to see that no person enters the danger areas.

9. STAGING

9.1. Properly completed staging with safe means of access shall be provided by the contractor for all work that cannot be done from the ground or with other safe means of support.

9.2. The Engineer shall have the right to reject any staging or scaffolding considered by him as unsafe and to direct the Contractor to effect necessary improvement before using such staging or scaffolding.

9.3. No claim arising from the Engineer's rejection of any staging or scaffolding shall be made by the Contractor.

10.SAFETY HELMETS, BELTS, SHOES & GOGGLES (PERSONAL PROTECTIVE EQUIPMENT)

The Contractor must provide all his employees / workers working overhead or in other hazardous jobs, with safety belts, Safety helmets, goggles, safety shoes or other footwear as and when directed by the Engineer and ensure their regular use by their employees/ workers to prevent accidents. The safety belts and other equipment as stated above must be subject to inspection and approval by the Engineer.

11. FIRST AID

The Contractor must have arrangement for rendering necessary first-aid in case of accidental injuries. They must provide with first-aid boxes containing items as specified in the Factories Act and Rules framed there-under and keep them in a conspicuous place where it is easily accessible.

12.REPORTING OF ACCIDENTS

The Contractor shall report immediately to the Engineer any accident or dangerous occurrence involving his men or equipment.

13.BARRIERS

All construction areas in or near the existing plant, building access routes or thoroughfare, lift well entrance etc. shall be adequately protected with barriers.

14.IONIC RADIATIONS

The Contractor shall not consign or bring to the Site any radioactive substance, nor use thereon such substance, or any X-Ray apparatus until he has obtained written instructions with regard to such use from the Engineer.

15.SAFETY CONDITION

The Contractor shall appoint a competent person holding PWD License as Supervisor and this appointment is subject to the satisfaction of the Engineer. This supervisor will be responsible for the control of all maintenance and repairs to any switchboard, distribution board, hand tools etc., and no other unauthorized person must be allowed to touch these. All the equipment must have appropriately rated plug pins, naked wire will not be allowed.

16.SUPPLY OF ELECTRICITY & WATER

If the Authorities supply electricity, it will be provided at one point, which will be determined by the Engineer. The supply will be at 230V, 50Hz, single phase or at 415V, 50Hz three phase and the Engineer would decide which one of the two should be provided to Contractor. The provision of all connections and equipment required beyond this point shall be the responsibility of the Contractor

and be in accordance with these Safety Conditions and comply strictly with the current Indian Electricity Rules.

Manually operated Hand Tools

All manually operated hand tools will be periodically inspected by the Contractor and properly earthing / Grounding prior to their use.

Fuses and Equipment belonging to the Project

In no circumstances shall be the Contractor or his employees tamper with the fuses and equipment belonging to the Project Authority.

Connections to project Authority's Power Sources (Not Applicable since the vendor is providing electricity, however, safety norms shall be followed)

Before the Contractor connects any equipment to any power source belonging to the Project Authority he shall:

- a) Satisfy the Engineer that the equipment is in good condition.
- b) Inform the Engineer, in writing, of the maximum current required and the voltage and phase of the equipment.
- c) Obtain the written permission of the Engineer detailing the power sources to which the equipment may be connected.
- d) Satisfy the Engineer that the cabling to all equipment are of adequate sizes for the power required, have earth conductors in addition to metallic armoring overalls and fitted with suitable connections.
- e) Satisfy the Engineer that any distribution system which he proposes to install and any instrument he proposes to use, will not endanger persons or property.

Care of cable

No electric cable, which is used by the Project Authority, shall be disturbed without prior permission of the Engineer. No weight of any description shall be imposed on any such electric cable nor any staging, ladder or similar equipment shall rest against or be attached to it.

Drilling Holes etc.

Contractors shall not drill or cut plant, structure or building floor for fixing 0cable racks etc., without the permission of the Engineer.

Road and Rail Crossing

While taking underground cables under roads and rail tracks already completed, the job shall be made complete the same day without leaving it to be followed up the next day. Exemption from such restriction shall only be allowed by the Engineer, in exceptional cases.

Danger Notice

While working on circuits having voltage over 380V suitable warning labels should be posted, such as **“Danger-440V – Work in Progress”** etc.

Care of equipment

No totally enclosed equipment shall be left open or unsecured at the end of the day’s work.

Work at Night

Contractor’s employees will not be allowed to work on energized circuits at night unless special permission to the contrary has been obtained from the Engineer.

17. RULES FOR CONTRACTORS WORKING AT THIS SITE

17.1 Observance of rules

The Contractor shall explain to each of his employees / sub-contractors, the Site Rules in a language understood by the employees. The Contractor shall be responsible for the compliance by his employees and those of his sub-contractors with the Site Rules and must ensure their compliance without fail.

18. ACCESS TO SITE

18.1 Control at Gates

Access to the Site shall be through specified gates only. All Contractor’s employees shall be checked by watchmen engaged on behalf of the Project Authority and posted at the gates.

18.2 Identification of Contractors / Sub-Contractors and their employees

The Contractor shall arrange to issue a token to be specified by the engineer to each of his workers. The Contractor shall also issue an identification card with photograph affixed to each of his employees/ workers as per approved specimen. Access to the Site will be allowed only on production of the token and the identification card, as the case may be. The Contractor must ensure that their employees/ workers display the tokens on their person and carry their identity cards at all times at all times while in the Project Site.

18.3 Withdrawal of identification Cards

When a person ceases to be employed by the Contractor, or his entry into the site becomes forbidden, the Contractor shall withdraw the token and the identification card from such person and confirm to the Engineer his having done so for security reasons, so that the Engineer may in turn inform the Project Authority’s security.

CONTRACTORS OBLIGATION UNDER STATUTORY LAWS

19. COVERING EMPLOYMENT OF WORKERS

19.1 The Contractor shall comply with all applicable statutes, as applicable in respective countries, like:

- i) Contractor Labour (Regulation and Abolition) Act, 1970
- ii) Employees' State Insurance Act, 1948
- iii) Employees' Provident Funds & Miscellaneous Provision Act, 1952
- iv) Factories Act, 1948
- v) Payment of Wages Act, 1936
- vi) Minimum Wages Act, 1948
- vii) Workmen's Compensation Act, 1923
- viii) Such other regulations as may be applicable to their workers.

The Contractor shall indemnify and keep the Owner indemnified against all claims, damages, losses and expenses that may arise on account of non-compliance of any of the aforesaid regulations.

The Owner reserves the right to withhold payments to Contractor [including sub-contractor of Contractor] in the event of the Contractor [including sub-contractor of such Contractor] not complying with the provisions of any of the aforesaid regulations.”

19.2 Consistent with the requirement of Contract Labour (Regulation and Abolition) Act and Rules framed there under or otherwise when required by the Engineer, the Contractor shall deliver to the Engineer or at his office a Return or returns in such form/ forms and at such intervals as may be prescribed showing in detail the names of the individuals and the numbers of the several categories of labour engaged by the Contractor/ Sub-Contractor on the Project Site from time to time and such information in respect of the construction of the plant as the Engineer may require, besides statutory and other information as may be required from to time. In this connection the Contractor shall maintain such Register and issue such Employment Card and Service Certificate to its works, as also maintain such Muster Roll and Register of wages etc., in such forms as may be prescribed and required of him by law or otherwise by the Engineer.

20. HOURS OF WORK

The Contractor must ensure that their employees conform to such timings (starting, finishing and meal breaks) as prescribed by law for time being in force and observe such norms and rules of discipline on Site as may be specified by the Engineer. While working outside the normal working hours prior written permission of the Engineer is required even though such working may be within the framework of law for the time being in force.

21. STORAGE & CARE OF MATERIALS

Any supply made by the contractor for the execution of the works should be as per the actual requirements at site and the owner is not liable to pay for the excess quantity of materials supplied.

The Contractor shall store his plant and materials only in areas allowed to him by the Engineer.

The Contractor shall make no claim on PROJECT Authority for any loss or damage thereto caused by whatever source or reason.

The Contractor shall be responsible for keeping the site clear and tidy to the satisfaction of the Engineer. Pieces of wood, packing box, timber, shuttering planks, brickbats, scraps, excavated spoil, etc. will not be allowed to remain scattered on the site. Such and any other rubbish must be disposed of as they arise in manner as approved by the Engineer. In disposing of the waste, the Contractor shall comply with all applicable regulations at their own cost & all Owner/ Company identifiers shall be removed before the waste is to be transported to the disposal site.

22.REMOVAL OF MATERIALS ETC. FROM SITE

22.1 No plant, tools or materials, whether belonging to the Contractor or otherwise, shall be removed from the site unless a pass for it has been issued by the Engineer.

22.2 All material leaving the factory shall be subject to examination by security staff deployed on Project Authority's behalf, even if this necessitates unloading and re-loading, at Contractor's cost.

22.3 The Contractor shall not take away from the site any samples, plans or drawings which are the property of Project Authority

23.PARKING OF VEHICLES

The Contractor or his employees shall park their vehicles, including personal cars, only in areas allocated by the Engineer. Parking of vehicles at any other place shall not be permitted.

All the Trucks, trawlers shall have blocks to their wheels when parked.

24.WASTAGE OF WATER

If Project Authority provides water to the contractor, the Contractor shall ensure that no water is wasted in any manner. He shall use press-type taps, if the Engineer so directs, to prevent loss of water arising from his employees leaving the taps open.

25.FEMALE WORKERS

Contractor shall not engage under any circumstances a woman worker except between 6.00 am to 7.00 PM

26.EATING AT SITE

The Contractors shall ensure that their employees take their food only at specified places to be notified by him. Eating on the job site shall not be permitted.

27. LIVING ON SITE

Contractor's employees will not be allowed to live on the site. The overall security of the entire site will rest in Watch and Ward deployed on Project Authority's behalf and no employee of the Contractor shall be allowed to remain on site without the prior permission of the Engineer/Client.

28.INFECTIOUS DISEASE

The Contractor shall report to the Engineer any cases of infectious disease amongst his employees and shall immediately remove such cases from the Site.

29.ACCIDENTS

All accidents to Contractor's employees or to any other person in the project Site must be reported to the Engineer immediately by the Contractor. The Contractor shall be responsible for complying with all statutory requirements in case of any accident involving his employees.

30.RULES FOR CONTRACTOR'S EMPLOYEES

30.1 Materials taken from the Site

A Contractor's employee must not take any material out of the site, except with the written permission of the Engineer / Owner

30.2 Searching by Security Staff deployed on Project Authority's behalf

Members of the Security Staff at the gate and elsewhere have been authorised to search any person entering or leaving the site or during working hours, and also examine any vehicle, locker, bag, basket, can, parcel, or other container in the possession of any person on the Site.

30.3 Photographs

Taking of photographs of anything in the Work Site is strictly prohibited. However photographs showing progress of works may be taken by Contractor unless noted otherwise with official permission in writing from site engineer / Owner

30.4 Intoxicating liquor or Drugs and disorderly behavior forbidden at the project site. Anybody observed under the influence of intoxicating liquor or drugs shall be refused admittance or may be ordered for eviction from site, and the Contractor shall ensure his removal.

30.5 Traffic Rules

A Contractor's employee must, while on site, observe the ordinary rules of the road. These are the same as those in general use outside the site, including the use of lights at night. He must observe speed limits and traffic rules imposed inside the site. He must, when cycling, keep to the roadway. A bicycle shall not carry more than one person at a time.

31.PRIVATE TRADING

A Contractor's employee must not conduct any form of private trading including money lending on the Site.

32.GENERAL

32.1 Unless otherwise specified and agreed to in writing by the Engineer, all expenses etc., involved in observing the provisions/ conditions laid down in these Site Rules and/ or covered by statutory requirements, will be to the account of the Contractors and no reimbursement etc., will be made by the Project Authority.

32.2 The Project Authority will fully stand indemnified against any statutory or other lapses on Contractor's part, claims arising from his employees, statutorily allowed interval after termination of the contract/ work.

32.3 The Project Authority reserves the right to amend or delete any of the above clauses or add new clauses, as and when deemed necessary by them and these will be binding on the Contractor.

TECHNICAL EVALUATION CRITERIA SHEET

This sheet should be filled up after reading the complete tender document and relevant details asked for should be enclosed with this sheet.

1. List of major jobs attended in last five years giving details of type of work, name and address of client and consultants, value of job and duration including photocopies of major orders with completion certificate.
2. All terms and conditions, technical specifications, drawings and volume of job is duly understood. If not, such clarifications should be taken from the Consultant before filling the tender document.
3. If any deviation is wanted, it should be clearly filled in the enclosed sheet giving reasons for wanting the deviation.
4. Qualification and experience of similar nature of job of technical staff, labour (Skilled and Unskilled) to be deployed in the job full time at site.
5. Copies of Certificates from the Clients and Consultant of similar job only.
6. Qualification of project persons to be deputed at site full time.
7. Capabilities of doing Validation and documentation of Pharma Projects as per cGMP / Schedule M requirement. Bidder to submit necessary documents or confirmation.
8. Experience in the Electrification of the production building of Pharmaceuticals.

TECHNO-COMMERCIAL DEVIATION STATEMENT

| Sl. No. | Item No. / Clause No. | Item / Clause Description as per Tender | Deviation asked for by Bidder | Reason for asking Deviation |
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I /We hereby declare that the information provided above are correct and in accordance with the tender filled by us.

The deviation not mentioned in this document but observed in the tender will be sufficient reason for disqualifications of my / our tender.

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SIGNATURE OF BIDDER

TECHNICAL STAFF

1. NUMBER OF QUALIFIED GRADUATE ENGINEERS
2. NUMBER OF QUALIFIED GRADUATE ENGINEER INTENDED TO BE POSTED ON THIS PROJECT
3. NUMBER OF QUALIFIED DIPLOMA ENGINEERS
4. NUMBER OF QUALIFIED DIPLOMA ENGINEERS INTENDED TO BE POSTED ON THIS PROJECT (FULL TIME)
5. NUMBER OF EXPERIENCED SUPERVISOR
6. NO. OF EXPERIENCED SUPERVISORS INTENDED TO BE POSTED ON THIS PROJECT.

.....
SIGNATURE OF BIDDER

SKILLED, SEMI-SKILLED AND UN-SKILLED LABOUR

Manpower for M/s..... site only
to be deputed at site. Also specify qualification of skilled man power.

| Sl. NO. | CATEGORY | NO. AVAILABLE | NO. INTENDED TO BE DEPLOYED IN THIS PROJECT |
|----------------|-----------------|----------------------|--|
| 1. | Skilled | | |
| 2. | Semi-Skilled | | |
| 3. | Un Skilled | | |

SIGNATURE OF BIDDER

DEFINITIONS OF TERMS IN CONTRACT

In this contract, the following words and expressions shall have the meanings as stated below :

‘OWNER’ shall mean M/s. Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO) and shall include their successors and assigns, as well as their authorized representatives.

‘CONSULTANT’ shall mean and shall include their authorized representatives of the Engineering Consultants appointed by owner for the project.

‘ENGINEER-IN-CHARGE’ shall mean the engineer appointed by the owner to supervise all activities of the project.

‘TENDERER’, shall mean the company / agency who quotes against the tender enquiry for undertaking the work.

‘CONTRACTOR’ shall mean the successful bidder whose tender has been accepted by the owner and to whom the order is placed by the Owner and shall include his heirs, legal representatives, successors etc..

‘PERMANENT WORKS’ shall mean all the works included in the schedule of quantities and shall include additions, alterations etc... Communicated in writing.

‘SITE’ shall mean the actual place, i.e. Alappuzha, Kerala where the project is to be executed.

‘PROJECT’ shall mean entire work specified in the contract documents inclusive of extra items / extra quantities (if any) executed during the contract period.

‘ACCEPTANCE LETTER’ shall mean written consent by a letter of owner to the tenderer intimating him that his tender has been accepted.

‘CONTRACT’ shall mean written the articles of Contract Agreement, the conditions of contract, schedule of quantities, specifications, drawings attached and duly signed by the Owner and the Contractor.

‘DATE OF CONTRACT’ shall mean the date on which the Owner has issued acceptance letter.

‘CONTRACT PERIOD’ shall mean the period (including rainy season) specified in the tender documents during which the contract shall be executed.

‘COMPLETION CERTIFICATE’ shall mean the certificate issued by the Owner to the contractor after successful completion of the project. This certificate will be issued on the basis of consultant’s certificate to owner about the completion of job.

‘EXTRA ITEMS’ are those items which are not appearing in the B.O.Q. but are required to be executed during the project period and for which rates are to be derived as per the formula given in the conditions of contract.

CONDITIONS OF CONTRACT

1. PROJECT INFORMATION

1.1 General :

The detailed information of the project given below is as per our present requirement. However, it is not binding on the owner in any way and shall not govern the scope of works.

1.2 Location of Site :

The project site is located at Pathirappally, Alappuzha, Kerala.

1.3 Clearing of Site :

- a. After completion of the project, the contractor shall remove all the temporary structures constructed by him and clear the site as per instructions of the Consultant / Owner. In case, if the contract fails to do so, the Owner has the right to remove the temporary structures and clear the site. The expenses incurred shall be recovered from the contractor from the payments due to him.
- b. The contractor has to remove all left over, excess, scrap material from the site and restore the site to fully clean condition as and when required. In case he fails to do so, the Owner reserves the right to remove such materials from the site and expenses incurred in this case shall be deducted from the payments due to the contractor. However, no claim for any less of material in this case shall be acceptable.

2. COMMITMENT OF CONTRACTOR

2.1 Interpretation of contract documents :

- a. All the documents forming part of the contract are to be taken as mutually explanatory, supplementary and complementary to each other. If there is any error, omission or discrepancy in any of them, it shall be brought to the notice of the Owner / Consultant. The decision of the owner shall be final and binding. The contractor shall execute the work accordingly.
- b. The contractor shall examine all the contract documents thoroughly including the scope, nature and magnitude of works he has to execute in accordance with the contract documents.
- c. The contractor shall visit the project site so as to study the site conditions, means of access to the site and other factors governing the works.
- d. There may be change in layout of site as per technical requirements and the tenderer shall not be entitled for any claim due to such changes.

2.2 Delay :

Delay in work execution due to reasons beyond the control of the Contractor

2.3 A Force majeure :

If the execution of work is delayed due to force majeure, then owner as per the affected period may extend the time of completion.

2.4 Time Schedule :

The successful tender shall submit time schedule within 7 days from the date of Letter Of Intent (L.O.I.) in the form of BAR/PERT charts before commencing the work and shall execute the work strictly as per the schedule submitted by him and approved by the Owner / Consultant. The schedule of job is 6 months from the date of award of job inclusive of Mechanical completion, commissioning and validation.

2.5 Compensation for delay :

Time is the essence of contract. If the contractor fails to complete the work and clear the site on or before the dates fixed for the completion, he shall without prejudice be liable to pay liquidation damage (LD), i.e. half percent of the contract value for every week that the whole or the part of work remains incomplete. For the purpose of this condition, the contract value shall be total value of quantities of items in the contract at contract rates plus algebraic sum of the subsequent work ordered. However, the total amount of LD to be paid under this condition shall not exceed five percent of the contract value.

2.6 Default of Contractor :

If the contractor fails to maintain progress and quality of work proportionate to time period allotted for the work in spite of notices or complete the work within stipulated time period or extended time period, the Consultant/ Owner shall have the right :

- i To terminate the contract: In this event the contract shall be terminated by giving written notice to the contractor and the unfinished works shall be completed by labourers engaged by the owner or through other agency at the cost of the contractor.
- ii Without terminating the contract: In this event, the remaining works shall be got executed through a fresh contractor in which case the contractor shall not have any objection or claim on this account.
- iii Before terminating the contract: In this event, if the owner finds that the defaults of the contractor can be rectified, then, an opportunity shall be given to the same contractor to rectify the defects / defaults in the specified time.

- iv Termination of contract for death: If the contractor is an individual of a proprietary firm and proprietor of the firm dies and if the contractor is an Attorney of partnership firm and dies, then the owner has the right to terminate the contract unless and until the owner is satisfied that the surviving partners are capable of executing and completing the remaining contract. In case of termination of contract, the legal representatives of the deceased contractor are not entitled for any compensation or claim. Also, the owner shall not levy any penalty against the damage caused by incomplete work.
- v Termination of contractor in part or in full for contractors default. If the contractor fails to execute the work in the manner described in the contractor documents or if he at any time, in the opinion of the owner :
 - a Fails to carry out the works in accordance with the contract conditions or as per the specifications mentioned in the documents.
 - b Stops the execution of works without giving prior information of the owner.
 - c Fails to carry out the works to the satisfaction of the owner / Consultant both with respect to qualities and time schedule.
 - d Fails to supply sufficient or suitable construction plant, materials and labourers etc.
 - e Commits breach of any of the provisions of the contract.
 - f Abandons the work.
 - g Becomes bankrupt during the continuance of the work. Whenever the employer shall exercise his authority to cancel the contract under the above condition, the employer shall be at liberty to hold and retain in their hands materials, tackles machinery and stores of all kinds on site as they may think proper and may at any time sell any of the materials, tackle, machinery and stores and apply the proceeds of sale in or towards the satisfaction of any loss which may arise from the cancellation of contract as aforesaid. The employer shall also be at liberty to use materials, tackle machinery and other stores on the site of contractor, as they think proper in completing the work and the contractor will be allowed the necessary credit. The value of materials and stores and amount of credit to be allowed for tackle and machinery belonging to contractor and used by the employer in completing the work shall be assessed by the consultant and amount assessed shall be final and binding on the contractor.

Incase employer completes or decides to complete the work under the provision of this condition, the cost of completion to be taken into account in determining the excess cost to be charged to the contractor under the condition shall consist of the cost of materials purchased or required to be purchased, labour provided or required to be provided.

2.7 Variation in scope of work :

- a Variation in quantity: The consultant / Owner have the right to increase or decrease the quantity of work or delete/add certain items of work. However such changes shall not entitle the contractor for any compensation, claim regarding the change in scope of work.
- b Variation in drawings and specifications :
 - i The variation in scope may be by way of changes in drawings regarding dimensions but specification remaining the same. In such a case, the contractor shall not be entitled for any claim due to change.
 - ii In case of change of specification, the difference of amount (on either plus or minus side) shall be established on unit rate by owner in consultation with consultant and the same shall be acceptable to the contractor.

2.8 Staff and Workers

The contractor shall depute qualified engineers for execution of the project. The technical staff employed by the contractor shall be responsible for the quality and workmanship of the work as per the specification of the Consultant / Owner. The instructions given by the consultant or his authorized representative should be followed by the contractor's supervisory staff. If any of the contractor's staff members is incapable or in-experienced, in the opinion of the consultant/owner, then he should be removed immediately and contractor should do suitable substitution. Technical staff employed should be degree holder from a government recognized institution or equivalent with at least 3 years practical experience of work in addition to Diploma holder and other experienced supervisory staff.

If the workers or the supervising staff of the contractor are involved in riotous or illegal activities to such an extent that it becomes necessary to hand over the matter to the police then the contractor would be solely responsible for the case and all the expenses incurred in the legal proceedings shall be borne by the contractor.

2.9 Subletting of Contract : No subletting of contract is permitted

2.10 Co-operation with other agencies at site :

The contractor or his authorized representatives must work in close co-operation with the agencies executing other works forming the part of the project and also with the representatives of the Consultant/Owner for the execution of works which are not included in the contract. Contractor shall permit free access and generally afford reasonable facilities to other agencies or departmental workmen etc.

The contractor's quoted amount/ rate shall be deemed to cater for all the above contingencies and nothing extra shall be admissible on this account.

Contractor should keep his working site clean and the materials brought for work shall be kept in a properly stacked/stored way. The work site should be swiped at the end of each working day after removal of debris / left over materials. The contractor has to take full care so as not to spoil or damage other contractor's /owners job/material.

2.11 Safety of adjoining properties: The contractor or his authorized representatives should conduct all the operations necessary for the execution of works in such a manner that no inconvenience / damage are caused to the properties of other persons and owner.

2.12 Arbitration Act :

All disputes regarding the specifications, designs drawing instructions and quality of work or quality of materials used for the work or any other matter relating to the work shall be referred to the sole arbitration to be appointed by consultant.

The party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this, together with the amount or amounts claimed in respect of each such dispute.

The arbitrator may from time to time with consent of the parties extend the time, for making and publishing the award.

If possible, the work under the contract shall be continued during the arbitration proceedings and no payment due or payable to the contractor shall be withheld on account of such proceedings.

The arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing. The arbitrator shall give a separate award in respect of each dispute of difference referred to him.

The venue of arbitration shall be solely at Alappuzha.

The award of the Arbitrator shall be final, conclusive and binding on all parties relating to this contract.

The cost of arbitration shall be as decided by arbitrator.

2.13 Escalation

The rates quoted by the contractor in this contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation in the cost of materials or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion.

2.14 Insurance

The contractor shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the owner as under :

i. Insurance of works :

The contractor shall take full responsibility for loss, damage and care of plant and works until it is delivered to site, constructed, erected, commissioned and taken over by the owner. Without limiting such responsibility, the contractor shall in the interest of the work insure the plant and work for their full value plus ten percent until they have been taken over. Such insurance shall cover the equipment's and works against loss, damage or destruction by fire, earthquake, theft or any other cause, throughout the duration of the contract period or extended contract period.

ii. Insurance of employees

The contractor shall accept full and exclusive liability for the compliance of all obligations and responsibilities imposed by the Employee State Insurance Act, 1948 and any liability or penalty which may be imposed by the Central, State or Local Authorities due to the reason of violation by the contractor or sub-contractor of the Employees State Insurance Act, 1948. the contractor shall agree to fulfill the requirement of the Employee State Insurance Corporation and maintain the declaration forms and all such forms which may be required in respect of the contractor's, sub-contractor's employees who are employed in the work provided for or those covered by E.S.I.C. from time to time under the agreement. The owner shall retain such sum as may be necessary from the total contract value until the contractor shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948 have been paid by him.

ii Workmen's Compensation :

Insurance shall be effected for all the contractor's employees engaged for this contract. The contractor shall also carry and maintain all other insurance which may be required under the law or regulations from time to time. He should also carry and maintain any other insurance which may be required by the Owner.

iv Transit Insurance :

The cost of transit insurance relating to the items to be transported by the contractor to the site of work shall be borne by the contractor and the quoted price shall be inclusive of this cost.

v. Loss or damage and indemnity Agreement :

The contractor shall be responsible during the progress of work as well as maintenance period for any liability imposed by law for any damage to work or any

part thereof or to any of the material or other things including those of owner used in performing the work or for injury to any person or persons for any property damaged in or outside the site. The contractor shall indemnify and hold the owner and the Engineer harmless against all liabilities, claims, loss or injury including costs, expenses and attorney's fees incurred in the defense of same, arising from any allegation whether groundless or not, of damage or injury to any person or property resulting from the performance of the work or work site or from any cause whatsoever during the progress and maintenance of the work.

vi Third Party Insurance :

Before commencing the execution of the works the Contractor, but without limiting his obligations and responsibilities, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the owner, or to any person, including any representative of the owner, by or arising out of the execution of works or in the work being carried out by the owner, by or arising out of the provision of clause. 2.14 hereof.

Such insurance shall be effected with an insurer and in terms approved by the Owner and for at least the amount stated in the Appendix of the tender.

Note: The contractor's payment shall be cleared only after his compliance of all insurance formalities as given above. He shall have to deposit the photocopies of various policies and payment receipts with the owner's site engineer for this purpose.

3 EXECUTION OF WORK :

3.1 General: All the works shall be executed in accordance with the detailed drawings, specifications, and instructions given by the consultant or mentioned in the contract document. Any supply made by the contractor for the execution of the works should be as per the actual requirements at site and the owner is not liable to pay for the excess materials supplied.

3.2 Drawings :

The drawings given in annexure-1 with the tender document are as per the present requirement and are meant for the purpose of giving idea of the type and quantum of work to be executed.

All working drawings / Shop drawings prepared by contractor and approved by Consultant shall be marked "Release For Execution" and duly signed by the Consultant. All the old drawings shall be discarded and marked with "Superseded by Drg. No."

If during the execution of the work, any discrepancy occurs in the drawings or between the drawings and specification then the same should be clarified from the Consultant prior to the execution of work. The decision given by the Consultant /

Owner would be final.

3.3 Inspection Of Works :

- i. The Owner / Consultants shall have the full authority to inspect the works at any time, at any stage. The contractor shall provide adequate facilities to carry the inspection work. The contractor should be present himself or his authorized representative during the inspection so that the Consultant can convey the instruction regarding the works.
- ii The contractor shall give information to the consultant before covering up the works so that the same can be inspected and measured jointly & correctly to true dimensions.
- iii If the contractor fails to get the work inspected before covering it up, then the owner/consultant has full authority to get the work uncovered at the expenses of the contractor and if any fault is found then the same should be rectified by the contractor without claiming any extra payment.

3.4 Inadequate/substandard works and materials:-

- i If any material brought by the contractor is found unsuitable or of sub-standard quality after testing, then the contractor shall remove those faulty materials immediately from the site as per the instructions of the consultant.
- ii If any work executed by the contractor is found to be of bad workmanship or not as per the drawings, then the same is to be dismantled and re-executed by the contractor without claiming any extra payment or extension in time period.

3.5 Default of contractor in compliance:- If the contractor or his authorised representative fails to follow the instructions given by the consultant/owner regarding any of the works, then the same shall be got executed by other persons employed by the owner and the expenses incurred shall be borne by the contractor.

3.6 Discrepancies between instructions: - If any discrepancy occurs between the various instructions conveyed to contractor or his authorised representative or if any misunderstanding arises between the contractor's staff and owner's staff, the contractor shall report the matter immediately to the consultant/ owner. The decisions of owner shall be final and binding. Moreover, no claims for losses due to discrepancies between instructions, doubts or misunderstandings shall be admissible.

3.7 Change in specifications and valuation of extra items:- If there is any variation in specification for any change in make of item, then it has got to be approved from the owner/consultant prior to installation or execution and the financial effect, plus or minus, or impact shall be incorporated accordingly by the owner/consultant. If any of the items to be executed is not included in the schedule of quantities, then

the contractors shall submit the rate analysis of the item specifying the actual landed cost on basis of prevailing rates of material and labour and allowing 20% to cover overhead & profit. The rates of such items shall be recommended by the consultant and approved by the owner and shall be binding on the contractor.

3.8 Work not specified in the specification: - If, for any work, no specification has been given in the tender document, then the work will be executed as per the IS specifications, and if the work is not covered by IS specifications also, then it should be executed as per standard engineering practice, subject to approval of the consultant.

3.9 Testing:-

The contractor shall agree for testing works as mentioned in the specifications of various items of works involved in the project.

I If the various tests prescribed in the specifications at specified intervals for ascertaining the quality of the work done prove unsatisfactory, the consultant/owner shall have the authority to instruct the contractor to re-execute the work done or make alterations as per the orders of the owner/consultant.

ii The contractor shall furnish to the owner/consultant, for approval adequate samples of all materials to be used in the works free of cost. Such samples shall be submitted before the work is commenced, giving ample time to permit the tests. All materials furnished in actual works shall be of the same quality of that of approved samples.

iii The testing of various materials to be used in works shall be tested in standard laboratories as directed by the owner/consultant and the expenses incurred shall be borne by the contractor.

3.10 Progress Report: -During execution of the contract, the contractor shall furnish fortnightly progress reports to the consultant and in the format as specified by the consultant indicating the progress achieved during the fortnight and the total progress up to the fortnight as against scheduled and anticipated completion dates in respect of key phases of the work. The contractor shall also furnish any other information in order to ascertain progress, if called for by the consultant.

3.11 Liabilities for defects and rectifications:- If it shall appear to the owner/ consultant that any work has been executed with imperfect or unskilled workman or with materials of any inferior description, or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the contractor shall on demand in writing from the owner/consultant or his representative specifying the work, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct that work so specified and provide other proper and suitable materials or articles at his own charges and cost, and in the event of failure to do so within a period to be specified by the owner/ consultant or his demand aforesaid, the owner/

consultant may on expiry of notice period rectify or remove, re-execute the work at the risk of contractor and the cost shall be recovered from the contractor. The decision of the owner/ consultant as to any question arising under this clause shall be final and conclusive.

3.12 Period of liability: - The liability period of the work shall be 12 months from the date of completion of the work as certified by the owner and this date will be as indicated in the provisional completion certificate. If any damage or defect occurs in the work during this period then the contractor shall rectify the damage or defect at his own expense to the satisfaction of the consultant/owner. If the contractor fails to do so, then the owner shall have the authority to get the work done by other means and the expenditure incurred shall be recovered from the contractor.

3.13 Suspension of work:- The contractor shall suspend the progress of work, on receipt of the written order from the owner / consultant for any of the following reasons:-

- i On account of any default on the part of the contractor. In this case the contractor shall be entitled for the extension of time, but the contractor shall have no claim for payment of compensation for re-execution of faulty works.
- ii For execution of the works for reasons other than the default of the contractor.
- iii For safety of the works.

In case of suspension of work:-

- a The contractor shall during such suspension, properly protect and secure the works carried out according to the instructions of the consultant.
- b If the suspension is ordered for the reasons 3.13 (b) and (c) as stated above, the contractor shall be entitled for extension of time equal to the period of every such suspension but no compensation for damages etc. shall be admissible on account of suspension of work.

3.14 Possession prior to completion: - The owner shall have authority to take possession of any completed or partially completed works. Such possession shall not be deemed to be acceptance of any work completed in accordance with the contract. If such prior possession delays the progress of works then the adjustment in the time of completion shall be done accordingly. The decision of the consultant / owner regarding the extent of delay shall be final and binding.

3.15 Care of works : From the commencement to the completion of works, the contractor shall take full responsibility for the care of all works including all temporary works and in case any damage or loss occurs then the contractor shall at his own cost repair and make good the same so that on completion of the work, the same shall be in good order in every respect in accordance with the contract and to the satisfaction of the consultant/owner.

4 CERTIFICATES AND PAYMENT TERMS

4.1 Schedule of rates :

- i The payments to be made to the contractor for various items of works shall be as per the finalized rates in tender document and the rates of extra items finalized from time to time.
- ii The rates finalized in the tender document shall remain firm till the completion of the work including extension of time, if any.
- iii After the completion of work, the contractor will have to submit the clearance certificate for all statutory payments like royalties, octroi etc.

4.2 Measurement :

Joint measurements of the various items of the work shall be taken by the contractor's authorized representative in presence of the owner's and consultants authorized persons from time to time for maintaining the records and preparing the bills. If the contractor fails to send his representative then the measurements taken by the owner's and consultants authorized representative shall be final and no claim shall be entertained in this regard.

4.3 Mode of measurement: All measurement shall be in the metric system and in accordance with Indian standard specifications and in accordance with standard engineering practice. If the contractor has any objection regarding the measurements then he shall inform the owner/consultant immediately. The decision given by the consultant shall be final and binding on the contractor. In case of mode of measurement of any items is not specified, and then I.S.I mode of measurement (as applicable during contract period) shall be followed.

4.4 Billing :

- a The running account bills to be submitted by the contractor should be of a minimum reasonable amount as decided by the consultant depending upon the quality of work allotted. The bill should be in the proforma approved by the consultant/ owner giving abstract and detailed measurements of various items of works executed and material brought by the contractor for execution of work.
- b The billing shall be cumulative billing given details of previous bill amount advance paid & deducted, security deduction and clearly showing the amount due against the submitted bill.

4.5 Lumps sums in tender :For the items in tender where it includes lump sum in respect of parts of works, the contractor shall be entitled to payment in respect of the items at the same rates as are payable under this contract for such items. If in the opinion of the consultant, any part of the work is not susceptible to measurement, the consultant may at his discretion pay the lumpsum amount for the

work and the decision of the consultant/owner shall be final and binding on the contractor.

4.6 Running account payments to be regarded as advances : All running account payments shall be regarded as payments by way of advances against the final payment only and not as payment for work actually done and completed, and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the performance of the contract or nor shall it conclude, determine or affect in any way the powers of the owners under these conditions or any of them as to the final settlement of the accounts or otherwise, or in any other way vitiate or affect the contract. The final bill shall be submitted by the contractor within one month from the date of actual completion of the work, to the consultant, otherwise the consultant's and owner's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on the contractor. The payment of final bill shall be done within three months after the submission of final bill by the contractor, to the consultant including period of one month of clause no.5 (a) f terms of payment.

4.7 **Payment of Contractor's bills:**

- a The payment due to the contractor shall be made by NEFT / RTGS. In no case, will the owner be responsible if the Amount is misled or mis-appropriated by the contractor or his representatives. The Amount shall be released only against submission of duly signed and revenue stamped receipt.
- b The owner reserves the right to carry out post payment audit and technical examination of the bills and work executed including all supporting voucher etc. The owner further reserves the right to enforce recovery of over-payment when detected. Similarly, if any under payment is discovered, the amount shall be paid to the contractor.
- c Wherever any claim for payment against the contractor arises as per the contract, the same may be deducted from the bill of the contractor or from his security deposit.

4.8 **Provisional completion certificate:** - When the contractor successfully completes the works as per the contract, he shall be eligible to apply for provisional completion certificate in respect of the works. The owner shall issue to the contractor the provisional completion certificate after verifying from the completion documents submitted by the consultant and satisfying himself that the work has been completed in accordance with the construction drawings and the contract document. The contractor, after obtaining the provisional completion certificate, is eligible to present the final bill for the work executed by him under the terms of the contract. The work will not be considered as complete and taken over by the owner until all the temporary works, labour hutments etc. Are removed

and the work site cleared to the satisfaction of the consultant.

If the contractor fails to comply with the requirements of the above on or before the date for the completion of the works, the owner may, at the expense of the contractor, remove the tools and plants and surplus materials and dispose of the same and the contractor shall pay the amount of all expense incurred.

- 5** **Terms of payment:** - The contractor shall submit running bills of works completed or partially completed along with detailed measurements recorded in the M. Book (Measurement Book) as supporting documents to the consultant. The consultant after verification shall forward the bill for payment to the Managing Director, HOMCO.
- a 10% of the running account bill will be withheld as retention and will be released along with the Final Bill. All statutory deductions will also be effected from the running account bills.
 - b In addition to performance guarantee, security deposit for the work will be deducted from the running / final bill of the contractor @2.5% of the gross amount of each running and or final claims till the expiry of defect liability period.

6. Labour laws and safety regulations:-

6.1 Labour Laws:-

- i Labour below the age of 18 years shall not be employed on the work.
- ii The contractor shall not pay less than what is specified by the law to labourers engaged by him on the work.
- iii The contractor shall, at his own expenses, comply with all labour laws and the owner shall not be responsible for any recovery/penalty imposed by the representative authorities for violating the labour laws.
- iv If the contractor is covered under the contract labour (Regulation & Abolition) Act, he shall obtain a license from the licensing authority (i.e. the Office of Labour Commissioner), by payment of the necessary prescribed fee and deposit, if any, before starting the work.
- v The contractor shall furnish to the consult/owner, the details of the workers employed on the works.
- vi The contractor shall comply with the provisions of the existing rules and regulations relating to labour laws.
- vii The consultant shall on a report having been made by an inspecting officer as defined in contract labour (Regulation and Abolition) Act, have the power to deduct from the amount due to the contractor any sum required or estimated to be required for making good the losses suffered by a worker or workers by reasons of non-fulfillment of the conditions of the contract for the benefit of the workers, or if deductions made from his or their wages which are not justified by the terms of contract or non-observance of the said regulations.

6.2 Minor accident on duty: - For cases of minor accident on duty not covered under compensation by insurance, the contractor shall have to compensate the affected person by reimbursing this medical expenses against submission of actual expenditure document. The absence from duty, if takes places, due to such accident shall be considered as special leave and full payment shall have to be made for duration of such absence.

6.3 Provident Fund: - It shall be solely the contractor's responsibility to complete all provident fund formalities as per statutory regulations.

7 Safety Code :-

7.1 Safety and protection: - The contract shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. While carrying out the work, the contractor should provide for :

- i Safety of personnel engaged in the construction.
- ii Protection and safety of works and materials during their progress.
- iii Sanitary and hygienic conditions of working and living for his workers, as required by the consultant.

7.2 **Use of safety gadgets:-** The contractor shall have to ensure availability and use of all desire safety gadgets like safety belts, helmets, goggles, hand gloves etc.

7.3 **Unsafe working condition:** -If any activity is found to be progressing without proper and complete safety measures (including use of safety gadgets) being implemented, the contract may be asked to stop the work unless he fulfills the desired safety norms. Such delays shall not be allowed to be considered for extension in duration of the allotted time period.

7.4 **First Aid:** - The contractor shall provide first aid facilities for his employees and those of his sub-contractors. The requisite first aid box and medicines should always be available at work site.

7.5 **Contractor's Barricades:-** The contractor shall erect and maintain barricades required in connection with his operations to guard or protect:-

- i Excavations
- ii Hoisting areas
- iii Areas adjudged hazardous by the contractor's or consultant's representatives.
- iv Charged panels.

Owner's existing property liable to get damaged by contract's operation.

Preservation of Peace :-

The contractor shall take precautions to prevent any riotous or unlawful behavior by his workers, for the preservation of peace and protection of inhabitants and the security of property in the neighborhood of the work.

8 Details of work execution:-

- i The work shall be done in such a manner so as to clear work front availability for other agencies working at side.

- ii Finish of work shall be as per drawings & details given by owner/consultant.
 - iii In general the complete work is to be done as Indian standard and esthetical norms as specified and detailed in tender.
- 9 Site:** The site is located at Alappuzha, Kerala---- The contractor shall be responsible for the movement of his men, material and equipment at no extra cost.
- 10 Electricity & Water:**Electricity & Water shall be free of cost at a single point only.
- 11 Contractor's scope of supply :**All material required for executing the jobs specified in the bill of quantities, inclusive of all tools, tackles, scaffolding, consumables & testing equipment's shall be procured and supplied by the contractor at his own cost accept for any items specified as owner supplied.
- 12 Recovery from the contractor:-**
- i If the contractor or his employees damage or destroy property of the owner, then same shall be replaced /refunded by the contractor, otherwise the expenses may be recovered from his bill or security deposit.
 - ii All compensation & recoveries to be made as per terms of contract shall be deducted from the contractor's bill or security deposit.
 - iii Forfeiture of security deposit: - Whenever any claim against the contractor is to be recovered then the same may be made from the security deposit. If the contractor abandons the work or leaves the work in complete, then the owner/ consultant has the right to forfeit the security deposit.
- 13 a Special Instructions:-**
- All materials to be used in execution of project shall be first class quality; I.S.I. marked and shall be approved by owner/consultant before its application.
- b The contractor shall be paying all testing charges required for testing of materials and samples as and when taken by owner /consultant. The contractor shall arrange necessary labour and transportation to facilitate testing of samples/ materials. Frequency of testing materials/ samples shall be as per related I.S. codes.
 - c The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the consultant before completely executing the work.
 - d The owner/consultant should be immediately informed for any discrepancy in

drawings, specifications and instructions in the execution of job at site before actual execution of particular item having discrepancy.

- e Any item found to be having been executed with poor workmanship or materials of inferior quality then the contractor shall have to rectify/ reconstruct the work as specified by owner/consultant. No extra charge will be admissible in such case. If contractors fails to do so, the owner/consultant reserved the right to rectify reconstruct the through some other agency at the expenses of contractor.
- f The schedule of activities as submitted by the contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the contractor giving all details for monitoring of the schedule.
- g The contractor shall take charge of site and if site clearance is involved, he shall attend to it. (If such type of unforeseen and unavoidable situation occurs, in that case actual labour employed for such job shall be paid including overheads and profit).
- h The work shall be carried out in a manner so, as not to damage the existing structure and the working should be such that there is minimum disturbance in the adjoining working area.
- i Special care is to be taken for cleanliness of the site. After the end of day's work the site should be cleaned immediately.
- j The materials to be used for work are to be stacked at location as shown by the site engineer. For handling of materials, temporary scaffolding may be constructed (if required)
- k The contractor shall have to co-operate with the agencies executing other work in the same area.
- l While executing the work, the contractor shall ensure safety and security of the property of the owner so as to avoid theft etc.

A. TECHNICAL PARTICULARS

01 Power System

A Voltage

- AC : 420 Volts
Phases : 3 Ph /Neutral
Frequency : 50Hz

B Fault

- Current : 50KA
Level : 35MVA

02. Site conditions

- A Ambient temperature Altitude : 45 Deg. Cent
B Altitude : Less than 2000 meter
C Atmosphere : Not heavily polluted

B DRAWINGS/DOCUMENTS

1 To be supplied by manufacturer:- The manufacturer shall supply 3 sets of documents/ drawings for following:-

- a Control circuits wiring diagram
b Testing certificates for all routine/ type carried out.

2 Procedures for approval of drawings:-

- a The supplier shall furnish complete assembly drawings, wiring and schematic diagrams and such detailed drawings, instructions and test reports as necessary for installation, operation and maintenance of the equipment, for demonstrating that it complies with requirements of specification. Drawing, instruction and reports shall be identified by descriptive titles indicating their application to contract and shall be signed by the responsible representative of supplier.
- b 2 copies of each drawing should be submitted to consultant/owner. They shall forward one copy to the supplier marked "Approved/Approved with correction as noted" or "Returned for correction".

- c Prints marked “approved” authorizes the supplier to proceed with the manufacture of the equipment covered by such drawing. Upon receipt of these prints the supplier shall submit three additional prints for purchaser’s distribution.
- d Prints marked “Approved with correction as noted” authorizes the supplier to proceed with manufacture of the equipment covered by such drawings with corrections indicated thereon. Upon receipt of these prints supplier shall make necessary revision and submit 3 prints for purchaser’s distribution. Additional approval by purchaser of such revised drawings will not be required.
- e Prints marked “Returned for correction” require the supplier to make necessary corrections and resubmit prints for approval in routine as before.

C GENERAL:-

- a Approval by purchaser shall not relieve supplier of the responsibility for correctness of drawings furnished by supplier nor for their compliance with the specification unless so stated at time of approval. If at any time before completion of the work, changes are made, necessitating major revision of approved drawings, the supplier shall make such revisions and shall proceed in the same routine as for the original approval.
- b Upon completion of work, supplier shall furnish to the purchaser one set of transparencies of all drawings approved by purchaser including all corrections/ revisions made up to the time of completion of work.
- c 3 Copies of instructions for installation, operation and maintenance shall be submitted in advance of delivery of equipment’s.

D All equipment offered shall be complete with all parts which are necessary for their efficient operation. Such parts shall be deemed to be within the scope of purchaser’s specification whether specifically mentioned or not. No claim for any extra charge for providing such parts shall be entertained after the award of contract.

E All equipment offered should comply with Indian standard and Indian Electricity rules and regulations. They should withstand the atmospheric conditions as mentioned below:-

- Max ambient temperature : 35degree Celsius
- Max relative humidity : 92
- Wind pressure : 60
- Seismic coefficient : As per IS1893
- Atmosphere : Expected to be mildly

polluted

F Operation manuals: - Three sets of operations manual switch, technical leaflets of components used in the boards are to be provided after completion of job.

2.0 Fans, Light fixtures and plugs points.

Technical specifications for supply of lighting fixtures, fans, switchboards and plug points.

a Concealed lighting fixtures:-

i T.L. Lamp fitting: - Mirror optics light fittings, false ceiling mounted type complete with choke reflector, choke, condenser, internal wiring etc. But without lamp. The fixture should be suitable for 2 no's 36W TL lamps. The fitting should be flush mountable with false ceiling having S.S bottom cover with totally clear toughened glass. The fixture should also be suitable for grouting in ceiling while casting the roof, such that the bottom of the fixture is flush with the bottom of the finished roof & 2-3mm thick collar to overlap by 4-6mm on finished surface roof.

ii P.L. Lamp fitting:- Mirror optics light fittings, false ceiling mounted type complete with choke reflector, choke reflector, choke, condenser, internal wiring etc. But without lamp. The fixtures should be suitable for 2 no's 11W TL lamps. The fitting should be flush mountable with false ceiling having S.S. bottom cover with totally clear toughened glass. The fixture should also be suitable for grouting in ceiling while casting the roof, Such that the bottom of the fixture is flush with the bottom of the finished roof & 2-3 mm thick collar to overlap by 4-6mm on finished surface roof.

b Exposed type fixtures: - Surface mounted type. T.L. Lamp fitting complete with choke, condenser, internal wiring etc. but without lamps. The fixture should be suitable for 1x36w TL/ 2x36w TL lamp completely enclosed in clear glass/acrylic cover.

c Exhaust fans: - Denoted as EX shall be dia fresh air/exhaust fan to be mounted on toilet Window/ventilator.

d Switch boards:- Lighting switch boards:-

e Plug Boards:-

i For Toilet/ Office/ QC areas:- All plug boards in the toilet area shall be modular plate type 5 in 1 boxes consisting of switch, fuse, indicating lamp, 16/6A plugs encased in metallic box.

- ii For Production Areas: - Plug boards for production areas shall consist of 1no. SP/TP/ MCB controlling industrial type SPN & E/TPN & E plug socket as per rating as given in individual case.

G LIGHT/ POWER WIRING

1. Concealed / Exposed circuits wiring/ Point wiring

Conduiting :- Providing/ fixing of specified diameter 25/32mm HGMS black enameled ERx grade conduit of approved make with heavy duty accessories like bend, junction box, MS pull boxes with covers, adapters, check nuts etc. The junction boxes to be used should be 62mm deep for wall. Separate conduits shall be done for circuits wiring/ in no case it should be mixed with point wiring conduits. Complete work has to be performed as per drawing/specifications.

The work includes laying of conduit, pull boxes, bends in wall. Conduits shall be installed after casing of wall. The switchboard to be fitted with conduit on double check nut mounting. Conduit in case shall also be fitted with GI staples at every 200mm distance. Complete hardware like conduits reducers, bends, and junction boxes to fitted with thread type joint. All joints should be painted with red oxide primer. Pin type of accessories shall not be acceptable.

Wiring: - The scope of wiring shall be from distribution board to individual switchboard/ power socket outlets/ complete wiring shall be done with 660V grade PVC insulated copper wires. Independent wires with colour code shall be used for phase, neutral & earth. Wire sizes shall be used as per bill of quantities & drawings.

Circuits wiring mains wiring also includes termination of wires at DB & power outlet including providing ferrules at both ends for identification. Looping of power sockets shall be done only where it is specifically mentioned or shown in single line diagram.

Point wiring for light fitting/ Fan points shall be from lighting switchboards to the individual light/fan point. Other points shall remain same as that for the circuit wiring. However the supply and installation of switch boards shall not form a part of this item.

Earthing wires shall be dedicated type/ is to be used for each power point. For a three phase power point two earth wires of specified sizes are to be used from DB to power points. The earth wires are to be terminated at earthing link of panel/ power outlet box. For single phase system 1no. earth wire of specified size to be

used.

Colour code of wiring

| | | |
|------------|---|--------|
| | : | Colour |
| | : | Red |
| Phase wire | : | Yellow |
| | : | Blue |

(As per schedule of wiring given along with drawings.)

| | | |
|--------------|---|--|
| Neutral wire | : | Black |
| Earth wire | : | Green |
| Point wiring | : | Colour of point wire (Phase) shall be same as of circuit that switchboard. |

Maximum capacity of conduits for simultaneous drawing-in of PVC insulated copper conductor cables of 1.1 KV Grade (Flexible)

| Size of Conduit | 20mm | 25mm | 32mm | 40 |
|-------------------------------|--------------------------|-------------|-------------|-----------|
| Conductor of cables | Maximum number of cables | | | |
| Nominal Areas MM ² | | | | |
| 1.5 | 6 | 8 | 12 | 14 |
| 2.5 | 4 | 6 | 10 | 12 |
| 4 | 3 | 6 | 8 | 10 |
| 6 | - | 3 | 4 | 6 |
| 10 | - | 2 | 3 | 4 |
| 16 | - | - | 3 | 4 |

No steel conduit less than 20mm in Dia shall be used. Specifications of the conduit will as per following:-

| Nominal Size | Outside Dia | Tolerance Outside Dia | Minimum Inside Dia For Medium conduit |
|--------------|-------------|--------------------------|--|
| 20 | 20 | 0.3 | 16.9 |

| | | | |
|----|----|-----|------|
| 25 | 25 | 0.4 | 21.4 |
| 32 | 32 | 0.4 | 27.8 |
| 40 | 40 | 0.4 | 35.4 |

All Specification for conduit shall be as per IS 9537.

2. Technical specifications for installation: - Connections to the fans, fixtures/ exhaust fans shall be with copper conductor PVC insulated round flexible wires of no. / Size as specified. Connection charges shall also include all sundry material required for erection like connector strip, PVC tape, Machine/wood screws of GI, round blocks, plates etc.

Installation charges for fans, Exhaust fans shall include installation/ connection of regulator, installation of exhaust fans shall include grouting of frame or tightening of frame with Anchor bolts as per site condition.

Wall fans shall be fixed on wall using back plate of 300mm x 180mm size/ shall be grouted/ fixed on wall by 6nos. Anchor bolts of ½” dia of coach screw as per site conditions.

All work shall be carried out neatly as per the direction and to the satisfaction of consultant / Owner. All fans/fixtures shall be connected with earth wire.

Hanging type tube light fixture:- Installation, testing, fixing/commissioning of all types of tube light fixture hanging up to 750mm from ceiling/roof trusses etc. With 20mmDia (¾”) 1.6mm thick conduit pipe duly painted after installation with 2coats of synthetic enamel paint of white colour.

Nickel chrome brass sockets shall be heavy duty type approved by consultant used to hold the conduit to be fixed on round block. The block shall be fixed on ceiling directly or on existing MS junction box (as per site condition) all sundry material to be included like screws, checknuts, PVC tape etc. Round blocks shall be painted by 2 coats of synthetic enamel paint of white colour approved by consultant.

Switch Boards/Plug Boards: - All switch boards/plug boards shall be concealed type unless specifically mentioned otherwise. All flame proof switch boards shall be hung from S.S pendants. Plug boards of flame proof areas and other sterile areas also shall be hung from S.S pendants.

3. Instruction for carrying out L.T. installations:-

1. Contractor will have to bring all the necessary/proper tools/tackles for carrying out the work.
2. Work is to be carried out, when the building or parts are ready for installation.

3. Materials to be supplied by employer will have to be received by the contractor from employer's godown. Receipt and consumption statement to be kept ready by contractor at all stages.
4. All material to be supplied by contractor must be of approved quality/make/ must be got approved by Engineer-in-charge/ consultant before use.
5. Contractor shall follow all rules/ regulations like factory act, workmen compensation act/shall be responsible for any injury or accident to persons working at site.
6. Work is to be carried out as per Indian electricity rules/ standard code of practice / other relevant specifications. Workmanship shall be to specification of the engineer-in-charge/consultants. Preference to work/ items shall be given as per requirement of clients/site situations. As a guidance, list of applicable standards is given in enclosed Annexure.
7. The contractor shall have to keep a qualified/ technical representative at site of work for receiving instruction/ shall have to give satisfactory progress of work.
8. Any extra items that may crop during the progress of work, shall have to carry out by contractor, if ordered so/shall be paid for the same at rates to be worked out with mutual agreement.
9. If any part or whole of the work or any item is not executed to entire satisfaction of engineer-in charge/consultant, the contractor shall have to demolish/do the same work again without any extra cost, if so ordered by the engineer-in-charge/consultant.
10. No material supplied by employer shall be allowed to be removed from site of work unless/until ordered so by the engineer-in-charge/consultant in writing. The contractor shall ensure safety of material from date of receipts from employer's store till actual installation at works/handed over to client after connection/ testing. Contractor shall maintain a proper site order book at site which remains in the custody of officer-in-charge.
11. The place, after any work is completed, should be kept clean by contractor. Breaking of walls, slabs roads etc. necessary for laying cables, conduits drawing of cables/wires etc. / making them good to original position will have to be done by the contractor through skilled workers.
12. Whatever material/equipment's supplied by contractor, has to have 2 sets of test certificates from the manufacturers, like electrical control panel, sub distribution boards, MCB,MCCB, wires, cables etc.
13. On the completion of work the contractor shall supply, free of charge, completion plan incorporating changes in original drawing.

14. Testing of all equipment's and systems shall have to be done both before and after charging of equipment, as detailed in technical specifications of individual equipment and system. All tests reports shall have to be submitted in duplicate to consultant for his approval, before one copy is submitted to the client for their records.
15. Test reports to be obtained from outside agencies should be only from recognized laboratories as approved by consultant, before testing.
16. Any item (whether specified separately or not) required for completion of a job shall have to be supplied, at no extra payment, on this account.
17. Approved make of material as given in enclosed in Annexure- I, shall have to be strictly adhered. If material of make other than prescribed in enclosure or not mentioned in enclosure is to be used, it can be done only after getting prior approval from consultant/owner.
18. White petroleum jelly is to be applied at all terminals before making any connection.
19. General conditions for supply of electrical equipment's enclosed as annexure V have to be strictly adhered to.
20. It is compulsory for the bidder to fill up all items of B.O.Q. and mentioning supply/ installation rates separately as formatted in B.O.Q.
21. In case any item is supplied by client, only installation rate of that item shall be applicable.
22. Installation shall have to be approved by electrical inspector/ electricity supply authorities & / or any other local authorities, if required/such approval shall have to be arranged by contractor. Any alterations, additions suggested by them shall have to be incorporated by the contractor at his cost.
23. The quantities, as shown in tender, are approximate/ may change or be deleted according to site situation/conditions. However, payment will be made on actual supply/work carried out at site/duly certified by engineer-in-charge/consultant.
24. Testing/commissioning of conduit wiring: - Before lighting/power installation is made live, the contractor shall carry out tests enumerated below in presence of Engineer-in-charge or his authorised representative. All testing equipment's necessary to carry out tests shall be arranged by contractor/ tests results recorded on approved proforma. Nothing extra shall be payable for testing.
 - A Measure insulation resistance of each circuit without lamps being in place/ it should not be less than 5 mega ohms to earth.

- B Current /voltage of all phase shall be measured at the lighting panel bus bars with all circuits on with fixture/also in all switch board.
- C Check earth continuity for all socket outlets. A fixed relative position of phase/neutral connection inside the socket shall be established for sockets.

Annexure-I

List of approved make: - The following make of equipment and materials shall be accepted but the contractor shall specify which material he would be using. In case any make besides the list given is to be used, prior approval of the consultant/owner is must.

| | | |
|----|-----------------------------|---|
| 1 | MCB | SIEMENS/HAGER/L&T/ SCHNIDER/LEGRAND |
| 2 | Distribution Boards | SIEMENS/HAGER/L&T/ SCHNIDER/LEGRAND |
| 3 | Wires | FINOLEX/NICCO/GLOSTER/POLYCAB |
| 4 | MS boxes | CRCA SHEET 16 GUAGE BOXES DULY TREATED FOR SURFACE TREATMENT/PAINTED WITH RED OXIDE <<2COATS OF SURFACE (GREY SHED) |
| 5 | Ceiling Fan | KHAITAN/CROMPTON/BAJAJ/USHA |
| 6 | Exhaust Fan | KHAITAN/CROMPTON/BAJAJ/USHA |
| 7 | Conduit/conduit Accessories | BE/HIRA/MST/PRESSFIT/PRECISION/BALCO/ KONSEAL |
| 8 | Metal clad sockets | B/C/BCH/CGL/LEGRAND/CABTREE |
| 9 | Modular Switches | LEGRAND MYRIUS/ MK ELEMENTZ/ CRABTREE MURANO/ SCHNEIDER ZENCELO |
| 10 | CFL lamps | PHILIPS/GE/BAJAJ/WIPRO |
| 11 | LED lights | PHILIPS/WIPRO/HAVELS |
| 12 | SS Cable Tray(SS 304) | LEGRAND/THOMAS & BETTS(ABB)/COOPER B LINE(EATON) |

Annexure-II

IS specifications: - The following Indian standard specifications revised as on date will apply to the equipment/contract.

| | | | |
|---|--|---------|------|
| A | Switch fuse units on cubicle switch boards | IS 4047 | 1967 |
| B | Switchgears bus bars | IS 375 | 1963 |
| C | Distribution boards | IS 2675 | 1966 |
| D | Enclosure for low voltage switchgears | IS 2147 | 1962 |
| E | PVC cables | IS 1554 | 1964 |
| F | Tubular filament lamps | IS 2410 | 1963 |
| G | Tungsten filament lamps | IS 415 | 1963 |
| H | Ceiling fans | IS 374 | 1966 |
| I | Industrial light fittings | IS 1771 | 1961 |
| J | Water tight electric light fittings | IS 3553 | 1966 |
| K | Steel boxes for enclosure of electrical accessories | IS 5133 | 1966 |
| L | Fittings for rigid conduits | IS 2667 | 1964 |
| M | Rigid steel conduits for electrical wiring | IS 9537 | 1984 |
| N | Accessories for rigid steel conduits for electrical wiring | IS 3873 | 1966 |
| O | Switch socket outlet | IS 4615 | 1968 |
| P | Three pin plugs/socket outlet | IS 1293 | 1967 |
| Q | Switches for domestic/similar purpose | IS 3854 | 1966 |
| R | PVC wires | IS 694 | 1964 |
| S | Call bell/buzzers | IS 2268 | 1966 |

| | | | |
|---|--------------------------------|---------|------|
| T | Earthing | IS 3043 | 1966 |
| U | Electrical wiring installation | IS 732 | 1963 |
| V | Switchgears | IS 3072 | 1965 |
| W | Lightning protection | IS 2309 | 1969 |

Indian electricity rule 1956 amended as on date.