

**NIUM
NATIONAL INSTITUTE OF UNANI MEDICINE
BANGALORE**

(Volume – I)

**TENDER
FOR
CONSTRUCTION
OF
TEMPORARY CANTEEN & MISCELLANEOUS WORKS
FOR NIUM AT BANGALORE**

APRIL, 2011

HSCC (INDIA) LTD

(Consultants & Engineers for Mega Hospitals & Laboratories)
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TENDER NO. HSCC/112/PM/CANTEEN/PG-I/11

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NIUM.

(National Institute of Unani Medicine, Kottigepalya, Magadi Road,,
Bangalore

No. HSCC/112/PM/Canteen/PG-I/2011

Dated : 05/04/2011

Notice Inviting Tender

Director, National Institute of Unani Medicine, (NIUM) Bangalore, invites sealed tenders through HSCC(I) Ltd in two bid system from the contractors/firms for the following works:

Sl. No.	Name of Work	Estimated Cost (Rs.)	Bid Security (Rs.)	Cost of document (Rs.)	Period of Completion
1	“Construction of Temporary Canteen & Miscellaneous Works” for National Institute of Unani Medicine (NIUM), Kottigepalya, Magadi Main Road, Vishwaneedom Post, Bangalore- 560 091	30.00 lakhs	60000.00	3500.00	4 Months

Eligibility Criteria :

- (a) Average annual turnover during the last three years [2007-2008, 2008-2009, 2009-2010] shall be at least should be at least 30% of estimated cost
- (b) The contractor should possess experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: -
 - i) Three similar completed works each costing not less than the amount equal to 40% of estimated cost.
 - ii) Two similar completed works each costing not less than the amount equal to 60% of estimated cost.
 - iii) One similar completed work costing not less than the amount equal to 80% of estimated cost.

Applicants may obtain the tender documents on any working day between **10.00 AM** and **4.00 PM** from **11.04.11 to 20.04.11** on written request from HSCC (I) Ltd, E 6A, Sector-1, Noida- **201301**, against a non refundable amount of **Rs. 3500/-** payable in cash or in the form of Demand Draft/ Banker's Cheque in favour of **HSCC (INDIA) Limited** from any nationalized bank/ scheduled bank payable at **Noida / DELHI**. The applicant may collect the documents in person with authorization letter or on request, HSCC will promptly dispatch the documents by courier on payment of an extra amount of **Rs. 500/-** over & above the said document fee of **Rs. 3500/-**, but under no circumstances HSCC will be held responsible for late delivery or loss of the documents so mailed. The applicant may also download the tender document from HSCC website www.hsccltd.co.in and submit the same along with the tender document fee of Rs 3500/- through demand draft in favour of **HSCC (INDIA) Limited** from any nationalized bank/ scheduled bank payable at **Noida / DELHI**.

Last date of tender submission in sealed envelopes by hand or by registered mail to HSCC at the above address on **21.04.2011** by 3.00 PM. Tender shall be opened on **21.04.2011** at HSCC Office, Noida at 3.30 PM. Applicants are also advised to keep checking the website regularly for any amendments/clarifications if any

Director NIUM

INSTRUCTION TO BIDDERS

General

1.0 Scope of work :

1.1 Director, National Institute of Unani Medicune, (NIUM) Bangalore, invites sealed tenders through HSCC(I) Ltd in two bid system from the contractors/firms for the following works:

- i) **Construction of Temporary Canteen & Miscellaneous Works** at National Institute of Unani Medicine, Kottigepalya, Magadi Main Road, Bangalore defined in these documents as the site of works.

1.2 The Principal Employer :

The National Institute of Unani Medicine, Bangalore shall be Principal employer / owner for the subject work.

1.3 The successful bidder will be expected to complete the works within 120 days from the date of Engineer's order to commence the work.

2.0 Cost of Bidding :

2.1 The bidder shall bear all costs associated with the preparation and submission of his bid, and the Employer will in no case be responsible or liable for those costs.

3.0 Site Visit :

The bidder is advised to visit and examine the site of works and its surroundings and obtain for himself on his own responsibility and at his own risk all information that may be necessary for preparing the bid and entering into a contract for the above works. The costs of visiting the Site shall be at the bidder's own expense.

Bidding documents

4.0 Content of bidding documents :

4.1 The set of bidding document comprises of the following as given below and amendment issued in accordance with Clause 6.

- Instruction to Bidders
- Conditions of contract
- Technical Specifications
- Bill of Quantities

5.0 Clarification of bidding documents :

5.1 A prospective bidder requiring any clarification of the bidding documents may notify HSCC in writing or by Fax. HSCC will respond to any request for clarification, which he

receives earlier than 3 days prior to the deadline for submission of bids. Copies of such response/clarification will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

6.0 Amendment of bidding Document :

- 6.1 Before the deadline for submission of bids, HSCC may modify the bidding documents by issuing amendment.
- 6.2 Any amendment thus issued shall be part of the bidding documents and shall be communicated in writing or by Fax to all purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each amendment by Fax to HSCC.
- 6.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, HSCC shall extend as in their opinion be necessary, the deadline for submission of bids, in accordance with Sub-Clause 14.2.

Preparation of Bids

7.0 Language of bid :

- 7.1 All documents relating to the bid shall be in the English Language

8.0 Documents comprising the bid :

- 8.1 The bid submitted by the bidder shall comprise the following :

- a) Bid Form
- b) Bid Security
- c) Priced Bill of Quantities

and any other materials required to be completed and submitted by bidders in accordance with these instructions.

9.0 Bid Prices :

- 9.1 Unless stated otherwise in the bidding documents, the Contract shall be for the whole works as described in Sub-Clause 1.1 based on the priced Bill of Quantities submitted by the bidder.
- 9.2 The bidder shall fill in rates and prices for all items of the works described in the bill of quantities. Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.
- 9.3 All duties, taxes and other levies payable by the Contractor under the Contract or for any other cause, shall be included in the rates, prices, and total Bid Price submitted by the bidder.
- 9.4.1 The rates and prices quoted by the bidder shall be firm for the duration of the contract/till completion of work which ever is later and shall not be subject to adjustment on any account.

9.4.2 The rates shall be inclusive of supply, transportation, installation, commissioning & no price escalation/variation shall be allowed. Further no statutory variation in taxes & duties or for any other reasons whatsoever shall be payable & shall be considered as included in the rates quoted by the bidder.

10.0 Currencies of bid and payment :

10.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

11.0 Bid Validity :

11.1 Bids shall remain valid for a period of 60 days after the deadline for bid submission specified in Clause 14.

11.2 In exceptional circumstances, the bidders may be required to extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder agreeing to the request will be required to extend the validity of his bid security for the period of the extension, and in compliance with Clause 12 in all respects.

12.0 Bid Security :

12.1 The bidder shall furnish, as part of his bid, a security of Rs. 60,000/-(Rupees Sixty Thousand only.)

12.2 The bid security shall be in the form of a pay order/Demand Draft in favour of HSCC (India) Limited, Plot No. E-6(A), Sector -I, NOIDA (U.P) - 201 301 payable at Noida / from any nationalised bank/Schedule bank or by bank guarantee for an equal amount from any nationalised bank valid for 30 (thirty) days after bid validity i.e. for minimum 90 days.

12.3 Any bid not accompanied by an acceptable bid security shall be rejected by the Engineer.

12.4 The bid security of unsuccessful bidders will be returned within 15 days of the end of the bid validity period specified in Sub-Clause 11.1.

12.5 The bid security of the successful bidder will be discharged when the bidder has signed the agreement and furnished the required performance security.

12.6 The bid security will be forfeited

- a) If the bidder withdraws his bid during the period of bid validity;
- b) If the bidder does not accept the correction of his bid price, pursuant of Clause 21; or
- c) In the case of a successful bidder, if he fails within the specified time limit to
 - i) sign the Agreement; or
 - ii) Furnish the required performance security.

13.0 Sealing, marking and submission of bid :

13.1 The bid shall be submitted in accordance with the procedure detailed herein. Specified documents shall be enclosed in envelope of appropriate size each of which shall be sealed.

- i) Envelope No. 1 : Shall contain the bid security as indicated in clause 12 of these instruction to bidders.
- ii) Envelope No. 2 : Shall contain the covering letter and the other bid documents duly signed including the following :
 - a) Power of attorney of person authorised to sign the bid.
 - b) Original bid documents Vol I & II & Tender drawings duly signed,
- iii) Envelope No. 3 : Shall contain the Bill of Quantities (Vol III) and price bid duly filled in and signed.

The contractor must fill up prices in the Bill of Quantities both in words and figures. Please note that the price should not be indicated in any of the documents enclosed in envelope 1 and 2. No conditions shall be put in the price bid. If so, the same shall be rejected.

13.2 The bidder shall seal the bid.

13.3 All the three envelopes shall be sealed and enclosed in an envelope and addressed to the General Manager (PG-I), HSCC (India) Limited Plot No. E-6(A), Sector - I, NOIDA (U.P)- 201 301.

13.4 All the above envelope shall bear the following identification:

Name of work: : Construction of Temporary Canteen & Miscellaneous works for NIUM, Bangalore.

13.5 All the envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened, if required.

13.6 All recipients for the purpose of submitting a bid shall treat the contents of the documents as private and confidential.

14.0 Deadline for submission of bids :

14.1 Bids must be received by the Engineer, HSCC (India) Ltd., at the address specified above not later than **15:00 hrs** of the designated date.

14.2 HSCC (India) Ltd may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 6 in which case all rights and obligations of HSCC (India) Ltd and the bidders previously subject to the original deadline will then be subject to the new deadline.

15.0 Late bids :

15.1 Any bid received by HSCC (India) Ltd after the prescribed deadline for submission will

be returned unopened to the bidder.

16.0 Modification and withdrawal of bids :

- 16.1 The bidder may modify or withdraw his bid by giving notice in writing before the deadline prescribed in Clause - 14.
- 16.2 The bidder's modification or withdrawal notice shall be prepared, sealed marked, and delivered in accordance with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL" as appropriate.
- 16.3 No bid may be modified after the deadline for submission of bids.
- 16.4 Withdrawal of bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in the form of bid may result in the forfeiture of the bid security pursuant to Clause 12.

Tender Opening and Evaluation

17.0 Bid Opening :

- 17.1 Bid shall be opened in the office of HSCC (India) Ltd at E-6(A), Sector-I, NOIDA (U.P) - 201 301 /half an hour after the prescribed time for tender submission in presence of the bidder's representatives who may wish to be present.
Envelope No. 1 : Shall be opened first. If the bid security is not found as prescribed the bid shall be summarily rejected.
Envelope No. 2 : Shall then be opened. Bids of parties who do not accept the conditions laid above in the bid documents are also liable to be rejected.
- 17.2 The Tender Scrutiny Committee will examine the original bids to determine whether they are complete, whether the requisite bid securities have been furnished, whether the bids have been properly signed and whether the bids are generally in order.
- 17.3 Telephonic/Fax offer will be treated as defective, invalid and rejected. Only detailed complete bids received prior to the closing time and date of the bids will be taken as valid.
- 17.4 The bidder's names, general technical details, the presence of the requisite bid security and such other details as HSCC (India) Ltd , at their discretion may consider appropriate will be announced at the bid opening.
Envelope No. 3: Contain the sealed price bid of parties whose bid is found to be generally in order and substantially responsive shall be opened either at the bid opening or at a subsequent date to be intimated in advance to such eligible bidders.
- 17.5 Only summary of prices quoted by the bidders will be read out.
- 17.6 The bid of any bidder who has not complied with any of the instructions contained herein may not be considered.

18.0 Process to be confidential :

18.1 Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence HSCC (India) Ltd in processing of bids or award decisions may result in the rejection of his bid.

19.0 Clarification of bids :

19.1 To assist in the examination, evaluation, and comparison of bids, HSCC may at their discretion, ask any bidder for clarification of his bid including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by HSCC in the evaluation of the bids in accordance with Clause 21.

20.0 Examination of bids and determination of responsiveness :

20.1 Prior to the detailed evaluation of bids, HSCC will determine whether each bid (a) meets the eligibility criteria (b) has been properly signed; (c) is accompanied by the required securities; (d) is substantially responsive to the requirement of the bidding documents; and (e) provides any clarification and/or substantiation that HSCC may require.

20.2 A substantially responsive bid is one, which conforms to all the terms, conditions, and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which effects in any substantial way the scope, quality, or performance way, inconsistent with the bidding documents, the Employer's right or the bidder's obligations under the affect contract or (b) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

20.3 If a bid is not substantially responsive, it may be rejected by HSCC , and may not subsequently be made responsive by correction or withdrawal of non conforming deviation or reservation.

21.0 Correction of errors :

21.1 Bids determined to be substantially responsive will be checked by HSCC for any arithmetic error. Errors will be corrected by HSCC as follows :

- a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern ; and
- b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

21.2 The amount stated in Form of Bid will be adjusted by HSCC in accordance with the above procedure for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, his bid will be rejected, and the bid security may be forfeited in accordance with sub-clause 12.6(b).

22.0 Currency for bid evaluation :

22.1 Bids shall be evaluated as quoted in Indian Rupees in accordance with sub-clause 10.1.

23.0 Evaluation and comparison of bids :

23.1 The Employer will evaluate and compare only the bids determined to be substantially responsive in accordance with clause 20.

23.2 In evaluating the bids, the Employer will determine for each bid the Evaluated Bid Price by adjusting the Bid Price as follow :

- a) making any correction for errors pursuant to clause 21.
- b) excluding Provisional Sums and the provision, if any, for Contingencies in the Summary of Bill of Quantities.

23.3 NIUM / HSCC reserves the right to accept or reject any variation, deviation, or alternative offer, and other factors which are in excess of the requirements of the bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in bid evaluation.

Award of Contract

24.0 Award Criteria :

24.1 Subject to Clause 25, Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest evaluated bid price, provided that such bidder has been determined to be qualified in accordance with the provisions of clause and he is found capable of executing the work. as per the technical specification issued to the bidder.

25.0 Employers right to accept any bid and to reject any or all bids :

25.1 Notwithstanding clause 24, Employer reserves the right to accept or reject any bid, and to cancel the bidding process and reject all bids, at any time prior to the award of contract, without thereby incurring any liability to the affected bidder or bidders.

26.0 Notification of award :

26.1 Prior to expiration of the original period of bid validity prescribed by the Engineer, he will notify the successful bidder by Fax confirmed by registered letter/courier that his bid has been accepted. This letter (hereinafter and in the conditions of Contract called the Letter

of Acceptance) shall indicate the sum which HSCC / NIUM will pay to the Contractor in consideration of the execution, completion and maintenance of the works by the Contractor as prescribed by the Contract (hereinafter called the "Contract Price").

- 26.2 The notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security in accordance with the provision of Clause 27.
- 26.3 Upon furnishing the performance security by the successful bidder, the Engineer will promptly notify the other bidders that their bids have been unsuccessful.

27.0 Performance Security :

- 27.1 Within 15 days of receipt of the notification of award from the Engineer, the successful bidder shall furnish to the Engineer a performance security in the form of a DD or bank guarantee as per enclosed format of an amount equivalent to 5% of the contract price. The validity of the performance security shall be upto the end of the defect liability period which shall be 6 months from the date of completion.
- 27.2 Failure of the successful bidder to comply with the requirements of sub-clause 27.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the bid security.

General Conditions of Contract

1.0 Definitions :

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of contract but keep their defined meanings. Capital initials are used to identify defined terms.

Acceptance is the date when the contract came into existence upon receipt by the contractor of the Letter of Acceptance issued by the Engineer.

The **Activity Schedule** is a schedule of the activities comprising the Supplying, installation, testing and commissioning of the works.

The **Completion Date** is the date when the Engineer notified that the works can be used by the Engineer.

The **Principal employer/Owner** is National Institute of Unani Medicine (NIUM), Bangalore. HSCC (India) Ltd as consultant to employer shall represent them for tendering, award of work & execution of work.

The **Consultant** is M/s HSCC (I) Ltd. (HSCC), E-6A, sector 1 Noida.

The **Contract** is the contract between the consultant on behalf of the Employer of the one part and the Contractor of the other.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose bid to carry out the works has been accepted by the Employer.

The **Contractor's Bid** is the completed bidding documents submitted by the contractor to the Engineer.

The **Contract Price** is the price stated in the Letter for Acceptance and thereafter as adjusted in accordance with the provisions of the contract.

Days are calendar days: **Months** are calendar months.

A **Defect** is any part of the works not completed in accordance with the contract.

The **Engineer** is the person appointed by consultant who is responsible for supervising the Contractor, administering the Contract, certifying payments due to the Contractor, issuing and valuing variations to the Contract, awarding extensions of time etc.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the works.

The **Initial Contract Price** is the Contract Price at the date of the Employer's written acceptance of the bid.

The **Intended Completion Date** is the date on which it is intended that the contractor shall complete the works. The intended completion date is specified in the contract data. The intended completion date may be revised only by the Engineer by issuing an extension of time.

Plant is any integral part of the works which is to have a mechanical, electrical, electronic or chemical function.

The **Site** is the area defined as such in the contract data.

Site Investigation Reports are those which were included in the bid documents and are factual and interpretative reports about the ground and ground water conditions at the site.

The **Start Date** is given in the contract data. It is the date when the contractor can commence work on the contract. It does not necessarily coincide with any of the site Possession Dates.

A **Sub-contractor** is person or corporate body who has a contract with the contractor to carry out a part of the work in the contract, which includes work on the site.

Temporary works are works designed, constructed, installed and removed by the contractor which are needed for construction or installation of the works.

A **Variation** is an instruction given by the Engineer which varies the works.

The **Works** are what the contract requires the contractor to construct, install and hand over to the Employer.

2.0 Interpretation :

2.1 In interpreting these conditions of contract, singular also means plural, male also means female and vice versa. Headings and cross-reference between clauses have no significance. Words have their normal meaning under the language of the contract unless specifically defined.

2.2 If sectional completion is specified in the contract data, references in the conditions of contract to the works, the completion date, and the Intended Completion Date apply to any Section of the Works. (other than references to the completion date and intended completion date for the whole of the works)

3.0 Language and law :

3.1 The language of the contract and the law-governing contract are stated in the contract data.

4.0 Engineer's decisions :

4.1 The Engineer is to decide contractual matters between the Employer and the Contractor

fairly and impartially.

5.0 Delegation :

5.1 The Engineer may delegate any of his duties and responsibilities to other people after notifying the contractor and may cancel any delegation after notifying the contractor.

6.0 Communication :

6.1 Communications between parties which are referred to in the conditions are effective only when in writing.

7.0 Sub-Contracting :

7.1 The contractor shall not subcontract the whole works. Except where otherwise provided by the contract, the contractor shall not subcontract any part of the works without the prior consent of the engineer.

8.0 Other Contractors :

8.1 The contractor is to cooperate and share the site with other contractors, Public authorities, utilities, and the Employer as per requirements of the Employer. He is also to provide facilities and services for them as per Engineer's directives.

9.0 Personnel :

9.1 The contractor is to employ the key personnel to carry out the functions stated in the Scope of works or other personnel approved by the Engineer. The person so appointed shall be duly authorised to receive instructions from the Engineer and carry out the instructions issued.

10.0 If the Engineer asks the contractor to remove a person who is a member of his staff or his work force and states his reasons the contractor is to ensure that the person leaves the site immediately and has no further connection with the work in the contract.

11.0 Contractor's risks :

11.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the contract are the responsibility of the contractor.

12. ESCALATION:

It is a fixed rate contract.

13.0 Indemnities :

13.1 The contractor indemnifies the Employer against claims for damage caused by the movement of his equipment or temporary works outside the site.

14.0 Site Investigation report : Deleted

15.0 Queries about the Contract data :

The Engineer is to give instructions clarifying queries about the Contract data.

16.0 Contractor to construct the works :

16.1 The contractor is to construct the works in accordance with the specification and drawings.

17.0 The works to be completed by the intended completion date :

17.1 The contractor may begin the works on the start date and is to carry out the works in accordance with the program submitted by him, as updated with the approval of the Engineer, and complete them by the intended completion date.

18.0 Approval of the contractor's temporary works :

18.1 The contractor is to submit drawings and specifications showing his proposed temporary works to the Engineer, who shall to approve them if they comply with the contract data.

18.2 The contractor is responsible for design of temporary works.

18.3 The Engineer's approval does not alter the contractor's responsibility for his design of the temporary works.

18.4 The contractor is to obtain approval of third parties to his design of the temporary works where required.

19.0 Safety :

19.1 The contractor is responsible for the safety of all activities on the site.

20.0 Special Applications

Deleted.

21.0 Possession of the site :

21.1 The Employer is to give possession of all parts of the site to the contractor. Possession of site may be given in parts and the contractor is required to take such delay, if any, in his account.

22.0 Access to the site :

22.1 The contractor is to allow the Engineer and any person authorised by the Engineer access to the site and to any place where work in connection with the contract is being carried out or is intended to be carried out.

23.0 Instructions :

23.1 The contractor shall carry out all instructions of the Engineer, which comply with the law of the country in which the site is located.

24.0 Procedure for disputes :

24.1 If any dispute or difference of any kind what so ever shall arise between the Employer and the contractor or the Engineer and the contractor in connection with or arising out of the contract, or the execution of the works, whether during the progress of the works or after their completion and whether before or after the termination, abandonment or

breach of the contract, it shall in the first place, be referred to and settled by the engineer who shall, within a period of ninety days after being requested by either party to do so, give written notice of his decision to the Employer and the contractor subject to arbitration, as hereinafter provided, such decision in respect of every matter so referred shall be final and binding upon by the Employer and by the contractor and shall forthwith be given effect to by the Employer and by the contractor, who shall proceed with the execution of the works with all due diligence whether he or the Employer requires arbitration, as hereinafter provided, or not. If the engineer has given written notice of his decision to the Employer or the contractor within a period of ninety days from receipt of such notice, the said decision shall remain final and binding upon the Employer and the contractor. If the engineer shall fail to give notice of his decision, as aforesaid within a period of ninety days after being requested as aforesaid, or if either the Employer or the contractor be dissatisfied with any such decision, then and in any such case either the employer or the contractor may within ninety days after receiving notice of such decision within ninety days after the expiration of the first named period of ninety days as the case may be require that the matter or matters in dispute be referred to arbitration as hereinafter provided all disputes or differences in respect of which the decision if any of the Engineer has not become final and binding as aforesaid shall be finally settled under the Indian Arbitration Act 1996 or any statutory modification or enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. Such arbitration shall be settled by two arbitrators, one to be appointed by each party to the dispute and the arbitrators shall before taking upon themselves the burden of reference appoint an umpire. If, the arbitrators can not agree on the appointment of the umpire, the umpire shall be appointed by Chairman-cum-Managing Director, HSCC. The arbitration shall take place at Noida unless both parties agree otherwise neither party shall be limited in the proceedings. Before such arbitrator/s to the evidence or arguments put before the Engineer for the purpose of obtaining his said decision no decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator/s on any matter whatsoever relevant the dispute or difference referred to the arbitrator/s as aforesaid. The reference to arbitration may proceed notwithstanding that the works shall not then be or be alleged to be complete provided always that the obligations of the Employer the Engineer and the contractor shall not be altered by reason of the arbitration being conducted during the progress of the works.

Time Control

25.0 Programme :

- 25.1 The Contractor shall submit to the Engineer for his approval a programme showing the general methods, arrangements order, and timing for all the activities in the works, within one week of getting the letter of commencement.
- 25.2 The Engineer's approval of the program does not alter the Contractor's obligations.

26.0 Extension of the intended completion date :

- 26.1 Extension of completion time shall be considered & may be granted by the Engineer based on merit of the case which is required to be submitted by the Contractor along with full justifications & supporting documents for the reasons of delay not attributable to the Contractor. However the rates shall be firm & binding during the extended period of completion. No extra payment/compensation for extended stay shall be permissible.

27.0 Acceleration : Deleted

28.0 Delays ordered by the Engineer :

- 28.1 The Engineer may instruct the Contractor to delay the start of progress or any activity within the works. However no compensation on any account for such delay shall be payable to the Contractor.

29.0 Management Meetings :

- 29.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting is to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 29.2 The Engineer is to record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

30.0 Early warning : Deleted

31.0 Identifying defects :

- 31.1 The Engineer is to check the Contractor's work and to notify the Contractor of any

defects, which he finds. Such checking does not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover at test any work, which he considers may have a Defect.

32.2 Tests :

32.1 If the Engineer instructs the Contractor to carry out test not specified in the specification to check whether any work has a Defect and the test shows the it does, the Contractor is to pay for the test and its samples. If there is no defect the test is compensation event.

33.0 Correction of defects :

33.1 The Engineer is to give notice to the Contractor of Defects of which he is aware before the end of the Defects Notice Period, which begins at Completion.

33.2 Every time notice of a Defect is given, a Defect Correction Period for the notified defect beings. The Contractor is to correct the notified defect within the Defects Correction Period. The length of the Defects Correction Period is stated in the Contract Data.

33.3 The Contractor is to correct defects which he notice himself before the end of the Defects Notice Period.

33.4 The Engineer is to certify that all Defects have best corrected when all known Defects have been corrected. If the Engineer considers that correction of a Defect is not essential he can request the Contractor to submit a quotation for the corresponding reduction to the Contract Price or an earlier Intended Completion Date or both. If the Engineer accepts the quotation the corresponding change in the contract Data is Variation.

34.0 Uncorrected defects after completion date :

34.1 After Completion the Engineer may arrange for a third party to correct a Defect if the contractor has not corrected it within the Defects Correction Period.

34.2 The Engineer is to give the Contractor at least 28 days notice of his intention to use a third party to correct a Defect. If the Contractor does not correct the Defects himself within this notice period, the Engineer may have the Defect corrected by the third party. The cost of the correction will be deducted from the Contract Price.

35.0 Bill of Quantities :

35.1 The Bill of Quantities is to contain items for the construction of Temporary canteen & miscellaneous works to be done by the Contractor.

35.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

36.0 Changes in the quantities :

36.1 The quoted rates for all the items shall be firm, fixed and binding on the contractor irrespective of any variation of quantities stated in the contract.

37.0 Variations:-

All variations are to be included in updated programs produced by the Contractor.

38.0 Payments for variations :

38.1 The Contractor is to forecast the cost effect of a proposed variation on the Contract Price and provide the Engineer with a quotation for carrying out the variation when requested to do so by the Engineer before the variation is ordered by him.

38.2 If the Contractor's quotation is unreasonable, the Engineer orders the variation and make a change to the contractor's price which is based on his own, forecast of the effects of the variation on the Contractor's costs and which shall be binding on the contractor.

39.0 Cash flow forecasts :

39.1 The Contractor shall provide cash flow forecast at the start of work to the engineer.

40.0 Payment certificates :

40.1 The Contractor shall submit to the Engineer weekly statements of the estimated value of the work completed less the cumulative amount certified previously.

40.2 The Engineer shall check the Contractor's weekly statement and certify the amount to be paid to the Contractor.

40.3 The value of work completed is determined by the Engineer.

40.4 The value of work completed comprises the value of the quantities of the items in the Bill of Quantities completed and brought to the site of work.

40.5 The value to work completed includes the valuation of Variation and deductions for retention.

40.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

41.0 Payments :

- a) The Contractor shall be paid on the certification of the Engineer, the amount due to him.
- b) Retention Money at the rate of 10% (ten percent) shall be deducted from each interim certificate subject to a maximum of 5% (five percent) of the contract price.
- c) Payment upon each of the Engineer's certificates shall be made by the HSCC (India) Ltd. acting for and on behalf of Employer within 30 days after such certificate has been issued by the Engineer.

However, 75% of the estimated amount as determined by the Engineer of the payment due against the monthly running bill shall be paid within 10 (Ten)

working days after submission of the bill by the contractor in the approved format and complete in all respects.

- d) The Engineer may at any time make any corrections or modifications to any certificate, which shall have been issued by him and shall have power to withhold any certificate if the Works or any part thereof are not being carried out to his satisfaction.
- e) The responsibility for making the payments or meeting other obligations to the Contractor in respect of all Works as certified by the Engineer shall be that of the Employer and not of the Engineer.
- f) After completion of work and prior to final payment, the contractor shall furnish to the engineer, a release of claim against the Employer arising out of contract, other than claims specifically identified, evaluated and excepted from the operation of the release by the contractor.

42.0 Taxation

The contractor and his staff shall pay all taxes, duties, levies, etc. of the Government provisions of the Income-Tax Act or as per the advice of the Income Tax Authority, Labour Cess as per labour regulation act. Deduction of Income-Tax, VAT, / other taxes shall be made from each certificate of payment as per the relevant provisions of the Income Tax Act or as per the advice of the Income Tax authority/ other competent authority.

43.0 Subsequent Legislation Deleted

44.0 Retention :

- 44.1 The Employer is to retain from each payment due to the contractor the proportion stated in the Contract Data until completion of the whole of the works.
- 44.2 On completion of the whole of the works half the total amount retained is repaid to the contractor and half when the Defects Notice Period has passed and the Engineer has certified that all Defects notified by him to the Contractor before the end of this period have been corrected.

45.0 Liquidated damages :

- 45.1 The Contractor is to pay liquidated damages to the Employer at the rate per calendar day stated in the Contract Data from each day that the completion date is later than the Intended Completion date. The Employer may deduct liquidated damaged from payments due to the contractor. Payment of liquidated damages does not affect the Contractor's liabilities.
- 45.2 If the Intended Completion Date is extended after liquidated damages have been paid,

the Engineer is to correct any overpayment of liquidated damages by the contractor by adjusting the next payment certificate. The Contractor is to be paid interest on the overpayment, calculated from the date of payment to the date of repayment.

46.0 Advance payment :

46.1 Advance is not payable.

47.0 Securities :

47.1 The performance securities are to be provided to the Employer by the start date and are to be issued in a form and by a bank or bondsman acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable.

47.2 If there is no reason to call the performance security, the performance security is to be returned by the Employer within 14 days of the last defects correction period.

47.3 The Employer is to notify the contractor of any claim made against the institution issuing the security.

47.4 The Employer may claim against the surety if any of the following occurs for 42 days or more ;

- a) the contractor is in breach of the Contract and the Employer has notified him that he is; and
- b) the Contractor has not paid an amount due to the Employer.

48.0 Dayworks :

48.1 The days works rates in the Contractor's bid are to be used for small additional amounts of work and only when the Engineer has given written instructions in advance for additional work to be paid for in that way.

48.2 All work to be paid for as Day works is to be recorded by the Contractor on forms approved by the Engineer. Each completed forms to be verified and signed by the Engineer within two calendar days of the work being done.

48.3 The contractor is paid for day works only when he has obtained signed day works forms.

49.0 Cost of repairs :

49.1 Loss or damage to the works or materials to be incorporated in the works between the start date and the end of the Defects Correction is to be amended by the contractor at the contractor's cost if the loss of damage arises from the contractor's acts of omissions.

Finishing the Contract

50.0 Completion :

50.1 The Engineer is to issue a certificate certifying completion to the contractor and the Employer when he decides that the work is completed.

51.0 Taking over :

51.1 The Employer takes over the site and the works within a month of the Engineer issuing a certificate of completion.

52.0 Final account :

52.1 The contractor is to supply to the Engineer a detailed account of the total amount which he considers is payable to him under the contract before the end of the defects notice period. The Engineer is to certify any final payment which is due to the contractor within 30 days of receiving the contractor's account if it is correct and complete. If it is not, the Engineer is to issue a schedule which states the scope of the corrections or additions which are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Engineer is to decide on the amount payable to the contractor.

53.0 DELETED

54.0 Termination :

54.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract which substantially deprives him of the principal benefits of the contract.

54.2 Fundamental breaches of contract include, but are not limited to :

- a) the contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorised by the Engineer.
- b) the Engineer instructs the Contractor to delay the progress of the works and the instruction is not withdrawn within 28 days;
- c) the employer or the contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- d) a payment certified by the Engineer is not paid by the Employer to the Contractor within 84 days of the date of the Engineer 's certificate;
- e) the Engineer gives Notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer; and
- f) the contractor does not provide a security which is required.

54.3 When either party to the Contract gives notice of a breach of contract to the Engineer,

the Engineer is to decide whether the breach is fundamental or not.

54.4 Notwithstanding the above, the Employer may terminate the Contract at his convenience.

54.5 If the contract is terminated the contractor is to stop work immediately, make the site safe and secure and leave the site as soon as reasonably possible.

55.0 Payment upon termination :

55.1 If the contract is terminated because of a fundamental breach of contract by the contractor, the Engineer is to issue a certificate for the value of the work done and materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage of the value of the work not completed indicated in the contract data. Liquidated damages to not apply and the Employer has right to damages in respect of any delay incurred arising from the breach. If the total amount due to the Employer exceeds any payment due to the contractor the difference shall be a debt payable to the Employer.

55.2 If the contract is terminated at the Employer's convenience because of a fundamental breach of contract by the Employer, the Engineer is to issue a certificate for the value of the work done, materials ordered, the reasonable cost of removal of equipment, repatriation of the Contractor's personnel employed solely on the works, and the Contractor's costs of protecting and securing the works and less advance payments received up to the date of certificate.

56.0 Property :

56.1 All materials on the site, plant, and equipment owned by the contractor, temporary works and works are deemed to be the property of Employer and are at his disposal if the contract is terminated because of a fundamental breach of contract by the Contractor.

57.0 Frustration :

57.1 If the contract is frustrated by the out break of war or by any other event entirely outside the control of either the employer or the Contractor the Engineer is to certify that the Contract has been frustrated. The contractor is to make the site safe and stop work as quickly as possible after receiving this certificate and is to be paid for all work carried out before receiving it and for any work carried out afterwards to which he was committed.

The following documents are also part of the contract :

- * The Bid and letter of Acceptance
- * The conditions of Contract

* The Technical Specifications

* The Drawings

* The Priced Bill of Quantities

The Contractor is to submit the program for the works within 7 days of being notified of the acceptance of his bid.

The law which applies to the Contract is the law of the Union of India, that of Delhi High Court.

Arbitration procedure to be as per Arbitration and Reconciliation Act 1996. Court Jurisdiction New Delhi

Place where arbitration will take place: Noida

SPECIAL CONDITIONS OF CONTRACT

1. The quoted rates are deemed to include for all leads & lifts etc, and no claim on this account shall be entertained. When required by the engineer the work shall be carried out beyond office hours and at night and in such a case the contractor shall at his own cost make suitable arrangement for providing lighting etc. The quoted rates are deemed to include for all expenditures associated with overtime/night work.
2. The dimension given in the drawings are to be treated as approximate and indicative only. The contractor has to carry out the work as per actual site measurements.
3. Water & electricity shall be arranged by the Contractor at their cost or shall be supplied by Principal Employer if available, subject to recovery.
4. The BOQ, specification and other contract documents are jointly descriptive and supplementary to each other of the work involved. The items have been briefly described in the BOQ. However, the work shall be carried out as per detailed specifications and standards norms and practices followed for such type of works. The scope includes matters not specifically mentioned but required for proper completion of the work and no claim whatsoever shall be entertained on this account.
5. The contractor shall submit samples of the materials he proposes to use in the works for approval of the Engineer. Only approved material shall be used in the works. The approved samples shall be signed by the contractor and the engineer and retained in the office of the engineer for comparison.
6. The quantities indicated in the BOQ are tentative and may vary as per approved shop drawing. The contractor shall calculate the quantities of each item in accordance with approved shop drawing and get Engineer's approval for the same. The quantities of each item shall be as per this approved list. Payment shall be made as per quoted rates in BOQ.

FORM OF AGREEMENT

(On a stamp paper of appropriate value)

AGREEMENT

This Agreement made the _____ day of _____ 20_____ between National Institute of Unani Medicine (NIUM), Bangalore (hereinafter called "The Employer") represented by M/s HSCC (India) Ltd. who enters into this Agreement of the one part and M/s
..... (hereinafter called "The Contractor") of the other part.

Whereas The Employer is desirous that certain Works should be executed by the Contractor, viz _____ ("the works") and has accepted a Bid amounting to Rs. _____ by the Contractor for the execution and completion of the Works and the remedying of any defects therein.

Now this Agreement witnesseth as follows :

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz :
 - (a) The Letter of Award
 - (b) The said Bid;
 - (c) The General Conditions of Contract;
 - (d) Instructions to tenderers and Specific Conditions of Contract;
 - (e) The Specification;
 - (f) The Drawings;
 - (g) The Priced Bill of Quantities;
 - (h) Any other relevant documents referred to in this Agreement or in the aforementioned documents;

3. In consideration of the payments to be made by the HSCC (I) Ltd. (HSCC) acting as Employer to the contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor through HSCC in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written.

Signed, Sealed, and Delivered by the Said _____

Binding Signature of [NIUM] National Institute of Unani Medicine (NIUM), Bangalore.

Binding Signature of Contractor _____

In the presence of

Witness (1) :

Witness (2) :

APPENDIX TO TENDER

Important Clause	Clause No.	Remarks
Amount of performance security	27.1(Instruction to bidders)	5% of contract price.
Period of commencement from Engineer's order to commence		1 week.
Amount of Liquidated damages	45.1	0.5% (point five percent) of contract price per week of delay.
Limit of liquidated damages	45.0	10% of contract price
Defect Liability Period	27.1(Instruction to bidders)	6 months
Percentage of retention	44	10%
Limit of retention money	44	5% of the contract price.
Programme of work and progress reports	25.1	Programme updated quarterly, progress reported weekly.
Time of completion of work	1.3 (Instruction to bidders)	120 Calendar days for entire works.

PROFORMA FOR PERFORMANCE BANK GUARANTEE

(On a stamp paper of appropriate value from any Nationalised Bank or Scheduled Bank)

To,

M/s HSCC (India) Ltd.,

Plot No. 6(A), Block E, Sector 1,

NOIDA - 201 301.

Dear Sir,

In consideration of the National Institute of Unani Medicine (NIUM), Bangalore (hereinafter called Employer) which expression shall include his successor and assigns represented by his Consultant M/s. HSCC (I) Ltd., Plot - 6 (A), Block - E, Sector - I, Noida, Uttar Pradesh - 201 301 (hereinafter called HSCC) having awarded to M/s _____ (hereinafter referred to as the said Contractor or 'Contractor' which expression shall wherever the subject or context so permits include its successors and assigns) a contract No _____ in terms inter alia, of the HSCC Letter No. _____ dated _____ and the General Conditions of Contract and upon the condition of the contractor's furnishing security for the performance of the contractor's obligations and discharge of the contractor's liability under and in connection with the said contract upto a sum of Rs. _____ (Rupees _____ only) amounting to _____ percent of the total contract value.

1. We, _____ (hereinafter called 'The Bank' which expression shall include its successors and assigns) having our branch office at _____ and registered /Head office at _____ a company registered under the Companies Act, 1956) hereby jointly and severally undertake to guarantee the payment to the Employer in rupees forthwith on demand in writing and without protest or demur or any and all moneys anywise payable by the contractor to the Employer under in respect of or in connection with the said contract inclusive of all the Employer's losses and damages and costs, (inclusive between attorney and client) charges and expenses and other moneys anywise payable in respect of the above as specified in any notice of demand made by the Employer to the Bank with reference to this guarantee upto an aggregate limit of Rs. _____ (Rupees _____ only).

2. We _____ Bank Ltd. further agree that The Employer shall be sole judge of and as to whether the said contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by The Employer on account thereof and the decision of The Employer that the said Contractor has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by The Employer from time to time shall be final and binding on us.
3. The Employer shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other security in respect of the Contractor's obligations and liabilities hereunder or to vary the contract or the work to be done thereunder vis-a-vis the Contractor or to grant time or indulgence to the Contractor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forbear from enforcement of all or any of the security and/or any other security(ies) now or hereafter held by The Employer and no such dealing(s) reduction(s) increase(s) or other indulgence(s) or arrangements with the Contractor or release or forbearance whatsoever shall absolve the bank of the full liability to The Employer hereunder or prejudice the rights of The Employer against the bank.
4. This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all monies payable to The Employer in terms thereof.
5. The bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to The Employer in terms hereof.
6. The amount stated in any notice of demand addressed by The Employer to the Bank as liable to be paid to The Employer by the Contractor or as suffered or incurred by The Employer on account of any losses or damages or costs, charges and/or expenses shall be conclusive evidence of the amount so liable to be paid to The Employer or suffered or incurred by The Employer as the case may be and shall be payable by the Bank to The Employer in terms hereof.
7. This guarantee shall be a continuing guarantee and shall remain valid and irrevocable for all claims of The Employer and liabilities of the contractor arising upto and until midnight of _____.

8. This guarantee shall be in addition to any other guarantee or security whatsoever that The Employer may now or at any time anywise may have in relation to the Contractor's obligations/or liabilities under and/or in connection with the said contract, and The Employer shall have full authority to have recourse to or enforce this security in preference to any other guarantee or security which The Employer may have or obtain and no forbearance on the part of The Employer in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.
9. It shall not be necessary for The Employer to proceed against the said Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding that any security which The Employer may have obtained or obtain from the contractor shall at the time when proceedings are taken against the said bank hereunder be outstanding or unrealised.
10. We, the said Bank undertake not to revoke this guarantee during its currency except with the consent of The Employer in writing and agree that any change in the constitution of the said contractor or the said bank shall not discharge our liability hereunder.
11. We _____ the said Bank further that we shall pay forthwith the amount stated in the notice of demand notwithstanding any dispute/difference pending between the parties before the arbitrator and/or that any dispute is being referred to arbitration.
12. Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs. _____ (Rupees _____) and this guarantee shall remain in force till _____ and unless a claim is made on us within 3 months from that date, that is before _____ all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities thereunder.

Dated _____ day of _____ 20

For and on behalf of Bank.

Issued
under
seal :

TECHNICAL SPECIFICATIONS

1.0 CIVIL WORKS

- 1.01 The specifications and mode of measurements for Civil and Plumbing works shall be in accordance with C.P.W.D. specifications 1996 Volumes I to VI.

Unless otherwise specified in the nomenclature of individual item or in the specifications, the entire work shall be carried out as per the C.P.W.D. specifications with upto date correction slips upto the date of opening of tender.

- 1.02 For the item not covered under CPWD Specifications mentioned above, the work shall be executed as per latest relevant standards/codes published by B.I.S. (formerly ISI) inclusive of all amendments issued thereto or revision thereof, if any, upto the date of opening of tenders.
- 1.03 In case of B.I.S. (formerly I.S.I) codes/specifications are not available, the decision of the Engineer based on acceptable sound engineering practice and local usage shall be final and binding on the contractor.
- 1.04 However, in the event of any discrepancy in the description of any item as given in the schedule of quantities or specifications appended with the tender and the specifications relating to the relevant item as per CPWD specifications mentioned above, or in drawings the former shall prevail.
- 1.05 The work shall be carried out in accordance with the architectural, structural, plumbing and electrical drawings etc. The drawings shall have to be properly co-related before executing the work. In case of any difference noticed between the drawings, final decision, in writing of the Engineer shall be obtained by the contractor. For items, where so required, samples shall be prepared before starting the particular items of work for prior approval of the Engineer and nothing extra shall be payable on this account.
- 1.06 All materials to be used on works shall bear I.S. certification mark unless specifically permitted otherwise in writing. In case I.S. marked materials are not available (not produced), the materials used shall conform to I.S. code or CPWD specifications as applicable in this contract.

In such cases the Engineer shall satisfy himself about the quality of such materials and give his approval in writing. Only articles classified as "First Quality" by the manufacturers shall be used unless otherwise specified. All materials shall be tested as per provisions of the Mandatory Tests in CPWD specifications and the relevant IS specifications. The Engineer may relax the condition regarding testing if the quantity of materials required for the work is small. Proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the satisfaction of Engineer. Grade of cement used shall be 43 /53 unless otherwise specified explicitly. Reinforcement Steel used shall be of FE-415 unless otherwise specified.

- 1.07 In respect of the work of the sub-agencies deployed for doing work of electrification, air-conditioning, external services, other building work, horticulture work, etc. for this project and any other agencies simultaneously executing other works, the contractor shall afford necessary coordination and facilities for the same. The contractor shall leave such

necessary holes, openings, etc. for laying / burrying in the work pipes, cables, conduits, clamps, boxes and hooks for fan clamps, etc. as may be required for the electric, sanitary air-conditioning, fire fighting, PA system, telephone system, C.C.T.V. system, etc. and nothing extra over the agreement rates shall be paid for the same.

- 1.08 Unless otherwise specified in the bill of quantities, the rates for all items of work shall be considered as inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source such as rains, floods, subsoil water table being high or due to any other cause whatsoever.
- 1.09 Any cement slurry added over base surface (or) for continuation of concreting for bond is added its cost is deemed to have in built in the item unless otherwise / explicitly stated and nothing extra shall be payable or extra cement considered with consumption on this account.
- 1.10 The rate for all items in which the use of cement is involved is inclusive of charges for curing.
- 1.11 The contractor shall clear the site thoroughly of all scaffolding materials and rubbish etc. left out of his work and dress the site around the building to the satisfaction of the Engineer before the work is considered as complete.
- 1.12 Rates for plastering work (excluding washed grit finish on external wall surfaces) shall include for making grooves, bands etc. wherever required and nothing extra shall be paid for the same.
- 1.13 The rates quoted for all brick/concrete work shall be deemed to include making openings and making good these with the same specifications as shown in drawings and/or as directed. No extra payment shall be made to the contractor on this account.
- 1.14 Rates for all concrete/plaster work shall include for making drip course moulding, grooves etc. wherever required and nothing extra shall be paid for the same.
- 1.15 Rates for flooring work shall include for laying the flooring in strips / simple designs wherever required and nothing extra shall be paid for the same.
- 1.16 The quoted rate shall be for finished items and shall be complete in all respects including the cost of all materials, labour, tools & plants, machinery etc., all taxes, duties, levies, octroi, royalty charges, statutory levies etc. applicable from time to time and any other item required but not mentioned here involved in the operations described above. The client/HSCC/Employer shall not be supplying any material, labour, plant etc. unless explicitly mentioned so.

2.0 **ELECTRICAL WORKS**

2.1 The electrical Installation work shall be carried out in accordance with Indian Standard Code of Practice for Electrical Wiring Installation IS: 732-1989 and IS: 2274-1963. It shall also be in conformity with the current Indian Electricity rules and regulations and requirements of the Local Electricity Supply Authority and Fire Insurance regulations, so far as these become applicable to the installation. Electrical work in general shall be carried out as per following CPWD Specifications with upto date amendment.

- Specifications for Electrical Works Part-I (Internal) by CPWD – 1994 or latest revision
- Specifications for Electrical Works Part-II (External) by CPWD – 1994 or latest revision
- Specifications for Electrical Works Part-III (Lift & escalators) by CPWD - 2003 or latest revision
- Specifications for Electrical Works Part-IV (Substation) by CPWD – 1994 or latest revision

Wherever these specifications calls for a higher standard of material and or workmanship than those required by any of the above mentions regulations and specification then the specification here under shall take precedence over the said regulations and standards.

2.2 The scope of work includes testing & commissioning of all electrical installations, obtaining approvals from Chief Electrical Inspectors, Local Electricity Supply Authority, Pollution Control Board and any other statutory authorities required for the completion of electrical works.

**NIUM
NATIONAL INSTITUTE OF UNANI MEDICINE
BANGALORE**

(Volume – II)

Bill of Quantities

FOR

**CONSTRUCTION OF TEMPORARY CANTEEN &
MISCELLANEOUS WORKS FOR NIUM AT
BANGALORE**

APRIL - 2011

HSCC (INDIA) LTD.

(Consultants & Engineers for Mega Hospitals & Laboratories)
E - 6 (A), Sector - I, NOIDA (U.P.) - 201 301 (INDIA)

PHONE : 0120-2542436-440

FAX : 0120-2542447

E-mail:hsccltd@hsccltd.co.in

TENDER NO. HSCC/112/PM/CANTEEN/PG-I/11

PROJECT: CANTEEN WORKS AT NIUM, banglore

Bill of Quantities

CIVIL WORKS AND SERVICES

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
1.00	EARTH WORK					
1.01	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed :					
a)	All kinds of soil	162.00	CUM			
1.02	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	150.00	CUM			
1.03	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exc					
a)	All kinds of soil					
i)	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	75.00	Metre			

SUB TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7

2.00 CONCRETE WORK

2.01 Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.

- | | | | |
|----|---|-------|-----|
| a) | 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate 40 mm nominal size). | 47.00 | CUM |
| b) | 1:4:8 (1 cement : 4 coarse sand :18 graded stone aggregate 40 mm nominal size). | 49.00 | CUM |

Sub Total

3.00 REINFORCED CEMENT CONCRETE

3.01 Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement. including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-25 grade reinforced cement concrete by using 410kg. of cement per cum of concrete. All work up to floor V level.

7.00 Cum

3.02 Centering and shuttering including strutting, propping etc. and removal of form for :

- | | | | |
|----|--|-------|-----|
| a) | Foundations, footings, bases of columns, etc. for mass concrete. | 24.00 | SQM |
| b) | Shelves (Cast in situ) | 10.00 | SQM |

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
c)	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	10.00	SQM			
3.03	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.					
a)	Thermo-Mechanically Treated bars.	2500.00	Kgs			
SUB-TOTAL						
4.00 BRICK WORK						
4.01	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:					
a)	Cement mortar 1:6 (1 cement : 6 coarse sand)	7.00	CUM			
4.02	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level.					
a)	Cement mortar 1:4 (1 cement :4 coarse sand)	95.00	SQM			
4.03	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry (with F.P.S. bricks).	95.00	SQM			
SUB-TOTAL						
5.00 DOORS & WINDOWS						

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
5.01	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and paneling to be paid for separately) :					
a)	For fixed portion					
i)	Powder coated aluminium (minimum thickness of powder coating 50 micron)	70.00	Kg			
b)	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of PVC / neoprene gasket required (Fittings shall be paid for separately).					
i)	Powder coated aluminium (minimum thickness of powder coating 50 micron)	30.00	Kg			
5.02	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.					

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
a)	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	5.00	Sqm			
5.03	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item) :					
a)	With float glass panes of 5.50 mm thickness	40.00	SQM			
5.04	Extra for providing frostings on glass panes of 10.00 kg/sqm. (4mm thick) instead of ordinary glass panes 10.0 kg/sqm. (4mm thick) respectively in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)	40.00	SQM			
5.05	Providing and fixing aluminium handles colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary screws etc. complete. 125 mm	4.00	Each			
5.06	Providing and fixing aluminium tower bolt colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary screws etc.					
a)	150 x 10 mm	2.00	Each			
b)	250 x 10 mm	2.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
5.07	Providing and fixing aluminium sliding door bolts colour anodised (anodic coating not less than grade AC 10 as per IS : 1868) to required colour or shade with necessary nuts, screws etc. complete :					
a)	250 x 16 mm	2.00	Each			
5.08	providing and fixing IS:3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws extra complete	4.00	Each			
5.09	Providing and fixing aluminium hanging floor door stopper colour anodised to required colour & shade with necessary screws etc. complete					
a)	Twin rubber stopper	2.00	Each			
5.10	Providing and fixing 35mmx12mm wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete					
a)	Approved quality 1st class sal wood	14.00	Metre			
SUB-TOTAL						
6.00	STEEL WORK					
6.01	Steel work welded in built up sections/frame work including cutting, hoisting, fixing in position,making holes,repairing and applying a priming coat of approved steel primer using structural steel etc. as required.					
a)	In gratings, frames, guard bar, ladders, railings, brackets, gates in similar works.	11000.00	kg			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
6.02	providing and fixing pressed steel door frames conforming to IS:4351 manufactured from commercial mild steel sheet of 1.25mm thickness including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm. Or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split ends tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike plate and shock absorbers as specified and applying a coat of approved steel primer after pre treatment of the surface as directed by engineer-in-charge: profile E	11.00	Metre			
SUB-TOTAL						
7.00 FLOORING						
7.01	Providing and fixing 1st quality ceramic glazed tiles conforming to IS : 13753 of minimum thickness 5mm of approved make in all colours, shades except begundy, bottle green, black of any size as approved by Engineer-In-Charge in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqM including pointing in white cement mixed with pigment of matching shade complete. Size upto 300x300mm.	150.00	SqM			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
7.02	Providing and laying in ceramic glazed anti skid floor tiles (thickness to be specified by manufacturer) of 1st quality conforming to IS:13755, in all colours and shades except White,Ivory,grey, Fume red Brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting and pointing the joints with white cement and matching pigment etc. complete.					
a)	Sizes upto 395mm x 395mm.	470.00	SqM			
7.03	providing and laying 60mm thick factory made cement concrete interlocking paver blocks of M-30 grade made by block making machine with strong vibratory compaction and of approved size and design/shape laid in colours and pattern over and including 50mm thick compacted bed of coarse sand , fillins the joints with coarse sand etc. all complete as per the direction of engineer-in-charge	30.00	Sqm			
SUB- TOTAL						
8.00 CEILING & ROOFING						
8.01	providing & fixing pressed clay type (manglore tile) 20mm nominal thicknes and of approved size and as per approved pattern ceiling on steel frames work complete (steel frame work to be paid seperately)	500.00	Sqm			
SUB-TOTAL						
9.00 FINISHING						

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
9.01	15 mm cement plaster of mix;					
a)	1:6 (1 cement: 6 fine sand)	300.00	SQM			
9.02	painting with synthetic enamel paint of approved brand and manufacture to give an even shade: two or more coats on new works	60.00	Sqm			
9.03	Finishing Walls with Premium Acrylic Smooth Exterior paint with Silicone additives "Snowcryn-XT" or equivalent of required shade. New Work (Two or more coats applied @1.43ltr/10 sqm over and including base coat of water proofing cement paint Snowcem Plus or equivalent applied @2.20 kg/10sqm)	10.00	Sqm			
9.04	Applying one coat of cement primerr of approved brand and manufacture on wall surface	10.00	Sqm			
SUB-TOTAL						
10.00 INTERNAL PLUMBING , WATER SUPPLY & SANITARY FIXTURES						
A) SANITARY FIXTURES & INTERNAL PLUMBING						
10.01	Providing and fixing white vitreous china wash basin with C.I./M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required:					

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
a)	Flat back wash basin size 550 x 400 mm with a single 15mm C.P. brass pillar tap.	3.00	Each			
10.02	Providing and fixing bottle trap for wash basins and sinks.					
a)	32mm dia	3.00	Each			
10.03	Providing and fixing unplasticised PVC connection pipe with brass unions, 45 cm length.					
a)	15 mm dia nominal bore	10.00	Each			
10.04	Providing and fixing C.P. brass liquid soap container with C.P. brass lid and brackets fixed to wall with wooden cleats and C.P. brass screws, including cutting and making good the walls wherever required.	5.00	Each			
10.05	Supplying, fixing, testing and commissioning of storage type water heater (Geyser) etc. with Stainless steel body , copper container , automatic thermostatic control electric element, pressure release valve, M.S. nuts and bolts etc. conforming to IS: 2082 25 Litre Capacity	1.00	Each			
10.06	Providing & fixing 9 mm thick thermal insulation tubing of elastomeric flexible material having hermetic blistered closed cell structure of expanded synthetic rubber over pipes/ fitting as per manufacturer's specifications etc.complete.					
a)	15 mm dia nominal bore with wrapping of two layer of PVC heavy gauge sheet over insulation.	10.00	Metre			
b)	20 mm dia nominal bore with wrapping of two layer of PVC heavy gauge sheet over insulation	10.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
B)	SOIL, WASTE, RAIN WATER AND VENT PIPES					
10.07	Providing and fixing soil, waste and vent pipes.					
a)	100 mm dia.centrifugally cast (spun) iron S & S pipe	55.00	Metre			
b)	75 mm dia.centrifugally cast (spun) iron S & S pipe	25.00	Metre			
10.08	Providing and fixing M.S holder-bat clamps of approved design to Sand Cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.					
a)	for 100 mm dia. pipe	15.00	Each			
b)	for 75 mm dia. pipe	7.00	Each			
10.09	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
a)	100 mm Centrifugally cast (spun) iron S&S.	15.00	Each			
b)	75 mm Centrifugally cast (spun) iron S&S.	7.00	Each			
10.10	Providing and fixing plain bend of required degree.					
a)	100 mm Centrifugally cast (spun) iron S&S	10.00	Each			
b)	75 mm Centrifugally cast (spun) iron S&S	5.00	Each			
10.11	Providing and fixing terminal guard.					
a)	100 mm Centrifugally cast (spun) iron S&S	2.00	Each			
b)	75mm Centrifugally cast (spun) iron S&S	2.00	Each			
10.12	Providing and fixing collar:					

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
a)	100 mm dia Centrifugally cast (spun) iron S&S	5.00	Each			
b)	75 mm dia Centrifugally cast (spun) iron S&S	2.00	Each			
10.13	Providing lead caulked joints to sand cast iron /centrifugally cast (spun) iron pipes and fittings of diameter:					
a)	100mm	75.00	Each			
b)	75 mm	35.00	Each			
10.14	Extra for providing and fixing stainless steel jali (grating) in place of C.I. grating with or without hole for waste pipe for floor/ Nahani trap.					
a)	100 mm dia weight not less than 100 gms.	5.00	Each			
10.15	Providing and laying 50mm thick cement concrete 1:2:4 (1 cement :2 coarse sand: 4 hard stone aggregate 20mm and down gauge) alround C.I. pipes as per design and as directed.					
a)	100m dia	75.00	Metre			
10.16	Painting sand cast iron / centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate, grey, or buff etc. over a coat of primer (of approved quality) for new work:					
a)	100 mm diameter pipe	2.00	Metre			
b)	75 mm diameter pipe	2.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
10.17	Providing and fixing G.I.(heavy class) pipes and fittings conforming to IS: 1239 clamps and hinges including cutting chases and holes and making good the walls and ceiling for waste pipes from wash basins, urinals kitchen sink and equipment waste connections pump deliveries & suction & condensate drainage as directed.					
a)	50 mm nominal bore	50.00	Metre			
b)	40 mm nominal bore	50.00	Metre			
c)	32 mm nominal bore	20.00	Metre			
d)	25 mm nominal bore	20.00	Metre			
e)	20 mm nominal bore	20.00	Metre			
f)	15 mm nominal bore	25.00	Metre			
C WATER SUPPLY						
	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. (Internal work):					
a)	concealed					
i)	15 mm dia nominal bore	25.00	Metre			
ii)	20 mm dia nominal bore	20.00	Metre			
iii)	25 mm dia nominal bore	20.00	Metre			
iv)	32 mm dia nominal bore	20.00	Metre			
10.19	Painting G.I. pipes and fittings with white paint over a ready mixed priming coat, both of approved quality for new work..					
i)	15 mm dia nominal bore	25.00	Metre			
ii)	20 mm dia nominal bore	20.00	Metre			
iii)	25 mm dia nominal bore	20.00	Metre			
iv)	32 mm dia nominal bore	20.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
10.20	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
ii)	20 mm nominal bore	5.00	Each			
iii)	25 mm nominal bore	2.00	Each			
iv)	32 mm nominal	2.00	Each			
v)	40 mm nominal bore	2.00	Each			
vi)	50mm nominal bore	2.00	Each			
10.21	Providing and fixing C.P brass short body bib cock of approved quality.					
a)	15mm nominal bore.	2.00	Each			
10.22	Providing and fixing C.P brass long body bib cock of aproved quality conforming to IS standards and weighing not less than 690 gms					
a)	15 mm nominal bore	3.00	Each			
10.23	Providing and fixing C.P. brass angle valve of approved quality conforming to IS:8931.					
a)	15mm nominal bore.	10.00	Each			
10.24	Providing and fixing ball valve (brass) of approved quality complete:- High or low pressure with plastic floats					
b)	20mm nominal bore	5.00	Each			
c)	25mm nominal bore	2.00	Each			
d)	32mm nominal bore	2.00	Each			
e)	40mm nominal bore	2.00	Each			
f)	50mm nominal bore	2.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
10.25	Providing and placing on terrace (at all floors) polyethylene water storage tank ISI : 12701 MARKED indicating the BIS license No with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	5000.00	Litre			
SUB TOTAL						
11.00 SEWERAGE AND DRAINAGE						
11.01	Providing and fixing square-mouth S.W. gully trap grade 'A" complete with C.I. grating, brick masonry chamber with bricks of class designation 50 and water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design.					
a)	100x100mm size P type	3.00	Each			
11.02	Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 (1cement : 4 coarse sand : 8graded stone aggregate 40 mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, and making necessary channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design.					

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
a)	Inside size 90x80 cm and 60 cm deep including C.I. cover and frame (light duty), 455x610 mm internal dimension total weight of cover and frame to be not less than 38 kg.. (Weight of cover 23 Kg and weight of frame 15 Kg.)	3.00	Each			
11.03	Providing and laying non-pressure NP2 class (light duty) S & S R.C.C. pipes jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.					
a)	150 mm dia R.C.C pipe	75.00	Metre			
SUBTOTAL						

Item No	Description of Item	Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount In Rs.
1	2	3	4	5	6	7
12.00	Gas Bank					
12.01	Providing, installation, testing and commissioning of LPG gas bank having 2x12 domestic LPG cylinders of 14.2 Kg capacity each , in two banks (one working & one standby). The gas bank includes manifold flexible connectors, automatic changeover arrangement, pressure gauges, LPG leak detector, pigtails, cylinder adapters including suitable housing fabricated with angle iron etc. The LPG manifold shall be complete with all accessories and individual components / parts which are subjected to cylinder pressure shall be capable of withstanding a test pressure of 26 Kg/cm2. The LPG manifold shall as per specifications and drawing and shall be complete in all respect.	1	Set			
SUBTOTAL						
GRAND TOTAL						

COST ESTIMATE FOR THE ELECTRICAL-CONSTRUCTION OF CANTEEN FOR NIUM , BANGLORE

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5		7
1.00	DISTRIBUTION BOARDS					
1.01	Supplying & fixing following way, single pole and neutral,prewired,sheet steel, MCB distribution board, 240 volts,on recess/surface complete with loose wire box, terminal blocks, tinned copper busbar, neutral link, earth bar,din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc.Before procurement of DB the contractor has to take approval of DB schedule/drawing of each DB from the Electrical Engineer, HSCC, as per technical specifications and as required.(but without MCB & RCCB),					
	i) 8way Double door	2	Nos			
1.02	Supplying & fixing 6 Amps to32 Amps rating, 240 volts,'B' series, miniature circuit breaker suitable for lighting & other loads of following poles in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications & as required.					
	i) Single pole	12.00	Each			
1.03	Supplying & fixing following rating, double pole, 240 volts,63 Amp MCB-& ELCB having a sensitivity current upto 100 mA in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications and as required.					
	i) 63Amp	2	Each			
	TOTAL SUBHEAD:1- DISTRIBUTION BOARD					

S.No.		Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1		2	3	4	5		7
2.00		WIRING					
2.01	i	Wiring for light point/fanpoint/ exhaust fan point/call bell point with 1.5 sq.mm. PVC insulated,low smoke fire retardend copper conductor cable (including 1.5 sqmm) PVC insulated, copper conductor cable for earthing; from switchboard to each point) in recessed MSconduit (including supply & fixing of MS Conduit with accessories, wires etc with all accessories, etc); with modular type switches in suitable size modular metal boxes, base plate & modular cover plates etc. and all civil work complete as required.					
	ii	Supplying and Fixing Modular type switches (modular Bell push in case of call bell points) in suitable size modular metal boxes, base plate & modular cover plates, space for fixing electronic fan regulator in case of fan point ,space for 5A socket on theswitch board etc.					
	iii	Supplying and Fixing Modular type switches (modular Bell push in case of call bell points) in suitable size modular metal boxes, base plate & modular cover plates, space for fixing electronic fan regulator in case of fan point ,space for 5A socket on theswitch board etc.					
	iv	Supplying & Fixing Ceiling Rose in case of Exhaust Fan Points etc.					
		Note					
		i) Unless otherwise specified all the conducting work to be done in recess	50	Points			
2.03		Wiring for 5A light plugs with 1.5 sq.mm. PVC insulated, fire retardent low smoke(FRLS)copper conductor cable including 1.5 sq.mm. PVC insulated, FRLS copper conductor cable for earthing in recessed HEAVY DUTY MSConduit with all accssories as per technical specifications and as required. including supply and fixing in recessed of MS conduit with all accssories including all civil work	5	Point			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5		7
2.04	Wiring for power plug with 2X4 sqmm PVC insulated, fire retardent low smoke(FRLS) copper conductor, single core stranded cable in rigid heavy duty MS conduit along with 2.5 sqmm PVC insulated, fire retardent low smokecopper conductor, single core cable for loop earthing complete as required. (for power & A.C Point)(including supply and fixing in recessed of MS conduit with all accssories including all civil work	15	points			
2.05	Supply and fixing of following sizes of heavy duty MS conduit alongwith the accessories in recess including cutting the wall and making good the same in case of conduit as recessed required.					
	i) 20 mm dia	100	Metre			
	ii) 25 mm dia	50	Metre			
2.06	Wiring for submain wiring with following sizes of PVC insulated, fire retardent low smoke(FRLS) copper conductor single core cable in existing rigid heavy duty MS conduit complete as required.					
	i 2X1.5 Sqmm with 1 No. 1.5sqmm PVC insulated, copper conductor for earthing for circuit wiring(directly from DB to switchboard).	700	Mtr			
	ii 2x2.5 +1x2.5 sq mm					
	iii 2X6Sqmm with 1 nos6sq mm PVC insulated, fire retardent(FRLS) copper conductor for earthing(Directly from DB to point)	50	Mtr			
	2x16 +1x16 sq-mm (Directly from Panel to DB)	60	mtr			
2.07	Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 & 5/6 amps modular uni D socket outlet and 5/6 amps modular switch, connection, painting etc as required.(For light plugs to be used only in non-residential buildings.)	10				
2.08	Supplying and fixing suitable Module metal box on surface or in recess including providing and fixing 3 pin 5/6 amps. modular socket outlet and 5/6 amps modular type switch on light switchboard including wiring & connection etc.(Excluding modular base & cover) plate 'complete as required.	10	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5		7
2.09	Supply, installation, testing & commissioning of suitable modular metal box in recess including providing and fixing 6 pin 15/16 A modular socket outlet with shutters and 15/16 A modular switch, base plate, modular cover plate, connections, etc. and all civil works complete as required.	10	Each			
2.09	Supply, installation, testing & commissioning of following 20 Amps, 240 volts, 2P+E, Industrial Socket Outlet (with plugs) in a metal box with 32 Amp SP MCB in a sheet steel cover on surface or recess complete with all accessories including connections, testing and commissioning etc. as required.	10	Each			
	TOTAL SUBHEAD:2- WIRINGS					
Note : Unless otherwise specified conduiting is to be done in recess.						
3.00	LIGHT FIXTURES AND FANS					
3.01	Supply of following light fixture with copper ballast, starter, capacitor, tubes/lamps, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.(prior approval to be taken for quantity before the supply of fixture by HSCC officer/Client)					
	i) 2XTL5 28 watt surface mounted industrial fluorescent light fixture with GMS reflector(GMS 122M 2 28 /54 R) (Philips TMS 122M 2XTL5 28W EBT or approved equivalent)	10	Each			

S.No.		Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1		2	3	4	5		7
	ii)	1x42 watt decorative pendent light with gold plated chain and all accessories as required (GE CFL C1x42 DN or equivalent)	24	Each			
3.02		Installation, testing and commissioning of prewired, fluorescent fittings of all types, complete with all accessories and tube etc. directly on wall, ceiling/false ceiling, including connections with 1.5 sq.mm. PVC insulated, fire retardent low smoke copper conductor, single core cable etc. as required.	10	Each			
3.03		Installation, testing and commissioning of prewired, fluorescent fittings of all types, complete with all accessories and tube etc. on ceiling with Down Rods of required length, including connections with 1.5 sq.mm. PVC insulated, stranded copper conductor, single core cable etc. as required. (Wiring is to be done with 3 core stranded copper conductor flexible cable in case of ceiling rose is to be provided)	10	Each			
3.04		Installation, testing and commissioning of prewired, CFL light fittings of all types, complete with all accessories and tube etc. directly on ceiling/ wall/ false ceiling, including connections with 1.5 sq.mm. PVC insulated, copper conductor, single core cable etc. as required.	24	Each			
3.06		Supply, installation, testing & commissioning of following ceiling fans complete with double ball bearing, motor, blades, downrod, canopies, capacitor, modular type electronic fan regulator (five stepped type regulator)etc. wiring & providing the down rod of suitable length and connection with 1.5 sqmm PVC insulated, copper conductor single core cable as required. earthing of fan with suitable wire, suitable for operation on 230 volts, 50 Hz., 1 phase, AC supply complete as required.(Cromton Greeves high breeze or equivalent make)					
	i)	1200 mm sweep.	20	Each			
TOTAL SUBHEAD:3- LIGHT FIXTURE & FANS							

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5		7
4.00	CABLES					
4.01	Supply of following sizes of 1.1 kV grade XLPE multicore aluminum conductor PVC sheathed cable as					
	i) 3.5 Core, 35 sqmm (Al Conductor, Armoured)	125	Metre			
4.02	Supplying and making end termination with brass compression gland and aluminum lugs for following size of XLPE PVC insulated & PVC sheathed/ XLPE aluminum conductor cable of 1.1 kV grade complete as required.					
	i) 3.5 Core,35 sqmm (Al Conductor, Armoured)	4	Each			
4.03	Laying of following sizes of one number XLPE PVC insulated and PVC sheathed power cable 1.1kV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. with testing and commissioning of cables complete as required. The scope also includes cutting the hard rock if required.					
	i) Size more than 25mm and upto120 sq.mm	125	Metre			
4.05	supplying and fixing 6SWG dia GI wire on surface or recess for loop earthing along with the existing cable as required.	150	mtr			
4.06	Supplyiong and drawing 2nos 6SQ mm single core copper wire for earthing in existing conduit.	50	mtr			
	Total Estimate for Electrical Works					
	NOTE: All the equipments shall be of reputed make & should be approved by HSCC.					