# SETH G.S. MEDICAL COLLEGE & K.E.M. HOSPITAL, PAREL, MUMBAI-12. National Medical College Network(NMCN) Project, Regional Resource Centre, Western Region.

Bid No. NMCN/TPMU KEMH/ 2312 /AEME Due date. 27.12.2017 upto 2.00 p.m.

E.M.D. Rs.40000/-

**Sub:** Air conditioning of Digital Medical Lecture Theatre no.-3 at College Building of K.E.M. Hospital.

Name of the BIDDER and address : \_\_\_\_\_

**Office Address:** 

Issued by :

Office of the Nodal Officer, RRC, NMCN, Professor and Head, Microbiology Department, Fifth Floor, New MSB building, Seth GSMC & KEM Hospital, Mumbai.



SETH G.S. MEDICAL COLLEGE & K.E.M. HOSPITAL, PAREL, MUMBAI-12. National Medical College Network(NMCN) Project, Regional Resource Centre, Western Region.

# **Tender Document**

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# SETH G.S. MEDICAL COLLEGE & K.E.M. HOSPITAL, PAREL, MUMBAI-12.

# National Medical College Network(NMCN) Project, Regional Resource Centre, Western Region. TENDER NOTICE

#### No. NMCN/TPMU KEMH/ 2312 /AEME

Date: 16/12/2017

This is a Tender notice. The Dean & Chairperson, RRC, Telemedicine Program Management Unit- NMCN, Seth G.S.M.C. & K.E.M. Hospital, invites sealed tenders the following work for NMCN project.

The technical and commercial bids shall be submitted up to the Bid End Date & Time mentioned below.

Sr. No.	Name of the work	Earnest Money Deposit - Rs	Cost of E- Tender Rs.	Bid Start Date & time	Bid End Date & time
1	2	3	4	5	6
2	Air conditioning of Digital Medical Lecture Theatre no 3 at College Building of K.E.M. Hospital.	40,000/-	2100/-	16/12/2017	27/12/2017 2.00 pm
3	Eligibility criteria(Packet 'A')	2.01.2018		11:00 Hrs	
4	Technical Bid (Packet 'B')	2.01.2018		11:00 Hrs	
5	Commercial Bid (Packet 'C')	2.01.2018		11:00 Hrs	

All the Bidders, including those registered in MCGM having already paid the standing deposit, are required to pay the EMD in favour of "**RRC**, **KEM HOSPITAL**, **Mumbai**". The tenderer shall pay the EMD through Demand draft (DD) and <u>The bidder shall submit such DD physically in</u> Packet'A' on the date of submission of tender. If such DD is not submitted physically in Packet'A', the tender shall be treated as non- responsive and shall not be opened. <u>Terms and conditions:</u>

#### 1) Bid Price :

- a) All duties, GST and other levies payable by the contractor under the contract shall be included in the total price.
- b) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to the adjustment on any account.

### 2) Validity of Quotation:

Quotation shall remain valid for a period of not less than 30 days after the deadline date specified for submission.

### **3)** Evaluation of Quotations :

The purchaser shall evaluate and compare the quotations determined to be substantially responsive i.e.

a) Are properly signed.

b) Conform to the terms and conditions and specifications.

### 4) Award of Contract/Order:

The purchaser will award the contract/order to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

**a**) Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

**b**) The bidder whose quotation is accepted will be notified about the award of Contract by the purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

### 5) Liquidity Damages :

Liquidity damages at the rate of 0.5% per week for the delay in work subject to maximum of 10% computed on the value of delayed.

### 6) Warranty:

The warranty period should be clearly mentioned.

7) Payment will be made after completion of satisfactory work & report, along with the bill

8) You are requested to provide your offer latest by 2.00 pm hours on 27/12/2017.

9) Bids will be opened in the presence of the committee at 11.00 AM on 02/01/2018 in the office of the Nodal Officer, RRC, Professor and Head, Microbiology Department, Fifth Floor, New MSB building, Seth GSMC & KEM Hospital, Mumbai.

**10)** Notice is uploaded on KEM Hospital website; we look forward to receiving your bids and thank you for your interest in this project.

Sd/-Dr. Preeti Mehta Nodal Officer, RRC, TPMU-NMCN, Professor and Head, Microbiology Department Seth GSMC & KEM Hospital, Mumbai. Sd/-Dr. Avinash Supe Dean, Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai.

#### MANDATORY CONDITIONS OF TENDER

The conditions stipulated below are the mandatory conditions. Tenderer(s) are requested to note that the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall reject the tender if the tenderer fails to adhere to following conditions at the time of submission of tender.

- a) Does not submit Earnest Money Deposit (E.M.D.) Demand Draft .
- b) Does not fill in, sign and affix the stamp of the firm at following places:
  - i) TENDER FORM printed undertaking addressed to " Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai "
  - (ii) Various schedules in tender documents,
  - (iii) Technical Specifications.
- c) Does not pay the Additional Security Deposit, WHEREVER APPLICABLE for the rebate as per the formula specified in the tender and does not submit undertaking for the Demand Draft when required as per e-Tendering procedure in case the tenders are invited on the percentage basis.
- d) Submits conditional tender or stipulates hedging condition / own conditions.
- e) Stipulates the validity period less than what is stated in the tender.
- f) Does not enclose certified copy of PAN document & photograph.

#### <u>Any tenderer failing to do so will render himself liable to have his tender deposit forfeited</u> and the contract, if entered into, will be cancelled at any time during its currency.

### **INSTRUCTIONS TO TENDERERS**

**NOTE:** These instructions are provided to assist tenderers while preparing the tenders. They form part of the Contract and they shall be taken into consideration in interpreting or construing the Contract.

### IT. 1 Invitation to Tender

The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, for and on behalf of the RRC, TPMU-NMCN, KEM HOSPITAL, MUMBAI, herein referred to as the RRC, KEM HOSPITAL, MUMBAI, will receive Tenders for **Air conditioning of Digital Medical Lecture Theatre no.-3 at College Building of K.E.M. Hospital.** According to the specifications and Bill of Quantities in the Tender documents attached herewith.

Tenders shall not be accepted after the hour and date fixed for accepting of Tender. Telegraphic Tenders will not be accepted under any circumstances. Tenders received after the hour and date fixed will not be considered. <u>Tenderers should ensure to submit their bids well in time before the due date. Bidders will be solely responsible, if they try to submit the bid just before due date and time and fail to do so due to their system problems, internet problems, User Id locking etc.</u>

The tenders need to be submitted on / before end date / time and will be opened specific date & time, thereafter, Tenderer's authorized representatives may attend the Tender opening at which time relevant details will be read out.

However, the RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, MUMBAI, reserves right to reject all the Tenders or the lowest or any other tender which in the judgment the RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, MUMBAI, does not appear to be in its best interest and the Tenderer shall have no cause of action of claim against the RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, MUMBAI, or its Officers, employees, successors or assignee for rejection of its Tender.

The RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, MUMBAI, also reserves right of splitting the Tender amongst two or more tenderers, where the Bill of Quantities are distinctly separate as different parts of the same contract.

Tender Documents Are Not Transferable.

### IT. 2 Tender Validity Period:

The Tenders shall be kept valid for acceptance for a period of one eighty calendar days (180) from the date of opening of Tender.

#### **IT. 3 Documents:**

The Tender document is comprising of the following: -

- Tender Notice
   Mandatory Conditions of Tender
   Instructions to Tenderers
   General conditions of tender/contract
   Tender Form
- 6) Undertaking letter
- 7) Agreement Form
- 8) Specifications of work9) Schedule of quantities without rate.

# IT. 4 SPECIAL INSTRUCTIONS TO BIDDERS

#### **Earnest Money:**

Pay specific EMD as per the instructions given in the Tender Notice and/or Tender Document .

All the Bidders, including those registered in MCGM having already paid the standing deposit, are required to pay the EMD in favour of "RRC, KEM HOSPITAL, Mumbai". <u>The tenderer shall</u> submit such DD physically in Packet'A' on the date of submission of tender. If such DD is not submitted physically in Packet'A', the tender shall be treated as non-responsive and shall not be opened.

If during the Tender validity period, the Tenderer withdraws his Tender or the successful Tenderer fails to accept the Contract within 30 calendar days after receiving notice of the award of contract and fails to submit the Contract Deposit, the Earnest Money shall be forfeited and the Tenderer may be disqualified from Tendering for further works with the Municipal Corporation of Greater Mumbai.

The successful Tenderer's Earnest Money will be retained as security for the due signature of the Contract and for making the contract deposit in accordance with general conditions of contract.

The Tenderers/Contractors shall note that the Works Contract Taxes levied by the Government shall be borne by them for which no reimbursement shall be made by the Corporation. They should therefore, take this factor into account while quoting for the work.

No interest will be paid on any tender deposit/guarantee.

### IT.5 <u>Submission of Tenders</u>

### As MCGM switched to e-Tendering, all the references in respect to traditional bidding process like packets A, B, C etc may please be ignored. All documents that are required to be submitted as part of technical bid need to be enclosed in packets A, B, C physically.

Prices quoted shall be firm and no variation shall be allowed on any account. In the event that prices for some items are given as a lump sum where unit prices are required, the Corporation reserves the rights to evaluate unit prices on the basis of the given lump sum prices.

Queries relevant to the tender documents shall be immediately inform to concerned help desk.

### IT. 5.1 Submission of the Bidders:

The etender shall be submitted in three packets, eligibility criteria & EMD i.e. Packets 'A', Technical Bid i.e. Packets 'B' & item Data i.e. commercial bid .

### IT. 5.2 <u>'Three Packet System'</u>

In this system the Bidders will submit the Bids in three packets, eligibility criteria & EMD i.e. Packets 'A', Technical Bid i.e. Packets 'B' & item Data i.e. commercial bid . All the three packets shall be filled as follows.

### PACKET-WISE DISTRIBUTION OF VARIOUS DOCUMENTS IS AS UNDER.

### IT. 5.3 PACKET "A" (Eligibility criteria & EMD)

**Packet 'A'** shall contain requisite payment towards Earnest Money Deposit (EMD). All the Bidders, including those registered in MCGM having already paid the standing deposit, are required to pay the EMD in favour of **"RRC, KEM HOSPITAL, Mumbai"**. The tenderer shall pay the EMD through Demand draft (DD) and shall upload the scanned copy of the DD in Packet 'A' instead of paying the EMD at any of the CFC centers in MCGM Ward Offices. <u>The tenderer shall submit such DD physically in Packet'A' on the date of submission of tender. If such DD is not submitted physically in Packet'A', the tender shall be treated as non-responsive and shall not be opened.</u>

### IT. 5.4 PACKET "B" (Technical Bid)

### Packet "B" shall contain following documents.

- (1) Copy of Registration certificate if he is Municipal Registered Contractor.
- (2) Copy of original certificate of registration of VAT/CST issued by Govt. authorities in prescribed form.
- (3) "Pan Document" as follows.

i.Copy his own "PAN Card" in case of Retailer/Dealer/Supplier/Distributor, etc.

- ii. In case of Company or firm
  - (a) 'PAN' Card of proprietor in case of proprietary/ownership firm.
  - (b) (i) 'PAN' Card of a company in case of private Limited Co.
    - (ii) 'PAN' Card of a firm in case of partnership Firm.
  - (c) The Sansthas/Society/Trust which are registered under Public Trust Act 1950 / Registration Act 1860/The Maharashtra Co.op.Societies Registration Act 1960 (whichever is applicable) has to scan and upload the PAN Card of Sansthas/Society or Trust only.
    - (iii) However, in case of public limited companies, semi-govt. undertakings, govt. undertakings, no 'PAN' documents will be insisted.
- (4) Scanned copy of receipt of payment towards E.M.D., registration certificate if he is Municipal Contractor.
- (5) Latest partnership deed (in case of partnership firm)duly registered with C.A. (Treasury)
- (6) Documentary evidence (viz. Xerox copy of work orders) of the works executed during last one year about the similar type of works if asked.
- (7) tender document except Schedule of quantities & rates.

- (8) Certified copies of documents specified in the tender document.
- (9) Certified documents with concerned with specified prequalification criteria.
- (10) Tenderer shall have Valid Registration Certificate under EPF & M Act 1952 & ESIC Act 1948 OR Declaration on Rs. 100/- stamp paper as mentioned below.

I/We, the proprietor/partner/director/authorized signatory of M/s \_\_\_\_\_\_, hereby undertake that as per provisions in ESIC Act 1948 in fource, registration under ESIC Act 1948 is not applicable for our firm since

EITHER

- (i) workers in our establishment are less than 10 and the establishment is not involved in production using energy.
  - OR
- (ii) workers in establishment are less than 20 and the establishment is involved in production using energy.

and hence we do not have said registration certificate.

And therefore I/We further undertake that registration under EPF&M Act 1952 is also not applicable for our firm as per provisions in EPF&M Act 1952 in force.

### IT. 5.5 ITEM DATA (i.e. Commercial Bid)

<u>**Commercial Bid**</u> shall contain the following documents:

- a) Filled the item rate in case of item rate bidding process OR percentage rate in case of percentage rate bidding process tender on line.
- b) If the rebate offered is more than 12% of office estimate, in case of percentage tender, Demand Draft towards additional security deposit for the requisite amount as per formula indicated in condition No. IT 6 below along with 'Undertaking' as per IT 6-(ix).
- c) Rate analysis for major items in BOQ if the cost variation is very high i.e. to the tune of plus or minus 15 % or more.

### IT. 6 <u>The Additional Security Deposit :</u>

i) Over and above the earnest money, tenderer quoting the rebate more than 12% on office estimate shall have to pay additional security deposit in the form of Demand Draft valid for 6(six) months from the date of submission of tender depending upon the amount calculated as per formula given below.

**Formula:** Additional security deposit = 1 (X / 100) x office estimated cost

Where X' = percentage rebate quoted on Office Estimate by the tenderer minus 12%

For example = If the tenderer desires to quote percentage rebate 25(twenty five) percentage then the additional security deposit shall be worked out as under:-

= 1 x (25-12) x office estimated cost

100

ii) The demand draft of required amount as per above formula must be submitted by the tenderer only on the name of the same company under which he is quoting for the tender.

iii) The tenderer must also give the amount of Demand Draft, number of Demand Draft and the Bank from which it is drawn in the undertaking form, which will be part of the tender. Failing this, his tender stands rejected.

iv) All Demand Draft shall be in favour of Municipal Commissioner, Municipal Corporation of Greater Mumbai. The list of approved Banks with Municipal Corporation of Greater Mumbai is attached.

v) The Demand Draft required to be submitted along with the tender document shall be submitted in a sealed packet duly marked as "The Additional Security Deposit". This sealed packet should be enclosed with the tender. If the demand draft of requisite amount is not submitted, the tender will be treated as "Non-responsive" and rejected.

vi) The additional security deposit paid is not more than 3 (three) number of Demand Draft.

Vii) This additional security deposit will not carry any interest.

viii) The additional security deposit of the successful tenderer shall be refunded only on finalization of final bill, settlement of accounts of work by the contractor in all respects or after the completion of defect liability period whichever is later.

#### ix) UNDERTAKING FOR DEMAND DRAFT ON CONTRACTOR'S LETTER HEAD

Ι	hereby	submit	Demand	Draft	of	Rs	bearing	No
dated_		drawn		on		from	the	Bank
								branch
				along	with	the	tender	of
M/s.				-				

#### Name, Address & Signature of the tenderer (Firm)

#### IT. 7 Opening of tenders:-

Authorized representative may attend the tender opening when only Packet 'A' will be opened and the contents read out. On opening of Packet 'A' only eligible & responsive tenderer of Packet 'B' will be open on same date & scheduled time.

On opening of Packet 'B' if it is found that tenderer has not submitted required documents in Packet 'B', then the tenderer shall be intimated to comply with the said requirements within stipulated time period (max.7days) from the opening of Packet 'B'. If he fails to do so, then 10% amount of the EMD/SD paid by him shall be forfeited.

The Item Data i.e. Commercial Bid of only eligible & responsive tenderer shall be opened & the price & other relevant details shall be read out in due course.

#### IT. 8 Filling up the tender:

Tenderers are expected to fill in their tenders carefully and scrutinize them before submitting them to the RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, Mumbai. No variation on any ground such as mistake or misunderstanding will be allowed after the e-tender is opened, recommended of accepted. Deviation from tender specifications of the specified Terms and Conditions should be brought out clearly in the separate deviation sheet.

#### IT. 9 Rates and prices:

Rates OR Percentage shall be filled in "ITEM DATA" section only. The prices quoted shall be firm and no variation will be allowed on any account Tenderers shall not quote more than one alternative rate for any item. Tenders having more than one alternative rates for the same items are liable to be rejected.

#### IT. 10 Conditional tender rates:

Tenders containing contradictory onerous and vague Stipulation and hedging conditions such as "subject to prior sale ", " Offer subject to confirmation at the time of order", "Rates subject to market fluctuations", etc. are liable to be rejected outright.

### IT. 12 Modifications of Documents:

Modifications of specifications and extension of the closing date of the Tender, if required, will be made by an addendum, Copies of each addendum will be published online on www.kem.edu website. The Tenderer shall not add to or amend the text of any of the documents except in so far as may be necessary to comply with any addenda.

### IT. 13 Taxes and Duties on material.

For an indivisible Works Contract, taxes are not separately payable by the Corporation. Tenderers / Contractors are therefore, requested to quote their rates / percentages taking into consideration the existing taxes, duties etc. The same will not be reimbursed to the Contractors at actuals.

All charges on account of Octroi terminal or Sales Tax and other duties of material obtained from the work from any source including the tax applicable as per Maharashtra Sales Tax Act on the transfer of property in goods involved in the execution of works Contract (re-enacted ) Act shall be borne by the Contractor.

All rates shall be inclusive of all duties such as Customs, Excise, Octroi etc. When the tenderers proposed to charge these duties extra, the percentage and amount of each of these duties should be clearly stated in statement on letter head to be uploaded in bidders documents. Tenders that are vague in this respect will be rejected. Where no mention of aforesaid duties is made by the Tenderers, it will be presumed that the same are either not applicable or will be paid by the Tenderers. No subsequent claims for payment of the said duties will be entertained.

### IT. 14 Evaluation of Tender.

In comparing tenders, the RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, Mumbai shall consider such factors as the efficiency and reliability of instrument and methods proposed, compliance with the specifications, quality and the Tenderer's capacity to perform vis-à-vis the time of completion, apart from the prices offered.

### IT. 15 Payment Terms.

The terms of payment are defined in the Section VIII- General condition of contract of the tender document with amendments made up to date. The RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, Mumbai shall not under any circumstances relax these terms of payment and will not consider any alternative terms of payment. Tenderers should therefore, in their own interest note this provision, to avoid rejection of their tenders.

### IT. 16 Award of Contract.

Notification of Award will be made in writing to the successful tenderer.

The Contract will be awarded to the qualified and responsive Tenderer offering the lowest evaluated Tender or Tenders in conformity with the specifications subject to the provisions of IT.14, initially for one year only and will be extended year wise for next years, subject to satisfactory performance and maintenance of the subject works.

A responsive Tender is one which accepts all the terms and conditions of the Tender documents without any major modifications. A major modification is one which affects in any way the price, quality, quantity or completion of works which limits in any way, any responsibilities or liabilities of the Tendered or any rights of the Corporation, as specified in the Tender documents. The RRC, TPMU-NMCN, Seth GSMC & KEM HOSPITAL, Mumbai may waive any minor informality in a Tender, which does not constitute a major modification.

In the event of the Tender being accepted, full amounts of Contract deposits must be paid and the Contract must be signed by all the partners of the firm and should one of more partners be not available for this purpose, signatory must produce a power of Attorney authorizing him to sign of behalf of all absent partners. All such power of Attorney must be registered in the office of Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai ,shall be informed accordingly.

Postponement of the payment of the full security deposit or the execution of the contract will not be permitted by reason of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, having in possession, other deposits on account of other tenders or contracts, which deposits may be or become returnable to the Tenderer's and which they may wish to transfer as a security deposit under this contract. Such transfers will not under any circumstances be permitted.

The successful tenders will have to pay for preparing contract documents stamp duty on the contract and legal charges sanctioned rates which at present are as under :-

The Stamp Duty is payable as under subject to revision as per Government rules

Where the amount or value set forth	Stamp Duty – Rs. 100/-
in such contract does not exceed	
Rs.10 lacs	
Where it exceeds Rs. 10 lacs	Stamp Duty Rs.100/- plus one hundred
	rupees for every one lac rupees or part
	thereof, above rupees ten lacs subject to
	the maximum of rupees five lacs.

A reference table for the payment of legal & Stationary charges for the guidance of the tenderer is given below: These charges are to be paid by the successful bidder on receipt of acceptance letter for the work/supply as stated in the subject. As per circular from Law Officer under no. LO / 4 dt 24.05.2012, Revised Legal Charges are as follows.

Sr.No.	Contract Value in Rs.	Legal & Stationary
		charges in Rs.
1	Up to 3,00,000/-	Nil
2	3,00,001/- to 20,00,000/-	500/-
3	20,00,001/- to 1,00,00,000/-	2000/-
4	Above 1,00,00,001/-	5000/-

Note: The above said charges are subject to change. Actual charges as on the date of issue of letter of acceptance of tender will be charged.

### IT. 17 Signing of Contract

The successful tenderer shall be required to execute the contract within one month of receipt of intimation to execute the contract, failing which the Corporation will be entitled to claim discount offered for payment of bills inspire of non-payment is the result of non-execution of the Contract by the Tenderer.

The person to sign the Contract documents shall be the person as detailed in IT. 11 i.e. signing of Tender documents.

### IT. 18 Brand names

Specific reference in the specifications to any materials by trade name or catalog number shall be construed as establishing a standard of quality and performance and not as limiting competition and the tenderers, in such cases, may as their option freely use any other product, provided that it ensures an equal or higher quality than the standard mentioned and meets the Corporation's approval.

### IT. 20 Eligibility criteria

The eligibility criteria towards Tenderer's technical and financial ability is mentioned in the "Terms and conditions in the Section III– Specific instructions of Tender Document". This will be applicable to all the tenderers, including those Registered with M.C.G.M. irrespective of class of Registration or otherwise.

### IT.21 Rejection of Tender

The tender is liable to be rejected, if the Tenderer

- a) Stipulates the validity period less than what is in the form of tender,
- b) Stipulates his own conditions.
- c) Does not quote his rates inclusive of all taxes and duties.
- d) Does not disclose his full name and address with telephone no. and also the full names and addresses with telephone nos. of all his partners in case of partnership concern.
- e) Does not fill in and sign the Tender form as well as the Schedule of items, Annexture, Specifications, etc.
- f) Does not pay the Earnest Money Deposit.
- g) Does not submit the tender before the stipulated time on the specified date.
- h) If the tender is filled up partially in splitter manner it will be treated as non-responsive.
- i) If the tenderer does not fulfill the mandatory conditions.
- j) Post Tender Correspondence.

Does not submit in Packet 'B' certified copies of the 'PAN' documents & photographs of the individuals, owners, Karta of Hindu undivided family, firms, privet limited/ companies, registered co operative societies/partners of the partnership firms & at least two Directors if no. of Directors are more than two in case of private limited companies. However, in case of public limited companies, Semi Government Undertakings, Government undertakings no PAN documents will be insisted.

The documents can be certified by the Gazetted Officers or officers not below the rank of Assistant Engineers/Administrative Officers of M.C.G.M. OR practicing Notary approved by the Government of Maharashtra or Government of India, with his stamp with or without a red seal clearly stating his name & registration no.

Tender shall be termed to be under consideration from the opening of the tenders, until such time an official announcement of award is made. While tenders are under consideration, tenderers and their representatives or other interested parties, are advised to refrain from contacting by any means the Corporations personnel or representatives on matters related to the tenders under Consideration. The engineer's representative if necessary will obtain clarification of tendered by requesting such information from any or all the tenderers either if writing or through personal contact as may be necessary. The tenderer will not be permitted to change the substance of his contact as may be

been opened. This includes and Post tender Price revision of major modification as defined in IT.14. Not compliance with the provision is a cause for disqualification.

### IT.22 Tendering under different names:

- a) Firms with common proprietor/partner or connected with one another either financially or as principal and agent or as master and servant or with proprietor/partners closely related to each as husband, wife, father, mother and minor son/daughter and brother/sister and minor brother/sister, shall not tender separately under difference names for the same Contract.
- b) If it is found that firms as described in (a) have tendered separately under different names for the same Contract, all such tender(s) shall stand rejected and tender deposit of each such firm/establishment shall be forfeited. In addition such firms. Establishments shall be liable, at the direction of the Municipal Commissioner, for further penal action including blacklisting.
- c) If it is found that clearly related persons as in (a) have submitted separate tender/quotations under difference names of firms/establishments but with common address for each establishment/firm, though they have difference addresses, are managed or governed by the same person/persons jointly or severally, such tenders shall be liable for action as in Para (b) above including similar action against the firms/establishments concerned.
- d) If after the Award of Contract, it is found that the accepted tender violated any of the conditions in pares (a),

(b) or (c) above, the contract shall be liable for cancellation at any time during its currency in addition to penal

action against the contractors as well as related firms/establishments.

### IT.23 Jurisdiction of Courts

In case of any claim, dispute or difference arising in respect of the contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any such claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

### IT.24 Import License

The tenders shall have to make their own arrangements to secure import license and/or release of controlled or scarce raw materials or parts if required by them for fulfillment of their contract. The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, not be bound to give any assistance to the tenders in that behalf any taxes, duties, charges shall born by tenderer.

### IT.25 Safe Custody

All the charges for safe custody and withdrawal of and for the collection of interest etc. on the paper deposit will be payable by the parties.

### IT.26 Mode of payment

Intending tenderers are informed that the payment of the bills and other claims arising out of the contract will be made in the name of their bank by cheque only. Successful tender therefore will have to furnish the information as regards the name and complete address of their Bank, by filling ECS form. They will also have to submit fresh information when there is any change in these regards. They may submit fresh information for payment through NEFT & RTGS mode regarding MICR code, IFSC code, account number etc.

### **GENERAL CONDITIONS OF THE TENDER/CONTRACT**

### A. GENERAL OBLIGATIONS :

### 5. <u>Works to be carried out :</u>

The works to be carried out under this contract shall except or otherwise provided in these conditions include all labour materials, tools, plant, equipment and transport which may be required it preparation of and for and it the full and entire execution and completion of the works. The description given in the schedule of works / items / quantities and the bills of quantities shall unless otherwise stated be held to include waste on materials, carriage and cartage, fitting and fixing it position and all other labour necessary in and for the entire execution and completion as aforesaid in accordance with good practice and recognized principles.

#### 6. <u>Contract deposit :</u> (Security Deposit)

The contractor shall pay contract deposit equal to five percent of the contract sum as security for due fulfillment of the contract which will remain with the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, till physical completion of the work, certification of the final bill, for period of 3 months after completion of contract period.

The mode of making this deposit is as under :

#### **Contract deposit :**

- i) Wholly in cash or D. D.
- By way of general undertaking and guarantee with special adhesive stamp of Rs.100/- issued on behalf of the contractors by the banks on the approved list of the Municipal Corporation, provided the banker's guarantee is renewed as required and / or directed from time to time so as to cover the entire period of contract including the extended period, till physical completion of the work and certification of the final bill.
- Or by way of Public securities / National Saving Certificates duly endorsed in RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai's favour and payment of service charges.

#### 3 Inspection of site and sufficiency of the tender :

- (a) The contractor shall inspect and examine the site and its surroundings and shall satisfy himself before submitting his tender as to the nature of the site, the quantities and nature of the work and materials necessary information as to risk, contingencies and other circumstances which may influence or affect his tender.
- (b) The contractor shall be deemed to have satisfied himself before tendering or to the correctness and sufficiency of his tender for the works and of the rates and prices

quoted in schedule of works / items / quantities or in bill of quantities, which rate and prices shall except or otherwise provided, cover all his obligations under the contract and all matters and things necessary for proper completion and maintenance of the works. No extra charges consequent. On any misunderstanding or otherwise shall be allowed.

#### 4. <u>Contractor's supervision</u>

The contractor shall him self supervise the execution of works or shall appoint a competent agent approved by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, to act in his stead. If in the opinion of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, the contractor has himself not sufficient knowledge and experience to be capable of receiving instructions or cannot give his full attention to the works, the contractor shall at his own expense employ or his accredited agent an engineer or a suitably qualified and experienced person approved by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,. Orders given to the contractor's agent shall be considered to have the same force or if these had been given to the contractor himself.

### 5. <u>Safety provisions :</u>

The contractor shall at his own expenses arrange for the safety precautions of required by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,, in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the contractor fails to provide such facilities, the Corporation shall be entitled to do so and recover the costs thereof from the contractor.

The tenderer shall note that Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall not be responsible for any mishap or accident to workmen of the contractor or M.C.G.M.'s employee working at site, while performing to these jobs and no compensation shall be payable RRC, TPMU-NMCN,Seth GSMC & KEM Hospital, Mumbai, In case of mishap or accident, the amount of compensation decided by the concerned authorities will be kept in deposit from contractor's Bills.

The successful tenderer shall take all the precautions to avoid any damage to RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, property while working. If any damage is noticed, the charges for setting right the same will be recovered from their bills.

The successful contractor shall take utmost care not to cause any nuisance due to noise, welding operations etc. they shall take all the proper precautions in this respect.

### 6. <u>Patent rights and royalties</u>

The contractor shall save harmless and indemnify the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, from the against all claims and proceedings for or on account of infringement of any patent rights, design trade mark o name of other protected rights in respect of any constructional plant, machine work or material used for or in connection with the work or any of them and from and against all claims, proceedings, damage, cost, charges and expense whatsoever in respect of or in relation thereto.

### 7. <u>Production of vouchers</u>

The contractor shall when required by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, produce all quotations, invoices, vouchers, and accounts or receipts etc. to prove that the materials supplied by him are in conformity with the specifications laid down in the contract.

### 8. Payment of bills

As per RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, procedure the running payment of work done will be made within 30 days from the receipt of the bill subject to verification as per normal rules.

Running payment for material will be 60% of B.O.Q. value of material delivered. 30% after satisfactory installation and 10% after successful testing & commissioning.

The RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall not under any circumstances relax these terms of payment and will not consider any alternative terms of payment. Tenderer should therefore, in their own interest note this provision, to avoid rejection of their tenders.

#### 9. <u>Water and electricity and workshop / store room space</u>

Except electricity supply source, workshop / store room space and water point each and every material shall have to be arranged by the contractor. The necessary electric cable from electric supply source to site, water pipes etc. shall be arranged by the contractor.

#### **10.** <u>Disturbance to regular functioning</u>

The contractor shall ensure while tender specified works are in progress that the other functional aspects of the Medical Gas facility are not disturbed & hampered. In case such a disturbance is envisaged they will give sufficient prior intimation & make alternate arrangements.

#### 11. Minor Variation

The tender specifications for the works included in this tender are prepared with care with a view not to create any additional work. However if any minor variation is required while the work is physically progressing the contractors will have to undertake these modifications without any extra cost to RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, to complete in all respects. They should therefore study the specifications thereby and quote accordingly.

### 12. Contractor's other liabilities

From commencement to completion of the works, the contractor shall take full responsibility for the care thereof and for taking precautions to prevent loss or damage and to minimize the loss or damage to the greatest extent possible and shall be liable for any damage or loss that happen to the works or any part thereof and all Municipal tool and plants from any cause whatsoever (Save and except Excepted Risk) and shall at his own cost repair and make good the same so that at Completion the works and all Municipal Tools and Plants shall be in good order and conditions and in conformity in every respect in the requirements of the contract and the instructions of the Engineer.

In the event of any loss or damage to the works or any part thereof or to any tool and plant or to any material or article at the site from any of the excepted risk the following provision shall have effect.

a) The contractor shall as may be directed in writing by the Engineer, remove from the site any debris and so much of the works as shall heave been damaged, taking of the Municipal store such multiple tools and plants article and/or on materials as may be directed.

- b) The contractor shall, as may be directed in writing by the Engineer proceed with the erection and completion of the works in accordance with the provisions and conditions of the contract and
- c) There will be added to the contract sum the new amount due ascertained in the same manner as per deviation or as prescribed for payment in respect of the re-execution of the works lost or damaged, the replacement of any tools and plants and of any materials and articles lost or damaged but not incorporated in the works on the day when the loss or damage occurred and removed, by the Contractor as provided above of Municipal tools and plants, articles and/or materials to the Municipal Stores and of the debris and damaged works referred to therein.

The Contractor shall indemnity and keep indemnified the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, against all losses and claims for injuries of damage to any person of property whatsoever which may arise out of or in consequence of the construction and maintenance of the work and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto.

Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of to indemnify the Municipal Corporation against any compensation or damage causes by the Excepted Risks.

The Contractor shall at all times indemnify the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, against all claims, damages or compensation under the provisions of Payment of Wages Act 1936. Minimum Wages Act 1948, Employers Liability Act 1938. The workman's Compensation Act 1923, Industrial Dispute Act 1947, Indian Factories Act 194 and Maternity Benefit Act 1961 or any modifications thereof and rules made there under from time to time or as a consequence or any accident or injury to any workmen or other persons in or about the works, whether in the employment of the contractor or not, save and except where such accident; or injury have resulted from any act of the Municipal Corporation, their agents or servants and also against all costs, charges and expenses of any suit, Action or proceedings arising out of such accident or injury and against all sum or sums which may with the consent of the contractor be paid to his obligations and liabilities as above provided.

The Contractor shall insure against for his workers for injury and all claims, damages or compensation payable under the various acts mentioned above or any modifications thereof or any other law relation thereto contractors are requested to take care of health of their working personnel. No claim regarding contagious diseases/any other diseases/infection shall be entertained by RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, nor any compensation shall be paid to contractors.

#### 13. <u>Changes in constitution :</u>

A) When the Contractor is a partnership firm, the prior approval in writing of the Commissioner shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or Hindu Undivided Family business concern such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the work hereby undertaken by the Contractor. If prior approval as aforesaid is not obtained the contract shall be deemed to have been assigned in

contravention of the condition no. H-01 thereof and the same action may be taken and the same consequences shall ensue as provided for in the said condition.

#### **B) LABOUR**

#### **B-1** Employment of labour :

The Contractor shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer. The Contractor shall not employ connection with the work any child who has not completed his 15<sup>th</sup> year of age. He shall also not employ an adolescent who has not completed his 18<sup>th</sup> year unless he is certified fit for work as an adult as prescribed under clause (b) of sub-section (2) of section 69 of the factories Act 1948.

The contractor shall also see that all the provisions regarding employment of young persons covered by the employment of Children Act, 1933 and the factories Act, 1948, as amended from time to time shall be fully complied with . The Contractor shall also see that the provisions set for under the minimum wages act and contract regulation and abolition act 1970 with The Maharashtra Contract labour (Regulation and Abolition) rules 1971 as amended from time to time are fully complied with by him and shall maintain necessary registers and records for payment of Wages, overtime etc. made to his workmen as required by the Conciliation Officer (Central), Ministry of labour, Government of India, of such other authorize person appointed by the Central or the State Government.

The contractor shall make his own arrangements for the engagement of all labour local or otherwise.

The Contractor shall indemnify the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or any agent, servant or employee of Municipal Corporation for any lapses on the part of Contractor on account of non-compliance of above referred acts It is mandatory to take insurance policy of all the working personnel.

### B-2 Minimum Wages.

(a) The Contractor shall pay the laborers engaged by him on the work not less than a minimum wage (which expression shall mean whether for time or piece work, the respective rates of wages as fixed under the law for time being in force).

(b) The contractor shall, not withstanding the provisions of any contract to the contrary, cause to be paid such minimum wage to laborers indirectly engaged on the work including any labour engaged by labour contractors in connection with the said work as if laborers had been immediately employed by him.

(c) The contractor shall comply with the provisions of payment of wages act, 1936. Minimum Wages act 1948, Employers liability Act 1938. Workmen compensation Act 1923, industrial dispute Act 1947, Indian factories Act 1948, and the Maternity Benefit Act 1961, or any modification thereof or any other law relating thereto and rules made there under from time to time, he will observe and give effect to the provisions of any law for the time being in force and regulating the rights and privileges of the laborers employed by him directly or indirectly. (d) The contractor shall indemnify the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, by executing a separate indemnity Bond on requisite stamp paper against any payments to be made under and for the observance of the regulations, in force for the time being without prejudice to his right to claim indemnity from his sub-contractors.

### B-3 <u>Registration of Employment and welfare.</u>

The Contractor, which expression shall include sub-contractor of any such person of group of persons representing the Contractor who are required to handle iron and steel material shall register themselves as employer with the Bombay iron and steel labour Board and shall completely fulfill all the obligatory provisions of the Maharashtra Mathadi, Hamal and other manual workers (Regulation of Employment and Welfare) Scheme 1970. The consequences of failure of compliance of any of these provisions will entirely be the liability and responsibility of the Contract.

### C) <u>MAINTENANCE AND DEFECTS</u>

#### 1) Defects liability period

The contractor shall be held responsible to make good and remedy at his own expense within such period as may be stipulated by the Engineer and defects which may develop or may be noticed before the expiry of the period mentioned from certified date of completion and intimation of which has been sent to the Contractor within seven days of expiry of the said period by letter sent by hand delivery or by registered post.

### 2) Liability for defects or imperfections and rectification's thereof

If it shall appear to the Engineer or to his representative at any time during construction or reconstruction, that any work that has been executed with unsound, imperfect or unskillful workmanship or that any material or article provided by the Contractor for execution of the work is unsound or of a quality interior to that contracted for, or otherwise, not in accordance with in contract, or that any defect, shrinkage or other faults have appeared in the work arising out of defective or improper materials or workmanship, the Contractor shall, upon receipt of notice in writing in that behalf from the Engineer forthwith rectify or remove or reconstruct the work so specified in whole or part, as the case may require, or as the case may be, and/or remove the materials or articles so specified and provide other proper and suitable materials or articles at his own expense notwithstanding that the same may have been inadvertently passed, certified and paid for, and in the event of his failing to do so within the period to be specified by the Engineer in his notice aforesaid the Engineer may rectify or remove and re-execute the work and/or remove and replace with others the materials or articles complained of, as the case may be, by other means at the risk and cost of the contractor.

#### 3) Liability for damages and risks

The Contractor shall be responsible for all risks to the work and shall make good at his own cost, all loss or damage, whether to the works themselves or to any other Municipal property, or to the lives, persons, or property of others, from whatsoever cause, arising out of, or in connection with the works, during their progress and this although all reasonable and proper precautions may have been taken by the Contractor, and in case the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be called upon to make good any such costs, loss or damages, or to pay compensation (including that payable under the provision of Workmen's Compensation Act) to any person or persons sustaining damage as aforesaid by reason of any act or of any negligence or omissions on the part of the Contractor, the amount which the Commissioner may pay in respect thereof and the amount of any costs or charges (including law costs and charges) in connection with legal proceedings which he may incur in reference thereto, shall be charged to the Contractor. The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall have full power and right at his own discretion to pay or to defend or compromise any claim which may be made against the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, for damage or in case of threatened legal proceedings, or in anticipation of legal proceedings being instituted, consequent on the action or default of the Contractor, to take such steps as he may consider necessary or desirable to ward off or mitigate the effect of such proceedings charging to the Contractor, as aforesaid, any sum or sums of money which he may pay and any expenses, whether for reinstatement or otherwise which he may incur and the propriety of any payment, defense or compromise, or of the incurrence of any such expense shall not be called in question by the Contractor.

The contractor shall be held responsible for any obligations, damages and fines etc. arising out of or in connection with the works either during their progress or during the defects liability period and shall indemnity the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, against them and make good any such damages, fines and dues arising out of non-compliance of any regulation under the Minimum Wages Act by the Contractor which may develop on the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,. The contractor shall take out a policy as per the provisions of the Workmen's Compensation Act for the purpose of insuring compensation to the workers engaged by them.

#### (D) ALTERATION, ADDITIONS AND OMISSIONS:

Any alteration or addition or omission required to be executed for tender specified works to be in perfectly working condition should be of the cost of the tenderer exclusively and RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, will not be a party to it. Neither any cost will be beard by RRC, Seth GSMC & KEM Hospital, Mumbai, nor any compensation for the same shall be given at any stage at any circumstances. Before carrying out alteration/omission permission of RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be taken.

#### (E) Payment of final bill

The Contractor shall submit the final bill within three months of physical completion of the works. The Contractor shall make no further claims after submission of the final Bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bills in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be made within a reasonable period as may be necessary for the purpose of verification etc. After payment of the final bill as aforesaid has been made, the Contractor may, if he so desires, reconsider his position in respect of a disputed portion of final bill and if he fails to do so within 90 days, his disputed claim shall be dealt with as provided in the Contract.

### (F) REMEDIES AND POWERS

#### F-1 Cancellation of contract in full or in part

If the Contractor

a) At any time makes default in proceeding with the work with due diligence and continues to do so after notice in writing of fourteen days from the Engineer, or

b) Commits default in complying with any of the terms and conditions of contract and does not remedy it within fourteen days after a notice in writing is given to him in that behalf by the Engineer, or

c) Fails to complete the works or items with individual dates completion, on or before the date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer, or

d) Shall offer or give or agree to give to any person in Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, service or to any person on his behalf any gift or consideration of any kind as an inducement or reward for doing or for bearing to do or for having done or forborne to any other contract for the MUNICIPAL CORPORATION, or

- (i) Shall Obtain a contract with the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, as a result of ring tendering or other non bona fide methods of competitive tendering; or
- (ii) Being an individual or a firm, any partner thereof, shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him of shall take any proceedings for liquidation or composition (other than voluntary) liquidation for the purpose of amalgamation or reconstruction) under any insolvency Act for the time being in force or make any conveyance of assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under insolvency Act for the title being in force for the sequestration of his estate or if a trust deed be executed by him for his creditors; or
- (iii) Being a company, shall pass a resolution or the court shall make an order for the liquidation of his affairs, or a receiver or a manager on behalf of the debenture holder shall be appointed or circumstances shall arise which entitle the court of debenture holders to appoint a receiver or a Manager, or
- (iv) Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days, or
- (v) Assigns, transfers, sublets (engagement of labour on a piece work basis or labour with materials, not to be incorporated in the work, shall not be deemed to be subletting) or attempts to assign, transfer or sublet, the entire works or any portion thereof without the prior written approval of the Commissioner' the Commissioner may without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, by written notice cancel the contract as a whole or only such items of work in default from the contract.

The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall on such cancellation have powers to ;

a) Take possession of site and any materials, constructional plant, implements, stores, etc. thereon and/or

b) Carry out the incomplete work by any means at the risk and cost of the contractor.

On cancellation of the contract in full or in part the Engineer shall determine what amount, if any, is recoverable from the contractor for completion of works or in case the work or part of works is not completed, the loss or damage suffered by the RRC, TPMU-NMCN, KEM HOSPITAL, MUMBAI, in determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of the contractor's material taken over and incorporated in the work, and use of tackle and machinery belonging to the contractor.

Any excess expenditure incurred or to be incurred by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, in completing the works or part of the works or excess loss or damages suffered or may be suffered by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, as aforesaid after allowing such credit shall be recovered from any money due to the Contractor on any account and if such money are not sufficient the Contractor shall fail to pay the required sum within the aforesaid period of thirty days. If the Contractor shall fail to pay the required sum within the aforesaid period of thirty days, the Engineer shall have right to sell any or all of the Contractor's unused materials, constructional plant, implements, temporary buildings etc. And apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the contract, and if thereafter there by any balance outstanding from the Contractor it shall be recovered in accordance with provision of the contract.

Any sums in excess of the amounts due to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,.

and unsold materials, constructional plant etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,, of the works or part of the works is less than the amount of which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the Contractor.

Without prejudice to the generality of the foregoing, the contractor shall deposit the amount, as security deposit shall be absolutely forfeited to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, for such failure, or breach or determination of contract.

#### F-2 Termination of contract for death

If the Contractor is an individual or proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies then unless the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, is satisfied that legal representative of the individual Contractor or the proprietor of the proprietary concern and in case of partnership, the surviving partner, are capable of carrying out and completion the contract, the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, Mumbai,

shall be entitled to cancel the contact as to its uncompleted part without the RRC, TPMU-NMCN, KEM HOSPITAL, MUMBAI.

- being in any way liable to payment of any compensation to the estate of the deceased contractor and/or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, that the legal representative of the contract. The decision of the Dean & Chairperson, RRC, TPMU-NMCN, KEM HOSPITAL, MUMBAI.
- that the legal representative of the deceased Contractor or surviving partners of the Contractor's firm can not carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall not hold estate of the deceased Contractor and/or surviving partners of the Contractor's firm liable in damages for not completing the contract.

#### F-3 Urgent works

If any urgent work (in respect whereof the decision of the Engineer shall be final and binding) becomes necessary and the Contractor is unable or unwilling at once to carry it out, the Engineer may by his own or other work peoples carry it out as he may consider necessary. If the urgent work shall be such as the Contractor is liable under the contract to carry out at his expense all expense incurred on it by the Corporation shall be recoverable from the contractor and be adjusted or set off against any sum payable to him .

#### (G) FORECLOSURE

#### G-1 Foreclosure of contract in full or in part

If at any time after acceptance of the tender the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall decide to abandon or reduce the scope of the works for any reasons whatsoever and hence not require the whole or any parts of the works to be carried out; he shall inform the Contractor in writing to that effect and the contractor shall have no claim to any payment or compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at the contract rates full amount of works executed at site, and in addition, reasonable amount as certified by the Engineer for the value of much material (which material thereupon become the property of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,) and also such further allowances as the Engineer may think reasonable and fair in respect of (**a**) any expenditure incurred by the Contractor towards preliminary works etc. and (**b**) other reasonable and proper engagement of the Contractor may have entered into for carrying out the work, (**c**) such compensation as considered equitable under the circumstances.

#### (H) SETTLEMENT OF DISPUTES :

#### H-1 FINALITY OF DECISION AND NON – ARBITRABILITY

If any dispute, difference or claim is raised by the Contractor relating to any matter arising under the contract, the Engineer may refer such matter to the superior not below the rank of chief Engineer and other then RRC, TPMU-NMCN, KEM HOSPITAL, MUMBAI.

who, on examining the dispute, difference or claim, shall give decision in writing. Such decision will be final and binding upon all parties. This decision will not be arbitrable at all.

#### H-2 INCOME TAX

The Contractor shall pay Indian Income Tax on all payments made to him under the contract, other than reimbursements made to him by the Corporation to cover payments by Contractor of minor customs dues etc., or any other payment which the Contractor may Make on the Corporation's behalf. Under the provisions of section 194 – C of the Indian Income Tax Act, the Corporation is required to deduct tax at source and under present legislation will deduct as tax 2.2% (IT 2% Plus 0.2% Surcharge) of the gross amount of each bill submitted. Any ex-expatriate site staff not normally resident of India, employed by the Contractor shall pay personal Income Tax on all money earned and paid in India.

#### I) MATERIAL AND WORKMANSHIP :

#### I-1 INSPECTION AND APPROVAL

All works embracing more than one process shall be subject to examination and approval at each stage is ready. In default of such notice the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be entitled to appraise the quality and extent thereof. No work shall be covered up or put out of view without the approval of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and the contractor shall afford full opportunity or examination and measurement of any work which is about to be covered up or out of view and for examination of foundation before permanent work is placed thereon.

The contractor shall give due notice to the Corporation whenever any such work of foundation is ready for examination and the Corporation shall without unreasonable delay unless he considers it necessary and informs the contractor in writing accordingly attend for the purpose of examining and measuring such work or examining such foundation. In the event of the failure of the contractor to give such notice he shall if required by the Corporation uncover such works at the contractor's expense.

All the items of the plant/machinery and accessories, fabricated/bought as per specifications and drawings shall be of approved class and are liable for inspection and testing before dispatch. All the similar materials and removable parts of similar equipments shall be inter changeable with each other. Contractors shall arrange all necessary tests (Routine as well as functional) in the presence of the Engineer at manufacturer's premises or at site in accordance with the appropriate standards. No material shall be dispatched without the consent of the Engineer.

Departmental officers concerned with the works shall have powers at any time to inspect and examine any part of the works and the contractor shall arrange such facilities as may be required for such stage / final inspection and examination, which includes cost/charges for to and fro travel, inland transport, lodging and boarding, etc. for two Municipal Engineers. The tenderer shall offer the total cost considering above.

#### I-2 MATERIALS

The Contractor shall at his own expense provide all materials required for the works. All materials to be provided by the Contractor shall be in conformity with the specifications laid down in the contract and the Contractor shall if requested by the Corporation furnish proof to the satisfaction of the Corporation that the materials so comply. The materials used for fabrication like welding rods, plants, angles shall be of best quality and shall be used after prior consult of the site engineer.

The Contractor shall at his own expense and without delay supply to the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, samples of materials proposed to be used in the work. The RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall within seven days of supply of samples or within such further period as he may require and intimated to the Contractor in writing inform the Contractor whether the samples are approved by him or not. If the samples are not approved the Contractor shall forthwith arrange to supply to the Corporation for approval fresh samples complying with the specifications laid down in the contract.

All charges on account of GST and other duties on material obtained for the works from any source shall be borne by the Contractor.

The RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be entitled to have tests carried out for any material supplied by the contractor other than those for which as stated above, satisfactory proof has already been produced, at the cost of the Contractor and the Contractor shall provide at his expense all facilities which the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, may require for this purpose.

If no tests are specified in the contract and such tests are required by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, the Contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the Contractor only if the tests disclose that the said materials are not in accordance with the provision of the contract.

The cost of the material consumed in test shall born by the contractor in all cases except when otherwise provided.

#### J) OCTROI SALES TAX & OTHER DUTIES :

All charges on account of Octroi terminal, or sales tax and other duties on material obtained for the work from any source including the tax applicable as per Maharashtra Sales tax act on the transfer of property in goods involved in the execution of works contractors (re-enacted) act 1991 etc. or as amended up to date shall be borne by the contractors.

#### K) ACCEPTANCE/REJECTION OF TENDERS :

The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, does not bind himself to accept the lowest or any tender and to make any correspondence in any form in this regard.

#### L) GUARANTEE CLAUSE :

The successful tenderer shall have to furnish a free maintenance guarantee on the Municipal prescribed form affixed with a Special Adhesive Stamp of Rs. 100/- (Rupees Hundred only) thereon for 12 calendar months from the date of supply/commissioning or completion of work for any manufacturing defects or faulty workmanship. If any defect is noticed within the guarantee period and intimated to the contractors, they will rectify the same free of cost.

#### **M) PENALTY :**

#### M-1 PENALTY FOR DELAY

Penalty for delayed supply, erection, testing and commissioning (Beyond original contract period) shall be calculated at the rate of half percentage per week or part thereof of the contract value of part delayed subject to max. limit of 10% of contract value. The contract value for calculating Penalty on stages of delay in submission of drawings, supply of materials, installation/execution, testing and commissioning of the material/system will be reckoned as under .

- :-
- i. Delay in submission of layout and drawings -- 10% of contract value.
- ii. Delay in supply of material/system -- 50% of contract value.
- iii. Delay in erection of material/system -- 30% of contract value.
- iv. Delay in testing and commissioning of material/system --10% of contract value.

#### M-2 PENALTY FOR DEFECTS AND LAPSES OBSERVED

#### M-2(a) (for Work tender ) ::

All such work as is not in accordance with the direction of Engineer or other officer aforesaid or is composed of materials disapproved by him or the workmanship whereof is disapproved by him shall be taken down and removed by the contractors at his / their own risk and expense within twenty four hours after receipt by him / them of a notice to that effect signed by the Engineer or other officer aforesaid shall be at liberty at the risk and expense of the contractors to take down and remove the same and to cause such work to be executed by any person or persons at such rates and prices as the Engineer may think proper and cost and expense thereby incurred including 15 percent supervision charges on the works and also such penalty as the Engineer may impose for such wrongful conduct of the contractor which penalty the Engineer shall be only to the commissioner within seven days at the order in that behalf of the Engineer and the decision of the commissioner on which shall be final and binding upon the contractors may be deducted from any money due or to become due to the contractors under this or any other contract between the contractors and the said corporation.

A contractor will be levied for defects and lapses observed at first instance of Rs. 5000/-Second Rs. 10,000/- and so on.

After lapses and defects are notified to the contractors and if same are not attended by the contractors in time, a note will be taken in Ephemeral Register. The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,

#### M-2(b) ( for Supply tender ) ::

In case the contractors at any time during the continuance of these present supply of the material mentioned in schedule is rejected because of inferior quality, the commissioner reserves right to levy penalty for such inferior supply from contractor, not exceeding 20% of the cost of the supplied material. The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,

### TENDER FORM

To, Dean, Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai. Sir,

I / We have read and examined the following documents relating to work of Air conditioning of Digital Medical Lecture Theatre no.-3 at College Building of K.E.M. Hospital.

- (e) Packet ' B ' (Technical Bid) document.
- (f) e-Tender Notice.
- (g) Instructions to Tenderers.
- (h) Tender Form.
- (i) General conditions of contract / Articles of agreement.
- (j) Specific Instructions.
- (k) Scope of work and Technical specifications.
- (1) Various Schedules.
- I / We \_\_\_\_\_\_\_\_\_ (full name in capital letters starting with surname). The proprietor / managing partner / Managing Director / Holder of the business for the establishment / firm / registered company named herein below do hereby offer to\_\_\_\_\_\_\_ referred to in the specifications and schedule to the accompanying form of contract at the rates entered in the schedule of rates and signed by me/us.
- (a) I / We hereby tender for execution of the works referred to in the aforesaid documents, upon the terms and conditions or referred to therein and in accordance in all respects with the specifications and other relevant details at the rates enter in the aforesaid bill of quantities.

According to your requirements payment of E.M.D. amounting to Rs.\_\_\_\_\_\_is done.

- I / We hereby request you not to enter into a contract with any other person/s for the execution of the works until notice of non-acceptance of this tender has first been communicated to me / us, and in consideration of your agreeing to refrain from so doing I / We agree not to withdraw the offer constituted by this tender before the date of communication to me / us of such notice of non-acceptance, which date shall not be later than ten days from the date of the decision of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,
- I / We also agree to keep this tender open for acceptance for a period of 180 days from the date fixed for opening the same and not to make and modifications in its terms and conditions which are not acceptable to the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,

I / We agree that the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,

Mumbai, shall, without prejudice to any other right or remedy be at liberty to forfeit the said Earnest money absolutely, if.

3. I / We fail to keep the tender open as aforesaid

- 4. I / We fail to execute the formal contract or make the contract deposit when called upon to do so.
- 5. I/We do not commence the work on or before the date specified in the work order.
- I / We \_\_\_\_\_\_ have filled in the accompanying tender with full knowledge of liabilities and therefore we will not raise any objections or disputes in any manner relating to any action including forfeiture of deposit and blacklisting for giving any information, which is, found to be incorrect and against the instructions and directions given in the tender.
- I / We further agree and undertake that in the event it is revealed subsequently after the allotment of work / contract to me / us that any information given by me / us in this tender is false or incorrect I / We shall compensate the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, for any such looses or inconvenience caused to the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, in any manner and will not resist any claim for such compensation to any ground whatsoever.
- I / We agree to undertake that I / We shall not claim in such case any amount by way of damage or compensation for cancellation of the contract given to me / us or any work assigned to me / us or is withdrawn by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,
- I / We hereby further agree to pay all the charges of whatsoever nature in connection with the preparation, stamping and execution of the said contract.

Full name and address with Telephone nos. if any.

Yours faithfully

Signature of tenderer

1.\_\_\_\_\_

(On Rs. 500/- Stamp Paper)

I,

### **DECLARATION CUM INDEMNITY BOND**

\_\_\_\_\_\_ of \_\_\_\_\_\_, do hereby declared and undertake as under.

1. I declare that I have submitted certificates as required to Executive engineer

(Monitoring) at the time of registration of my firm/company \_\_\_\_\_ and there is nochange in the contents of the certificates that are submitted at the time of registration.

2. I declare that I \_\_\_\_\_\_ in capacity as Manager/Director/Partners/Proprietors of \_\_\_\_\_\_ has not been charged with any prohibitory and /or penal action such as banning(for specific time or permanent)/de-registration or any other action under the law by any Government and/or Semi Government and/or Government undertaking.

3. I declare that I have perused and examined the tender document including addendum, condition of contract, specifications, drawings, bill of quantity etc. forming part of tender and accordingly, I submit my offer to execute the work as per tender documents at the rates quoted by me in capacity as \_\_\_\_\_\_ of \_\_\_\_\_\_.

4.I further declare that if I am allotted the work and I failed to carry out the allotted work in accordance with the terms and conditions and within the time prescribed and specified, MCGM is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the contract.

5. I also declare that I will not claim any charge/damages/compensation for non availability of site for the contract work at any time.

6. I declare that I will positively make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge

## **Signature of Tenderer**

# **Agreement Form** For the purchase of materials/equipments

### & Job work /Repair work

 Bid No/Quotation no.:
 \_\_\_\_\_\_

 Dean's Sanction No.
 \_\_\_\_\_\_

 Dated
 \_\_\_\_\_\_

Supply / work of Air conditioning of Digital Medical Lecture Theatre no.-3 at College

Building of K.E.M. Hospital.

the

\_\_\_\_\_ Two Thousand THIS AGREEMENT MADE ON THIS \_\_\_\_\_Day of \_ Between \_\_\_\_\_ (Partner / Proprietor''s Full Name) in habitant/s of Mumbai, carrying on business at in Mumbai under the style and name of \_\_\_\_\_ for and on behalf of himself / themselves, his / Messer"s their heirs, executors, administrators and assigns ( Hereinafter called ,, the Contractor/s") of the \_\_\_\_\_the ,in which expressions are FIRST PART and Shri. / Smt. included unless such inclusion is inconsistent with the context or meaning therefore, include Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and any officers of Municipal Corporation of Greater Mumbai authorized by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and shall also include their successors & assign / assignee for the time being holding office, of the SECOND PART and the Municipal Corporation of Greater Mumbai (Hereinafter called ,, the Corporation") of the THIRD PART. WHEREAS the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, deputed. has interallia recently invited Tender for supply of

\_\_\_\_\_\_ mentioned in the schedule / specification here to annexed. AND WHEREAS the contractor/s has/have submitted Tender for the Supply of the said \_\_\_\_\_\_ and / or work thereof and his / their said Tender was accepted by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, on the Terms and Conditions hereinafter specified. AND WHEREAS the said Contractor/s has / have paid deposit of Rs.\_\_\_\_\_ (Rs.\_\_\_\_\_) in the office of Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, as Contract Deposit for the due and faithful performance of this contract OR has / have furnished the General Undertaking and Guarantee for Rs.\_\_\_\_\_ (Rs.\_\_\_\_\_) of Bank, for the payment interallia of the said amount of the Contract Deposit in the office of RRC, TPMU-NMCN, Seth GSMC & KEM

Hospital, Mumbai, for the due and faithful performance of this contract. NOW THESE PRESENTS WITNESS and it is hereby agreed and declared between and by the parties hereto as follows:

1. Contract Period That this Contract shall be deemed to have commence as from and after \_\_\_\_\_Day of \_\_\_\_\_Two Thousand \_\_\_\_\_and shall continue in force, subject to the power of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, for the time being to determine the same previously as hereinafter mentioned until \_\_\_\_\_Day of \_\_\_\_\_\_Two Thousand \_\_\_\_\_\_or until such time as the Supply herein mentioned and shall have been completed and certified for by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, / purchasing Officer as being of good quality and in good working order.

**2. Contract deposit.** Successful tenderer shall have to pay a contract deposit @ 5% of the total contract cost either in the form of DD or in the form of Bankers" Guarantee from the Bankers approved by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,& same will be retained 6 months after completion of contract period.

3. Supply to be made according to the Order The contractor/s shall, During the continuance of this contract, from time to time and at all times as and when the same shall be indented for, or by any officer of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, authorized in that behalf (such purchase order shall be in writing and signed by the said officer) supply/execute and do or cause to be executed and done according to the directions and to the entire satisfaction of the officers of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, authorized in that behalf within the stipulated period after receipt of the respective purchase orders in such quantities as may from time to time be placed, such of the articles specified in the schedule hereunto annexed or carry out any or all works comprised in this Contract which the Contractor/s may be called upon to do at the rates set opposite to the said respective articles/works in the said Schedule. 3(a). Failure to execute Orders If the Contractor/s fail to comply with the orders and / or carry out the work within the period stipulated, the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, / purchasing Officer shall exercise his discretionary powers to recover from the Contractor/s as agreed, liquidated damages or by way of penalty as may deem reasonable under the circumstance and the same shall be recovered from any dues of the Contractor/s, with the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, 3(b). Period Unless otherwise stated elsewhere in this Contract, goods shall be delivered by the Contractor/s within stipulated period from the date of receipt of Order by the Contractors.

4. Place of Delivery The articles/provisions so indented for, unless otherwise specified, shall be delivered by the Contractors at the indenting office of RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, located within the limits of Greater Mumbai or outside city divisions as may be mentioned in the respective indents for the same and all charges for the carriage and delivery thereof, and stacking to or at such place or places, measuring the quantities in the manner specified testing qualities and soundness of materials for workmanship of all parts of the said articles at the time of delivery in such manner as may be directed by the authorized Municipal officer, replacing damaged or defective part/s of the articles shall be borne by the Contractors. No expenses and no risk of any description shall be borne by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, until actual delivery of the materials shall have been taken by RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, The Contractors shall exercise all possible care while delivering and stacking the materials within RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,s premises. The cost of any damage done by the Contractors or their agents to RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,"s property while delivering and stacking the materials shall be recovered from their bills or any other outstanding dues. The materials shall be delivered by the contractors as per the convenience of the individual user department.

**5. Quality** All articles supplied by the Contractor/s in accordance with this contract, shall be new and of the best quality of their respective kinds, in accordance with the Municipal samples or specifications, if any and of the exact size, kind and description required and shall be subject to the

approval of the party or parties signs the same and in case of their not being approved shall be liable to be rejected.

**6. Quantity** The quantity in the tender is based on probable student strength as on June 2015 and hence it is approximate. The grand total of quantity mentioned in item data may increase or decrease by 10%. The RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, agrees to purchase the articles valued at not less than 25 percent of the total amounts of the contracts.

**7. Penalty for Inferior Supply** If the articles supplied are found of inferior quality or not as per the specification, when tested through Govt./Govt. approved Lab / having NABL accreditation and test reports are not found in consonance with the parameter mentioned in the specification of the tender, the supply shall be rejected and i) If the default committed by the tenderer/supplier is of first time he is liable for penalty up to 20% of the total purchase cost and ii) If the default committed is of second time, the firm shall be blacklisted for a period of three years and iii) If the default committed is of third time or more than that, the firm shall be permanently blacklisted.

**8. Replacement of Rejected Materials** Tenderer/contractor shall have to replace rejected Material with approved one. The supplier should remove the rejected Material within 15 days failing which the same will be disposed off by RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, at the risk and cost of contractors without any further correspondence in this regards.

**9. Rejection & appeal:** Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or the purchasing officer, shall not be bound to assign any reason in case of his rejecting the materials or articles supplied by the contractors, but the decision of the said rejecting authority shall be subject to appeal to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, whose decision as to Whether the said articles shall be accepted or rejected shall be final and binding on the Contractor(s).

**10. Fees** The contractors shall pay such fees as may be decided to be levied by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, in connection with the inspection, and field /or laboratory tests of materials supplied by the contractors. Such payment will however, be enforced only in the event of the articles supplied and analyzed, being found to be inferior to specifications or stipulated quality. Unless otherwise stated elsewhere in this contract, the materials destroyed partly or fully, during the process of inspection or testing shall be replaced by the contractor free of cost.

11. Risk & Cost Purchase In case the Contractor/s, shall at any time during the continuance of these presents fail to supply satisfactorily any of the said articles within the prescribed time as herein provided, or in case shall fail at once to replace any articles that may have been rejected as herein provided with other of approved quality, the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be at liberty forthwith to procure the same in the open market at the risk and cost of the contractor/s. Similarly if the work underlying the contract is not executed satisfactorily within the stipulated period, or after the same having been disapproved wholly or partly is not rectified or re-done to the satisfaction of the Officer in Charge within the said specified period, the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall get the same executed or rectified or re-done through any other agencies, at the entire risk of the contractor/s as to cost and consequences. The extra cost thereof (if any) and all expenses there thereby incurred which shall include a minimum charges of 5 per cent, in all cases of default, which may be raised to a maximum of 15 per cent, in special cases at the discretion of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be payable by and/or may be deducted from any moneys due or to become due to the Contractors under this or any other contract between the contractors and the Corporation. The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, may, however, fix such other subsequent date as he may think fit by which the delivery of the said articles or execution of the said work shall be completed.

**12.** Articles can be brought from elsewhere The RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be under no obligation to purchase from the contractors all or any of the articles specified in the said schedule or otherwise, but only such articles and those in such quantities, as may from time to time be indented for on the contractors by the purchasing Officer. The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, has the option of purchasing any of the articles from the market or other Contractors or elsewhere.

**13.** Submission of Bill The Contractor/s shall on completion of the delivery of the articles or completion of the work mentioned in the respective order, present his/their bills in duplicate to the purchasing officer within 8 days from the date of the completion of such delivery/work.

14. Monetary dealings with the Municipal Employees The Contractor/s shall not lend to, or borrow from, or have or enter into any monetary dealings or transactions, either directly or indirectly, with any Municipal Employees, and if he / they or any of them shall do so, the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be entitled to forthwith terminate this contract and forfeit the Earnest Money Deposit / Contract Deposit without prejudice to the other rights and remedies of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, claim damages from the Contractor/s for the breach of the Contract.

**15. Breach of Contract** In case of failure on the part of the Contractor/s at any time during the continuance of this Contract to comply with any of the condition herein contained or in case of any breach whatsoever of any portion of this contract, the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be at liberty, absolutely to determine the same by giving, the Contractor/s one calendar month"s previous notice in writing of his intention to do so, and in such case the Contractor/s shall be responsible for and shall make good to the Corporation all loss, cost and damage of every description which the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, may sustain in consequence of such failure or breach or determination of the Contract and without prejudice to generality of the foregoing, the said sum of Rs.\_\_\_\_\_\_ deposited as security as aforesaid shall be absolutely forfeited to the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, Mumbai, as liquidated damages for such failure or breach or determination of the contract.

**16. Dissolution of the Contract** The Contractor/s shall not at any time dissolve partnership in respect of this contract or otherwise, change or alter their respective interests therein or assign, sublet or makeover the present contract or the benefit thereof or any part thereof to any person/s whomsoever without the previous consent in writing of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, for the time being. In case the Contractor/s shall at any time commit any breach of this covenant then the security Deposit shall be forfeited to the RRC, Seth GSMC & KEM Hospital, Mumbai and shall be retained by the RRC, Seth GSMC & KEM Hospital, Mumbai as and for liquidated damages.

**17. Disputes etc. to be decided by the** Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, If any dispute or difference shall arise between Dean (KEM) or other officer aforesaid on the one hand and the Contractor on the other hand, concerning the supplies to be made by the contractor/s under these presents or any of them or the quantity or quality thereof the delivery, stacking measurement, weighment or making thereof or other action taken, or purporting respectively to have been imposed or taken under these presents, or regarding any default or alleged default or illegal or improper action on the part either of the Contractor or Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or the Officer aforesaid or the mode of carrying out and giving effects to the provisions of these presents, or concerning the meaning or intention of this contract or of any part thereof, or concerning any certificate or order made or purporting to have been made there under, or in any ways whatsoever relating to the interest of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or of the contractor, every such dispute and difference shall from time to time be referred to, and be settled and decided by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, who shall be competent to enter upon the subject matter of such dispute or difference with or without formal reference or notice to the Contractor or

others concerned, or any of them and who shall decide and determine thereon; and to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall also be referred to the settlement of this contract and the determination of the sum or sums or balance of money to be paid or received from the Contractor by the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, 18. Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, direction & decisions to be final and binding The directions, decisions, certificates, order and awards given and made on such reference as aforesaid of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, (which said directions, decisions, certificates, orders and awards respectively may be made from time to time) shall be final and binding upon the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and the Contractor respectively and shall not be set aside on account of any technical or legal defects therein or in the contract, or on account of any formality, omission, delay, or error of proceedings or on any other ground or for any pretence, suggestion, charge, insinuation of fraud, collusion or confederacy or otherwise, howsoever, and it shall not be competent for the contractor of the Corporation to expect to any hearing or determination before or of the Commissioner or to any certificate, order or award by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, on the ground of any want of jurisdiction or excess of authority or irregularity of proceeding, but all matter made the subject of any such hearing or determination or included in any certificate, order or award, and whether of retrospective or prospective operation or effect, shall be deemed to have been properly submitted to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and be taken to have been properly adjudicated upon.

**19. The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, not compellable to defend or answer any suit relating to any certificate or award made by him.** The Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall not be made a party to or be required to defend or answer any action, suit or proceedings at the instance of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or the Contractor nor shall be compellable by any proceeding whatsoever to answer or explain and matter relating to any certificate or award made by him or to state or show how or why or on what grounds he settle, ascertained or determined or omitted to settle, ascertain or determine in any matter whatsoever, nor shall he be compellable to state or give his reasons for any proceeding whatsoever which he may take or direct to be taken in or about the premises, or show to any person or persons for any purpose whatsoever any document whatsoever or any calculations or memoranda whatsoever in his possession or power relating thereto.

20. RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,"s lien over all moneys due to the Contractor or his deposit The RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall have a lien on over all or any moneys that may become due and payable to the Contractor/s under these present and or also on and over the deposit or security amount or amounts made under this contract and which may become repayable to the Contractor/s under the conditions in that behalf herein contained, for or in respect of any debt or sum that may become due and payable to the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, by the Contractor/s either alone or jointly with another or others and either under this or under any other contracts or transactions of any nature whatsoever between the Corporation and the Contractor/s and also for or in respect of any Municipal Tax or Taxes or other money which may become due and payable to the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, by the Contractor/s either alone or jointly with another and others. under the provisions of the Mumbai Municipal Corporation Act 1888, or any other Statutory enactment or enactment in force in modification or substitution thereof. AND further that the Commissioner on behalf of the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall at all times be entitled to deduct the said debt or sum or tax due by the Contractor/s from the moneys, security or deposit which may become payable or returnable to the Contractor/s under these presents provided however that nothing in this clause shall apply to any moneys due and payable by the Contractor/s in his/ their capacity as a trustee/s either alone or jointly with others. The provisions of these conditions shall also apply and extended to the Banker"s Guarantee if any given by the Contractor/s either in addition to or in substitution of the cash or contract deposit to be made under this

contract.

23. Banker"s Guarantee In the event of the said deposit of Rs.....having been made by the Contractors by delivery to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, of the General Undertaking and Guarantee of the Bankers of the contractors and of the contractors and of the Contractors under any of the provisions of this Contract becoming subject to or liable for any penalty or damages liquidated or unliquidated or of the said deposit of Rs.....becoming forfeited as hereinbefore mentioned then and in any such case the amount of any such penalty or damages and the deposit so forfeited if not previously paid to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall immediately on demand be paid by the said Bankers to and may be forfeited by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, under and in terms of the said General Undertaking and Guarantee. If no penalty or damage of forfeiture of deposit shall be exacted or claimable from or against the Contractors under this Contract the Contractors and the Bankers shall at the expiration of this contract be freed and released from the obligations of the said General Undertaking and Guarantee in respect of this contract without prejudice, however, to the continuing liability of the Contractors and of the said Bankers and the right of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and/or the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, to claim under the said General Undertaking and Guarantee for or in respect of any other subsisting Tender or Contract entered into by the Contractors with the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and/or the RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai.

**24. Partnership** Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these presents shall if signed in the partnership name by any one of the Contractor/s be of a good and sufficient discharge to the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, and RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, in respect of the money or security purporting to be acknowledged thereby and in the event of the death of any of the contractors, during the pendency of this contract it is thereby expressly agreed that every receipt by any of the surviving Contractor/s shall if so signed as aforesaid, be a good and sufficient discharge as aforesaid. PROVIDED that nothing in this clause contained shall be deemed to prejudice or affect any claim which the Dean & Chairperson, RRC, Seth GSMC & KEM Hospital, Mumbai, or RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or affect any claim which the Dean & Chairperson, RRC, Seth GSMC & KEM Hospital, Mumbai, or RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, may hereafter have against the legal representatives of any Contractor/s so dying or in respect of any breach of any of the conditions thereof, PROVIDED ALSO that, nothing in this clause contained shall be deemed to prejudice or affect the respective rights or obligations of the Contractor/s and of the legal representatives of any deceased Contractor/s inter se.

**25.** Charges All costs, charges and expenses incurred in connection with this contract including stamp duty and all other disbursements, shall be paid by the Contractor/s.

**26. Singular – Plural** Words in the Singular number shall include the plural and plural the singular.

**27. Meaning** The Word ,, Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, "wherever they occur in this Tender or in the Contract shall be construed to mean ,, Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,".

**28.** Acknowledgement Every notice served upon any one of the Contractor/s in pursuance of the Terms and Conditions of this Contract shall be deemed to have been duly served upon the Contractor/s if it is addressed to the place of the Contractor/s given by them and duly posted, even if the same may not have actually reached / received by them.

**29. Penalty** If the contractor fails to comply with the order within the delivery, installation and commissioning period stipulated, the municipal Dean & Chairperson, RRC, Seth GSMC & KEM Hospital, Mumbai ,/ Purchasing Officer shall exercise his discretionary power either :- (a)To recover from contractor as agreed, the liquidated damages or by way of penalty a sum not exceeding half percent of the price of the equipment/ material which the contractors has failed to deliver as aforesaid per week or part thereof during which the delivery of such equipment / material may be in arrears subject to maximum limit @ 10% of the balance amount of the stipulated price of the equipment undelivered. Such penalty is to be deducted always by the consignee from the contractors balance bill, B.G. or EMD or any money due to the contractor from RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai. OR (b)To purchase from elsewhere after giving due notice to the contractor on that account and at his risk, stores not delivered or otherwise of a similar description without cancelling the contract in respect of the consignment not yet due for delivery. OR (c)To cancel the contract and orders and forfeiture of EMD, contract Deposit and blacklisting the firm/company along with their partners/ directors.

**30. Scope of the Contract** And where it is further hereby agreed between the parties of all the parts herein that the Terms and conditions of the Instructions to the Tenderers including the Annexures thereof and the specification of the articles/work shall form parts & parcel of these Contract Agreement

**31. Operation of the Contract Clauses** Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, or his / her successor/s for the time being holding the office of the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be the competent officer to operate the various clauses under this contract and to sign and serve notices under the various clauses of the said contract. All such notices signed by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, be deemed to have been signed by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai, shall be deemed to have been signed by the Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai,

Signature, name Signed, sealed and delivered by and address of witness

The said Contractors, Shri/ Messers \_\_\_\_\_\_ In the presence of \_\_\_\_\_\_

Contractor

(Along with Seal of the Company)

And by the Dean (KEM), Shri/ Smt.\_\_\_\_\_ In the presence of

Nodal Officer, RRC, TPMU-NMCN, Professor and Head, Microbiology Department Seth GSMC & KEM Hospital, Mumbai

Dean & Chairperson, RRC, TPMU-NMCN, Seth GSMC & KEM Hospital, Mumbai

Date:

Contract examined with the tender details & the sanction no:\_\_\_\_\_\_ and found correct.

A.E. (M&E) KEM hospital

## PART-II

# SETH G.S. MEDICAL COLLEGE & K.E.M. HOSPITAL, PAREL, MUMBAI-12.

National Medical College Network(NMCN) Project, Regional Resource Centre, Western Region.

## **TECHNICAL SPECIFICATIONS**

- (b) <u>Name of the work</u>: Air-conditioning of Digital Medical Lecture Theatre no.-3 at College Building of K.E.M. Hospital.
- (c) **<u>Quantity:</u>** As per Schedule of Quantities.
- (d) Period of contract: 45 days.
- (e) Work place: College building, K.E.M. Hospital.
- (f) Eligibility Criteria:-

\*Contractors dealing in air conditioning work. Should have carried out such type of work in M.C.G.M. in past up to 10 lakhs and above.

\*The agency must have an average annual financial turnover of Rs. *One Crore* during last two years and should be profit making during the last two years. Copies of the following documents should be submitted along with the Technical Bid.

(a) Audited Balance Sheet including Income and Expenditure statement, Profit and Loss Account of last two years i.e. 2015-16, and 2016-17, duly certified by Chartered Accountant.

(b) Goods & Service Tax registration certificate.

(c) Copy of Registration/licence under Contractual Labour (R&A) Act, ESI, EPF and other statutory law required for providing maintenance services.

(d) PAN No. / TAN No. / ESI AND EPF / GST registration details.

(e) Income tax statement of last two years, duly certified by Chartered Accountant.

3. The Tenderer should have the Registered / Branch Office in Mumbai.

4. The Tenderer should have sufficient employees specifically trained for routine repair & maintenance work on its roll and paid directly by the Agency.

5. The Tendering agency should have a valid labour license.

6. The Tenderer should have during last five years (work orders as mentioned at clause 01 above.

(a) One completed work or currently executing one work of similar nature of aggregate 60% of estimated cost.

OR

(b) Two similar completed works or currently executing two works of similar nature each costing 40% of estimated cost.

OR

(c) Three similar completed works or currently executing three works of similar nature each costing 30% of estimated cost.

From any Govt. /Semi-Govt./PSU's office building or multi-specialty corporate hospital. Preference will be given to agencies having experience in the field of maintenance of civil works in Government hospitals / Semi-Government hospitals / PSU hospitals.

7. To verify eligibility criteria the tenderer has to submit satisfactory performance certificates from institutions (as mentioned at clause 06 above) where he has worked during last two years.

## (g) Scope of work: -

The work covered by these specifications comprises of Air-conditioning of Digital Medical Lecture Theatre no.-3 at College Building of K.E.M. Hospital, As per Schedule of Quantities. A VRF AC system shall be designed to provide year round thermal environment control.

Over & above this, the tenderer shall also include all the associated works like electrical wiring, plumbing, masonry / carpentry works if necessary, as per attached specifications and schedule. The bidders may include any other work not specifically stated above but which thev think is necessary for proper/efficient working of the system or not included in the bill of quantities. The quantities specified in the tender are estimated quantities based on the proposed design. The bidder may propose their alternative design. They must quote unit rate separately for must quote for all the items. various items mentioned in the schedule and

#### Visit to the site: -

Representative of the Contractor shall visit the site and see themselves the quantum of work involved etc. and fill in their tender thereafter to take care of all the necessary works needed.

## $(h) \qquad \qquad \underline{SPECIFICATIONS}$

#### **OUTDOOR DESIGN CONDITIONS**

Based on metrological data available MUMBAI, the outdoor design conditions have considered as follows :

Summer	:	Dry Bulb Temp. Wet Bulb Temp.	95 deg F 83 deg.F
Monsoon	:	Dry Bulb Temp. Wet Bulb Temp.	85 deg F 72 deg.F)

#### **INDOOR DESIGN CONDITIONS**

Based on our past experience, indoor design conditions for centrally air conditioned spaces shall be :

Dry Bulb	:	75 <u>+</u> 2 Deg. f
Relative Humidity	:	Around 55%

## **TECHNICAL SPECIFICATION**

#### TS-1 VARIABLE REFRIGERANT FLOW SYSTEM

#### SCOPE

The scope of section comprises the supply, erection testing and commissioning of Variable Refrigerant Flow System confirming to these specifications and in accordance with the requirements of Drawing and Schedule of Quantities.

## TYPE

Units shall be air cooled, variable refrigerant Flow air conditioner consisting of one outdoor unit and multiple indoor units. Each indoor units having capability to cool or heat independently for the requirement of the rooms.

It shall be possible to connect minimum 10 indoor units on one refrigerant circuit. The indoor units on any circuit can be of different type and also controlled individually. Following type of indoor units shall be connected to the system.

• High wall Mount type

Compressor installed in outdoor unit shall be equipped with all inverter based compressors in machines for higher reliability, improved life, better backup and duty cycling purpose. The system shall be capable of changing the rotating speed of inverter compressor by inverter controller to follow variations in cooling and heating load.

Outdoor unit shall be suitable for mix match connection of all type of indoor units.

The refrigerant piping between indoor units and outdoor unit shall be possible to extend up to 150m with maximum 50m level difference **without any oil traps.** 

Both indoor units and outdoor unit shall be factory assembled, tested and filled with first charge of refrigerant (410 a) before delivering at site.

## **OUTDOOR UNIT**

The outdoor unit shall be factory assembled, weather proof casing, constructed from heavy guage mild steel panels and coated with baked enamel finish. The unit should be completely factory wired, tested with all necessary controls :

- All outdoor units shall have minimum two scroll compressors and be able to operate even in case one of compressor is out of order.
- It should also be provided with duty cycling for multiple inverter compressor switching starting sequence for better stability and prolonging equipment life.
- The outdoor unit shall be modular in design and should be allowed for side by side installation.
- The unit shall be provided with its own microprocessor control panel.
- The outdoor units should have anti-corrosion paint free gal barium base plate for easy mounting of unit.
- The machine must have a sub cool feature to use coil surface more effectively thru proper circuit/bridge so that it prevents the flushing of refrigerant from long piping due to this effect thereby achieving energy savings.

The outdoor unit should be fitted with low noise, aero spiral design fan with aero fitting grill for spiral discharge airflow to reduce pressure loss and should be fitted with DC fan motor for better efficiency. The unit should also be capable to deliver 55 Pa external static pressure to meet long exhaust duct connection requirement.

The condensing unit shall be designed to operate safely when connected to multiple fan coil units.

## Note: The outdoor machines should give its 100% efficiency at $43^{\circ}C$ and its should not trip even at $54^{\circ}C$ .

The compressor shall be highly efficient scroll type and capable of inverter control. The inverter compress shall change the speed in accordance to the variation in cooling or heating load requirement :

- All outdoor units shall have multiple steps of capacity control to meet load fluctuation and indoor unit individual control. All parts of compressor shall be sufficiently lubricated stock. Forced lubrication may also be employed.
- Oil heater shall be provided in the compressor casing.
- The inverter compressor shall preferably be Reluctance DC inverter compressor for higher efficiency and improved reliability.

## HEAT EXCHANGER

The heat exchanger shall be constructed with copper tubes mechanically bonded to aluminium finds to form a cross fin coil.

- The aluminium fins shall be covered by anti-corrosion resin film.
- The unit should be with e-pass heat exchanger to optimize the path of heat exchanger and for better efficiency of condenser.
- The unit shall be provided with necessary number of direct driven low noise level propeller type fans arranged for vertical discharge. Each fan shall have a safety guard.

## **REFRIGERANT CIRCUIT**

The refrigerant circuit shall include liquid and gas shut-off valves and a solenoid valves at condenser end.

The equipment must have inbuilt refrigerant stabilization control for proper refrigerant distribution.

All necessary safety devices shall be provided to ensure the safety operation of the system.

## SAFETY DEVICES

All necessary safety devices shall be provided to ensure safe operation of the system.

Following safety devices shall be part of outdoor unit, high pressure switch, fuse, fan drive overload protector, fusible plus, over load relay, overload protection for inverter.

## OIL RECOVERY SYSTEM

Unit shall be equipped with an oil recovery system to ensure stable operation with long refrigeration piping lengths.

The system must be provided with oil balancing circuit to avoid poor lubrication.

## **INDOOR UNIT**

This section deals with supply, installation, testing, commissioning of various type of indoor units confirming to general specification and suitable for the duty selected. The type, capacity and size of indoor units shall be as specified in detailed Bill of Quantities.

#### GENERAL

Indoor units shall be High wall mounted type or other as specified in Schedule of Quantities. Each unit shall have electronic control valve to control refrigerant flow rate respond to load variations of the room.

- a) The address of the indoor unit shall be set automatically in case of individual and group control.
- b) In case of centralized control, it shall be set by liquid crystal remote controller

The fan shall be dual suction, aerodynamically designed turbo, multi blade type, statically and dynamically balanced to ensure low noise and vibration free operation of the system. The fan shall be direct driven type, mounted directly on motor shaft having supported from housing.

The cooling coil shall be made out of seamless copper tubes and have continuous aluminium fins. The fins shall be spaced by collars forming an integral part. The tubes shall be staggered in the direction of airflow. The tubes shall be hydraulically/mechanically expanded for minimum thermal contact resistance with fins. Each coils shall be factory tested at 21kg/sqm air pressure under water.

Unit shall have cleanable type filer fixed to an integrally moulded plastic frame. The filter shall be slide away type and neatly inserted.

Each indoor unit shall have computerized PID control for maintaining design room temperature. Each unit shall be provided with microprocessor thermostat for cooling or cooling and heating.

Each unit shall be with wired LCD type remote controller. The remoter controller shall memorize the latest malfunction code for easy maintenance. The controller shall have self-diagnostic features for easy and quick maintenance and service. The controller shall be able to change fan speed and angle of swing flap individually as per requirement. The auto sequencing operation to attain the required configuration and equal run house of indoor & outdoor units should be programmed in the controller as per the attached data sheet.

#### **REFRIGERANT PIPING**

All refrigerant piping for the air conditioning system shall be constructed from soft seamless up to 19.1mm and hard drawn copper refrigerant pipes for above 19.1mm with copper fittings and silversoldered joints. The refrigerant piping arrangements shall be in accordance with good practice within the air conditioning industry, and are to include charging connections, suction line insulation and all other items normally forming part of proper refrigerant circuits.

All joints in copper piping shall be sweat joints using low temperature brazing and or silver solder. Before jointing any copper pipe or fittings, its interiors shall be thoroughly cleaned by passing a clean cloth via wire or cable through its entire length. The piping shall be continuously kept clean of dirt etc. while constructing the joints. Subsequently, it shall be thoroughly blown out using nitrogen. After the refrigerant piping installation has been completed, the refrigerant piping system shall be pressure tested using nitrogen at pressure of 20 kg per sq.cm and 10 kg per sq.cm (lowside). Pressure shall be maintained in the system for 24 hours. The system shall then be evacuated to minimum vacuum if 700mm hg and held for 24 hours.

The air conditioning system supplier shall be design sizes and erect proper interconnections of the complete refrigerant circuit.

The thickness of copper piping shall not be less than 21 guage for pipes upto 19.1mm and 18 guage for bigger sizes.

The suction line pipe size and the liquid line pipe size shall be selected according to the manufacturers specified outside diameter. All refrigerant pipes shall be properly supported and anchored to the building structure using steel hangers, anchors, brackets and supports which shall be fixed to the building structure by means of insets or expansion shields of adequate size and number to support the load imposed thereon.

## PIPE INSULATION

## a) Refrigerant Pipe Insulation

The whole of the liquid and suction refrigerant lines including all fittings, vales and strainer bodies, etc. shall be insulated with 13mm/19mm thick Polyethylene as as specified in BOQ.

## b) Drain Pipe Insulation

Drain pipes carrying condensate water shall be insulated with 9mm thick Polyethylene insulation.

## **TS-2**) General Requirements.

The contractor shall visit the site, see the existing infrastructure i.e. sitting capacity / layout of lecture theatre & College building to access the quantum of work involved and specifically state the items which are not included in the schedule of quantities, and hence need to be included to carry out the work. No extra item/ excess will be permitted later on & contractor will have to carry out the work at their cost for extra / excess items.

## TS-3) OTHER GENERAL TERMS & CONDITIONS:

- (m) All the material used for the work shall be new & from fresh stock.
- (n) The work shall be carried out strictly as per the specification & as directed by the engineering staff at site.
- (o) All the material, tools machines & manpower required for this work shall be arranged by the contractor. Only electric supply will be provided to the contractor free of cost by RRC, Seth GSMC & KEM Hospital, Mumbai.
- (p) The contractor shall have to carry out the work at site at his risk & cost with safety precautionary measures & there shall be no liabilities on the RRC, Seth GSMC & KEM Hospital, Mumbai on what so ever account.
- (q) The contractor shall visit the site before submitting the offer to get acquainted with the scope of work & no claim will be entertained later on due to ignorance of site conditions.
- (r) The scaffolding if required to execute the work wherever necessary shall be arranged by the contractors at his own cost.

- (s) The contractor shall fill up the schedule of quantity on item rate basis and the payment will be made on actual measurement after completion of work.
- (t) All the duties, taxes etc. applicable shall be included in the total cost.

A.E.(M&E)KEMH

## Seth G. S. Medical College & King Edward Memorial Hospital Under MoHFW National Medical College Network (NMCN) Project Regional Resource Centre, Western Region

Sub:- Air conditioning of Digital Medical Lecture Theatre no.-3 at College Building of K.E.M. Hospital.

	SCHEDULE OF QUANTITIES/SPECIFICATION						
SR.NO.	DESCRIPTION	QTY	UNIT	RATE(Rs)	AMOUNT(Rs)		
Part- A	Supply of VRF Systems - A						
	Supply of All Inverter Based Variable Refrigerant Flow System (VRF) type Air- conditioners, comprising of High wall type indoor units, outdoor unit with multiple compressors, isolating valves, thermostatic Microprocessor based electronic control, safety cut-outs with Power Saver and Most Advanced Inverter Scroll Technology. Unit should give its 100% efficiency at 43 deg Centigrade and should work even upto 54 degree Centigrade.						
A-1	22 HP Top Discharge Outdoor Unit	1	Nos				
A-2	High wall IDU OF Capacity : 2.0TR	10	Nos				
A-3	Cordless remote controller	10	Nos				
A-4	Imported Refnut "T/Y" Joints	9	Nos				
A-5	SubTotal-1						
A-6	CGST @ 14%						
A-7	SGST @ 14%						
A-8	Total-A= SubTotal-1+GST						

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SR.NO.	DESCRIPTION	QTY	UNIT	RATE(Rs)	AMOUNT(Rs)
Part- B	Supply, Installation, Testing & Commissioning - B				
B-1	Refrigerant Piping: Supply, Installation & commissioning of Refrigerant piping, complete with fittings, elbows, supporting arrangement on walls. With Nitrile rubber insulation.	140	Rmt		
B-2	DRAIN PIPINGS: drain water pipings work out of PVC pipes, fitting, accessories, bends, elbows	80	Rmt		
B-3	ELECTRICAL CABLING: Supply, Providing and laying Power & Control electrical cabling.	150	Rmt		
B-4	FRAME WORK: Supply, fabrication and installation of M.S. base frame for outdoor units complete with epoxy painting, vibration isolating pads, supporters, hangers, brackets etc	1	Nos		
B-5	TESTING & COMMISSIONING: Testing & commissioning of Indoor units & outdoor condensing unit with nitrogen pressure testing, Vacumising & Gas charging.				
B-5-a	Installation of High Wall IDU's	10	Nos		
B-5-b	Outdoor unit 22 HP	1	Nos		
В-5-с	Supply of Gas R-410A	1	Lot		
B-5-d	Loading unloading of machines with Transportation	1	lot		
С	SubTotal-2				
D	CGST @ 9%				
Е	SGST @ 9%				
F	Total-B= SubTotal-2+GST				
G	Gross Total= Total-A+ Total-B				

In Words:Rs.

Vendor No:

Bidder's Name, Address & Seal.

Bidder's Signature:

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