

**SETH GS MEDICAL COLLEGE
&
KEM HOSPITAL**

ACHARYA DONDE MARG, PAREL, MUMBAI – 400 012.

GENERAL INSTRUCTIONS AND ARTICLES OF AGREEMENT

FOR PROCUREMENT OF EQUIPMENT

FOR

**SETH GS MEDICAL COLLEGE
MULTIDISCIPLINARY RESEARCH UNIT
(GSMC-MRU)**

October 2015

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**SETH GS MEDICAL COLLEGE
MULTIDISCIPLINARY RESEARCH UNIT
(GSMC-MRU)**

NOTICE INVITING QUOTATIONS

No. GSMC/MRU/EQUIP/PUR/ 101 /2015

Dated 29.10.2015

Dean, Seth GS Medical College & KEM Hospital [Dean (G&K)] and Managing Trustee, Seth GS Medical College & KEM Hospital Diamond Jubilee Society Trust (Managing Trustee, DJST) Parel, Mumbai 400 012. invites sealed quotations to supply, transport to site, installation and commissioning of following **Equipment** from reputed and financially sound manufacturer/ dealer/ firm/ company etc. excluding those who are blacklisted, demoted and debarred in MCGM, P.W.D, other Government/ Semi Govt. organizations in India, as per terms and conditions, for the establishment of **Seth GS Medical College & KEM Hospital Multidisciplinary Research Unit (GSMC-MRU)** as indicated below:-

		Phase I - Equipment list	
Sr. No.	Enquiry No.	Name of Equipment	Qty
1.	GSMC/MRU/EQUIP/2015-16/001	Auto analyzer Biochemistry	1
2.	GSMC/MRU/EQUIP/2015-16/002	Microscope (Binocular-light)	1
3.	GSMC/MRU/EQUIP/2015-16/003	Table top non refrigerated centrifuge	1
4.	GSMC/MRU/EQUIP/2015-16/004	Table top refrigerated centrifuge	1
5.	GSMC/MRU/EQUIP/2015-16/005	Refrigerator ordinary	1
6.	GSMC/MRU/EQUIP/2015-16/006	Freezer (-20 degree)	1
7.	GSMC/MRU/EQUIP/2015-16/008	Microfuge	1
8.	GSMC/MRU/EQUIP/2015-16/009	Biosafety Cabinet	1
9.	GSMC/MRU/EQUIP/2015-16/010	Water bath	1
10.	GSMC/MRU/EQUIP/2015-16/012	Hybridization system	1
11.	GSMC/MRU/EQUIP/2015-16/013	Microwave oven	1
12.	GSMC/MRU/EQUIP/2015-16/014	Electrophoresis (Horizontal, vertical, western)	1
13.	GSMC/MRU/EQUIP/2015-16/015	Gel dryer	1
14.	GSMC/MRU/EQUIP/2015-16/017	pH meter Electronic	1
15.	GSMC/MRU/EQUIP/2015-16/018	Electronic weighing balance	1
16.	GSMC/MRU/EQUIP/2015-16/019	Vortex mixers	1
17.	GSMC/MRU/EQUIP/2015-16/020	Ice flaking machine	1
18.	GSMC/MRU/EQUIP/2015-16/021	Micro pipettes sets	3
19.	GSMC/MRU/EQUIP/2015-16/022	Liquid N2 tank	1
20.	GSMC/MRU/EQUIP/2015-16/023	Water purification system with pre purification& softener	1
21.	GSMC/MRU/EQUIP/2015-16/024	Hot air oven	1
22.	GSMC/MRU/EQUIP/2015-16/025	Elisa Reader	1
23.	GSMC/MRU/EQUIP/2015-16/026	Elisa Washer	1
24.	GSMC/MRU/EQUIP/2015-16/027	Magnetic Stirrer	1
25.	GSMU/MRU/EQUIP/2015-16/028	Multi-channel micropipettes (variable)autoclavable sets	1
26.	GSMC/MRU/EQUIP/2015-16/029	Incubator	1
27.	GSMC/MRU/EQUIP/2015-16/030	Computers and Accessories with Internet facility	2

The quotations shall consist of 2 parts, namely **Folder-A and Folder-B**, in separate sealed cover. **Folder-A** of the quotation shall cover **administrative and technical** aspects; and **Folder-B** the **commercial** aspects of the bid. **Sealed covers of Folder-A and Folder-B offers shall be submitted in one sealed cover separately for each equipment with name of equipment and due date superscripted** on the cover and this will be received upto **2:00 PM on 20.11.2015**
The quotations will not be accepted after due date and time.

The quotations should be addressed to:

Seth GS Medical College & KEM Hospital Diamond Jubilee Society Trust
Parel, Mumbai 400012.
Kind Attn: Dr. N.N. Rege,
Nodal officer, GSMC-MRU

In case the specified date of quotation opening falls on / is subsequently declared a holiday or closed day for the purchaser, the quotations will be opened at the appointed time and place on the next working day.

Address for Communication	Seth GS Medical College & KEM Hospital Diamond Jubilee Society Trust (DJST), 1 st Floor, College Building, Parel, Mumbai 400012. Tel. No. 022-224156513
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Venue for opening of quotations	at above address
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The tenderer shall not disclose/quote the rate of the items in Folder – ‘A’. In case if there appears to be such indication of rate by the bidder in this part, the tender shall be rejected outright.

Commercial bids i.e. Folder ‘B’ of only those bidders who are found to be responsive in the evaluation of administrative & technical offers (Folder - A), as decided in purchase committee meeting will be opened.

After sanction of Higher Authorities or purchase committee, there will be issuance of the acceptance letter to successful vendor.

Payment of contract deposit, and submission of document for execution of written contract should be done within specified time period of seven days from the date of receipt of Acceptance Letter by successful vendor.

Supply of materials described in the specifications.

The Authority shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the bidding process, including any error or mistake therein or in any information or data given by the Authority.

GSMC-MRU reserves the right to reject all or any of the quotations without assigning any reason at any stage.

**By Order of the
[Dean (G&K)] and Managing Trustee, (DJST)**

Sd/-

A handwritten signature in blue ink, appearing to read 'R. Regal', is written over a horizontal line.

Nodal officer, (GSMC-MRU)

GENERAL INSTRUCTIONS TO THE VENDORS

1. **Who can quote:** Only the manufacturers and/or their authorized distributors/ dealers are qualified to fill and submit the quotations. The authorized distributors/dealers should submit the appropriate valid and current authority letter from the manufacturers as per the proforma given in annexure-6. The offers received from the distributors/dealers without authorization letter from the manufacturers shall be rejected outright.

Average annual turnover of the vendor during the last three financial years shall not be less than 35% of the estimated cost / total cost of supply / works tendered for. Further in case of only supply bidder should have experience of executing similar supply for last 2 years.

2. **Administrative documents (MANDATORY) - Folder- A'**

1. Instructions and Article of agreement duly filled in, signed and stamped. (Annexure-8)
2. Solvency certificate from the Nationalized /Scheduled banks of required amount as specified below and valid for 12 months, date of issue should not be more than 6 months prior to due date of tender.

	Total Estimated Cost (Rs. In Lakhs)	Solvency Certificate value (Rs. In Lakhs)
1.	Above 50 to 100	Rs. 15 Lakh
2.	Above 25 to 50	Rs. 10 Lakh
3.	Above 10 to 25	Rs. 5 Lakh
4.	Above 5 to 10	Rs. 2 Lakh
5.	Upto 5	Rs. 1 Lakh

3. Annual turnover and financial statement duly audited by the Chartered Accountant.
4. Valid Registration Certificate under ESIC Act 1948. OR Declaration on Rs. 100/- stamp paper if registration under ESIC Act not applicable.
5. Valid Registration Certificate under EPF & M Act 1952 if 20 or more workers are on the establishment of vendor. OR Declaration on Rs. 100/- stamp paper if registration under EPF & M Act 1952 is not applicable in case of workers less than 20 in the establishment.
6. Original VAT registration certificate or CST registration certificate as the case may be in prescribed form.
7. Pan card with Photograph
 - a) Vendor's own PAN Card in case of Individual/Dealers/Supplier/ Distributor etc.
 - b) In case of Company or firm
 - i) PAN Card of proprietor in case of proprietary /Ownership firm
 - ii) PAN Card of Company in case of Private limited Company
 - iii) PAN Card of a firm in case of Partnership firm
 - c) PAN Card of the Sansthas /Societies /Trust which are registered under Public Trust Act 1950 / Registration Act 1860 /the Maharashtra Co-Op Society

Registration Act 1960 (whichever is applicable)

8. Power of attorney in case of partnership Firms/Public Ltd. Co./Pvt. Ltd. Co./ Societies / Govt. Undertaking. Particulars about the vendor. (Annexure – 1)
9. Company Registration Certificate, Partnership deed, articles of association, Society's registration certificate as the case may be.
10. Undertaking for mandatory condition. (Annexure- 2)
11. Undertaking to be signed and sealed by the vendor. (Annexure– 3)
12. Declaration by the bidder regarding eligibility and acceptance of term and conditions of the bid/ inquiry. (Annexure- 4)
13. Affidavit for compliance of condition No 7(Incl. of 7A,7B and 7C) of Articles of Agreement and Best Rate quoted. (Annexure– 5)

3. **Technical documents (MANDATORY) Folder-A**

The vendor shall submit the compliance with specifications of the equipment given Annexure -10 and relevant brochures giving the complete information about the equipment

The vendor shall not disclose/quote the rate of the items in Folder – 'A'. In case if there appears to be such indication of rate by the vendor in Folder- A, the offer shall be rejected outright.

The vendor/bidder must submit the following currently valid mandatory documents on/or before the due date and due time.

1. Required licences /certificates in the name of bidder wherever required as specified.
2. Manufacturer's latest authorization letter as directed. (Annexure – 6)
3. Past performance/ experience certificate: (Annexure – 7) **Past Performance or Experience Certificate should be in the name of Bidder & not in the name of Manufacturer.**
4. Copy of Valid ISI/ISO/FDA/BIS/CE/ OTHER Certificate as mentioned in Technical Specification.
5. Any other documents as specified in the bid/inquiry.

4. **Folder-'B' (MANDATORY)**

The details of the price of the equipment should be quoted in Folder-B in the following manner:-

- (a) Basic price with warranty and CMC as specified in the specifications
- (b) Other charges such as freight, insurance, installation, charges on road permit, transportation upto site of installation, bank charges and any other charges whatsoever it may be;
- (c) Excise Duty, Customs Duty/ Octroi (*if applicable*) (*should be shown separately*)
- (d) Road permit tax or any other entry tax (*if applicable*) (-do-)
- (e) State / Central Sales Tax / or VAT (*as may be applicable*) (-do-)

Note: If any vendor quotes their commercial offer in any foreign currency other than **Indian** Rupee, the same will be converted into Indian Rupees for comparison taking the prevailing exchange rate on the date of opening of commercial offer.

DJST has been recognized as **SIRO by DSIR. Govt. of India** and to avail the **exemption in part of custom duty**, basic prices of the imported equipment preferably be quoted in foreign currency.

While quoting the prices, it must be inclusive of all taxes like VAT, Octroi, C.S.T, Service Tax, All Duties, Levies, Excise Duty, Custom Duty etc. The rate quoted will be taken into consideration for evaluation and price comparisons

5. **Documents to be submitted** Photocopies of specific documents mentioned in respective tender schedule copy attested from Gazetted officer of the State/Central Government or from the Officer of MUNICIPAL CORPORATION OF GREATER MUMBAI not below the rank of Assistant Engineer/ Administrative Officer before submitting the same in Folder – A & B).
6. **Sign and seal:** Affixing of signature anywhere while submitting the quotation shall be deemed to mean acceptance of the terms, conditions and instructions contained in this tender document as well as confirmation of the bid/bids offered by the vendor which shall include acceptance of special directions/terms and conditions if any, incorporated.
7. Firms with common proprietor/partners or connected with one another either financially or as master and servant or with proprietor/partners closely related to each other such as husband, wife /father/mother and minor son/daughter and brother/sister and minor brother/sister shall not quote separately under different names for the same contract.
 - 7 (A) If it is found that firms as described in clause 7 have quoted separately under different names for the same contract, all such tender(s) shall stand rejected. In addition, such firms/establishments shall be liable, at the discretion of the GSMC-MRU and DJST, for further penal action including blacklisting.
 - 7 (B) If it is found that closely related persons as in clause 7 have submitted separate quotations under different names of firms/establishments but with common address for such establishments/firms and/or if such establishments/firms, though they have different addresses, are managed or governed by the same person/ persons jointly or severally, such quotations shall be liable for action as in clause no. 7(A) including similar action against the firms/establishments concerned.
 - 7(C) If after award of contract it is found that the accepted vendor violated any of the clauses (7, 7(A) or 7(B)) 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 firm/establishments.
8. **Unconditional offer** Vendors shall quote a firm & unconditional offer. **Conditional offers shall not be considered and shall be treated as non-responsive.** Bonus / complimentary / discount offer given with condition will also be rejected. Bonus / complimentary / discount offer without any condition will not be considered for evaluation of comparative assessment. The net price quoted will only be considered for determining the lowest bidder irrespective of unconditional Bonus / complimentary / discount offer.

9. **Variation in rate** Vendors shall fill in the quotations carefully after noting the items and it's specifications. No variation in rates etc. shall be allowed on any grounds such as clerical mistake, misunderstanding etc. after the quotations has been submitted.
10. **Firm price** The prices quoted shall be firm and no variation will be allowed on any account whatsoever.
11. **Contradictory Clause in quotation.** Quotations containing contradictory, onerous and vague stipulations and hedging conditions such as "subject to prior sale" "offer subject to availability of stock" " Offer subject to confirmation at the time of order" "Rates subject to market fluctuations" etc. will be rejected outright.
12. **Alternative clauses in quotation.** No alteration or interpolation will be allowed to be made in any of the terms or conditions of the bid & contract and / or the specifications and /or in the schedule of quantities. If any such alteration or interpolation is made by the vendor, his quotation shall be rejected.
13. **Validity.** The validity of the offer should be for at least 120 days from the date of the opening of the quotation.
14. **Product Names.** The vendor must state the brand name of the product, if any.
15. **Manufacturer's address.** The manufacturer's complete address, list of partners with their names and commercial and residential addresses must be indicated in the quotation as per format given in Annexure - 1.
16. In case of contracts for items of plant and machinery, mechanical and electrical equipments, instruments, furniture and such other things/articles etc., after the acceptance and installation of the equipment the contractor shall have to, maintain, uphold and keep the same in smooth and working condition for a specified period at their sole cost and expense and to the entire satisfaction of the Dean(G&K) or the Nodal Officer(GSMC-MRU) or Secretary DJST or the Indenting Officer, the whole of machinery/ equipment/furniture etc. and shall also be responsible for and be liable under the provisions of this clause to make good any defect that may occurs during that period which affect the normal and proper working of the machinery/equipment/furniture etc.
17. **Order** The user department GSMC-MRU/ DJST will place orders as and when required during the contract period.
18. **Delivery** The vendor should give free delivery to user department of Seth GS Medical College & KEM Hospital/ the indenting office/ actual place of installation and commissioning of premises of GSMC-MRU/ DJST within specified period from the date of placing the order.
19. **Contract.** Contract means the Contract Agreement entered into between the Purchaser, henceforth called Dean (G&K), GSMC-MRU and DJST, and the Supplier, together with the Contract Documents. The Contract and the term 'The Contract' shall in all such documents be construed accordingly.

The 'Contract Document' means the entire document along with any attachments and all documents forming part of the Contract (and all parts of these documents) are intended to be correlative, complementary and mutually explanatory. The contract shall be read as a whole.

The Contract Agreement means the agreement entered into between the Dean (G & K), GSMC-MRU & DJST and the vendor. The date of the Contract Agreement shall be recorded in the signed form.

Vendor must distinctly understand:

That they shall be strictly required to conform to the conditions of this contract as contained in each of its clauses and that the plea of "custom prevailing" shall not on any account be admitted as an excuse on their part for infringement of any of the condition.

The contract entrusted to the successful vendor shall be subject to "Force Majeure Clause" as per Section 56 of Indian Contract Act restricting to the case of natural calamity such as earthquake, storm, floods or rising of war by any country.

20. **Contract Postponement** Postponement of the payment of the full contract deposit or the execution of the contract will not be permitted by reason of the Dean (G&K), GSMC-MRU and DJST having in possession, other deposits on account of other bids or contract, which deposits may be or become returnable to the vendor and which they may wish to transfer as a contract deposit, under this contract. Such transfers will not, under any circumstances, be permitted
21. **Acceptance of offer** The decision of the Dean (G&K) and Managing Trustee, DJST shall be final and binding and Dean (G&K) and Managing Trustee, DJST do not pledge himself to accept the lowest or any offer and reserves the right to split the quantity amongst the eligible. The Dean (G&K) reserves the right to reject any or all offers and relax/stringent any of the condition of proposal without assigning any reasons.
22. **Acknowledging communications.** Every communication from the Dean (G&K), GSMC-MRU and DJST to the vendor should be acknowledged by the vendor with the signature of authorized person and with official rubber stamp of the vendor.
23. **Jurisdiction of courts** In case of any claim, disputes or differences arising in respect of a contract, the causes of action there at shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any such claim, disputes or differences shall be instituted in a Competent Court in the City of Mumbai only.
24. **Taxes and Duties.** All the rates quoted by the vendor should be inclusive of all duties, levies, Excise Duty, Custom Duty and taxes etc. If there is any increase in above taxes/duties during the period of contract repayment claim will not be entertained by the Dean (G&K), GSMC-MRU and DJST.
25. **Information regarding payment.** Payment will be made within 30 days from the date of satisfactory supply, submission of the bills thereof and submission of all documents for execution of contract.

Vendors are informed that the payment of the bills and other claims arising out of the contract shall be made in the name of their bank account by crossed cheques only. Successful vendor shall have to furnish the information as regards the name and complete address of their bank, its branch and their Bank A/c. No. etc. Such Bank account must be in any Nationalized Banks or Schedule Commercial Banks or Scheduled Co-Op. Banks or Foreign Banks in Mumbai jurisdiction.

26. Rejection. If the particulars furnished by the vendor are found materially incorrect or misleading, such quotation shall be rejected. Any change occurring within their institute like change in name of firm, change of partner, change in the constitution, change in brand name of the product, merger with any other institutions, contract work, if any, allotted to another firm, any freshly initiated court case should be promptly intimated to the Dean (G&K), GSMC-MRU and DJST. If the vendor fails to submit such information during the tenure of the contract, that shall invite legal action.

27. Penalty If the successful tenderer fails to comply with work/purchase the order within the delivery period stipulated, the Dean (G&K) and Managing Trustee (DJST) shall exercise his discretionary power either :-

To recover from contractor as agreed, the liquidated damages or by way of penalty half percent of the price of the equipment which the contractor has failed to deliver/ install/ commission/ as aforesaid per week or part thereof during which the delivery/ installation/commissioning of such equipment may be in arrears subject to maximum limit @ 10% of the balance amount of the stipulated price of the materials undelivered. Such penalty is to be deducted always by the consignee from the contractor's balance bill, B.G. or any money due to the contractor from GSMC-MRU and DJST.

Or

To purchase 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

To cancel the contract and orders and forfeiture of contract deposit and blacklisting the firm/company along with their partners/ directors.

28. Consequence of inferior supply If the equipment/material supplied is found of inferior quality, or not as per specifications, the contractor shall replace the equipment/material within one month from the date of intimation, at the cost & risk of the contractor and also liable to pay the fine imposed by the Dean (G&K), GSMC-MRU and DJST, failing which performance Bank Guarantee (BG) of the contractor shall be forfeited & the vendor shall be liable for penal action including black-listing etc. In addition to the forfeiture of the BG, if any fine is imposed by the Dean (G&K), GSMC-MRU and DJST, the same shall be payable by the vendor immediately on demand, failing which the same shall be recovered from other dues payable to the contractor from the Dean (G&K), GSMC-MRU and DJST.

- 29. Stamp duty** The contract agreement shall be adjudicated for the payment of stamp duty by successful bidder and accordingly the successful bidder shall have to pay the stamp duty on contract agreement as per the Government Directives.
- 30. Amendment to enquiry documents** Before deadline for submitting offers, the Dean (G&K),GSMC-MRU and DJST may modify any condition included in this inquiry document by issuing addendum/corrigendum/clarification and publish it in the newspapers and/or on the website of Seth GS Medical College. Such addendum/corrigendum/clarification so issued shall form part of the inquiry documents. All vendors shall sign such addendum/corrigendum/clarification and submit it in Folder 'A'
- 31. Secrecy** The contractor shall take all reasonable steps necessary to ensure that all persons employed in any work in connection with the contract, who obtains in the course of the execution of the contract, any information whatsoever, which would or might be directly or indirectly of use to any person not connected with the contract, should treat it as secret and shall not at any time communicate it to any person. Any breach of above said condition shall be a sufficient cause to cancel the contract and the Dean (G&K),GSMC-MRU and DJST shall be at liberty to purchase the same material at the risk and cost of the contractor.
- 32. Confidential Information** All the information furnished to the contractor relating to the supply of material/equipment/plant shall be treated as confidential and shall not be divulged to any third party. It shall remain the property of Dean (G&K),GSMC-MRU and DJST. If, during the process of execution of the contract, any improvement, refinement or technical changes and modifications are effected by the contractors, such changes shall not affect the title to the property and all the information, including the improvement/modifications effected by the contractor shall continue to be the property of the Dean (G&K),GSMC-MRU and DJST.
- 33.** In case of the mandatory documents, which are submitted with bid, original of which, if called, shall be produced for verification within 3 days, failing which the bidder will be treated as **non-responsive**. Administrative and Technical Bid will be opened on the due date and due time as defined for the bid in the system. Financial Bid/ commercial bid of the respective bidder submitted will be opened only if the administrative & Technical offer in 'Folder – A' is acceptable. The date & time of opening of Financial Bid will be intimated to the responsive vendor.
- 34.** The vendors are advised to physically apprise themselves with delivery, installation Conditions and working areas if required. They are advised to get themselves sufficiently acquainted with the actual nature of installation if required, prevalent conditions and facilities available.
- 35.** This purchase process is covered under Information Technology ACT & CYBER LAWS AS APPLICABLE.
- 36.** The vendor shall offer the best prices for the subject supply/work as per the present market rates and that the bidder should not be offered less prices for the subject supply/work to any other outside agencies including Govt./Semi Govt.

agencies. Further, the vendor has to fill in the quotations with full knowledge of the above liabilities and therefore they will not raise any objection or dispute in any manner relating to any action for giving any information which is found to be incorrect and against the instruction and direction given in this behalf in this inquiry. In the event, if it is revealed subsequently after the allotment of work/ contract to tenderer, that any information given by vendor, in this bid is false or incorrect, he shall compensate the Dean (G&K),GSMC-MRU and DJST for any such losses or inconveniences caused to the Dean (G&K),GSMC-MRU and DJST, in any manner and will not resist any claim for such compensation on any ground whatsoever. Vendor/vendors shall agree and undertake that he/they shall not claim in such case any amount, by way of damages or compensation for cancellation of the contract given to them or any work assigned to them if it is withdrawn by the Dean (G&K),GSMC-MRU and DJST

Affidavit shall be submitted-in this respect as per annexure – 5.

37. Vendors participating in this bidding process have to furnish the details as per annexure – 1.
38. The vendor shall submit all the information /declarations/ affidavits mentioned in respective annexures.
39. **Risk & Cost Purchase** In case, the Contractor/s, shall at any time during the continuance of these presents fail to supply satisfactorily, the articles/equipment 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 (G&K),GSMC-MRU and DJST 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 (G&K),GSMC-MRU and DJST 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 Dean (G&K),GSMC-MRU and DJST may, however fix such other subsequent date as he may think fit by which the delivery of the said article and or execution of the said work shall be completed.
40. The Dean (G&K),GSMC-MRU and DJST have their right to inspect the manufacturing premises of the company as and when required.
41. **Quotations not submitted as per the above procedure will be treated as invalid.**

**Particulars about the Vendor - (Specimen copy)
(To be submitted in Folder 'A')**

Following information to be submitted along with quotations (**in Folder 'A'**) as detailed herein below on the letterhead of the tenderer. (Put a tick mark where applicable/ Write N.A. where not applicable).

1. Name & Address of the tenderer.
2. Names and addresses of all the partners.
3. e-mail address of the firm
4. Name & address of the manufacturer
 - a. Places of Manufacturer
(In case of firms having more than one place, mention the nearest one).
 - b. Registered Head Office with Postal Address and Telephone Numbers
 - c. Mumbai Office address with Telephone Numbers.
5. Total annual turnover in the last Financial Year of the tenderer.
6. Is the tenderer registered under the Indian Companies Act-1 of 1956 or any other Act, in force?
 - a. If so, furnish photo state copy of Certificate of Registration.
 - b. In case of Limited Companies furnish a copy of the memorandum of Articles of Association.
 - c. In case of Proprietorship/Partnership firms, name of proprietors / Directors with address. (Two in order of % of shares).
 - d. Ownership status of the Firm (Maharashtra Govt./Other state Govt./ Central Govt. / Joint Sector / Co-Operative / B.S.I. / Private / Foreign Company etc.)
7. Whether tenderer is as Manufacturer / Distributor (State the category)
8. Name and post of the Officer / Address, Phone Number who should be contacted by this office in case of emergency.
9. Location of other manufacturing works / factories owned by the firm (if any).

I/We have carefully gone through the documents and the terms and conditions mentioned therein & are all acceptable & agreeable in its entirety to me/us.

**Full Signature of the tenderer with
Official Seal & Address**

Form of undertaking of Mandatory Conditions
(To be submitted in Folder 'A')

SUB: Supply of _____ enquiry. _____ Due On _____

Mandatory Conditions of this tender:

1. **Number of Models:** The vendor shall quote the price for one model only, which is as per the specifications mentioned in the inquiry. The vendor who have filled-in the price for more than one model, such offer shall be rejected outright.
2. **Validity.** Every quotation shall be made open for acceptance for minimum period of 90 days from opening of the quotation. Quotations specifying validity for less than 90 days shall be rejected outright.
4. **Payment.** Payment will be made within 30 days from the date of satisfactory supply, submission of the bills and submission of all documents for execution of written contract.
5. **Contract deposit.** Successful vendor shall have to pay a contract deposit @ 5% of the total contract cost in the form of Bankers' Guarantee from the Bankers & same will be retained 6 months after completion of contract period.
The Banker's Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Banker's Guarantee is countersigned by the Manager of a Branch of the same, within the Mumbai City limit categorically endorsing thereon that the said Banker's Guarantee is binding on the endorsing Branch of the Bank within Mumbai limits and is liable to be enforced against the said Branch of the Bank in case of default by the contractor/supplier furnishing the banker's guarantee.
6. **Delivery** The vendor should give free delivery to user department of Seth GS Medical College within specified period from the date of placing the order.
7. **Order** The GSMC-MRU and DJST will place orders as and when required during the contract period.
8. **Penalty** Late supply or installation will be penalized as per Clause No. 28 of Articles of Agreement.
9. **Acceptance of Tender** The decision of the Dean(G&K)& Managing Trustee, DJST shall be final and binding and Dean(G&K) & Managing Trustee, DJST do not pledge himself to accept the lowest or any tender and reserves the right to split the quantity amongst the eligible. Dean(G&K) & Managing Trustee, DJST reserves the right to reject any or all tenders and relax/stringent any of the condition of tender without assigning any reasons.
10. **Contact details:** Address, E-Mail, Tel. / Fax No. of the manufacturer, authorized distributors/dealers/agents in Mumbai.

11. Liquidated damage. The conditions of the contract provide for the damages for the late delivery as liquidated damages. In the event of late delivery of materials, the contractor shall pay to the Dean(G&K),GSMC-MRU and DJST liquidated damages a sum equal to half percent of quoted price of the material/equipment supply late per week calculated from the next day after the agreed delivery, period is over. This is subject to maximum limit @ 10% of the quoted price of the equipment/ material. Such penalty is to be deducted always by the consignee from the contractors balance bill, B.G. or any money due to the contractor from Dean(G&K),GSMC-MRU and DJST.
OR

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

To cancel the contract and orders, forfeiture of contract Deposit and blacklisting the firm/company along with their partners/ directors.

The primary responsibility for the supply of items in time shall rest with the supplier.

12. "THE QUOTATION SHALL BE REJECTED OUTRIGHT IF THE TENDERER DOES NOT FULLFILL THE MANDATORY CONDITIONS AS BELOW."

If the vendor does not submit scanned copies of the PAN Documents and Photographs of the individuals, owners, Karta of the Hindu Undivided family, Partners of the Partnership Firms and Director / Directors in case of Private Limited/ Public Limited Companies or the authorized representatives of the registered Co-operative Societies / Semi Government Undertakings as the case may be, Affidavit for compliance of condition no.7 and Best rate quoted as per annexure – 5.

13. In case one or more offers with the same prices are received, the decision of the Dean(G&K)& Managing Trustee, DJST to accept any of the offers shall be final and the said decision shall be binding on the vendors.

I / We have gone through the "General Instruction to the vendor", "The Articles of Agreement", "Copy of Undertaking for mandatory Conditions" and "Technical Offer" and I / We agree to abide the same.

**Full Signature of the vendor with
Official Seal and Address.**

**Undertaking to be signed by the vendor
(To be submitted in Folder 'A')**

Enquiry No.:

Due Date:

To
Dean,
Seth GS Medical College & KEM Hospital and
Managing Trustee,
Seth GS Medical College & KEM Hospital Diamond
Jubilee Society Trust (DJST),
Parel, Mumbai 400 012.

Sir,

I/We _____ (Full Name in the Capital Letters starting with surname) the Proprietor / Managing Partner / Managing Director / Holder of the Business / Authorized Distributors for the Establishment / Firm / Registered Company named herein below do here offer to supply the as mentioned in the tender & in accordance with the specifications therein. I / We also abide by the accompanying Form of Contract and the Form of Items' Rates & Costs, which are herewith duly signed by me / us.

I / We _____ do hereby state & declare that I / We, whose names are given herein below in detailed with the addresses have not filled in this quotation under any other name or under the name of any other Establishment / Firm or otherwise nor we are in any way related or concerned with any Establishment / Firm or any other person who have filled in the above case quotation.

I / We have quoted for all Items and Quantities as per your specifications, which include all Taxes and Duties payable & born by us, and have carefully noted the conditions of the Contract and the Specifications with all the stipulations which I /We agree to comply. I / We undertake to complete the delivery within the period stipulated after receiving an order.

I /We _____ have filled in the accompanying quotation with full knowledge of liabilities and therefore, we shall not raise any objection or disputes in any manner relating to any action, for giving any information which is found to be incorrect and against the instruction and direction given in this quotation and failure to execute the written contract.

I / We further agree & undertake that in the event if it is revealed subsequently after the allotment of contract to me / us, that any information given by me / us in this quotation is false or incorrect, I / We shall compensate the Seth GS Medical College & KEM Hospital – Multidisciplinary Research Unit (GSMC-MRU) and DJST for any such losses or

inconvenience caused to the institution in any manner and shall not resist any claim for such compensation on any ground and whatsoever. I / We agree & undertake that I / We shall not claim in such case any amount by way of damages or compensation for cancellation of the contract given to me / us or any work assigned to me/us is withdrawn by the Dean (G&K),GSMC- MRU and DJST.

OR

I/We hereby request you not to enter into a contract with any other person/persons for the supply/work underlying this contract for which the present tender is submitted until notice of non acceptance of this tender has been first 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 or such notice of non acceptance, which date shall be not later than fifteen days from the date of the decision of the Dean (G&K),GSMC- MRU and DJST, not to accept this tender.

I / We do hereby agree to pay all cost, charges and expenses in connection with this contract including stamp duty, preparation and execution of the written contract.

Yours faithfully

**Full Signature of the tenderer with
Official Rubber Stamp**

Full Name, Office & Residential Address of the Proprietor / Partners & E-mail Address

No.	Full Name	Office Address	Residential Address	Signature
1.				
2.				
3.				
4.				
5.				

DECLARATION BY THE VENDOR REGARDING ELIGIBILITY AND ACCEPTANCE OF TERMS AND CONDITIONS OF THE ENQUIRY DOCUMENTS

(To be filled in and signed by the vendor and to be submitted on non judicial paper of Rs, 200/-duly notarized by Notary Public. / First Class Magistrate along with bid)

To be submitted in folder 'A'

AFFIDAVIT

To,
Dean,
Seth GS Medical College & KEM Hospital
and Managing Trustee,
Seth GS Medical College & KEM Hospital
Diamond Jubilee Society Trust (DJST),
Parel, Mumbai 400 012.
Sir,
Ref your enquiry No: _____.

I / we give following undertaking:

1. I / we have thoroughly read and understood the terms and conditions as indicated in this enquiry document and accept all the terms and conditions.
2. I / we have also appraised myself / ourselves with Seth GS Medical College Multidisciplinary Research Unit (GSMC-MRU) and DJST, actual nature of supply/ work and other prevalent conditions.
3. I / we hereby confirm that I / we will be able to carry out the supply/ work offered by me /us as per specifications indicated in the enquiry, after compliance of all the required formalities within the specified time at the quoted rates, if accepted by GSMC-MRU and DJST.
4. I / We agree to abide the regulations of the GSMC-MRU) and DJST premises now in force or which may come into force, during the currency of the contract.
5. I / We also undertake to carry out the supply / work without any interference, what- so-ever to the supply/work.
6. I / We agree for reserving the right to stop any supervising staff/ labour employed by me / us from entering in the GSMC-MRU and DJST premises/area, if GSMC-MRU and DJST feels that the said person is an undesirable element or is likely to create mischief. Dean (G&K) and Managing trustee, DJST will not be required to assign any reason while exercising this right and I/We shall abide by such decision of the Dean(G&K) and Managing trustee, DJST as final and binding on me/us.
7. I / We shall not sublet the work or supply to any other agency without the prior approval of the Dean (G&K) and Managing trustee, DJST.
8. I / We agree to execute an agreement in the Proforma given and shall bear necessary cost of stamp duty as per Government directives in this regard.
9. I / We also agree, to undertake to carry out all types of supply / work covered under Items of this enquiry as ordered from time to time by the Officer In Charge or by his authorized representatives.
10. I/we hereby declare that the information furnished in the quotations is correct and true to the best of my / our knowledge and belief. I /we also know and accept that if at any stage the information is found to be not correct , my / our quotations shall not

be considered by GSMC-MRU and DJST and I /we will be liable for action as per terms and condition.

11. The acceptance of this quotations by GSMC-MRU and DJST, shall constitute a binding contract between me / us and GSMC-MRU and DJST.
12. I/we solemnly confirm the compliance of all the requirements / Conditions of the enquiry.
13. I / we have offered our rates as per specifications and conditions mentioned in the enquiry.
14. I/ we hereby certify that I/we was/ were never black listed by any of central Govt. / state Govt. / Public sector undertaking/any other Local body.

Solemnly affirmed on this _____ the day of _____20 .

**Full Signature of the tenderer with
Official Seal & Address**

Enquiry No. _____
(To be submitted in Folder 'A')

The undertaking to be obtained from the prospective bidders on Rs. 200 /- stamp paper along with the quotations should be as under-
Affidavit in terms of condition No 7 (Incl of 7A.7B and 7C) of Articles of Agreement and for Best quoted Rates

To,
 Dean,
 Seth GS Medical College & KEM Hospital and
 Managing Trustee,
 Seth GS Medical College & KEM Hospital
 Diamond Jubilee Society Trust (DJST),
 Parel, Mumbai 400 012.
 Sir,

Enquiry No. _____
 "I/ We _____

_____ (full name in capital letters, starting with surname), the Proprietor/Managing Partner/Managing Director/Holder of the Business/Manufacturer/Authorized Dealer, for the establishment/firm/ registered company, named herein below, do hereby, state and declare that I/We _____ whose names are given herein below in details with the addresses have not filled in this quotation under any other name or under the name of any other establishment /firm or otherwise, nor are we in any way related or concerned with any establishment / firm or any other person, who have filled in the quotation for the aforesaid work".

"I/We (full name in capital letters, starting with surname), the Proprietor/Managing Partner / Managing Director/ Holder of the Business/Manufacturer/Authorized Dealer, for the establishment /firm/registered company, named herein below, do hereby undertake that we have offered the best prices for the subject supply/work as per the present market rates and that we have not offered less prices for the subject supply/work to any other outside agencies including Govt./Semi Govt. agencies and within the Seth GS Medical College Multidisciplinary Research unit (GSMC-MRU) and DJST also. Further, we have filled in the accompanying quotations with full knowledge of the above liabilities and therefore we will not raise any objection or dispute in any manner relating to any action for giving any information which is found to be incorrect and against the instruction and direction given in this behalf in this enquiry.

I/We further agree and undertake that in the event, if 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 GSMC-MRU and DJST for any such losses or inconveniences caused to the GSMC-MRU and DJST, in any manner and will not resist any claim for such compensation on any grounds whatsoever. I/We agree and undertake that I/We shall not claim in such case any amount, by way of damages or compensation for cancellation of the contract given to me/us or any work assigned to me/us or is withdrawn by the GSMC-MRU and DJST.

However, in case of price difference, if it is a result of differential tax structures, different Dollar value of Rupee, differential logistic of transport etc. considering this aspect, before invoking the action,, I/we will be given a reasonable opportunity of being heard by representing our case as to why such price variation/differential has been arisen.

In case, if the explanation submitted by me/us is unsatisfactory then action may be taken against me/us.

VENDOR'S FULL SIGNATURE
 WITH RUBBER STAMP

(Note: This affidavit should be given on Rs.200/- stamp paper duly notarized by Notary with red seal and registration Number.)

PROFORMA FOR MANUFACTURER'S AUTHORIZATION LETTER
(To be submitted in Folder 'A')

To,
Dean,
Seth GS Medical College & KEM Hospital and
Managing Trustee,
Seth GS Medical College & KEM Hospital
Diamond Jubilee Society Trust (DJST),
Parel, Mumbai 400 012.

Dear Sir,

Reference: - Your enquiry No. _____ dated _____.

We, _____ who are an established and reputed manufacturer of _____ (name & description of the goods offered in the enquiry) having factories at _____, hereby certify that M/s. _____ (name & address of the distributor/dealer/ agent) is our authorized distributor/dealer/agent & authorize them submit quotation, process the same further and enter into a contract with you against your requirement as contained in the above referred enquiry for the above goods manufactured by us.

Yours faithfully,

(Signature with Date, Name, & designation)

For and on behalf of M/s. _____

Note: 1) This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

PERFORMANCE CERTIFICATE
(To be submitted in Folder 'A')

Past Performance Certificate which must be valid and current on the due date in respect of supply of _____ to State Government / Central Government or their undertaking / Semi Government Local Bodies / Large Corporates (without disclosing rates therein) should be submitted.

“M/s _____ have supplied satisfactorily their _____ to our institution in _____ (month/year) and their performance /the service support is satisfactory”.

**Signature and designation of the
authorized officer issuing performance
certificate**

**NOTE: Past Performance or Experience Certificate should be in the name
of vendor & not in the name of Manufacturer.**

PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last two years)

Specify how much quantities of products were supplied to the State Government / Central Government or their undertakings / Semi Government / Local Bodies/ Large Corporates as shown below. (Use separate sheet, if necessary)

Tender No. : _____

Date of Opening: _____

Time: _____

Name & Address of the vendor : _____

Name & Address of manufacturer: _____

Order placed by (Full address of Purchase/ Consignee)	Description and quantity of ordered goods and services	Have goods been functioning satisfactorily (attached documentary proof)**
1	2	3

Signature & seal of the vendor

****The documentary proof will be a certificate from the consignee/end user with cross reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished. If at any time, information furnished is proved to be false or incorrect, vendor will be liable for action decided by Seth GS Medical College Multidisciplinary Research unit (GSMC-MRU) and Seth GS Medical College * KEM Hospital Diamond Jubilee Society Trust(DJST) .**

Note: - Past performance or Experience Certificate should be in a name of the vendor and not in the name of manufacturer.

Details of the Item Data :- (Rate to be filled by tenderer in commercial offer)

Item code	Description of the Items	Quantity

Proforma of Articles of Agreement for the purchase of material/equipments.

Quotation due on _____

Contract for the Supply / work of:

THIS AGREEMENT MADE ON THIS _____ Day of _____

Two Thousand _____ Between _____

(Partner /Proprietor's Full Name) in habitant/s of Mumbai, carrying on business at

in Mumbai under the style and name of Messer's _____ for and on behalf of himself / themselves, his/their heirs, executors, administrators and assigns (Hereinafter called 'the Contractor/s') of the FIRST PART and _____ Shri / Smt. _____ the Dean, Seth GS Medical College & KEM Hospital [Dean (G&K)] and Managing Trustee Seth GS Medical College & KEM Hospital Diamond Jubilee Society Trust (DJST) in which expressions are included unless such inclusion is inconsistent with the context or meaning therefore, include [Dean (G&K)] and Managing Trustee, DJST and any officers of GS Medical College & KEM Hospital and DJST authorized by [Dean (G&K)] and Managing Trustee, DJST and shall also include their successors & assign/ assignee for the time being holding office, of the SECOND PART

Shri / Smt. _____ the Nodal officer, Seth GS Medical College Multidisciplinary Unit (GSMC-MRU) in which expressions are included unless such inclusion is inconsistent with the context or meaning therefore, include Nodal officer, GSMC-MRU and any officers of GSMC-MRU authorized by the Nodal officer, GSMC-MRU and shall also include their successors & assign/ assignee for the time being holding office, of the THIRD PART

WHEREAS the [Dean (G&K)] and Managing Trustee, DJST has interallia deputed his powers, functions and duties to the Nodal officer, GSMC-MRU.

AND WHEREAS the Nodal officer, GSMC-MRU in pursuance of the power vested in him / her recently invited Quotation for supply of the material and/or certain articles/ certain works mentioned in the specification here to annexed.

AND WHEREAS the contractor/s has/have submitted quotation for the Supply of the material and/ or work thereof and his / their said quotation was accepted by the Nodal officer, GSMC-MRU on the Terms and Conditions hereinafter specified.

AND WHEREAS the said Contractor/s has /have paid deposit of Rs. _____

(Rs. _____) in the office of GSMC-MRU or DJST 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 Nodal officer, GSMC-MRU 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 (G&K)] and Managing Trustee, DJST, Nodal officer, and GSMC-MRU for the time being to determine the same previously as hereinafter mentioned until _____ Day of _____ Two Thousand _____ Or until such time as the Supply / work herein mentioned and shall have been completed and certified for by the Dean (G&K)] and Managing Trustee, DJST Nodal officer, GSMC-MRU purchasing Officer as being of good quality and in good working order.

- 2. Contract deposit.** Successful vendor shall have to pay a contract deposit @ 5% of the total contract cost either in the form of cash/DD or in the form of Bankers' Guarantee from the Bankers approved by Nodal officer, GSMC-MRU & 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 purchase order for the same shall be placed as required by the any officer of the Nodal officer, GSMC-MRU 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 Nodal officer, GSMC-MRU 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 for such of the brittles 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, Dean (G&K)] and Managing Trustee, DJST/Nodal officer, GSMC-MRU / 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 GSMC-MRU and DJST.

- 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 user department of Seth GS Medical College & KEM Hospital/the indenting office/ actual place of installation and commissioning of premises of GSMC-MRU/ DJST, 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 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 GSMC-MRU /DJST until actual delivery of the materials shall have been taken by the GSMC-MRU/ DJST. The Contractors shall exercise all possible care while delivering and stacking the materials within DJST/ GSMC-MRU's premises. The cost of any damage done by the Contractors or their agents to DJST/ GSMC-MRU's property while delivering and stacking etc. 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 and in working condition of their respective kinds, in accordance with the 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 signing signs the same and in case of their not being approved shall be liable to be rejected.

6. Quantity

The quantity in the schedule is approximate. GSMC-MRU/ DJST 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 is 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 pre-tested sample submitted along with the tender, the supply shall be rejected and

- i) If the default committed by the vendor /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. Rejection & appeal

Nodal officer, GSMC-MRU/ Secretary, DJST/ 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, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST), whose decision as to Whether the said articles shall be accepted or rejected shall be final and binding on the Contractor(s).

9. Fees

The contractors shall pay such fees as may be decided to be levied by the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) 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 the test results 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.

10. 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, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) 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, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) 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, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) 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 GSMC-MRU/ DJST. The Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) 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.

11. Articles can be brought from elsewhere

GSMC MRU/DJST 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, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) has the option of purchasing any of the articles from the market or other Contractors or elsewhere.

12. 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.

13. 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 GSMC-MRU/ DJST Employees, and if he / they or any of them shall do so, The Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, (DJST) shall be entitled to forthwith terminate this contract and forfeit the / Contract Deposit without prejudice to the other rights and remedies of the GSMC- MRU/ DJST, claim damages from the Contractor/s for the breach of the Contract.

14. 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST 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 GSMC- MRU/ DJST all loss, cost and damage of every description which the GSMC- MRU/ DJST 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 Contract Deposit as aforesaid shall be absolutely forfeited to the Corporation as liquidated damages for such failure or breach or determination of the contract.

15. 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST for the time being. In case the Contractor/s shall at any time commit any breach of this covenant then the Contract Deposit shall be forfeited to the Corporation and shall be retained by the GSMC-MRU/ DJST as and for liquidated damages.

16. Disputes etc to be decided by the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST

If any dispute or difference shall arise between Nodal officer GSMC MRU/ Secretary , DJST 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 for 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 Nodal officer, GSMC-MRU/ Secretary, DJST 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 thereunder, or in any ways whatsoever relating to the interest of the GSMC-MRU/ DJST 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST, 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST 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 GSMC-MRU/ DJST.

17. Commissioner's 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST (which said directions, decisions, certificates, orders and awards may be made from time to time) shall be final and binding upon the GSMC-MRU/ DJST 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 GSMC-MRU/ DJST to expect to any hearing or determination before or of the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST or to any certificate, order or award by the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST and be taken to have been properly adjudicated upon.

18. Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST not compellable to defend or answer any suit relating to any certificate or award made by him.

The Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST shall not be made a party to or be required to defend or answer any action, suit or proceedings at the instance of the GSMC-MRU/ DJST 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.

19. GSMC-MRU/ DJST's lien over all moneys due to the Contractor or his deposit

The GSMC-MRU/ DJST 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 GSMC-MRU/ DJST 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 GSMC-MRU/ DJST and the Contractor/s and also for or in respect of any Tax or Taxes or other money which may become due and payable to the GSMC-MRU/ DJST by the Contractor/s either alone or jointly with another or any other Statutory enactment or enactment in force in modification or substitution thereof. AND further that the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST on behalf of the GSMC-MRU/ DJST 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.

20. Termination of the Contract

These presents in every clause matter and thing herein contained shall cease and determine on the.....Two Thousand..... (Unless the same shall have been previously determined by the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST as hereinbefore provided) except only as to the rights and remedies of the parties hereto in respect of any clause or thing herein contained which any have been broken or not performed

21. Return of the Contract Deposit:

If the Contractor/s shall duly and faithfully carry out this contract and shall duly satisfy all claims properly chargeable against him / them hereunder the said sum of Rs._____ shall be returned to the Contractors and any balance due to the contractor /s under these present shall at the same time be paid to him/them.

22. Banker's Guarantee

In the event of the said deposit of Rs.....having been made by the Contractors by delivery to the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST shall immediately on demand be paid by the said Bankers to and may be forfeited by the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST and/or the GSMC-MRU/ DJST to claim under the said General Undertaking and Guarantee for or in respect of any other subsisting contract entered into by the Contractors with the Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST and/or the GSMC-MRU/ DJST.

23. 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST and GSMC-MRU/ DJST 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, Seth GS Medical College & KEM Hospital and Managing Trustee, DJST or GSMC-MRU/ DJST 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.

24. 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.

25. Singular – Plural

Words in the Singular number shall include the plural and plural the singular.

26. **Meaning** The Word 'The Dean (G&K) and Managing Trustee, DJST or 'Dean (G&K) and Managing Trustee, DJST' wherever they occur in this Tender or in the Contract shall be construed to mean 'Dean, Seth GS Medical College & KEM Hospital and Managing Trustee, Seth GS Medical College & KEM Hospital Diamond Jubilee Society Trust (DJST)'

The Word 'The GSMC-MRU or GSMC-MRU wherever they occur in this enquiry or in the Contract shall be construed to mean 'Seth GS Medical College & KEM Multidisciplinary Research Unit '

The Word 'The DJST or DJST wherever they occur in this Tender or in the Contract shall be construed to mean 'Seth GS Medical College & KEM Hospital Diamond Jubilee Society Trust '

27. **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.

28. **Penalty**

If the contractor fails to comply with the order within the delivery, installation and commissioning period stipulated, the Dean (G&K) /DJST/GSMC-MRU/ 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 any money due to the contractor from DJST/GSMC-MRU.

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 contract Deposit

29. Warrantee

In case of contracts for items of plant and machinery, mechanical and electrical equipments, instruments, furniture, material and such other article etc., the Contractors shall, for a period of thirty six calendar months after the acceptance and installation of the equipment, maintain, uphold and keep the same in thorough repairs and working order at their sole cost and expense and to the entire satisfaction of the 'Dean (G&K) and Managing Trustee, DJST / nodal officer GSMC-MRU or the Purchasing Officer, the whole of machinery/equipment/furniture material & articles etc. and shall also be responsible for and be liable under the provisions of this clause to make good any defect that may during that period develop in the normal and proper working of the machinery/equipment/furniture/ articles.

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

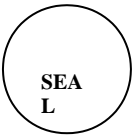
The Dean (G&K) or nodal officer 'Dean (G&K) and Managing Trustee, DJST GSMC-MRU or his / her successor/s for the time being holding the office of the GSMC-MRU/ DJST shall be the competent officer to operate the various clauses under this contract and to sign and serve notices under the various clauses of the said contract. All such notices signed by the nodal officer 'Dean (G&K) and Managing Trustee, DJST GSMC-MRU shall be deemed to have been signed by the 'Dean (G&K) and Managing Trustee, DJST.

In witness whereof the Contractors and the Dean (G&K) have hereunto set hands and the seal of the corporation has been hereunto affixed.

_____ Signed, sealed and delivered by
— The said Contractors,
Shri/Messrs.....
.....
In the presence of
Signature, name and address of
witness
.....
.....
.....
And by the Dean (G&K)
.....
.....
The common seal of the
as affixed on the
.....day of
Two thousand,.....
.....
In the presence of Witness
(1)
.....
(2)
.....
Two Members of the Purchase
Committee of the Seth GS
Medical College
Multidisciplinary Research Unit
.

Contractors

'Dean (G&K) and
Managing Trustee, DJST



* Contract examined with the quotation and found correct.

Clerk

Secretary
DJST

Nodal officer
GSMC-MRU

Annexure - 9

1. The following Banks with their branches in Greater Mumbai and upto Virar and Kalyan have been approved only for the purpose of accepting Banker's Guarantee.
2. The Banks Guarantee issued by branches of approved banks beyond Kalyan and Virar can be accepted only if the said Bankers' Guarantee is countersigned by the Manager of a Branch of the same bank, within the Mumbai Limit categorically endorsing thereon that the said bankers guarantee is binding on the endorsing Branch of the Bank within Mumbai limits and is liable to be enforced against the said branch of the Bank, in case of default by the contractor / supplier furnishing the Bankers Guarantee.

List of approved Banks

(A) S.B.I. & its subsidiary banks

(B) NATIONALIZED BANKS

(C) SCHEDULED COMMERCIAL BANKS

(D) SCHEDULED URBAN CO-OP BANKS

(E) FOREIGN BANKS

ANNEXURE -10
SPECIFICATIONS

**Automated Analyzer
Specification**


1. It should be fully automated random access clinical chemistry analyzer: Discrete Floor/bench top model.
2. The system should run on the analytical principle of absorbance photometry, Turbidometry, Potentiometry (ISE). Should be able to perform end point. Rate and fixed point kinetics to run general range of blood biochemistries tests, Immunoturbidimetric test and proteins tests.
3. It should have the facility to do the therapeutic drug monitoring (TDM)
4. Photometric test throughput should be 240 tests /hour or more excluding electrolytes.
5. Sample type: serum plasma, urine, CSF, Other body fluid.
6. Sample container types: primary tubes 5-10 ml, sample cups, micro cups.
7. Sample volume: 3 μ l to 35 μ l
8. Should be capable of carrying TRUE STAT samples in terms of loading of the sample in emergency mode, performing tests and providing reports.
9. Cuvette: Semi Permanent
10. Temperature control for cuvettes section should be of Dry Bath/wet bath
11. 8 to 12 stages washing process for onboard laundry for washing of probes/cuvette, facility of sample pre dilution, auto dilution, blank correction.
12. Reagent volume: R1 - 20 μ L to 250 μ L & R2 - 20 to 180 μ L (1 μ L increment each)

GSMC/MRU/EQUIP/2015-16/001

13. At least 45 reagent position on-board. Reagent should be ready to use.
14. Should have Barcode reading facility for reagent identification also for sample identification with mono and bidirectional interfacing facility.
15. Sample input: continuous loading more than 30 samples on board.
16. System should have wavelength grating photometer and wavelength should be between 340- 800 nm with halogen/xenon lamp.
17. Should have on-board refrigeration for reagents. Dedicated positions for QC and Calibrators should be available.
18. Should have separate probes (one / two) for sample and reagent with liquid sensing, probe crash detection facility.
19. Should have interactive Quality control feature with daily, monthly and cumulative statistics with Levey-Jennings chart, West Guard rules , twin plot methods.
20. Inventory management software should be on screen for operator information and should have a data storage capacity on the hard disk.
21. Should be supplied with 2 auto pipettes (10-100u1 variable and 500u1 fixed),
22. Water requirement should not be more than 7 litres per hour.
23. Computer compatible with instrument with printer.
24. Online UPS for at least half hour backup
25. Reagents/ kits, controls and calibrators should be supplied with machine sufficient for carrying out 100 samples complete liver function tests, renal function tests including the electrolytes and lipid profile
26. Performance report and user list should be attached

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27. 3 Years comprehensive warranty to be followed by 5 years CMC. Technical support, required spares and consumables should be assured for two years after contract period is over.
28. It should be CE Certified along with declaration of conformity or US FDA approved.
29. Demonstration of offered model is compulsory
30. Power supply: 230 V \pm 10%, 50 Hz \pm 3%.
31. Service Training to MEC Engineer and Operational training to user department should be provided
32. Operating and detail service manual with circuit diagram should be provided.
33. Tropicalizaion: Operating Temperature: 40°C
Storage Temperature: 60°C
Relative Humidity: Up to 90% non condensing.



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GSMC/MRU/EQUIP/2015-16/002

Seth G.S. Medical College & KEM hospital Multi-Disciplinary Research Unit (MRU)

Binocular Microscope

Specification

Body: Binocular, sturdy, stable base body with focus adjustment controls.

1. Eye piece:

Paired, high quality, (the image of the object as seen through the binocular eyepiece should be well defined centrally in at least 2/3 field of view), achromatic, wide field. 10x with inbuilt pointer. The eyepiece should be aplanatic and have a minimum field number of 18 Diopter adjustment must be present on one/ both eye pieces or on the eye piece tube. Optical system should be infinity corrected. System complete with illumination system is required.

2. Objective:

Three objectives 10x, 40x, 100x. 10x and 40x objectives should have numerical apertures of 0.25 and 0.65 respectively and should be of spring loaded type or otherwise. 100x should have numerical aperture of 1.25 and should be of oil immersion and spring loaded type. Suitable prominent marking should be provided on 100x for easy identification. Unbreakable containers to be provided for storing the objectives. All objectives should be wide field, achromatic and parfocal.

3. Making for the Objectives:

Each objective should be engraved with the following information's:-Name of the manufacturer Magnification and numerical aperture, for example, 10x/0.25, 100x objective should be engraved with the word 'Oil' in changing from one objective to another or reintroducing the same objective by rotation of the nosepiece, the object at the center of the field should not appear displaced by more than 0.02 mm in the object plane in any direction.

4. Nose piece:

Revolving nose piece to accommodate a minimum of three objectives with click stops. It should be provided with ribbed grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment. Extra ports if any should be fitted with dust proof metallic/ebonite caps. Stage uniformly horizontal, mechanical

GSMC/MRU/EQUIP/2015-16/002

stage having dimensions of length 140 mm (11- 20mm) with fine vernier graduations (minimum reading accuracy of 0.1 mm). The stage should be provided with spring loaded slide holder for exact positioning of specimen/ slide. It should be designed with convenient sub-stage vertical coaxial adjustment for slide manipulation. The stage should have ball-bearing arrangement to allow smooth travel in transverse directions i.e. 80 mm (+1-5mm) and front to back direction, 50mm (-F/- 5mm).

5. Sub-stage condenser:
Abbe-type condenser, numerical aperture (N.A.) 1.25 focusable with rack and pinion arrangement incorporating an spherical lens and an iris-diaphragm. The condenser should have a filter holder and removable/ swing in/ out blue filter (suitable for bright field Microscopy).
6. Sub-stage illuminator:
The system should have a build-in variable light source (Illuminator). This light source should have a 20 W, 6 V Halogen lamp. The circuitry for the light source should include a constant voltage supply. The system should be provided with a step down transformer and an on-off switch and intensity control. The lamp should be provided with a lamp socket which has the facility for easy replacement of the bulb
7. Power supply: Voltage 220 V AC, 50Hz. Should have one on-off power switch, 3 core power cord with a 3 point male plug. The system should have an inbuilt protective/safety device to withstand fluctuations of voltage from 140 V to 280 V.
8. A piano-concave mirror in fork mounting should be supplied which would be attachable to the base for field use when power is not available. The fuse for the halogen lamp should be easily accessible to the operator. The Illuminator should have a build-in field diaphragm for Kohler illumination.
9. Eye piece tubes: Binocular eye piece tubes, inclined at 45 degrees, rotatable through an angle of 360 degrees, having inter-papillary distance range of 54-74 mm or wider, covering the above mentioned range.
10. Focusing knob: Co-axial coarse and fine focusing knobs capable of smooth fine focusing movement over tilt full range of coarse travel. The fine focusing movement should have sensitivity of two microns or less (finer) over the entire coarse focusing stop safety arrangement should be provided.

GSMC/MRU/EQUIP/2015-16/002

General:

1. All optical parts including objectives, eye pieces and prisms should have anti-reflective coating which also gives anti-fungal property.
2. All metallic parts should be corrosion-proof, acid proof and stain-proof.
3. Working manual should be provided with each microscope.
4. A bottle of at least 25 ml immersion oil, a roll of lens tissue paper and lens cleaning solution (100 ml)
5. Should be provided with each microscope.
6. One anti-static cleaning brush should be provided with each Microscope for cleaning purpose.
7. Microscope should be supplied with all spare parts including Fuses - 6 Nos.
8. All consumables required for installation and standardization of system and microscope cover to be given free of cost.
9. The unit shall be capable of being stored continuously in ambient temperature of 0 -50 DegC and relative humidity of 15-90%.
10. Should be FDA or European CE approved product.
11. 3 years warranty, 5 years comprehensive CMC should be available with service centers in close proximity.
12. User/Technical/Maintenance manuals to be supplied.
13. Certificate of calibration and inspection from factory.
14. List of important spare parts and accessories with their part number and costing.



A.E. (M&E)



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**Seth G.S. Medical College & KEM hospital
Multi-Disciplinary Research Unit (MRU)**

Table top non refrigerated centrifuge

Specifications :

1. Table top non refrigerated centrifuge Microprocessor controlled system must be capable of generating RCF to 20,800 x g approx. or with a maximum speed of 14000 rpm (maximum motor speed) with a facility to change the rotor as per requirements
2. The system should have brushless induction motor with variable frequency drive.
3. The centrifuge must be supplied with a rotor having swing bucket/s accommodating 50 ml tubes, 15 ml tubes, 5 - 7 ml tubes, 1.5 ml /2.0 ml Eppendorf tubes with reduction adaptors
4. Timer : Digital LED
5. Speed Controller : Digital
6. Body : MS with powder coated
7. Input Voltage : 230 V, 50 Hz, AC Supply
8. The instrument should have enough memory to store at least 5 programmes
9. The chamber should be stainless steel with aerosol tight rotor and should be corrosion resistant.
10. Dynamic braking for quick acceleration and deceleration and rapid stop without cell disturbance
11. Last set parameter recall (useful for repetitive analysis)
12. Automatic door opening
13. System should have safety features like lid lock and lid interlock
14. System should have touch keypads for data entry and large LED displays for good visibility.
15. Noise level should be less than 60db.
16. Imbalance detection and centrifugation stop with display of error motor overload protection and emergency lid lock release.
17. Should provide the operating manual and detailed service manual with the instrument.
18. It should follow the International Safety Standards and requirements i.e. should have ISO / CE certificate
19. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
20. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC.


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Seth G.S. Medical College & KEM hospital
Multi-Disciplinary Research Unit (MRU)

Table top Refrigerated Centrifuge

Specifications :

1. Table top Refrigerated Centrifuge for conical bottom and round bottom tubes should be micro processor controlled and should have brushless induction motor with variable frequency drive.
2. Instrument should have a maximum speed of 14000rpm
3. The centrifuge must be capable of generating Max RCF of 20,800 x g
4. Microprocessor controlled, swing out rotor.
5. Temperature range from -9°C to 40°C
6. Instrument should be supplied with
 - a. The centrifuge must be supplied with a rotor having swing buckets with atleast 12 tubes accommodating 5 - 7 ml tubes conical bottom tubes, and round bottom tubes, 1.5 ml /2.0 ml eppendorf tubes with reduction adapters.
 - b. with a swing out rotor for 16x96 and 8x94 wells micro titer plates
 - c. with a angle head rotor for 1.5 ml/2 ml Eppendorf tubes
 - d. with a angle head rotor for 6 strips of 8X0.2ml
7. Time setting range should be around 0~99min
8. Power supply
 - a. Hertz 50Hz
 - b. Voltage 220 - 240V
 - c. Amperage 18A
9. Maximum time usage : 15 - 20 mins
10. Timer : Digital LED
11. Speed Controller : Analogue OR Digital
12. Body : MS with powder coated
13. Weight : Approx 4 kgs
14. The instrument should have enough memory to store at least 5 programmes
15. Last set parameter recall (useful for repetitive analysis)
16. The chamber should be stainless steel with aerosol tight rotor and should be corrosion resistant.
17. Automatic door opening
18. System should have safety features like lid lock and lid interlock
19. System should have touch keypads for data entry and large LED displays for good visibility.
20. Noise level should be less than 60db.
21. Imbalance detection and centrifugation stop with display of error motor overload protection and emergency lid lock release.
22. Fast Temp function for pre-cooling of the centrifuge

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23. Instrument should have the function to switch off the compressor automatically after 8 hours of non-usage
24. Dynamic braking for quick acceleration and deceleration and rapid stop without cell disturbance
25. It should be possible to adjust the acceleration and deceleration ramps from 0-9
26. Should have a set rpm function which enables timer countdown to be started only after the set speed is reached
27. Should be possible to set the speeds in rpm/rcf, radius correction values must be user changeable
28. There should be a separate short spin key for brief spin
29. Instrument should have a built - in condensation drain to eliminate water accumulation and prevent corrosion. Should provides the operating manual and detailed service manual with the instrument.
30. It should follow the International Safety Standards and requirements i.e. should have ISO / CE certificate
31. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
32. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC.


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Multi-Disciplinary Research Unit (MRU)**

REFRIGERATOR
SPECIFICATIONS

1. Minimum Gross storage Capacity: 310 to 330 litres.
2. Model Type Double door.
3. Voltage Range at 40 degree centigrade Capable of working on 220 volts + 12 % A.C 50 Hz.
4. Input voltage: 230V, 50Hz.
5. Method of Defrosting Frost Free.
6. Insulation Puff / Maxi 2 / Polyurethane.
7. CFC free refrigerant gas.
8. Power saver compressor.
9. Accessories: Adjustable shelves, chiller Tray, Temperature controller, Auto lamp On/off feature, should be supplied with all standard accessories as per manufacturer catalog for the model supplied.
10. Stabilizer should be supplied.
11. Body should be made of plastic or corrosion resistant material.
12. Should be CE or ISI approved product.
13. Three years warranty, Five years CMC should be available with service centers in close proximity.
14. User/technical/Maintenance manuals to be supplied
15. Working manual should be provided.
16. Tropicalization:
 - Operating temp.: upto 32° C
 - Storage temp: upto 60° C
 - Voltage 220-240v / 50 Hz
 - Relative humidity: upto 90% non-condensing


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**Seth G.S. Medical College & KEM hospital
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DEEP FREEZER (-20°C)

SPECIFICATIONS

1. Vertical/ Upright model
2. Microprocessor controlled
3. Capacity >200L
4. Temperature adjustable to at least -30°C
5. Should be able to maintain -30°C upto 32°C ambient temperature
6. Separate corrosion resistant stainless steel doors for each compartment
7. Heated door frame to avoid frost formation.
8. Separate rust free stainless steel freezer racks for two compartments along with the equivalent number of boxes to store 2ml tubes.
9. Four or more shelves as per requirement.
10. Refrigeration system- Heavy duty CFC free with hermetically sealed compressor and min. noise and vibration
11. Cabinet construction should be corrosion and rust free and should resist chipping. Interior should be made of corrosion resistant stainless steel.
12. Should be mounted on heavy duty ball bearing castor wheels for smooth movements.
13. Microprocessor based operational control- like temperature setting, temperature display, etc.
14. Freezer control monitor- audio –visual alarm indicators, maintenance indicator to take care of eventualities like power failure, high or low temperature, door open, probe failure, high or low voltage etc. Should provide auto rechargeable battery backup for temperature display and alarm system.
15. Digital display of set and actual temperature.
16. No condensation on storing material with automatic electric defrost.
17. Cooling type: Direct cooling
18. Defrost mode: Manual
19. Standard safety features as per International or national standards where available.
20. Should have all accessories required like trolley, automatic voltage stabilizer, UPS etc for the smooth functioning of the equipment.
21. Tropicalization:
 - Operating temp.: upto 32°C
 - Storage temp: upto 60°C
 - Voltage 220-240v / 50 Hz
 - Relative humidity: Upto 90% non-condensing

GSMC/MRU/EQUIP/2015-16/006

22. Documentation required- training manual, calibration certificate as per NABL, Installation qualification, Performance qualification and operation qualification (IQ / PQ / OQ).
23. Should be FDA or European CE approved product.
24. All parameters should be matched OR should be superior in order to qualify for the Technical Bid.
25. The Committee has the rights to rule out any Party in case the requested parameters do not match their requirement.
26. Three years warranty, Five years CMC should be available with service centers in close proximity.
27. Demonstration compulsory.
28. Training to MEC engineers.
29. User/technical/Maintenance manuals to be supplied.
30. Working manual should be provided.



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**Seth G.S. Medical College & KEM hospital
Multi-Disciplinary Research Unit (MRU)**

MICROFUGE

Specifications

Should be compatible for applications like Cell pelleting, Quick spins for enzyme reaction, Initial spin for DNA Sequencing, Quick spin for primer annealing / hybridization, serum sampling, other short spins runs.

1. Settable RPM : ≥ 6000
2. Auto on / off : If Lid closed / opened
3. Capacity : 6 x 1.5 / 2ml tubes or better (fixed rotor)
4. Interchangeable rotors (tool free)
5. Separate rotors for both microcentrifuge tubes and PCR strip rotor.
6. Adaptors for major microfuge tubes (6 or 8 place) and PCR tube (2.0, 1.5, 0.5, 0.2 ml)
7. Brushless DC Motor
8. Imbalance detection, less heat generation
9. Timer : Upto 99 mins
10. Input Voltage : 230 V, 50 Hz, AC Supply
11. Low noise level
12. Compact Design
13. Should be FDA or European CE approved product.
14. All parameters should be matched OR should be superior in order to qualify for the Technical Bid.
15. Three years warranty, Five years CMC should be available with service centers in close proximity.
16. User/technical/Maintenance manuals to be supplied.
17. Working manual should be provided.
18. Tropicalization:
 - Operating temp.: upto 32° C
 - Storage temp: upto 60° C
 - Voltage 220-240v / 50 Hz
 - Relative humidity: Upto 90% non-condensing



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**Seth G.S. Medical College & KEM hospital
Multi-Disciplinary Research Unit (MRU)**

SPECIFICATIONS FOR BIOSAFETY CABINET

SPECIFICATIONS

- 1) The BSC to meet the requirements of class IIB2 NSF 49 or class II EN 12469; specifically, with regard to inward airflow (≥ 0.40 m/s according to EN 12469:2000 or ≥ 0.50 m/s according to NSF 49:2004).
- 2) It should have personal protection sample protection cross contamination protection and environment protection
- 3) Face velocity of Inflow (Negative pressure): At least 100 fpm and velocity of down flow(positive pressure: At least 70 fpm
- 4) It should have dual blower for independent control for inflow and down flow velocities
- 5) Air flow direction: Vertical laminar flow and air intake across front opening
- 6) 100% of the air volume should be exhausted as sterile air back into the environment
- 7) Pressure sensor should be in built for exact air flow measurement for balancing air flow
- 8) The motor must automatically adjust the airflow speed without the use of damper to ensure continuous safe working conditions even without maintenance adjustments
- 9) Pre-filter construction preferred; easily accessible, filter change without tools preferred.
- 10) High-efficiency particulate air (HEPA) filter /ULPA (inflow and exhaust air filter); metal framed.
- 11) Internal working area (approximate): $L \times D \times H = 3' \times 2' \times 2'$
- 12) Single piece working surface
- 13) Inside finish: stainless steel, 304 grade or higher
- 14) External housing, including screws, made of stainless steel or equivalent resistant galvanized (zinc-coated) sheet steel, subsequently powder coated and thermally hardened; resistant to disinfectants and chemicals used in a medical testing laboratory, and abrasion resistant.

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- 15) Vertically adjustable sliding window: aerosol-tight, sliding, safety glass (laminated multilayer safety glass only), thickness ≥ 6.7 mm, counterbalanced.
- 16) Working aperture: ≥ 170 mm measured from work surface to the bottom of the sash window.
- 17) Maximal lifting height of front window: 500 mm.
- 18) Ability to lock the window hermetically for gaseous disinfection for filter decontamination.
- 19) The UV light Ultraviolet C (UVC) light (253.7 nm wavelength) must be provided which should be programmed to turn off automatically. The settings must allow the user to program the timer from 30 minutes to 24 hours in 30 minute increments.
- 20) Noise pressure level: ≤ 65 dbA
- 21) Flicker-free, low-glare, warm-coloured light, > 1000 lux.
- 22) Electronic fan control
- 23) Control display on the front of the BSC. Electrical control or indicators.
- 24) Flow meter for air inflow velocity
- 25) Flow indicator or meter for air downflow velocity.
- 26) Filter condition indicator
- 27) The microprocessor must display the number hours of use on the HEPA filters to ensure user knows when to replace the HEPA filters to achieve safe working conditions
- 28) Exhaust volume airflow/fresh airflow inward: for a 4 ft BSC quantum should be 300–600 m^3/h
- 29) Blower system to be able to maintain the airflow within a minimum window (narrow limits) on voltage fluctuations. Data to be available on request.
- 30) Exhausted air should be pathogen free
- 31) Air duct construction to hard duct out or thimble exhausts air from the BSC. The air duct to be made for the BSC offered should fit precisely
- 32) Alarms, visible and/or audible, for any unsafe condition of the BSC (e.g. airflow, window position, hardware or software errors)
- 33) Documentation : Manufacturer's certificate

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- 34) The manufacturer to individually test each BSC before shipment. The test report to be provided to the customer, with a duplicate fixed to the BSC. The tests to be performed with research-grade instruments for valid calibration according to test methods outlined in EN 12469 or NSF 49.
- 35) The test report to contain at least data on: ▪ inflow air velocity ▪ downflow air velocity ▪ filter leak scan for both filters to document filters' efficiency and integrity.
- 36) At least one set of operation, maintenance and service manuals to be provided
- 37) User training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty and CMC.
- 38) IQ, OQ, PQ and calibration certificates with traceability should be provided
- 39) Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
- 40) Technical support and required spares and consumables should be available for 7 years after expiry of initial warranty period.
- 41) Quotation should include annual calibration for 8 yrs.
- 42) 230 ± 10 V, AC, 50 Hz
- 43) Tropicalisation The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in Indian conditions. The equipment must be tropicalized as below: Operating room temp : upto 40° C Storage room temp : upto 55° C Relative Humidity : upto 90% Non-condensing
- 44) Accessories All standard accessories, consumables and parts as required for the proper installation, operation and maintenance of the BSC to be included in the offer by the supplier and to be specified and quantified. The following accessories should be provided
- 45) Gas tap with solenoid valve, optional right or left side.
- 46) Electric point inside workspace (15 / 5mA)
- 47) Castor wheel at base for easy movement when required.
- 48) The equipments shall have valid EUROPEAN CE mark / US FDA approval and documentary evidence to that effect shall be uploaded.

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- 49) Vendor tenderers should have a full-fledged and well-established service centre in Mumbai with engineers qualified in servicing of Biological Safety Cabinet. Please provide details of the same in Annexure – 1
- 50) Supply, installation, of Biological Safety Cabinet described in the specifications: The scope of work includes minor civil, mechanical and electrical works in the room/s provided by the hospital. The bidders are advised to make a site visit.



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Seth G.S. Medical College & KEM hospital Multi-Disciplinary Research Unit (MRU)

Water Bath

Specification

1. Double walled with stainless steel interior and MS powder coated exterior with approx. Dimensions (external): 30 cm x 30 cm x 20 h cm. Dimensions (internal): 22 cm x 22 cm x 16 h cm.
2. Temperature range: 37⁰C- 100⁰C.
3. Should have Digital temperature control and Display.
4. Time proportional temperature controller cum digital display using PT -100-as sensor.
5. Temperature resolution- 0.10⁰C.
6. Stainless steel rack for accommodating Eppendorf Tubes, Test tubes and stainless steel gabled cover.
7. Should have provision to maintain uniformity of temperature.
8. Should have accuracy upto 0.5.
9. Should have the provision to incubate racks of all size of test tubes.
10. Should have Illuminated ON switch.
11. Should have Indicator light showing heating element operation
12. Should have visual over temperature alarm indicator.
13. Electrical: 220-240 volts, 50 Hz.
14. Should be FDA or CE or ISI approved product.
15. 3 years warranty, 5 years comprehensive CMC should be available with service centers in close proximity.
16. User/Technical/Maintenance manuals to be supplied.
17. Working manual should be provided.



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HYBRIDISATION OVEN

SPECIFICATION

1. Hybridisation Oven should be made of Heavy Gauge MS with powder coated body.
2. Temperature should be maintained from above ambient to 70 Deg C with an accuracy of 0.5°C with the help of powerful centrifugal blower.
3. D.C. motor is used to get accuracy in speed and for low noise levels.
4. Speed should be controllable from 10 rpm to 36 rpm with an accuracy of 2 rpm.
5. The controller type should be of microprocessor.
6. Front door should be made of acrylic with locking system.
7. Should have Analogue / digital RPM Indicator and have roller and shaker.
8. The display should be of LED.
9. Tube Diameter : 39 mm Diameter x 210 mm length
10. Capacity : 44 Lts
11. Motor : D.C. Motor
12. Weight : 12 kgs
13. Size : 406 x 360 x 360 mm
14. Input Voltage : 230 V, 50 Hz. A.C. Supply
15. It should have International safety standard CE certificate.
16. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
17. Demonstration compulsory.
18. Training to MEC engineers.
19. Operating and detailed service manual should be supplied.



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Microwave oven

Specification

1. Capacity should be 17-25 Liter.
2. Control Type : Tact (Buttons)
3. Auto Cook Menu: 40.
4. Temperature Range: 110 - 200 degree C.
5. Should have Digital temperature control and Display.
6. Power Output should be 850 Watts (approx)
7. Dimension should be approx. 370 x 485 x 275 (mm)
8. Should be FDA or CE or ISI approved product.
9. 3 years warranty, 5 years comprehensive CMC should be available with service centers in close proximity.
10. User/Technical/Maintenance manuals to be supplied.
11. Working manual should be provided


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Electrophoresis System (Horizontal, vertical, western)

Specifications

Horizontal System :

1. Main Unit single molding casted leak proof buffer tank provided with Platinum electrodes, base leveling screws and lid to accommodate removable UV transparent gel casting trays of size : 7 X 10 cm:1No.
2. Main Unit single molding casted leak proof buffer tank provided with Platinum electrodes, base leveling screws and lid to accommodate removable UV transparent gel casting trays of size : 15 X 20 cm: 1No.
3. Removable UV transparent gel casting trays two each of two different sizes : 7 X 10 cm and 15 x 20 cm with gel casting gates
4. Comb slots 2 or 4
5. Combs of adjustable heights to fit variable needs and different dimensions. 8-well combs of 0.75 -1.0 mm thickness (3Nos.) and 1.5-2.0 mm thickness (3 Nos.)
6. Combs compatibility: Compatible multichannel pipettes
7. Connecting Cord: red and black 2each.
8. Connecting cords & system should be compatible with power packs from different companies of different ranges
9. Bubble level/ Gel levelling table
10. Buffer saver blocks
11. Gel rulers
12. Gel scoop
13. Gel spacer
14. The system should be provided with startup kit including consumables sufficient for atleast 25 runs

Vertical System :

15. Main Unit single molding casted leak proof buffer tank provided with Platinum electrodes, base leveling screws and lid.
16. Glass plates for Gel Size 10 x 10 cms: 2Nos.
17. Teflon Spacers of 1 mm: 2Nos.
18. Teflon Spacers of 0.5 mm: 2Nos.
19. Notched glass plates: 2Nos.
20. Dummy plate: 1No.
21. 8 well combs of 1mm thickness: 2Nos.
22. 16 well combs of 1mm thickness: 2Nos.
23. Combs compatibility: Compatible multichannel pipettes
24. Silicon seals: 2Nos.
25. Clamp and base leveling screws: 2 sets.
26. Connecting Cord : red and black 2 each
27. Connecting cords & system should be compatible with power packs from different companies of different ranges
28. Necessary accessories required to use the unit as blotting applications should be provided
29. The system should be provided with startup kit including consumables sufficient for atleast 25 runs.

Electro-transfer (Western) System

30. Main Unit single molded/casted leak proof buffer tank provided with Platinum electrodes, base leveling screws and lid.
31. The electro-blotting system should be able to run four mini and midi gels simultaneously and to facilitate this it should have standard accessories like 4 electro-blotting cassettes, 8 fibre pads
32. Buffer Reservoir : 1 No.
33. Buffer Volume : 1500 ml.
34. Standard snap lock connectors to allow the cooling coil within each unit to be connected to an external chiller units
35. Connecting Cord : red and black (1each).
36. Connecting cords & system should be compatible with power packs from different companies of different ranges
37. The system should be provided with startup kit containing pack of Nitrocellulose mini membranes 100 Nos. stain free SDS PAGE kit (10% and 12% precast gels) and other consumables (antibodies and buffers) required blotting and SDS applications

Power Pack to run electrophoresis systems

38. Output DC Voltage : 0-300Volts variable
39. Output current : 0-400mA Variable
40. Power: 75-90W
41. Output : Two pairs parallel outputs, 4 mm socket
42. Display : Digital
43. Timer: 15mins. to 4 hours
44. Input Voltage : A.C. Power supply: 230 V \pm 10%, 50 Hz \pm 3%.
45. The capability to pause and resume the electrophoresis run
46. The power pack should have No load detection, sudden change detection , short circuit detection and overload protection
47. Suitable for standard vertical, horizontal gel electrophoresis as well as gel transfer and blotting applications.
48. It should be European CE Certified along with declaration of conformity or US FDA approved.
49. Operating and detail service manual with circuit diagram should be provided.
50. Demonstration of offered model is compulsory.
51. Service Training to MEC Engineer and Operational training to user department should be provided
52. Tropicalizaion: Operating Temperature: 40°C
Storage Temperature: 60°C
Relative Humidity: Up to 90% non condensing.
53. Three Years comprehensive warranty to be followed by 5 years AMC. Technical support, required spares and consumables should be assured for two years after contract period is over.
54. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC.



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Gel dryer

Specifications :

1. Gel Dryer should be designed to accommodate all gel sizes made on any of the electrophoresis instruments available in the laboratory.
2. Gels (1.5 mm) should take only 30 mins to dry and the unit should shut off automatically after lapse of set time.
3. Model should have unique audio and visual alarm to indicate end of run.
4. Clear silicon sheet permits easy viewing while gels dry on powerful heaters (400 OR 800 W). The temperature (upto 120° C) and time (upto 4hrs) should be electronically controllable by specific knobs.
5. The gel dryer should have the facility to connect to a vacuum pump delivering more than 22 PSI (560 mm Hg).
6. Temperature Range : 5 Deg. C. Above ambient to 120°C. (Ambient at 25°C).
7. Temperature controller : Digital.
8. Temperature Sensitivity : +/- 1°C.
9. Temperature sensor : PID
10. Timer : Digital
11. Timer Range : 1-999mins.
12. Body : FRP (fibreglass reinforced plastics)
13. Platform Dimension : 35cm x 45cm (Drying surface)
14. Input Voltage : 230V, 50 Hz, 15 amps(max). A.C. Supply
15. Gel capacity : 16 mini (8 x 7 cm) gels, 9 Criterion™ (13.3 x 8.7 cm) gels, 2 large (20 x 20 cm) gels, 1 sequencing gel
16. Gel support plate : Porous polypropylene, 120 µm average pore size
17. Vacuum pump should be optional accessory. Vacuum source Minimum ultimate vacuum of 25" Hg pump with a rating of 28" Hg or better and a capacity of 20–30 L/min recommended
18. Two independent four-hour timers – one for the heating element and one for the vacuum source. Timing the vacuum to run longer than the heat allows gel to cool under vacuum, preventing cracking.
19. Mylar* sheet and a porous polyethylene sheet are provided for different gel types.
20. Translucent silicone rubber cover provides a vacuum seal to hold gels flat
21. Flexible mesh supports the gel during drying.
22. Should provide the operating manual and detailed service manual with the instrument.
23. It should follow the International Safety Standards and requirements i.e. should have European/ISO / CE certificate
24. Three years Comprehensive Warranty from date of installation with 5 years Comprehensive Maintenance Contract and should provide technical support and required spares and consumables for 3 years after warranty period is over duly supported by their principal
25. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC

23. It should follow the International Safety Standards and requirements i.e. should have European/ISO / CE certificate
24. Three years comprehensive warranty and 5 year CMC should be available with service centres in close proximity.
25. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC



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pH Meter

Specifications

1. Microprocessor based pH/mV/Temperature meter with Large Easy-to-Read LCD with self-diagnostic messages for hassle-free operation temperature probe, single junction pH electrode
2. Electrode should be ATC, refillable, combination glass type along with the refilling solution as a consumable. (Preferably sat. Potassium Chloride ; KCl).
3. BNC connection for pH electrodes,
4. Automatic multipoint calibration
5. pH Range should be 0.00 to 14.00 pH
6. Resolution & Accuracy (pH) 0.01 & +0.01 pH
7. Temperature Range 0.0 to 100.0 °C
8. Resolution & Accuracy(for temperature) 0.1° C & ± 0.3° C
9. Automatic Temperature Compensation (ATC) / Manual (0 to 100 °C)
10. Parallel temperature display and analogue recorder output.
11. mV Range ±199.9 mV; ±1999 mV
12. Resolution & Accuracy (for mV) 0.1mV & ±0.2 mV (within ±199.9 mV); 1 mV
13. 0.2 & ±2 mV (beyond ±200 mV)
14. Five/Multi-Point Push-Button Calibration for unprecedented full-range accuracy
15. Auto-Buffer Recognition to eliminate mistake during calibration.
16. Non-Volatile Memory to store and recall up to 50-100 data sets.
17. RS-232C/USB port computer or printer interface for recording readings and charts on external devices.
18. View Electrode Characteristics - electrode slope and offset value to verify electrode performance.
19. Special Functions like Averaging/Stability; Self-diagnostic; Hold & pH Slope
20. Display should show slope while performing tests on meter.

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21. Hold Function to freeze reading momentarily for easy recording.
22. Integral Electrode Holder - For holding multiple electrodes and probes during measurement.
23. Should provide the operating manual and detailed service manual with the instrument.
24. It should be CE Certified along with declaration of conformity or US FDA approved.
25. Three Years comprehensive warranty to be followed by 5 years CMC. Technical support, required spares and consumables should be assured for two years after contract period is over.
26. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in AMC
27. Demonstration of offered model is compulsory.
28. Power supply: 230 V \pm 10%, 50 Hz \pm 3%.
29. Service Training to MEC Engineer and Operational training to user department should be provided
30. Operating and detail service manual with circuit diagram should be provided.
31. Tropicalizaion: Operating Temperature : 40oC
Storage Temperature: 60oC
Relative Humidity: Up to 90% non condensing.



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ELECTRONIC WEIGHING BALANCE
SPECIFICATIONS

1. Weighing capacity 0.0001 gm – 200gms.
2. Repeatability- 0.0001gm
3. Readability of 0.0001 gm
4. Linearity- $\pm 0.0002g$
5. Should have Fluorescent/ LCD display and Monoblock technology for working.
6. Weighing accuracy is maintained by Automatic internal calibration system without user intervention.
7. Weighing pan: At least 80mm diameter.
8. Maximum response time should be up to 6 seconds.
9. The machine should have multiple weighing units including gm, pounds, ounces, carrats etc.
10. The balance should have RS-232C/ USB port for computer or printer interface and the printers should be able to give GLP/GMP prints
11. Power supply: 230V \pm 15%, 50 Hz \pm 3%
12. Tropicalization- Operating Room temp: upto 40°C.
Storage Room Temp.: upto 60°C.
Relative humidity: upto 90%, Non Condensing
13. Analytical electronic balance with Die cast Aluminum.
14. It should have International safety standard EUROPEAN CE certificate.
15. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
16. Demonstration compulsory.
17. Training to MEC engineers.
18. Operating and detailed service manual should be supplied.



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Vortex Mixer

Specification

1. Should have two modes of operations: touch mode and constant mode.
2. Should be supplied with one cup attachment and one micro tube insert.
3. Tube insert attachment should hold upto 13 tubes
4. Speed range should be [rpm] 0- 3200.
5. Orbital Diameter should be [mm] 4
6. Motor Rating Input / Output should be [W] 20 / 15
7. Mild Steel powder coated body with Dimension (mm /W×D×H) - 154×210×83 (approx.)
8. Working condition: 4⁰C to 60⁰C ambient.
9. Input Voltage : 230V, 50Hz. A.C. Supply
10. Should be FDA or CE or ISI approved product.
11. 3 years warranty, 5 years comprehensive CMC should be available with service centers in close proximity.
12. User/Technical/Maintenance manuals to be supplied.
13. Working manual should be provided.



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ICE FLAKER

Specifications

1. Should have flake ice production up to 80-100 Kg/24hr
2. Well-insulated bin for storage with capacity up to 20 kg or more ice
3. CFC free Refrigerant will be preferred.
4. High load capacity bearings for enhanced reliability
5. Corrosion resistant stainless steel body with adjustable feet and easy access door.
6. Low Noise Operation.
7. The interior should be of corrosion resistant stainless steel.
8. Self-cleaning system for cleaning its entire water distributionsystem
9. Air filter on condenser
10. Washable aluminium mesh filter for preventing lint, dust and grease from entering to produce clean flakes.
11. Input voltage: 230V, 50Hz.
12. Should be FDA or CE approved product
13. All parameters should be matched OR should be superior in order to qualify for the Technical Bid.
14. Three years warranty, Five years CMC should be available with service centers in close proximity.
15. User/technical/Maintenance manuals to be supplied.
16. Working manual should be provided.
17. Tropicalization:
Operating temp.: upto 32° C
Storage temp: upto 60° C
Voltage 220-240v / 50 Hz
Relative humidity: Upto 90% non-condensing



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**Micropipettes
Specifications :**

1. High accuracy and precision required for repetitive, long lasting pipetting
2. Smooth surfaces for comfortable working and simple cleaning
3. Minimised risk of contamination with safe cone filters and Fully autoclavability
4. Entire set ranging from 0.5-10ul, 20-200 ul, 100-1000 ul
5. Tips from all makes should fit in these pipettes
6. Improved ergonomic handle and tip ejector
7. Control button and Ejector so that it requires very low operating force
8. Spring loaded tip cone to provide tight fit to the tip
9. Slender, contoured grip fewer rough edges to make it possible to work in every position
10. Quick connection clip to remove lower part easily
11. Calibration display should be a 4-digit display for exact volume setting (clearly visible from every angle)
12. Volume adjustment should be possible in only a few turns to reach desired volume
13. Adjustable digital dial with volume lock and quick and secure volume setting
14. Should provide the operating manual and detailed service manual with the instrument.
15. It should follow the International Safety Standards and requirements i.e. should have ISO / CE certificate
16. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
17. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC



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Liquid Nitrogen Storage Tank
Specifications

1. Tank capacity should be more than 40 lits.
2. It should have vertical Configuration.
3. Static holding time of the tank should be ≥ 45 days.
4. It should have minimal static evaporation rate.
5. Tank should be preferably with a Nitrogen level Monitor.
6. Number of racks should be ≥ 4 with box capacity per rack ≥ 5 (with vial capacity of ≥ 700).
7. Should have super insulation along with vacuum insulation.
8. Should be made of corrosion resistant stainless steel or aluminium.
9. Should be light weight and preferably be supplied with cart for ease of moving.
10. Should be FDA or CE approved product
11. Three years warranty, Five years CMC should be available with service centers in close proximity.
12. User/technical/Maintenance manuals to be supplied.
13. Working manual should be provided.

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Water purification system

Specification

There should be either two separate systems or separate modules in single system to produce and deliver Type II and Type I water having following specifications:

A. Module / System 1. for TYPE II water

1. This module / system should be capable of producing Type II water with following quality standards:

Resistivity.....	10- 15 Mega Ohms @ 25 deg C
TOC (ppb)	<30
Flow Rate (L/hr).....	10
Bacteria.....	< 10 cfu/ml
Water Recovery.....	upto 50%
Silica Rejection.....	99.9%

2. Module should have following units:

- a. Pretreatment unit made of Anti scaling compound, 0.5 micron depth filter and activated Carbon beads
- b. Pressure gauges and Booster pump automatic cut off to maintain the flow rate in the module.
- c. Reverse Osmosis (RO) unit made up of high flux thin film composite polyamide RO membrane with output capacity of 10 lit/hr and 94- 99⁰ rejection, high Recovery loop with capillary tube and diaphragm valve to reduce the water wastage to drain and conductivity cells before and after RO to provide the efficiency of the membrane in rejecting the contaminants as well as the permeate water quality.
- d. Mixed bed ion electro deionization (EDI) module with auto regeneration by a weak electric current, eliminating the need for chemical regeneration or replacement of deionization resin cartridges. Carbon beads at cathode of the EDI module to prevent scaling of the module. Facility for conductivity measurement of Type II water.
- e. Storage unit with polypropylene or PE tank of 30 liters capacity & a programmed

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B. Module / System 2. for TYPE I water

1. This module / system should be capable of producing Type I water at the rate of product water delivery 1.5 L/min with following quality standards:

Resisitivity	> 18.2 Mega Ohms @25 deg C
TOC	< 1 PPb
Bacteria	< 0.1cfu/ml
Particle>0.1 pm	< 1 per ml
Endotoxin	< 0.001 EU/ml
RNase and DNase	free

2. Module should have following units:

- a. UV-Oxidator unit with UV light energy 185 nm & 250 nm with dual wavelengths.for the oxidation of organic material in the water.
- b. Polisher unit consisting of electronic grade mixed resin for removal of inorganic material and selected carbon and electronic grade mixed resin for removal of organic material which are required for achieving resistivity >18.2 Mega Ohms and low TOC levels.
- c. Ultra filtration unit consisting of hollow fiber membrane for removal of endotoxins, RNase, DNase and DNA.
- d. Flexible Dispenser with easily accessible modes, manual and volumetric dispensing, should have a choice of point-of-use final filter options, including a final filter with 0.22 pm pore size, and an FDA- registered medical device, to meet individual needs.
- e. Facility to measure the conductivity, TOC measurement and quality standard parameters at appropriate phases.
- f. The system should incorporate a fully comprehensive, graphic color LCD display to provide information
 - On system status and performance parameters,
 - On routine maintenance needs, and
 - On alarms for troubleshooting in the event of system malfunction and graphic icons regarding tank level.
- g. To ensure on-time reordering of the pre-treatment consumables, the system will have automatic warnings.

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- h. To prevent deterioration of water quality during periods of non-use, the system should be able to recirculate water to maintain high water quality.
- i. There should be constant communication between the ultrapure water system and the feed tank to ensure that there is always a constant supply of water to the polishing portion of the system.
- j. The water system should incorporate a built-in Quick Reference Guide for immediate understanding of the main operations.
- k. Should be FDA or,CE ori.S-rapproved product.
- l. Should provide 3 years warranty with 5 years comprehensive CMC which should be available with service centers in close proximity.
- m. User/Technical/Maintenance manuals to be supplied.
- n. Working manual should be provided.


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Seth G.S. Medical College & KEM hospital Multi-Disciplinary Research Unit (MRU)

Hot air oven

Specification

1. Should have Double wall construction with Inner chamber made of Stainless steel and outer made of Mild steel with Powder coating.
2. Gap between the walls fitted with glass wool insulation to avoid heat loses
3. Should have Silicon rubber door sealing prevents heat loss
4. Temperature range: Ambient 5°C to 250°C.
5. Temperature control accuracy should be $\pm 1^{\circ}\text{C}$ of set point.
6. Temperature uniformity should be $\pm 3.5^{\circ}\text{c}$
7. Inner dimension : 45 x 45 x 45cm (approx.)
8. Outer dimension : 65 x 70 x 95cm(approx.)
9. Control type: Time proportionate digital / Microprocessor PID
10. Temperature display: 3½ digit LED
11. Should be digitally controlled to maintain the temperature.
12. Fiberglass insulation between inner and outer walls.
13. Input voltage: 230Volts AC, 50 Hz
14. Shelves : 2
15. All the control switches & pilot lamps are fitted on the front panel.
16. Trays should be supplied with G.I wire mesh.
17. Air ventilations are placed on top of both sides to remove hot gases
18. Forced convection system with the adjustable air vents provides excellent uniformity
19. Should have visual over temperature alarm indicator.
20. Should have simple keypad input allows easy temperature setting.

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21. Should be FDA or CE or ISI approved product.
22. 3 years warranty, 5 years comprehensive CMC should be available with service centers in close proximity.
23. User/Technical/Maintenance manuals to be supplied.
24. Working manual should be provided.


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MAGNETIC STIRRER
SPECIFICATIONS

1. Accurate speed control.
1. Stirring Speed: 100 rpm to 1400 rpm.
2. Stirring Capacity : 2 litres (at Viscosity of water)
3. With heating function temperature of $\geq 80^{\circ}\text{C}$
4. Magnet : High power steel magnet
5. Stirring Paddle PTFE coated with dimensions (approx.) 7X 15mm, 9X 25mm and 9X35 mm
6. Control : Feedback control system(For linear precise control)
7. Body made of Corrosion resistant material
8. Cabinet : Chemical resistant
9. Working condition : 4 to 60°C
10. Power Supply : 230V, 50Hz. A.C. Supply
11. Should be FDA or CE approved product.
12. All parameters should be matched OR should be superior in order to qualify for the Technical Bid.
13. Three years warranty, Five years CMC should be available with service centers in close proximity.
14. Training to MEC engineers.
15. User/technical/Maintenance manuals to be supplied.
16. Working manual should be provided.
17. Tropicalization:
 - Operating temp.: upto 32°C
 - Storage temp: upto 60°C
 - Voltage 220-240v / 50 Hz
 - Relative humidity: Upto 90% non-condensing



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Multi channel auto pipettes (8 and 12 channel)

Specifications :

1. Multi channel auto pipettes should be ideal for all standard 96 well formats
2. Multiple piston assembly for superior accuracy and reproducibility
3. 8 and 12 channel models with atleast four overlapping volume ranges
4. There should be minimized risk of contamination with safe cone filters and Fully autoclavability
5. Volume Range 1-10 μ l, 20-200 μ l, 30-300 μ l
6. Volume display: 4 digits, magnified clear display (clearly visible from every angle)
7. Volume adjustment should be possible in only a few turns to reach desired volume
8. Calibration display and adjustment which helps you calibrate your pipette to a specific liquid and volume
9. Adjustable digital dial with volume lock to minimize pipetting error and lock the required volume for quick and secure volume setting
10. Streamlined handle provides exceptional user comfort
11. Slender, contoured grip fewer rough edges to make it possible to work in every position
12. Control button and Ejector that requires very low operating force positioned for perfect ergonomics
13. Tip ejection system should requires minimal force
14. Spring loaded tip cone to provide tight fit to the tip
15. Quick connection clip to remove lower part easily
16. Channel indicator which helps in using the pipette the same way round all the time
17. Remove individual channels to Gain flexibility for individual needs
18. Ideal for high throughput and microplate applications
19. Should provide the operating manual and detailed service manual with the instrument.
20. It should follow the International Safety Standards and requirements i.e. should have ISO / CE certificate
21. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
22. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC


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**Incubator
Specifications :**

1. Elegantly designed, double walled with outer suitable insulation Microprocessor controlled
2. Inside wall made of thick stainless steel, outside wall made of Mild Steel Sheet furnished in Epoxy Powder Coating and gap of 75 mm between two walls filled with pure mineral wool
3. Double door system with inner glass door to permit observation inside.
4. Dimensions : Internal - W X D X H (MM) 600 x 600 x 800
External - W X D X H (MM) 710 x 760 x 855
5. Capacity : Approx. 220 ltr
6. Atleast two Chrome plated stainless steel racks/ perforated shelves should be adjustable at any level.
7. Rounded edges for easy cleaning
8. The temperature should be controlled by an Electronic Digital Temperature Controller cum Indicator from 5 deg.C - 50 deg.C with sensitivity of plus minus 0.5 deg. C with Digital temperature setting with an accuracy of 0.1° C.
9. Safety devices to prevent temperature overshoots and Alarms for temperature deviation
10. Engineered to provide at even temperature distribution and rapid heating
11. Adjustable ventilation by means of top exhaust duct
12. Electric Supply : 220VAC, 50/60 Hz
13. PID Controller with integrated time 0 to 99 hours, having one ramp & soak profile should be fitted in above instrument.
14. Should provide the operating manual and detailed service manual with the instrument.
15. It should follow the International Safety Standards and requirements i.e. should have ISO / CE certificate
16. Three years comprehensive warranty and 5 year CMC should be available with service centers in close proximity.
17. Should provide yearly calibration certificate including temperature calibration verification test, temperature non-uniformity test and performance diagnostic test within warranty as well as in CMC



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COMPUTERS

Specifications

1. CPU: 4th Generation Intel® Core i7 -4770 (3.50GHz, 8MB L3 Cache and 4cores) or higher/ better.
2. Chipset & MBD: Minimum Intel Q87 Express or equivalent or higher series Chipset on Intel / OEM.
3. Motherboard Memory: Min 8GB RAM, 1600 MHz, non-ECC DDR3 SDRAM dual channel with 4 DIMM slots, expandable to 32GB or more.
4. Hard Disk Drive: Min. 1TB SATA HDD at 7200 rpm, upgradable to 2 HDD Suitable storage controllers.
5. Graphics: Min.1GB NVidia or AMD or equivalent Graphics on PCI:
6. Monitor: Min. 21 inch LED monitor with Min Resolution: 1920 x 1080.
7. Keyboard: OEM's Standard windows KBD.
8. Mouse: OEM's USB 2 button Optical Scroll Mouse.
9. Printer & Scanner: Colour Inkjet printer, with USB 2.0 Connectivity, monthly page capacity ≥ 800 pages, wireless printing (built in WiFi), print speed of ≥ 10 for black & white and ≥ 6 for colour, compatibility with at least A4 and A5 size papers.
Scanner should be flatbed with resolution of 1200x1200 dpi or better, compatibility with at least A4 size paper, colour scanning, scan format of PDF, JPG, DOC/X, PNG, TIFF, XLS/X
10. Audio: Integrated internal speakers with min 1.5W Min. Bays: Internal: 2 x 3.5" External: 1x 5.25".
11. Optical Drive: One Internal SATA 8X or better DVD +/- RW (DVD writer). The make of the drive should be of same make (OEM) of system. Network: Min. Integrated 10/100/1000.
12. Operating System: Min. Preinstalled Genuine Windows 8 Professional 64bit or the latest version with media & documentation and certificate of authenticity.
13. Cabinet: Tower / Mini Tower.
14. Operating system: Minimum MS Windows version 8 (licensed) or above.
15. MS office 2013.
16. Anti-virus program Quick Heal licensed for three years from the date of purchase.

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17. Safety Certification: Min. FCC for EMI and UL / CE for safety the product details / brochure should be available in OEM's website and should be enclosed with the technical quote. Indicate the website address for the complete details of the quoted item.
18. Input voltage: 230V, 50Hz.
19. Three years warranty, Five years CMC should be available with service centers in close proximity.
20. User/technical/Maintenance manuals to be supplied.
21. Working manual should be provided.



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ELISA READER

SPECIFICATIONS

1. Should have reading capability of 1 to 96 wells individually.
2. Should have a linear measurement range of 0 to at least 3.000 Abs.
3. Should have a photometric accuracy of $\pm 3\%$ or better.
4. Should have a resolution of 0.001 Abs.
5. Should have variable speed plate shaking capability.
6. Should have wavelength range from 340 to 750 nm and should have easy access 6-8 position filter wheel.
8. Should have automatic filter selection.
9. Should have automatic calibration before each plate reading.
10. Should have at least 6 second reading speed.
11. Should have the facility of storing at least 90 assay protocols
12. Capable of doing multi standard tests and controls.
13. Should have different types of blanking facility like air wise and well wise.
14. Should be capable of reading U, V and flat type wells
15. Should be capable of reading 8 or 12 well strip plates. Should have the option of single and dual wavelength measurement
16. Should use halogen/LED light source and at least four spare bulbs should be provided.
17. The manufacturer should provide calibration certificate, Installation qualification, Operation qualification and performance qualification certificates on installation
18. Should provide with necessary software for using the instrument through PC and should also be provided with external laser printer
19. Should be supplied with branded online UPS for 30 mins backup with dust cover for the same
20. Acrylic cover for the instrument to be provided.
21. Should provide the operating manual and detailed service manual with the instrument.
22. Should have free software and pre-programmed applications including basic data evaluation.
23. Computer Specifications-
CPU Intel core i7 processor, 4 GB RAM, 1 TB Hard disk, 2 GB Graphic card, Monitor: 17" LED with keyboard, optical mouse, Wi-fi, Wireless key board and mouse, 64 bit and latest version of Licensed Microsoft Operating system, antivirus, with licensed MS office, Laser printer (>20 pages/ min) > 5000 pages refilling of cartridge.
24. Power supply: 230 V +/- 15%, 50Hz +/- 3%, built in facility to work over a wide range of voltage fluctuations
25. Tropicalization- Operating Room temp: upto 40°C.
Storage Room Temp.: upto 60°C.
Relative humidity: upto 90%, Non Condensing
26. Should provide the operating manual and detailed service manual with the instrument.

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27. It should follow the International Safety Standards and requirements i.e. should have European CE marking / US FDA approval along with declaration of conformity or US FDA approved.
28. Three years Comprehensive Warranty from date of installation with 5 years Comprehensive Maintenance Contract and should provide technical support and required spares and consumables for 8 years after warranty period is over duly supported by their principal
29. Should provide yearly calibration certificate within warranty as well as in CMC.
30. User's list with the addresses and contact No.'s to be provided
31. Training to MEC Engineers for servicing and user department staff for operating and maintaining the instrument.
32. Demonstration compulsory within 15 days of intimation



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ELISA WASHER

SPECIFICATIONS

1. Should have capability to wash flat, U or V bottomed micro 8 well strip plates.
2. Should have 8 way manifold.
3. Should have more than 50 wash program memory.
4. Should have programmable washing time, volume and soaking time and plate shaking capacity.
5. Should have minimum 6 wash cycles.
6. Should have residual volume less than 5 μ l to 7 μ l.
7. Should have in-built vacuum and dispensing pumps to ensure accurate and quiet washing.
8. Should have waste bottle with full bottle alarm or sufficient mechanism to avoid spillage and damage to equipment. Should provide at least two spares each of wash buffer bottle and waste bottle.
9. Strip and Plate washing modes should be present. Soak time should be upto 10 sec in strip mode and 0 – 30 mins in plate mode.
10. Wash volume should be 1000 μ l.
11. The manufacturer should provide calibration certificate, Installation qualification, Operation qualification and performance qualification certificates on installation
12. Acrylic cover for the instrument to be provided.
13. Power supply: 230 V +/- 15%, 50Hz +/- 3%, built in facility to work over a wide range of voltage fluctuations
14. Tropicalization- Operating Room temp: upto 40 $^{\circ}$ C.
Storage Room Temp.: upto 60 $^{\circ}$ C.
Relative humidity: upto 90%, Non Condensing
15. Should provide the operating manual and detailed service manual with the instrument.
16. It should follow the International Safety Standards and requirements i.e. should have European CE marking / US FDA approval along with declaration of conformity or US FDA approved.
17. Three years Comprehensive Warranty from date of installation with 5 years Comprehensive Maintenance Contract and should provide technical support and required spares and consumables for 8 years after warranty period is over duly supported by their principal
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