Invitation of tender for:

“Upgradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital”

e-TENDER

(Item Rate)

(SAMPLE DT FOR KEM HOSPITAL)

Name of work: **"Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital."**

(http://www.kem.edu).

Prepared by:

J.E.(M&E) KEMH

Checked by:

S.E.(M&E) KEMH

Sd/-

A. E. (M&E) KEMH **Dean (KEMH)**

Office of the:
A. E. (M&E) KEMH
King Edward Memorial Hospital,
E. Borges Road, Parel,
Mumbai- 400 012

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E-TENDER NOTICE

KEM HOSPITAL, PAREL, MUMBAI 400012

E-TENDER NOTICE

No. KEMH/ 6735 /AEME. Dt: 18.03.2019

This is a Tender notice. The DEAN (G.S.M.C & K.E.M.H.) invites the following tenders. The tender copy can be downloaded from (G.S.M.C & K.E.M.H.)'s portal (http://www.kem.edu).

DEAN(G.S.M.C. & K.E.M.H.) has opened a help desk at the K.E.M Hospital Assistant Engg (M&E)'s office to help the bidders in this regard.

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

Sr. No.	Name of the work	Earnest Money Deposit – Rs	Cost of E-TenderRs.	Bid Start Date & time	Bid End Date & time
1	2	3	4	5	6
2	**Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital**	3,00,000/-	7000/- plus GST@ 5%	20.03.2019 (15:00 Hrs)	30.03.2019 (15:00 Hrs)
3	Eligibility criteria(Packet 'A')	02.04.2019		11:00 Hrs	
4	Technical Bid (Packet 'B')	02.04.2019		11:05 Hrs	
5	Commercial Bid (Packet 'C')	02.04.2019		11:30 Hrs	

The bidder shall have to pay the "Cost of Downloading Tender" as mentioned in the above table through online payment gateway before downloading the tender documents.

All the Bidders, are required to pay the Earnest Money Deposit (E.M.D.) of specified amount in favor of MEDICAL COLLEGE LEVEL VRDL.

The DEAN (G.S.M.C & K.E.M.H.) reserves the rights to accept any of the application or reject any or all the application received for above works, without assigning any reasons thereof.

Tender bidders shall note that, any corrigendum issued regarding this tender notice will be published on the K.E.M.H. portal only. No corrigendum will be published in the local newspaper.

1) **Bid Price :**
   a) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
   b) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to the adjustment on any account.
2) **Validity of Quotation:**
   Quotation shall remain valid for a period of not less than 30 days after the deadline date specified for submission.
3) **Evaluation of Quotations :**
   The DEAN (G.S.M.C. & K.E.M.H.) shall evaluate and compare the quotations determined to be substantially responsive i.e.
   a) Are properly signed.
   b) Conform to the terms and conditions and specifications.
4) **Award of Contract/Order:**
   The DEAN (G.S.M.C. & K.E.M.H.) will award the contract/order to the bidder whose quotation has been determined
   to be substantially responsive and who has offered the lowest evaluated quotation price.

a) Notwithstanding the above, the DEAN (G.S.M.C. & K.E.M.H.) reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

b) The bidder whose quotation is accepted will be notified about the award of Contract by the DEAN (G.S.M.C. & K.E.M.H.) prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

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

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

Sd/-

H.O.D. (MICROBIOLOGY)

(G.S.M.C. & K.E.M.H.)

HEADER DATA

HEADER DATA

Tender Document No	Bid no. 6735
Name of Organization	
Subject	"Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital."
Cost of Tender	(Rs.7000.00 + GST@ 5%).
Cost of E-Tender(Estimated Cost)	Item Rate
Bid Security Deposit/ EMD	Rs.3,00,000.00
Date of issue and sale of tender	20.03.2019 from13:00Hrs
Last date &time for sale of tender & Receipt of Bid Security Deposit	30.03.2019 from13:00Hrs
Submission of Packet A, B & C	30.03.2019 from13:00Hrs
Pre-Bid Meeting	N/A
Opening of Packet A	02.04.2019 from11:00Hrs
Opening of Packet B	02.04.2019 from11:05Hrs
Opening of Packet C	02.04.2019 from11:30Hrs
Address for communication	Office of the:- Assistant Engineer(M&E) King Edward Memorial Hospital, E. Borges Road, Parel, Mumbai- 400 012
Venue for opening of bid	in Dean (KEM)'s office.

This tender document is not transferable.

The DEAN(G.S.M.C. & K.E.M.H.) reserves the rights to accept any of the application or reject any or all the application received for above subject without assigning any reason thereof.

Sd/-

H.O.D. (MICROBIOLOGY)

(G.S.M.C. & K.E.M.H.)

ELIGIBILITY CRITERIA

ELIGIBILITY CRITERIA

The Tenderers fulfilling the following criteria are eligible to apply for this tender.

1. The Work should be carried out to the specifications stated under however not limited to the same.
2. The Bidder should have in the last 7 years, successfully completed as a prime contractor at least one similar work of Government institute.

And also having experience of completed 3 similar type of work of any research lab / pharma lab / institute.
Copies of Completion certificates issued by the clients should be submitted along with the bid

3. The Laboratory shall be delivered fit for the purposes for which it is intended to as per the requirement and Satisfaction of the Client and further shall satisfy all norms of VRDL Lab prescribed by competent authority.
4. Furnishing of design, drawings from the competent authorities shall be part of the scope of the work.
5. Bidders must have an ISO 9001: 2015, CE & GMP Certifications.

6. The intending tenderer should offer site visit to similar & equivalent installation carried out by them, before submitting tender.

Tenderer must upload documentary evidences regarding above information specified in the Schedule of Post Qualification.

7. The Bidder should have an average annual turnover of at least Rs.45 Lakh or above in the last 3 consecutive financial years And Annual Turnover per year should minimum 30 lakh and should be profit making during the last two years. Copies of the following documents should be submitted along with the Technical Bid.

(a) Audited Balance Sheet including Income and Expenditure statement, Profit and Loss Account of last two years i.e. 2016-17, and 2017-18, duly certified by Chartered Accountant shall be submitted.

(b) Goods & Service Tax registration certificate.

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

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

8. The Tenderer should have the Registered / Branch Office /service facility in Mumbai / Navi Mumbai / Mumbai Metropolitan Region.
9. To verify eligibility criteria the tenderer has to submit satisfactory performance certificates from institutions where he has worked during last two years.

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Note: The M.C.G.M. reserves the right to cancel the tender without assigning any reason for which no compensation shall be payable.

DISCLAIMER

DISCLAIMER

The information contained in this e-tender document or provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of the DEAN(G.S.M.C. & K.E.M.H.)), hereafter also referred as “The Authority “, or any of its employees or advisors, is provided to Applicant(s) on the terms and conditions set out in this e-tender and such other terms and conditions subject to which such information is provided.

This e-tender includes statements, which reflect various assumptions and assessments arrived at by the (DEAN(G.S.M.C. & K.E.M.H.)) in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. This e-tender may not be appropriate for all persons, and it is not possible for the (DEAN(G.S.M.C. & K.E.M.H.)), its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this e-tender. The assumptions, assessments, statements and information contained in this e-tender may not be complete, accurate, adequate or correct. Each Applicant should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and

information contained in this e-tender and obtain independent advice from appropriate sources.

Information provided in this e-tender to the Applicant(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The (DEAN(G.S.M.C. & K.E.M.H.)) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed here.

The (DEAN(G.S.M.C. & K.E.M.H.)), its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant or Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this e-tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the e-tender and any assessment, assumption, statement or information contained therein or deemed to form part of this e-tender or arising in any way with pre-qualification of Applicants for participation in the Bidding Process.The (DEAN(G.S.M.C. & K.E.M.H.)) also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Applicant upon the statements contained in this e-tender.

The (DEAN(G.S.M.C. & K.E.M.H.)) may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this e-tender.

The issue of this e-tender does not imply that the (DEAN(G.S.M.C. & K.E.M.H.)) is bound to select and short-list pre-qualified Applications for Bid Stage or to appoint the selected Bidder or Concessionaire, as the case may be, for the Project and the (DEAN(G.S.M.C. & K.E.M.H.)) reserves the right to reject all or any of the Applications or Bids without assigning any reasons whatsoever.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by The (DEAN(G.S.M.C. & K.E.M.H.)) or any other costs incurred in connection with or relating to its Application. All such costs and

expenses will remain with the Applicant and the DEAN(G.S.M.C. & K.E.M.H.) shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the Bidding Process.

INTRODUCTION

INTRODUCTION

1. Background :

The covers an area of 437.71sq.kms.with a population of 1.24 Crores as per census of 2011. The metropolis accounts major portion of India's international trade and government's revenue, from being one of the foremost centers of education, science and technological research and advancement.

The Mumbai Metropolis has historic tradition of strong civic activism dedicated to the cause of a better life for all its citizens. And it's the (DEAN(G.S.M.C. & K.E.M.H.)), hereafter called the "corporation", the primary agency responsible for urban governance in Greater Mumbai.

DEAN(G.S.M.C. & K.E.M.H.) (The Authority) is one of the largest local self-governments in the Asian Continent. In observance of historic traditions of strong civic activism, with the change in time and living conditions to match with the urbanization, DEAN(G.S.M.C. & K.E.M.H.) has mainly focused in providing almost all kinds of engineering services viz, Hydraulics, storm water drain, sewerage, water supply projects, roads, bridges, solid waste management, and environmental services. Beside this, the DEAN(G.S.M.C. & K.E.M.H.) is also providing dedicated services in various segments such as Health, Primary Education as well as the construction and maintenance of Public Markets and Slaughter Houses.

DEAN(G.S.M.C. & K.E.M.H.) is an organization having different departments, right from engineering depts. to health depts. Moreover we have other dept. like education, market, fire brigade dept., Octroi and other such departments where quite a good number of staff members are working.

2. Scope of Work:

DEAN(G.S.M.C. & K.E.M.H.) is primarily an organization, which in the interest of citizens and with the speed of urbanization deals with the variety of the infrastructure services and delivered to the public by different departments like Water Supply Projects, Sewerage Projects, Hydraulics, Storm Water Drain/Roads and bridges and Building Construction etc.

Please refer SECTION – 7 for PROJECT SPECIFIC SCOPE OF WORK

(Please refer the said SCOPE OF WORK Attached Herewith Separately)

The tender is available on DEAN(G.S.M.C. & K.E.M.H.) portal, http://www.kem.edu.), as mentioned in the Header Data of the tender. The tenders duly filled in should be uploaded and submitted online on or before the end date of

submission. The Packet **'A'**, Packet **'B'** & Packet **'C'** of the tenderer will be opened as per the time-table shown in the Header Data in the office of Dean (KEMH).

The DEAN(G.S.M.C. & K.E.M.H.) reserves the right to reject all or any of the e-Tender(s) without assigning any reason at any stage. The dates and time for submission and opening the tenders are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the DEAN(G.S.M.C. & K.E.M.H.) Portal (http://www.kem.edu).

INSTRUCTIONS TO APPLICANTS

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Scope of Application

The Authority wishes to receive Applications for Qualification in order to SELECT experienced and capable Applicants for the Bid Stage.

Eligibility of Applicants (Also refer document **"HEADER DATA & CRITERIA") ::**

The (DEAN(G.S.M.C. & K.E.M.H.)) invites e-tender to appoint Contractor for the aforementioned work from contractors of repute, multidisciplinary engineering organizations i.e. eminent firm, Proprietary/Partnership Firms/ Private Limited Companies/ Public Limited Companies/Companies registered under the Indian companies' act 2013, the contractors registered with the , (DEAN(G.S.M.C. & K.E.M.H.)) in **Class …… as per old registration and Class …… as per new registration** and from the contractors/firms equivalent and superior classes registered in Central or State Government/Semi Govt. Organization/Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with DEAN(G.S.M.C. & K.E.M.H.) will have to apply for registering their firm within three months' time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

~~1.1 Technical Capacity~~

~~The tenderer(s) in their own name should have satisfactorily executed the work of similar nature DEAN(G.S.M.C. & K.E.M.H.) /Semi Govt. /Govt. & Public Sector Organizations during **last seven (7) years** ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar~~

~~nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)~~

~~**a) Three** similar **completed** works **each** of value not less than the value equal to **20**% of estimated cost put to tender~~

~~**Or**~~

~~b) **Two** similar **completed** works **each** of value not less than the value equal to **25%** of estimated cost put to tender~~

~~**Or**~~

~~c) **One** similar **completed** work of value equal and or not less than the **40%** of estimat-ed cost put to tender~~

~~The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.~~

~~**Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:**~~

~~- made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or~~

~~– Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc~~

D. **Equipment Capabilities as required for this work**

a) **Regular and Routine works**: The successful bidder will make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge. **The successful bidder and, to that effect he will ensure commitment on an undertaking on Rs.500 stamp paper to be submitted**

along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of DEAN(G.S.M.C. & K.E.M.H.).

b) **New and Original Works**: The bidder should, undertake their own studies and **furnish with their bid,** a detailed construction planning and methodology supported with assessment study of requirements of equipment/plants & machineries to allow the employer to review their proposal. The bidder will ensure his commitment to make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of DEAN(G.S.M.C. & K.E.M.H.).

Note:

1.Bidders shall submit the undertaking for equipment capability and other undertakings as such on a single Rs. 500/- stamp paper.
2. Insistence of availability of equipments/plants at a particular distance from site should not be made in the tender document.

E) Technical Personnel

The contractor and/or its managerial staff should have qualification/experience appropriate to
the function they fulfill. The minimum standard shall be increased by asking that at least one
number or more of the contractor or its managerial staff have acquired qualifications or work
ex-perience to the needs of the contract. The minimum standard may also state that the person
or per-sons responsible for managing the works must have a minimum of no's of years' experience work-ing on similar nature of projects.

1. ***For fixing requirement of Technical Staff as required for this work.***

(B) General Guidelines for Fixing Requirement of Technical Staff

Cost of work	Requirement of Technical		Staff	Minimum	Designation
(Rs in Crore)	Qualification	Number			

More than 10 to 20	I) Project Manager with degree in corresponding discipline of Engineering	1		10	Principal Technical representative
	ii) Graduate Engineer	1		5	Technical Representative
	iii) Graduate Engineer	2		2	Project/Site Engr. And project planning / Billing Engineer
	OR Diploma Engineer	2		5	
More than 5 to 10	i) Graduate Engineer	1		5	Principal Technical Representative
	ii) Graduate Engineer	2		2	Project/Site Engineer
	OR Diploma Engineer	2		5	Engineer
More than 1.5 to 5	i) Graduate Engineer	1		5	Principal Technical Representative
	ii) Graduate Engineer	1		2	Project/Site Engineer
	OR Diploma Engineer	1		5	Billing Engineer
Up to1.5	i) Graduate Engineer	1		2	Principal Technical Representative
	Or Diploma Engineer	1		5	Project/Site Engr. And project planning / Billing Engineer

Notes-1 : **"**Cost of work**"**, in table above, shall mean the agreement amount of the work.

2. Rate of recovery in case of non-compliance of the clause be stipulated at followingrates :-

Sr.No	Qualification	Experience(years)	Rate of Recovery
1	Project Manager with degree	10	Rs.30000/-p.m.
2	Graduate Engineer	5	Rs.25000/-p.m.
3	Graduate Engineer	2	Rs.15000/-p.m.
4	Diploma Engineer	5	Rs.15000/-p.m.

F. TIME PERIOD OF THE PROJECT :

Entire project should be completed and delivered within 4 **Months** of time, from the date of award of contract that includes Monsoon.

The time allowed for carrying out the work as entered in the Tender shall be strictly observed by the Contractor and shall be reckoned from the date on which the Letter of Acceptance is given to the Contractor. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence as time being deemed to be the essence of the contract on the part of the Contractor. On failing to do so, the Contractor shall pay as compensation an amount which shall be governed as per Clause - 8(e) of Standard General Conditions of Contract.

The Contractor should complete the work as per phase given below :

¼ of the work in .. ¼ of the time

½ of the work in .. ½ of the time

¾ of the work in .. ¾ of the time

Full of the work in .. Full of the time

Full work will be completed in ….. One **Months** including monsoon.

The programme for completion of work shall be a part of the Contract Document in the form of Bar Chart / GANTT Chart. The Contractor is supposed to carry out the work and keep the progress as per Bar Chart/GANTT Chart. The Contractor shall complete the work as per the Schedule given in the Contract and the programme submitted by the Contractor.

G. <u>Contract Execution :</u>

All required documents for execution of the contract shall be submitted within 30 days from the date of issue of letter of acceptance. If the documents are not submitted within the stipulated time a penalty of Rs 5000/- per day will be applicable to the contractor. All contract documents need to be duly affixed with stamp duty properly signed along with evidence/proof of payment of security/contract deposit/ within 30 days from the date of letter of acceptance received by him

h) If the amount of the Contract Deposit to be paid above is not paid within 30 days from the date of issue of Letter of Acceptance, the Tender / Contractor already accepted shall be considered as cancelled and legal steps be taken against the contractor for recovery of the amounts.

i) The amount of Security Deposit retained by the DEAN(G.S.M.C. & K.E.M.H.) shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete the rectification work within the period up to which the contractor has agreed to maintain the work in good order, the amount of security deposit retained by DEAN(G.S.M.C. & K.E.M.H.) shall be adjusted to-wards the excess cost incurred by the Department on

rectification work.

j) <u>Action when whole of security deposit is forfeited :</u>

In any case in which under any Clause of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installments or in the case of abandonment of the work owning to serious illness or death of the contractor or any other cause, the Engineer on behalf of the Municipal Commissioner shall have power to adopt any of the following process, as he may deem best suited to the interest of DEAN(G.S.M.C. & K.E.M.H.) -

(a) To rescind the contract (for which recession notice in writing to the contractor under the head of A.E. Engineer shall be conclusive evidence) and in that case, the security deposit of the contract shall stand forfeited and be absolutely at the disposal of DEAN(G.S.M.C. & K.E.M.H.).

(b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the un-executed part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the A.E.Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally, shall be final and conclusive against the contractor.

(c) To order that the work of the contractor be measured up and to take such part thereof as shall be un-executed out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the

new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the un-executed work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under Clause (a) above, the contractor shall not be entitled to recover or be paid any sum for any work therefor actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in Clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors amount of excess shall be deducted from any money due to the contractor, by DEAN(G.S.M.C. & K.E.M.H.) under the contract or otherwise, howsoever, or from his security deposit or the sale proceeds thereof provided, however, the contractor shall have no claim against DEAN(G.S.M.C. & K.E.M.H.) even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clauses (a), (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchase or procured any materials or entered in to any engagements or made any advance on account of or with a view to the execution of the work or the performance of the contract.

k) <u>Contract may be rescinded and security deposit forfeited for bribing a public officer or if contractor becomes insolvent</u>

If the contractor assigns or sublets his contracts or attempt so to do, or become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do or if

bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given promised or offered by the contractor or any of his servants or agents through any public officer, or person in the employ of DEAN(G.S.M.C. & K.E.M.H.)/Govt. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract the Engineer In-charge may thereupon, by notice in writing rescind the contract and the Security Deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of DEAN(G.S.M.C. & K.E.M.H.) and the same consequences shall ensure as if the contract had been rescinded under above clause J hereof; and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

SUBMISSION OF TENDERS

SUBMISSION OF TENDERS

PACKET "A" (Eligibility criteria & EMD**)**

Packet 'A' shall contain requisite payment towards Earnest Money Deposit (EMD). All the Bidders, are required to pay the EMD in favour of MEDICAL COLLEGE LEVEL VRDL on or before the due date . The tenderer shall pay the EMD through Demand draft (DD) only. **The tenderer shall submit such DD physically in Packet'A' on or before the date of submission of tender. If such DD is not submitted physically in Packet'A', the tender shall be treated as non-responsive and shall not be opened.**

PACKET – B (Technical Bid)

The Packet 'B' shall contain certified copies of the following documents

Scrutiny of this packet will be done strictly with reference to only the certified copies of Documents enclosed in packet 'A'

a) Valid Bank Solvency Certificate of Minimum Solvency amount Rs. 20,00,000/-as governed by Registration Rules in force for respective Class of Contractor for Civil and M&E works.

b) A document in support of Registration under GST.

c) Certified copies of valid 'PAN' documents and photographs of the individuals, owners, Karta of Hindu undivided Family, firms, private limited companies, registered co-operative societies, partners of partnership firms and at least two Directors, if number of Directors are more than two in case of Private Limited Companies, as the case may be. However, in case of Public Limited companies, Semi Government Undertakings, Government Undertakings, no 'PAN' documents will be insisted.

d) Latest Partnership Deed in case of Partnership firm duly registered with Chief Accountant (Treasury) of DEAN(G.S.M.C. & K.E.M.H.).

e) tender document except Schedule of quantities & rates.

f) The bidders shall categorically provide their Email-ID in packet 'B'.

g) Certified copies of documents specified in the tender document.

h) Certified documents regarding specified ELIGIBILITY criteria.

NOTE:

- If the tenderer(s) withdraw tender offer during the tender validity period, his entire E.M.D shall be forfeited.
- If it is found that the tenderer has not submitted required documents in Packet "A" then, the shortfalls will be communicated to the tenderer through e-mail only and compliance required to be made within a time period of **three working days** otherwise they will be treated as non-responsive.

Regular and Routine works : The successful bidder shall make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge. The successful bidder and, to that effect he will ensure commitment on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of DEAN(G.S.M.C. & K.E.M.H.).

New and Original Works: The bidder should, undertake their own studies and **furnish with their bid,** a detailed construction planning and methodology supported with assessment study of requirements of equipment/plants & machinery to allow the employer to review their proposal. The bidder shall ensure his commitment to make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of DEAN(G.S.M.C. & K.E.M.H.).

~~***Special Works****: The concerned Ch.Eng. shall enlist the equipments in the tender document justified for the project and ensure the capacity of the bidder for the same with the approval of concerned AMC.*~~

~~**Note :*Insistence of availability of equipments/plants at a particular distance from site should not be made in the tender document.***~~

i) Details of works in hand (Proforma VI-A & VI-B), along with copies of work orders & attested copies of percentage of works completed or part thereof.

ii) The undertaking of Rs.500/- stamp paper as per the proforma annexed in 'Annexure B &C'

a) The successful bidder shall submit valid registration certificate under E.S.I.C., Act 1948, if the tenderer has more than 10 employees /persons on his establishment (in case of production by use of energy) and 20 employees/persons on his establishment (in case of production without use of energy) to DEAN(G.S.M.C. & K.E.M.H.) as and when demanded. In case of less employees/persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200 stamp paper as per circular u/no. CA/FRD/I/65 of 30.03.2013.

b) The successful bidder shall submit valid registration certificate under E.P.F. & M.P., Act 1952, if tenderer has more than 20 employees/persons on his establishment, to DEAN(G.S.M.C. & K.E.M.H.) as and when demanded. In case if the successful bidder has less employees/persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200 stamp paper as per circular u/no. CA/FRD/I/44 of 04.01.2013.

Note:

- If it is found that the tenderer has not submitted required documents in Packet "B" then, the shortfalls will be communicated to the tenderer through e-mail only and compliance required to be made within a time period of *three working days* otherwise they will be treated as non-responsive.

FOLDER "C" :

Bidder shall upload the duly filled 'Special Annexure-I' with the details about the GST in PDF format IN THIS FOLDER ONLY. Bidder shall not upload 'Special Annexure-I' in Packet A or Packet B folder. If bidder does not upload 'Special Aneexure-I' in folder C or uploads 'Special Annexure-I' in packet A or B folder, such bidders shall be treated as Non-Responsive.

Folder C can be visible/opened only after opening of Commercial packet, which shall be opened as per usual practice in the presence of Accounts Officer and hard copy of documents/'Special Annexure-I' uploaded by bidders shall be taken and be signed by the deprtment's concerned officer and Account Officer in presence of whom the bid is opened and be kept in sanction file for future reference.

Annexure'A' for TAX

(Duly filled data in following format, to be submitted in Folder "C" as mentioned in Standard Bid Conditions)

G.S.T. and other state levies /cess which are not subsumed under GST will be applicable. The tenderer shall quote rate/s inclusive of all taxes. It is clearly understood that DEAN(G.S.M.C. & K.E.M.H.) will not bear any additional liability towards payment of any Taxes & Duties.

Wherever the Services to be provided by the Tenderers falls under **Reverse Charge Mechanism**, the Price quoted shall be exclusive of GST, but inclusive of Taxes / Duties / Cess other than GST, if any.

The Tenderer shall mandatorily upload the information of applicable tax in the pro-forma as enclosed under 'Special Annexure-I' given below in Folder 'C'. Wherein the tenderer shall indicate in the tabular format, all the applicable taxes and their percentages and the tax amount considered while quoting the tender.

Rates accepted by DEAN(G.S.M.C. & K.E.M.H.) shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates; increase in taxes / any other levies / tolls etc, except that payment / recovery for overall market situation shall be made as per price Variation.

Further Chapter XXI-Miscelleneous, Section 171(1) of GST Act, 2017 governs the 'Anti Profiteering Measure' (APM).

As per the provision of this section, 'Any reduction in the rate of tax on any supply of goods or services or the benefit of input tax credit shall be passed on to the recipient by the way of commensurate reduction in prices'.

Accordingly, the contractor should pass on the complete benefit accruing to him on account of reduced tax rate or additional input tax credit, to DEAN(G.S.M.C. & K.E.M.H.).

Further, all the provisions of GST Act will be applicable to the tender.

SPECIAL ANNEXURE - I

Sr. No.	SAC/ HSN Code	Item/ Work Description	Amount iuclusl ve of all taxes and duties.	Bidder to indicate the amount of applicable taxes.								
				CGST		SGST		IGST		Other taxes if any		Total amount of taxes
				%	Amount	%	Amount	%	Amount	%	Amount	
TOTAL												

ITEM DATA (Earlier Packet C)

PACKET – C

a) tender filled the item rate in case of item rate bidding process OR percentage rate in case of percentage rate bidding process tender on line.

in either percentage plus or minus (above or below), or at par. (There is no separate provision to quote % in physical form, this is a part in Header Data of online Tendering). For Packet 'C' tenderer(s) will fill data in 'Item Data Tab' in Service Line Item via Details and quotes his percentage variation figures. **(If entered '0' it will be treated as 'at par'**. By default the value is zero only).

Note: In case of rebate/premium of 15% and above as quoted by the tenderer, the rate analysis of major items shall be submitted by L1 and L2 bidder.

BID SECURITY OR EMD

- The Bidder shall furnish, as part of the Bid, Bid Security/EMD, in the amount specified in the Bid Data Sheet. This bid security shall be in favour of the authority mentioned in the Bid Data Sheet and shall be valid till the validity of the bid.
- The tenderers shall pay the EMD through DEMAND DRAFT physically in Packet A physically in favour of the authority.
- Any bid not accompanied by an acceptable Bid Security and not secured as indicated in sub-clause mentioned above, shall be rejected by the Employer as non-responsive.
- The Bid Security of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposits.
- The Bid Security/ EMD of L-3bidder shall be refunded immediately after opening of financial bid but, the EMD/ASD submitted by the L-2 bidder will be returned after issue of P.O to L-1.
- **The Bid Security may be forfeited:**

a) if the Bidder withdraws the Bid after bid opening (opening of technical qualification part of the bid during the period of Bid validity;

b) In the case of a successful Bidder, if the Bidder fails within the specified time limit to:

i. sign the Agreement; and/or

ii. Furnish the required Security Deposits.

The cases wherein if the shortfalls are not complied by a contractor, will be informed to Registration and Monitoring Cell. Such non-submission of documents will be considered as 'Intentional Avoidance' and if three or more cases in 12 months are re-

ported, shall be viewed seriously and disciplinary action against the defaulters such as banning/de-registration, etc. shall be taken by the registration cell with due approval of the concerned AMC.

1. No rejections and forfeiture shall be done in case of curable defects. For non-curable defects the 10% of EMD shall be forfeited and bid will be liable for rejection.

Note:

i) Curable Defect shall mean shortfalls in submission such as:

a. Non-submission of following documents,

i. Valid Registration Certificate
ii. Valid Bank Solvency
iii. Sales Tax Registration/ GST Registration Certificate (VAT)
iv. Certified Copies of PAN documents and photographs of individuals, owners, etc
v. Partnership Deed and any other documents
vi. Undertakings as mentioned in the tender document.

b. No proper submission of experience certificates and other documents, etc.

ii) Non-curable Defect shall mean

a. In-adequate submission of EMD/ASD amount,
b. In-adequacy of technical and financial capacity with respect to Eligibility criteria as stipulated in the tender.

BID VALIDITY

- Bids shall remain valid for a period of not less than **one twenty (180) days** after the deadline date for bid submission specified in Bid Data Sheet. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension.

BID CAPACITY

The bid capacity of the prospective bidders will be calculated as under:
Assessed Available Bid Capacity = (A* N* 2 - B)

Where,

A = Maximum value of Civil Engineering works executed in any one year (year means Financial year) during **the last five years** (updated to the price level of the Financial year in which bids are received at a rate of 10% per year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the Project/Works, **excluding monsoon period**, for which these bids are being invited. (E.g. 7 months = 7/12 year) For every intervening monsoon 0.33 shall be added to N.

B = Value of existing commitments (only allotted works) on the last date of submission of bids as per bidding document and on-going works to be completed during the period of completion of the Project/Works for which these bids are being invited.

Note: The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- Made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

DEFECT LIABILITY PERIOD

•

• The Contractor is expected to carry out the construction work in Workmen like manner so as to meet the requirement and specification for the project. It is expected that the Workmanship and materials will be reasonably fit for the purpose for which they are required.

• Defects or defective work is where standard and quality of workmanship and materials as specified in the contract is deficient. Defect is defined as a failure of the completed project to satisfy the express or implied quality or quantity obligations of the construction contract. Defective construction works are as the works which fail short

of complying with the express descriptions or requirements of the contract, especially any drawings or specifications with any implied terms and conditions as to its quality, workmanship, durability, aesthetic, performance or design. Defects in construction projects are attributable to various reasons.

- Some of the defects are structural defects results in cracks or collapse of faulty defective plumbing, inadequate or faulty drainage system, inadequate or faulty ventilation, cooling or heating systems, inadequate fire systems etc. The defects could be various on accounts of different reasons for variety of the projects.
- The Engineering In charge/Project Officer shall issue the practical completion certificate for the project. During the Defect Liability Period which commences on completion of the work, the Engineering In charge shall inform or the contractor is expected to be informed of any defective works by the Employer's representative of the defects and make good at contractor's cost with an intention of giving opportunity to the contractor of making good the defects appeared during that period.
- It is the contractor's obligation under the contract to rectify the defects that appear during Defect Liability Period and the contractor shall within a reasonable time after receipt of such instructions comply with the same at his own cost. The Engineering In charge/Project Officer shall issue a certificate to that effect and completion of making good defects shall be deemed for all the purpose of this contract to have taken place on the day named in such defect liability certificate.
- If defective work or workmanship or design have been knowingly covered-up or conceived so as to constitute fraud, commencement of the Defect Liability Period may be delayed. The decided period may be delayed until **discover** actually occurs on at least the defect could have been discovered with reasonable diligence, whichever is earlier.
- The DLP Shall be as follows ;

Department	**Type of work**	**DLP**
M & E - KEHM	Regular & routine work	2 Years

M & E - KEMH	Other Works – e.g. Repair	1 Year

- Also, in case of defect, the Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at. The Defects Liability Period shall be extended for as long as Defects remain to be corrected. Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice. The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.
- It is the Completion Stage when the contractor has completed all of the works and fixed all of the defects that were on the list of issue by Engineer-in-charge. When this happens, the engineer must issue a 'Certificate of Completion'. On the issue of 'Certificate of Completion', the 'Defect Liability Period 'starts. The contractor also must issue a 'Certificate statement' as an acknowledgment to the engineer not later than 14 days after the 'Certificate of Completion' has been issued. During the 'Defect Liability Period', the contractor has to obey all written instructions from the engineer to carryout repairs and fix any defects which appear in the Permanent Works. If the contractor does not ,due to his own faults finish the repair works or fix the defects by the end of 'Defect Liability Period', the 'Defect Liability Period' will continue until all works instructed by engineer is done.

SECURITY DEPOSIT AND ADDITIONAL SECURITY DEPOSIT

A. Security Deposit

The security deposit shall mean and comprise of

I) Contract Deposit and

II) Retention Money.

I) **Contract Deposit** – The successful tender, here after referred to as the contractor shall pay an amount equal to **two (2)**percent of the contract sum shall be paid within thirty days from the date of issue of letter of acceptance.

II) ***Retention Money*** *– The contractor shall pay the retention money an amount equal to* ***five (5)****percent of the Contract Sum which will be recovered from the contractors every bill i.e. interim / running / final bill.*

B. Additional Security Deposit

The **additional security deposit** will be applicable when a rebate of more than of 12 % at the rate of with no maximum limit. The ASD is calculated as follows:

Additional security deposit = (X/100) x office estimated cost,

Where X=percentage rebate quoted above 12%

The ASD shall be paid online in the ASD tab for bidders in e-tendering system before submission of the bid.

C. Performance Guarantee

The successful tender, here after referred to as the contractor shall pay in the form of "Performance Guarantee" at different rates for different slabs as stated below:

Offer	PG applicable %
For premium, at par and rebate 0 to 12%	PG= 0.92% x contract sum **applicable for rebate of 12**%
For rebate of 12.01%	P.G. = {0.92% x contract sum applicable for rebate of 12%} +(X) x contract sum where X= percentage rebate quoted more than 12%

Note: Contract sum shall mean amount after application of rebate/premium as quoted by the contractor with contingencies only and excluding price variation.

The PG shall be paid in one the following forms.

I) Cash (In case guarantee amount is less than Rs.10,000/-

II) Demand Draft (In case guarantee amount is less than Rs.1,00,000/-)

III) Government securities

IV) Fixed Deposit Receipts (FDR) of a Schedule Bank.

V) An electronically issued irrevocable bank guarantee bond of any Schedule bank or f in the prescribed form given in Annexure.

Performance Guarantee is applicable over and above the clause of Security Deposit. Performance Guarantee will have to be paid & shall be valid till the defect liability period or finalization of final bill whichever is later.

This deposit will be allowed in the form of I to V as mentioned above and shall be paid within 15 days after receipt of Letter of Acceptance.

D. Refund of Security Deposit

I. Refund of Contract Deposit

The Contract Deposit shall be released after 3 months after completion of contract period subject to no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor.

II. Refund of Retention Money

Retention Money shall be released after 3 months of Completion of contract period.

III. Refund of Additional Security Deposit

The additional security deposit shall be released after 3 months of issue of 'Certificate of Completion' with respect to the whole of the Works.

IV. Refund of Performance Guarantee

The Deposit on account of performance guarantee shall be released after 3 months of completion of contract period subject finalization of final bill whichever is later and no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor.

E. Legal + Stationary Charges: (As per applicable circular)

Successful bidder shall pay the Legal Charges +Stationary charges as per *Circular* no CA/FRG/23dtd08.12.2016

Contract Value						Legal+ Stationery Charges
Upto	Rs.	3,00,000/-	To	Rs.		Nil
From	Rs.	3,00,001/-	To	Rs.	20,00,000/-	Rs. 750/- +GST
From	Rs.	20,00,001/-	To	Rs.	1,00,00,000/-	Rs. 2940/- +GST

From	Rs.	1,00,00,001/-	To	Rs.	Any amount	Rs. 7330/- +GST
						(Maximum)

The tenderers are requested to note that stationary charges as given in the table above will be recovered from the successful tenderer for supply of requisite prescribed forms for preparing certificate bills in respect of the work.

F. Stamp Duty: (As per applicable circular)

It shall be incumbent on the successful tenderer to pay stamp duty on the contract.

i. As per the provision made in Article 63, Schedule I of Bombay Stamp Act 1958, stamp duty is payable for "works contract" that is to say, a contract for works and labour or services involving transfer of property in goods (whether as goods or in some other form) in its execution and includes a sub-contract, as under :

(a)	Where the amount or value set forth in such contract does not exceed rupees ten lakh.	five Hundred rupees stamp duty
(b)	Where it exceeds rupees ten lakhs	five hundred rupees plus one hundred rupees for every Rs.1,00,000/- or part thereof, above rupees ten lakh subject to the maximum of rupees five lakh stamp duty.

ii. The successful bidder shall enter into a contract agreement with M.C.G.M. within 30 days from the date of issue of Work Order and the same should be adjudicated for payment of Stamp Duty by the successful bidder.

iii. Further shortfall if any, in amount of stamp duty paid as against prescribed amount for the documents executed in Mumbai City & Mumbai Suburban District be recovered from the concerned work contractors and to deposit the deficit or unpaid Stamp Duty and penalty by two separate Demand Draft or Pay Order in favour of "Superintendent of Stamp, Mumbai" within 15 days from intimation thereof.

All legal charges and incidental expenses in this respect shall be borne and paid by the successful tenderer.

IMPORTANT DIRECTIONS TO TENDERERS

1. All the information uploaded shall be supported by the corroborative documents in absence of which the information uploaded will be considered as baseless and not accepted for qualification criteria. All the documents shall be uploaded with proper pagination. The page No. shall be properly mentioned in the relevant places.

The information shall be uploaded in the sequence as asked for with proper indexing etc. The Bidder shall be fully responsible for the correctness of the information uploaded by him.

2. Applicants/Bidders shall refer portal.DEAN(G.S.M.C. & K.E.M.H.).gov.in\tenders for "The Manual of Bid-Submission for Percentage Rate/Item Rate Tender Document." The detail guidelines for creation and submission of bid are available in the referred document.

Any queries or request for additional information concerning this TENDER shall be submitted by e-mail to……The subject shall clearly bear the following identification/ title: **"Queries/ Request for Additional Information: TENDER for "Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital.".Any changes in mail ID will be intimated on the portal.**

3. In case of **Equal Rates** of lowest bidders (L1), the allotment of work shall be done by giving 48 hrs**(2 working days)** from the day of opening of packet C **on same BID-Document number for re-quoting** and such development needs to done by IT department in DEAN(G.S.M.C. & K.E.M.H.)'s SRM system. **Till such development is made; 'Sealed Bids' shall be called from the bidders quoting the same rates i.e. L-1.**

In case of equal rates of lowest bidders arereceived even after re-quoting, then the successful bidder will be decided by lottery system by concerned ***Dean.***

The bidder shall need to submit the additional ASD if applicable within 7 days after receipt of notification issued by concerned Dean.

Also, the Performance Guarantee shall be paid in 15 days after receipt of Letter of Acceptance.

SPECIAL CONDITIONS RELATING TO WORK

1. Contractor will be given a rent free suitable space where his supervisor and otherstaff will normally sit and place their tools & tackles and materials. However all furniture,stationery etc. required for carrying out his office works & the storage arrangement forstoring his materials will be organized by theContractor at his cost.
2. Contractor will keep at site at all times all essential tools and tackles required for executionof routine maintenance jobs as attached with Annexure – D. In case any worker is found to be working without proper tools & tackles, Engineer will be within his right to stop the workor levy some penalty.
3. Each workman of regular gang will have to attend his duty regularly. In case of absenceof any worker deduction will be made from the contractor's bill at the rate of daily wages ofthe worker. If a workman is absent for more than two (2) days, Contractor shouldimmediately make alternative arrangement by bringing additional manpower.
4. All maintenance complaints should normally be attended within 1hours and complete the same within 8 hours. In case oftedious / tricky complaints, time taken should not exceed 2 days. Complaints having somespecial problems, which can't be done within 2 days, the complainant should be informed bygiving a note indicating the date when the complaint is likely to be completed. In case ofcomplaints / jobs where the occupant has to observe some precautions, he should be dulyinformed about this in writing after taking approval of Engineer. In case of unreasonabledelay the penalty clause will be apply.
5. No jhuggis or temporary structure will be built by the contractor inside hospital campus for hisworkers. Contractor's persons shall normally come in the duty hoursand go back after duty hours.
6. Supervisor shall be available on site with mobile phone.
7. If any employee or worker of the contractor on the works appears to be negligent in hisduties or incompetent or to behave in an improperly manner, such person shall beimmediately removed from the works by the contractor on the request of the engineer andsuitable replacement will be provided at the earliest.
8. Though contract will be awarded initially for a period of one year but may be renewed furtherdepending upon the performance of the contractor. There is no binding on DEAN(G.S.M.C. & K.E.M.H.) to renew the contract after first year.
9. Contractor shall ensure safe storage of materials inside the space allotted. Any damage occurred tothe materials under the custody of the contractor, due to whatsoever reasons shallbe entirely borne by contractor.
10. Contractor will take personal interest to ensure that all the works given by the hospital authority areattended and completed by their staff in a satisfactory manner.Contractor will meet Engineer in-charge regularly to ensure that there are no complaints fromuser

department and will speedily sort out all the problems communicated by Engineer in-charge.

11. **Labour Laws:** The contractor will follow all labour laws / acts of Central Govt., LocalGovt. applicable from time to time. He should maintain proper attendance register and recordof wages paid to the workers and these documents should be submitted to MGCM whileraising their bills and whenever asked. He will obtain necessary Labourlicencerequired for engaging labour at site. It will be solely contractor's responsibility to face anyconsequences arising out of non-compliance of various labour laws. If DEAN(G.S.M.C. & K.E.M.H.) has to incursome expenditure due to non-payment of wages to the labourers or non-compliance ofvarious labour laws by contractor, the same will be recovered form contractor's billalongwith 10% departmental charges.
12. **Labour Safety:**Contractor shall undertake all necessary safety precautions during theexecution of work as laid down in relevant I.S codes and CPWD safety manuals. In case ofinjury to any person, contractor shall always have the arrangement to take him to hospital fortreatment at his own cost in addition to first aid box always available at site. Contractor willbe fully responsible for any repercussions which may arise as a result of any violation ofsafety norms on his part.**All the employees of the contractor will have to be covered under insurance against anypersonal accident and** DEAN(G.S.M.C. & K.E.M.H.)**will not be liable for payment of any compensation on thataccount.**
13. **Water and Electricity**: Water and electricity will be provided to thecontractor free of costat specified points. However, any further extension required beyond the point will be doneby contractor at his own cost. If contractor is found to be misusing / mishandling wasting thewater & electricity, a suitable deduction will be made in the contractor's bill asconsidered reasonable by DEAN(G.S.M.C. & K.E.M.H.).
14. Manpower deployed by the contractor at our site for carrying out contracted works is strictlyprohibited being associated with any other works on the campus.
15. Contractor's all workers are compulsorily required to wear uniform, safety shoes and caps.

16. **Payment Procedure:**

Payment will be made up on submission of monthly / quarterly bill. Payment of the bill will be based on computerized print outs in standardized Performa approved by DEAN(G.S.M.C. & K.E.M.H.).

The bill must be supported with the following documents:

a. Attendance sheets of all the workers and staffs deployed duly certified by the DEAN(G.S.M.C. & K.E.M.H.) staff.
b. Details of complaints attended and rectified within time.
c. Details of complaints attended with delay.

While submitting the bill, the agency must file a certificate certifying the following -

i. Wages of workers were credited to their bank accounts on _____

ii. ESI Contribution relating to workers amounting to Rs._____ wasdeposited on _____ (challan enclosed)

iii. EPF Contribution relating to workers amounting to Rs._____ wasdeposited on _____(date) (challan enclosed)

iv. We are complying with all statutory Labour Laws including Minimum Wage Act.

17. **Liquidated Damages:** Whenever and wherever it is found that the service is not up to the mark, it will be brought to the notice of the supervisory staff of the Contractor by DEAN(G.S.M.C. & K.E.M.H.) and if no action is initiated within stipulated period penalty at Rs.500/- per complaint shall be imposed. The decision of Hospital Authority shall be final and binding upon contractors in this regard.

PRE BID MEETING

(if specified in e-tender)

PREBID MEETING

Pre-bid meeting of the interested parties shall be convened at the designated date, time and place, if specified. A maximum of three representatives of each Applicant shall be allowed to participate on production of authority letter from the Applicant.

During the course of Pre-bid meeting, the Applicants will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall Endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.

FRAUD AND CORRUPT PRACTICES

FRAUD AND CORRUPT PRACTICES

- The Applicants and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process.

  Without prejudice to the rights of the Authority under relevant Clause hereinabove, if an Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, such Applicant shall not be eligible to participate in any tender or RFQ issued by the Authority during a period of 2 (two) years from the date such Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

  For the purposes of this Clause , the following terms shall have the meaning hereinafter respectively assigned to them:

A. "**corrupt practice**" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to, or employing, or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Concession Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or

save and except as permitted under the relevant sub clause, engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Concession Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;

B. **"fraudulent practice"** means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process ;

“coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;

“undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and

“Restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

If the Employer/Financier determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days’ notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of relevant Clause shall apply as if such expulsion had been made.

Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with relevant Clause.

For the purposes of this Sub-Clause:

i. “corrupt practice” is the offering, giving, receiving to soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

ii. “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes Financer staff and employees of other organizations taking or reviewing procurement decisions.

iii. “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

iv. “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

v. “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

vi. “obstructive practice” is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede the Financier investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or

intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

vii. acts intended to materially impede the exercise of the Financer's inspection and audit rights provided .

viii. "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

ix. "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non-competitive levels.

a "party" refers to a participant in the procurement process or contract execution.

GENERAL CONDITIONS

OF

CONTRACT

General Conditions of Contract

A. General

DEFINATIONS :::

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.
The “Contract” shall mean the tender and acceptance thereof and the formal agreement if any, executed between the Contractor, Commissioner and the G.S.M.C. & K.E.M.H.together with the documents referred to therein including these conditions and appendices and any special conditions, the specifications, designs, drawings, price schedules, bills of quantities and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.
The Contract Data defines the documents and other information which comprise the Contract.
The “Contractor” shall mean the individual or firm or company whether incorporated or not, whose tender has been accepted by the employer and the legal successor of the individual or firm or company, but not (except with the consent of the Employer) any assignee of such person.
The Bidder is a person or corporate body who has desired to submit Bid to carry out the Works, including routine maintenance till the tender process is concluded.
The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.
The “Contract Sum” means the sum named in the letter of acceptance including Physical contingencies subject to such addition thereto or deduction there-from as may be made under the provisions hereinafter contained.

Note : The contract sum shall include the following –
In the case of percentage rate contracts the estimated value of works as mentioned in the tender adjusted by the Contractor’s percentage.
In the case of item rate contracts, the cost of the work arrived at after finalization of the quantities shown in schedule of items / quantities by the item rates quoted by the tenderers for various items and summation of the extended cost of each item.
In case of lump sum contract, the sum for which tender is accepted.
Special discount / rebate / trade discount offered by the tenderer if any and accepted by the Corporation.
Additions or deletions that are accepted after opening of the tenders.

The “Contract Cost” means the Contract Sum plus Price Variation. This cost shall be included in the letter of acceptance.
A Defect is any part of the Works not completed in accordance with the Contract.
The Defects Liability Certificate is the certificate issued by the Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.
Drawings means all the drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation & maintenance manual and other technical information of like nature submitted by the Contractor and approved by the Engineer.
The Authority shall mean (DEAN(G.S.M.C. & K.E.M.H.))

The “Employer” shall mean the Municipal G.S.M.C. & K.E.M.H.for Greater Mumbai / Municipal Commissioner for Greater Mumbai, for the time being holding the said office and also his successors and shall also include all “Additional Municipal Commissioners, Director (Engineering Services & Projects)” and the Deputy Municipal Commissioner, to whom the powers of Municipal Commissioner, have been deputed under Section 56 and 56B of the Mumbai Municipal G.S.M.C. & K.E.M.H.Act.

The Engineer in-charge shall mean the Executive Engineer in executive charge of the works and shall include the superior officers of the Engineering department i.e. Dy.Ch.Eng/Ch.Eng. and shall mean and include all the successors in DEAN(G.S.M.C. & K.E.M.H.).

The Engineer's Representative shall mean the Assistant Engineer, Sub. Engineer/Jr. Engineer in direct charge of the works and shall include Sub Eng./ Jr. Eng of Civil section/ Mechanical section/ Electrical section appointed by DEAN(G.S.M.C. & K.E.M.H.).

The “Engineer” shall mean the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer, appointed for the time being or any other officer or officers of the Municipal G.S.M.C. & K.E.M.H.who may be authorized by the commissioner to carry out the functions of the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer or any other competent person appointed by the employer and notified in writing to the Contractor to act in replacement of the Engineer from time to time.

Contractor’s Equipment means all appliances and things of whatsoever nature required for the execution and completions of the Works and the remedying of any defects therein, but does not include plant material or other things intended to form or forming part of the Permanent Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

The Intended Completion Date is the date on which it is intended that the Contractor shall complete the construction works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the Contractor for inG.S.M.C. & K.E.M.H.in the Works and works of routine maintenance.

Plant is any integral part of the Works that shall have a mechanical, electrical, electronic, chemical, or biological function.

Routine Maintenance is the maintenance of activities of the competed structure for five years as specified in the Contract Data.

The “Site” shall mean the land and other places including water bodies more specifically mentioned in the special conditions of the tender, on, under in or through which the permanent works or temporary works are to be executed and any other lands and places provided by the Municipal G.S.M.C. & K.E.M.H.for working space or any other purpose as may be specifically designated in the contract as forming part of the site.

Site Investigation Reports are those that were included in the bidding documents and are reports about the surface and subsurface conditions at the Site.

“Specification” shall mean the specification referred to in the tender and any modification thereof or addition or deduction thereto as may from time to time be furnished or approved in writing by the Engineer.

The Start Date/Commencement Date is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A Nominated Sub-Contractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the construction work and/or routine maintenance in the

Contract, which includes work on the Site.
Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

Variation means a change to the:-
Specification and /or Drawings (if any) which is instructed by the Employer.
Scope in the Contract which is instructed by the Employer.
Price in the Contract which is instructed by the Employer.

The Works, as defined in the Contract Data, are what the Contract requires the Contractor to construct, install, maintain, and turn over to the Employer. Routine maintenance is defined separately.
Jurisdiction: In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

2. INTERPRETATION :::
2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
2.3 The documents forming the Contract shall be interpreted in the following documents: (1) Agreement, (2) Letter of Acceptance, (3) Notice to Proceed with the Work , (4) Contractor's Bid, (5) Contract Data, (6) Special Conditions of Contract Part (7) General Conditions of Contract Part I, (8) Specifications, (9) Drawings, (10) Bill of Quantities, and (11) Any other document listed in the Contract Data.

3 . Engineer's Decisions :::

Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Engineer is required under the rules and regulations and orders of the Employer to obtain prior approval of some other authorities for specific actions, he will so obtain the approval, before communicating his decision to the Contractor.
Except as expressly stated in the Contract, the Engineer shall not have any authority to relieve the Contractor of any of his obligations under the contract.

Delegation :::
4.1 The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other person(s), except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

Communications :::
All certificates, notices or instructions to be given to the Contractor by Employer/ Engineer shall be sent on the address or contact details given by the Contractor of Bid.

The address and contact details for communication with the Employer/ Engineer shall be as per the details given in Contract Data. Communications between parties that are referred to in the conditions shall be in writing. The Notice sent by facsimile (fax) or other electronic means shall be effective on confirmation of the transmission. The Notice sent by Registered post or Speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.

Subcontracting ::

6.1 Unless specifically mentioned in the contract subletting will not be allowed. Subletting, where otherwise provided by the contract shall not be more than 25% of the contract price.

6.2 The Contractor shall not be required to obtain any consent from the Employer for :

(A) The sub-contracting of any part of the Works for which the Subcontractor is named in the Contract;

(B) The provision for labour, or labour component.

(C) The purchase of Materials which are in accordance with the standards specified in the Contract.

6.3 Beyond what has been stated in clauses 6.1 and 6.2, if the Contractor proposes sub contracting any part of the work during execution of the Works, because of some unforeseen circumstances to enable him to complete the Works as per terms of the Contract, the Employer will consider the following before according approval:

a. The Contractor shall not sub-contract the whole of the Work

b. The permitted subletting of work by the Contractor shall not establish any contractual relation-ship between the sub-contractor and the DEAN(G.S.M.C. & K.E.M.H.) and shall not relieve the Contractor of any responsibility under the Contract.

6.4 The Engineer should satisfy himself before recommending to the Employer whether

a. the circumstances warrant such sub-contracting; and

b. the sub-Contractor so proposed for the Work possesses the experience, qualifications and equipment necessary for the job proposed to be entrusted to him.

Other Contractors

7.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the Contract Data. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

7.2 The Contractor should take up the works in convenient reaches as decided by the Engineer to ensure there is least hindrance to the smooth flow and safety of traffic including movement of vehicles and equipment of other Contractors till the completion of the Works.

Personnel

8.1 The Contractor shall employ for the construction work and routine maintenance the key personnel including technical personnel named in the Contract Data or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are

substantially equal to those of the personnel stated in the Contract Data.
8.2 The Contractor's personnel shall appropriately be qualified, skilled and experienced in their respective trades or occupations. The Engineer shall have authority to remove, or cause to be removed, any person employed on the site or works, who carries out duties incompetently or negligently and persists in any conduct which is prejudicial to safety, health or the protection of the environment.
8.3 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.
8.4 The Contractor shall not employ any retired Gazetted officer who has worked in the Engineering Department of the DEAN(G.S.M.C. & K.E.M.H.) /State Government and has either not completed two years after the date of retirement or has not obtained DEAN(G.S.M.C. & K.E.M.H.)/State Government's permission to employment with the Contractor.

Employer's and Contractor's Risks
The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

Employer's Risks ::
The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot, commotion or disorder (unless restricted to the Contractor's employees) and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

Contractor's Risks ::
All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 11.1, are the responsibility of the Contractor.

Insurance ::
12.1 The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:
A) Loss of or damage to the Works, Plant and Materials;
B) Loss of or damage to Equipment;
C) Loss of or damage to property (other than the Works, Plant, Materials, and Equipment) in connection with the Contract;
D) Personal injury or death.

Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
Alterations to the terms of insurance shall not be made without the approval of the Engineer.
Both parties shall comply with any conditions of the insurance policies.

If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid, from payments otherwise due to the Contractor or if no payment is due, the payment of premiums shall be debt due.

Site Investigation Reports
The Contractor, in preparing the Bid, may rely, at his own risk, on any Site Investigation Reports referred to in the Contract Data, supplemented by any other information available to him, before submitting the bid.

Queries about the Contract Data
The Engineer will clarify queries on the Contract Data.

Contractor to Construct the Works and Undertake Maintenance (if specified in the tender) :::
15.1 The Contractor shall construct, and install and maintain the Works in accordance with the Specifications and Drawings and as per instructions of the Engineer.
15.2 The Contractor shall construct the works with intermediate technology, i.e., by manual means with medium input of machinery required to ensure the quality of works as per specifications. The Contractor shall deploy the equipment and machinery as required in the contract.
15.3 The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in future by the State or Central Government or the local authority. Salient features of some of the major laws that are applicable are given below:

The Water (Prevention and Control of Pollution) Act, 1974, this provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. ‘Pollution’ means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

The Air (Prevention and Control of Pollution) Act, 1981, this provides for prevention, control and abatement of air pollution. ‘Air Pollution’ means the presence in the atmosphere of any ‘air pollutant’, which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The Environment (Protection) Act, 1986, this provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. ‘Environment’ includes water, air and land and the inter-relationship which exists among and between

water, air and land, and human beings, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act, 1991, This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

The Works and Routine Maintenance to be completed by the Intended Completion Date ::
The Contractor may commence execution of the Works on the Start Date and shall carry out the Works and Routine Maintenance, if specified in the tender, in accordance with the Programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

Approval by the Engineer ::
17.1 1The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.
17.2 The Contractor shall be responsible for design and safety of Temporary Works.
17.3 The Engineer's approval shall not alter the Contractor's responsibility for design and safety of the Temporary Works.
17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

Safety ::
18.1 The Contractor shall be responsible for the safety of all activities on the Site. He shall comply with all applicable safety requirements and take care of safety of all persons entitled to be on the site and the works. He shall use reasonable efforts to keep the site and the works, both during construction and maintenance, clear of unnecessary obstruction so as to avoid danger to the persons and the users.
Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles
Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Power warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
The workers engaged for cleaning the manholes/sewers should be properly trained before allowing working in the manhole.

18.2 Safety Programs:-
Have adequate safety supervision in place to ensure that safety programs set up by the firms/agencies are in compliance with prevalent laws and regulations.
Review safety programs developed by each of the trade firms, prepare and submit a comprehensive safety program.
Monitor day to day implementation of safety procedures.

18.3 First Aid Facilities: -

At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.

The first-aid box shall be distinctly marked with a red cross on white back ground.

Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.

Nothing except the prescribed contents shall be kept in the First-aid box.

The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.

A person in charge of the First-aid box shall be a person trained in First-aid treatment, in the work places where the number of contract labour employed is 150 or more.

19. Discoveries :-

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

Possession of the Site

The Employer shall handover complete or part possession of the site to the Contractor 7 days in advance of construction programme. At the start of the work, the Employer shall handover the possession of at-least 75% of the site free of all encumbrances, the remaining 25 % of the possession as per contractor’s construction programme.

Access to the Site :-

The Contractor shall allow access to the Site and to any place where work in connection with the Contract is being carried out, or is intended to be carried out to the Engineer and any person/persons/agency authorized by: a. The Engineer b. The Employer or authorized by the Employer.

Instructions :-

22.1 The Contractor shall carry out all instructions of the Engineer, which comply with the applicable laws where the Site is located.

22.2 The Contractor shall permit the appointed and/or authorized persons to inspect the Site and/or accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed, if so required. The Contractor’s attention is invited to Clause of ‘Fraud and Corruption’, which provides, inter alia, that acts intended to materially impede the exercise of the inspection and audit rights provided for under the Clause & constitute a obstructive practice subject to contract termination.

22.3 Engineer to have power to issue further drawings or instructions :

The Engineer shall have the power and authority from time to time and at all times to make and issue such further drawings and to give such further instructions and directions as may appear to him necessary or proper for the guidance of the contractor and the good and sufficient execution of the works according to terms of the specifications and Contractor shall receive, execute, obey and be bound by the same, according to the true intent and meaning thereof, as fully and effectually as though the same had accompanied or had been mentioned or referred to in the specification, and the Engineer may also alter or vary the levels or position of nature of works contemplated by the specifications, or may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any work or any portion of work executed or partially executed, to be removed, changed or altered, added if needful, may order that other works shall be substituted instead thereof and difference of expense

occasioned by any such diminution or alteration so ordered and directed shall be added to or deducted from the amount of this Contract, as provided under condition no.10(a) hereinafter.
No work which radically changes the original nature of the Contract shall be ordered by the Engineer and in the event of any deviation being ordered which in the opinion of the Contractor changes the original nature of Contract he shall nevertheless carry it out and disagreement as to the nature of the work and the rate to be paid therefore shall be resolved in accordance with condition no.13 d.
The time for completion of the Works, shall be in even of any deviations resulting in additional cost over the contract price being ordered, be extended or reduced reasonably by the Engineer. The Engineer's decision in this case shall be final.

B. Time Control
23. Programme :-
23.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme, including Environment Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works.
After the completion of the construction works, the programme for the Routine Maintenance Work, showing the general methods, arrangements, order and timing for all the activities involved in the Routine Maintenance will also be submitted by the Contractor to the Engineer for approval if specified in the tender. The programme for Routine Maintenance will be submitted in each year for the period of Maintenance.
23.2 The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/ equipments being placed in field laboratory and the location of field laboratory along with the Programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme
23.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
23.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
23.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme shall show the effect of Variations and Compensation Events.

24. Extension Of Time In Contracts :
Subject to any requirement in the contract as to completion of any portions or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:
a) Extension attributable to DEAN(G.S.M.C. & K.E.M.H.) ::-
Extension Due To Modification: If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the

Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case should not be less than 30 days before the expiry of the date fixed for completion of the works.
Extension For Delay Due To DEAN(G.S.M.C. & K.E.M.H.): In the event of any failure or delay by the DEAN(G.S.M.C. & K.E.M.H.) to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the DEAN(G.S.M.C. & K.E.M.H.) due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the DEAN(G.S.M.C. & K.E.M.H.) may grant such extension(s) of the completion date as may be considered reasonable.
Note: For extension of time period as governed in (i) and (ii) above, any modifications in design/drawings, specifications, quantities shall be needed to be justified with recorded reasons with approval of Ch.Eng. for not anticipating the same while preparing estimates and draft tender.

b) Extension Of Time For Delay Due To Contractor : The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed no later than the date(s) / the programme for completion of work as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in above as (a.i) and (a.ii), the DEAN(G.S.M.C. & K.E.M.H.) may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time as the Engineer may decide. On such extension the DEAN(G.S.M.C. & K.E.M.H.) will be entitled without prejudice to any other right and remedy available on that behalf, to recover the compensation as governed by Clause 8(e) of GCC.
For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued.
Further, competent authority while granting extension to the currency of contract under Clause (b) of as above may also consider levy of penalty, as deemed fit based on the merit of the case. Also, the reasons for granting extension shall be properly documented.

25. Delays Ordered by the Engineer :-
25.1 The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay/delays totaling more than 30 days will require prior written approval of the DMC/AMC.

26. Management Meetings :-
26.1 The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for progress of the Works. The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

C. Quality Control
Work to be open to Inspection and Contractor or Responsible agent to be present

27.1 All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Eng-in-charge and his subordinates and the contractor shall at all times during the usual working hours, at all other times, during the usual charge and his subordinates to visit the works shall have been given to the contractor, either himself be present to receive orders and instruction or have responsible agent duly accredited in writing present for that purpose. Order given to the contractors' duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

27.2. Notice To Be Given Before Work Is Covered UpThe contractor shall givenot less than ten days' notice in writing to the Eng-In-Charge or his subordinate incharge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension thereof taken before the same is so covered up or placed beyond the reach of measurements and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Eng-In-Charge or his subordinate incharge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractors expenses, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed.

27.3 Works to be executed in accordance with specifications / drawings / orders etc. : The contractor shall execute the whole and every part of the work the most substantial and workman like manner and both has regards material and every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer In-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site or work during office hours. The contractor shall be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost.

27.4 Ready Mix Concrete/ Asphalt Mix

The contractor shall have to arrange Ready Mix concrete (RMC)/Asphalt from RMC/ASPHALT producing plants registered with DEAN(G.S.M.C. & K.E.M.H.)

The contractor shall, within a 7 days of award of the work, submit a list of at least three RMC/Asphalt producers with details of such plants including details and number of transit, mixers & pumps etc. to be deployed indicating name of owner/company, its location, capacity, technical establishment.

The Engineer-in-charge will reserve right to inspect at any stage and reject the concrete if he is not satisfied about quality of product at the user's end.

a) The Engineer-in-charge reserves the right to exercise control over the:-

b) Calibration check of the RMC/Asphalt plant.

c) Weight and quantity check on the ingredients, water and admixtures added for batch mixing for RMC plants

d) Time of mixing of concrete/grade of asphalt.

e) Testing of fresh concrete/asphalt mix, recording of results and declaring the mix fit or unfit for use. This will include continuous control on the work ability during production and taking corrective action, if required.

f) For exercising such control, the Engineer-in-charge shall periodically depute his authorized representative at the RMC/Asphalt plant. It shall be responsibility of the contractor to ensure that all necessary equipment, manpower & facilities are made available to Engineer-in-charge and or his authorized representative at RMC/Asphalt plant.

g) All required relevant records of RMC/Asphalt mix shall be made available to the

Engineer-in-charge or his authorized representative. Engineer-in-charge shall, as required, specify guidelines & additional procedures for quality control & other parameters in respect of material production& transportation of concrete mix which shall be binding on the contractor & the RMC/Asphalt plant. Only concrete as approved in design mix by Engineer-in-charge shall be produced in RMC plant and transported to the site.

h) The contactor shall have to produce a copy of chalan receipts/SCADA reports/VTS reports as issued by the RMC/Asphalt plant as a documentary proof in lieu of supply of RMC/Asphalt mix before releasing payment.

28. Identifying Defects : -

28.1 The Engineer shall check the Contractor's work and notify the Contractor of any Defect Engineer may instruct the Contractor to search for a Defects and to uncover and test any work that the Engineer considers may have a Defect.

28.2 The Contractor shall permit the Employer’s technical person(s) to check the Contractor’s work and notify the Engineer and Contractor if any defects that are found.

29. Tests :-

29.1 For carrying out mandatory tests as prescribed in the specifications, the Contractor shall establish field laboratory at the location decided by Engineer. The field laboratory will have minimum of equipments as specified in the Contract Data. The contractor shall be solely responsible for:

Carrying out the mandatory tests prescribed in the Specifications, and

For the correctness of the test results, whether preformed in his laboratory or elsewhere.

29.2 If the Engineer instructs the Contractor to carry out a test not specified in the Specification/ Quality Assurance Handbook to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no defect, the test shall be a compensation event.

When required by the Engineer-in-charge the contractor(s) shall supply for the purpose of testing samples of all materials proposed to be used in the works. Samples submitted either to govern bulk supplies or required for testing before use shall be in suitable packages to contain them and shall be provided free of charge by the contractor. The cost of testing shall be borne by the contractor even if the result of the sample confirm or do not confirm to the relevant BIS code specifications.

All expenditure required to be incurred for taking the samples conveyance, packing shall be borne by the contractor himself.

The failed material shall be removed from the site by the contractor at his own cost within a week time of written order of the Engineer-in-charge.

29.3 Setting of Site Laboratories:

Contractors shall set up a laboratory at site before commencement of work at their cost for performing various tests and at least the following machines and equipments shall be pro.

Set of Sieves as per I.R.C. /I.S.
Compressive Testing Machine(For new works)
Oven, Electrically Operated
Weighing Balance (20 kg capacity)
3 m straight edge
Sieve shaker
First Aid Box
Measuring Jar (for silt content)
Other Machines/apparatus as may be directed by the Engineer

VernierCaliber
Level / Theodolite
All the test records shall be maintained in the site office and made available as and when required. The laboratory must be established within 15 days from the date of receipt of the orders from Engineer In charge. On failure to do so, a penalty of Rs 1000/- per day shall be imposed.
The contractor shall install testing equipment at site. The contractor shall ensure and certify the calibration of the equipment so installed and shall maintain the same in working order throughout the period of construction. The contractor shall also provide necessary technically qualified experienced trained staff for carrying out such tests for using such equipment. The tests shall be carried out under the supervision of the Engineer-in-charge. The calibration shall be checked every twelve months as directed by Engineer-in-charge.

30. Correction of Defects noticed during the Defects Liability Period.
30.1 The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and ends after five years. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
30.2 Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice.
30.3 The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.

31. Uncorrected Defects and Deficiencies :-
If the Contractor has not corrected a Defect pertaining to the Defect Liability Period under clause and deficiencies in maintenance, to the satisfaction of the Engineer, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect or deficiency corrected, and the Contractor shall pay this amount, on correction of the Defect or deficiency by another agency.

Cost Control
32. Variations :=
The Engineer shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works he considers necessary or advisable during the progress of the Works. Such Variations shall form part of the Contract and the Contractor shall carry them out and include them in updated Programmes produced by the Contractor. Oral orders of the Engineer for Variations, unless followed by written confirmation, shall not be taken into account.
33. Payments for Variations :-
33.1 If rates for Variation items are specified in the Bill of Quantities, the Contractor shall carry out such work at the same rate.
33.2 The rate for Extra/Excess shall be governed by clause 10.A of Standard General Condition of Contract
34. Cash Flow Forecasts :-
When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.

35. Payment Certificates :
The payment to the Contractor will be as follows for construction work:
A bill shall be submitted by the Contractor monthly or before the date fixed by the

Engineer In-charge for all works executed in the previous month, and the Engineer same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within 10 days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer In-charge may depute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose counter signature to the measurement list shall be sufficient warrant, and Engineer In-Charge may prepare a bill from such list which shall be binding on the contractor in all respects.
The Engineer shall check the Contractor's fortnightly/monthly statement within 14 days and certify the amount to be paid to the Contractor.
The value of work executed shall be determined, based on measurements by the Engineer.
The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
The value of work executed shall also include the valuation of Variations and Compensation Events.
The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
The contractor shall submit all bills on the printed forms at the office of Engineer In-charge. The charges to be made in the bills shall always be entered at the rates specified in tender.

36. Payments :-
Payments shall be adjusted for deductions for advance payments, retention, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 15 days of the date of each certificate.
All sums payable by a contractor by way of compensation under any of these conditions, shall be considered as a reasonable compensation to be applied to the use of DEAN(G.S.M.C. & K.E.M.H.) without reference to the actual loss or damage sustained and whether any damage has or has not been sustained.
No payment shall be made for any work estimated to cost less than Rupees One Thousand till after the whole of work shall have been completed and the certificate of completion contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the work than approved and passed by the Engineer In-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actual done and completed and shall not preclude the Engineer In-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the offering of any claim not shall it conclude, determine or effect in any other way, the powers of the Engineer In-charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for the completion of the work otherwise the Engineer In-charge’s certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.

37. The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor for not having given early warning or not having cooperated with the Engineer.

38. Tax :-

All taxes, duties, cess and charges such as Octroi, Service Tax, Terminal or Sales Tax, VAT etc. and other duties on material obtained for the work from any source including the tax applicable as per Maharashtra Sales Tax Act, on the transfer of property in goods involved in the execution of work contract (re-enacted) Act 1989 or as amended shall be borne by tenderer. The tenderer will not be reimbursed the taxes, duties, cess and charges whether now in force or that may be enforced in future.

Rates accepted by DEAN(G.S.M.C. & K.E.M.H.) shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates; increase in tax-es/any other levies/tolls etc. except that payment/recovery for overall market situation shall be made as per Price Variation.

39. Currencies : All payments will be made in Indian Rupees.

Liquidated Damages :- Both, the Contractor and the Employer have agreed that it is not feasible to precisely estimate the amount of losses due to delay in completion of works and the losses to the public and the economy, therefore, both the parties have agreed that the Contractor shall pay liquidated damages to the Employer and not by way of penalty, at the rate per week or part thereof stated in the Contract Data for the period that the Completion Date is later than the Intended Completion Date. Liquidated damages at the same rates shall be withheld if the Contractor fails to achieve the milestones prescribed in the Contract Data. However, in case the Contractor achieves the next milestone, the amount of the liquidated damages already withheld shall be restored to the Contractor by adjustment in the next payment certificate. The Employer and the contractor have agreed that this is a reasonable agreed amount of liquidated damage. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor’s other liabilities.

41. Cost of Repairs :-

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at his cost if the loss or damage arises from the Contractor's acts or omissions.

Finishing the Contract

42. Completion of Construction and Maintenance

The Contractor shall request the Engineer to issue a certificate of completion of the construction of the works, and the Engineer will do so upon deciding that the works is completed. This shall be governed as per clause no.8(g) of Standard General Conditions of Contract.

Taking Over :-

The Employer shall take over the works within seven days of the Engineer issuing a certificate of completion of works. The Contractor shall continue to remain responsible for its routine maintenance during the maintenance period if specified in the contract.

Final Account :-

Final joint measurement along with the representatives of the contractor should be taken recorded and signed by the Contractors. Contractors should submit the final bill within 1 month of physical completion of the work.

If the contractor fails to submit the final bill within 1 month, the DEAN(G.S.M.C. & K.E.M.H.) staff will prepare the final bill based on the joint measurement within next 3 months.
Engineer's decision shall be final in respect of claims for defect and pending claims against contractors.
No further claims should be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bills in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by the Commissioner shall be made within a reasonable period as may be necessary for the purpose of verification etc.
After payment of the final bill as aforesaid has been made, the contractor may, if he so desires, reconsider his position in respect of a disputed portion of the final bills and if he fails to do so within 84 days, his disputed claim shall be dealt with as provided in the contract.
A percentage of the retention money, over and above the actual retention money as indicated below shall be held back from payments till the finalization of final bill to be submitted as per above and will be paid within 30 days of acceptance of the final bill.

No.	Amount of Contract Cost	Minimum Payable Amount in final bill
1	Upto Rs.5 Crs.	Rs.10 Lakhs or final bill amount whichever is more
2	Upto Rs.25 Crs.	Rs.1 Crore or final bill amount whichever is more
3	UptoRs. 50 Crs.	Rs.2 Crore or final bill amount whichever is more
4	Upto Rs.100 Crs.	Rs.4 Crore or final bill amount whichever is more
5	More than Rs.100 Crs.	Rs.7 Crore or final bill amount whichever is more

Penalty for Delay in submission of Bills :
If the contractor fails to submit their bills to concerned executing department for the completed work / running bill within 15 days, penalty or action as shown below will be taken for each delayed bill.

1	After 15 days from the date of completion / running bill upto certain date, upto next 15 days i.e. upto 30 days.	Equal to 5% of bill amount.
2	Next 15 days upto 45 days from the date of completion / running bill upto specified date.	Equal to 10% of bill amount.
3	If not submitted within 45 days from date of completion / R.A. Bill.	Bill will not be admitted for payment.

45. Operating and Maintenance Manuals :
45.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
45.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

46. Termination :
The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
Fundamental breaches of Contract shall include, but shall not be limited to, the following:

the Contractor stops work for 30 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
the Contractor does not maintain a Security, which is required
the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in relevant clause.
the Contractor fails to provide insurance cover as required under relevant clause .
if the Contractor, in the judgment of the Employer, has engaged in the corrupt or fraudulent practices as defined in GCC in competing for or in executing the Contract.
if the Contractor fails to set up a field laboratory with the prescribed equipment, within the period specified in the Contract Data; and any other fundamental breaches as specified in the Contract Data.
if the Contractor fails to deploy machinery and equipment or personnel as specified in the Contract Data at the appropriate time.

46.3 When either party to the contract gives notice of a breach of contract to the Engineer for a cause other than those listed above, the Engineer shall decide whether the breach is fundamental or not.
46.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
46.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

47. Payment upon Termination
47.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for value of the work done and materials ordered less liquidated damages, if any, less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the Contract Data. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered from the security deposit, and performance security. If any amount is still left un-recovered it will be a debt due from the Contractor to the Employer
47.2 If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.

48. Property :-
All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance construction work if the Contract is terminated because of the Contractor's default, till the Works is completed after which it will be transferred to the Contractor and credit, if any, given for its use.

49. Release from Performance :
If the Contract is frustrated by the outbreak of war or by any other event entirely outside

the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

Other Conditions of Contract

50. Labour :

50.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

50.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the number of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

51. Compliance with Labour Regulations

During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority.

Furthermore, the Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance guarantee. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The Contractor shall require his employees to obey all applicable laws, including those concerning safety at work.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

52. Drawings and Photographs of the Works :-

The Contractor shall do photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work as required by Engineer In-charge and lastly after the completion of the work. No separate payment will be made to the Contractor for this.

The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, except those permitted under above clause, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs/ Video photography shall be published or otherwise circulated without the approval of the Engineer in writing.

53 The Apprentices Act, 1961 :-

The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so, he shall be subject to all liabilities and penalties provided by the said Act and said Rules.

54 Contract Document :-

The documents forming the contract are to be taken as mutually explanatory of one another. Unless otherwise provided in the contract, the priority of the documents forming the contract shall be, as follows:

Contract Agreement (if completed)
The letter of Acceptance
The Bid:
Addendum to Bid; if any
Tender Document
The Bill of Quantities:
The Specification:
Detailed Engineering Drawings
Standard General Conditions of Contracts (GCC)
All correspondence documents between bidder/contractor and DEAN(G.S.M.C. & K.E.M.H.).

55 Conflict of Interest :-

The Applicant shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Applicant found to have a Conflict of Interest shall be disqualified. An Applicant shall be deemed to have a Conflict of Interest affecting the Bidding Process, if

A constituent of such Applicant is also a constituent of another Applicant; or

Such Applicant has the same legal representative for purposes of this Application as any other Applicant; or

Such Applicant, or any Associate thereof has a relationship with another Applicant, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each other's information about, or to influence the Application of either or each other; or

The Applicant shall be liable for disqualification if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Applicant, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Applicant, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this TENDER. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

56. Applications and costs thereof :-

No Applicant shall submit more than one Application for the Project. An applicant applying individually shall not be entitled to submit another application either individually. The Applicant shall be responsible for all of the costs associated with the preparation of their Applications and their participation in the Bid Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

57. Acknowledgment by Applicant :

It shall be deemed that by submitting the Application, the Applicant has ;
made a complete and careful examination of the tender;
received all relevant information requested from the Authority;
accepted the risk of inadequacy, error or mistake in the information provided in the tender or furnished by or on behalf of the Authority relating to any of the matters referred; and
Agreed to be bound by the undertakings provided by it under and in terms hereof.

"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 TENDER or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority.

58. Right to accept or reject any or all Applications/ Bids :-
Notwithstanding anything contained in this TENDER, "The Authority" reserves the right to accept or reject any Application and to annul the Bidding Process and reject all Applications/ Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.
"The Authority" reserves the right to reject any Application and/ or Bid if ;
at any time, a material misrepresentation is made or uncovered, or
the Applicant does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Application.
In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof including the concession thereby granted by "The Authority", that one or more of the pre-qualification conditions have not been met by the Applicant, or the Applicant has made material misrepresentation or has given any materially incorrect or false information, the Applicant shall be disqualified forthwith if not yet appointed as the Successful Bidder either by issue of the LOA (Letter of Approval) or entering into of the Agreement, and if the Applicant has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this TENDER, be liable to be terminated, by a communication in writing by "The Authority" to the Applicant, without the Authority being liable in any manner whatsoever to the Applicant and without prejudice to any other right or remedy which the Authority may have under this TENDER, the Bidding Documents, the Concession Agreement or under applicable law.
"The Authority" reserves the right to verify all statements, information and documents submitted by the Applicant in response to the TENDER. Any such verification or lack of such verification by the Authority shall not relieve the Applicant of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.

59. The bid shall be rejected if the bidder -
Stipulates the validity period less than 180 days.
Stipulates own condition/conditions.
Does not fill and (digital) sign undertaking forms, which are incorporated, in the document.

60 Clarifications
Applicants requiring any clarification on the tender may notify "the Authority" in writing or by fax or e-mail. They should send in their queries before the date specified in the

header data. “The Authority” shall Endeavor to respond to the queries within the period specified therein. The responses will be sent by fax and/or e-mail. The Authority will forward all the queries and its responses thereto, to all purchasers of the TENDER without identifying the source of queries.
“The Authority” shall Endeavor to respond to the questions raised or clarifications sought by the Applicants. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read any clarification, but not later than the date provided in header data.
“The Authority” may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Applicants. All clarifications and interpretations issued by the Authority shall be deemed to be part of the tender. Verbal clarifications and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

61. Amendment of tender :-
At any time prior to the deadline for submission of Application, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by an Applicant, modify the tender by the issuance of Addendum.
Any Addendum thus issued will be sent in writing/ Fax/ Email to all those who have purchased the tender.
In order to afford the Applicants a reasonable time for taking an Addendum into account, or for any other reason, the Authority may, in its sole discretion, extend the Application Due Date.

Preparation and Submission of Application
62. Language :-
The Application and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Applicant with the Application may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Applicant. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.

63. Format and signing of Application :
The Applicant shall provide all the information sought under this TENDER. The Authority will evaluate only those Applications that are received in the required formats and complete in all respects. Incomplete and /or conditional Applications shall be liable to rejection.
The Applicant will upload bid in One Folder in electronic form which shall contain the scanned certified copies of the documents given below and the documents uploaded has to be digitally signed by the bidder. These copies shall be certified by Practicing Notary approved by the Govt. of Maharashtra or Govt. of India with his stamp, clearly stating his name & registration number, except where original documents are demanded

64. Marking of Applications :
The Applicant shall submit the Application in the format specified at Appendix-I, together with the documents, upload in folder as “VENDOR” together with their respective enclosures. Applications submitted by fax, telex, telegram shall not be entertained and shall be rejected outright.

65. Late Applications :
Applications received by the Authority after the specified time on the Application Due Date shall not be eligible for consideration and shall be summarily rejected.

66. Confidentiality :
Information relating to the examination, clarification, evaluation, and recommendation for the short-listed qualified Applicants shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Authority in relation to or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of Application, in confidence and will require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority or as may be required by law or in connection with any legal process.

67. Clarification Of Financial Bids :
To assist in the examination, evaluation and comparison of Bids, the Engineer may, at his discretion, ask any bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing or by post/facsimile/e-mail. No Bidder shall contact the Engineer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. Any effort by the Bidder to influence the Engineer in the Engineer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

68. Inspection of site and sufficiency of tender :
a) The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works and means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender. He shall also take into consideration the hydrological and climatic conditions.
b) The Employer may make available to the Contractor data on hydrological and sub-surface conditions as obtained by or on his behalf from investigations relevant to the works but the Contractor shall be responsible for his own interpretation thereof. The contractor shall engage his investigating agency with prior approval of the Engineer from the approved list of such agencies by DEAN(G.S.M.C. & K.E.M.H.) or Govt at his cost initially before commencing actual work and which shall be reimbursed immediately subject to satisfaction of the Engineer for faithful compliance and submission of required data regarding such investigation within specified time.
c) The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of works / items / quantities, or in Bill of Quantities, which rates and prices shall, except as otherwise provided cover all his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works. No extra charges consequent on any misunderstanding.
d) Not Foreseeable Physical Obstructions or Conditions: If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions

were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Contractor, determine:
any extension of time to which the Contractor is entitled and
The amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price.
And shall notify the contractor accordingly. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer. However such costings shall be got approved by the competent authority as governed vide rules prevailing with authority.

e) Office for the Engineer (Works costing upto Rs.50 Lakhs) ;
The Contractor shall at his own cost and to satisfaction of the Engineer provide a small temporary office, at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, telephone with a pre-requisite of e-governance and electronic communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance for Municipal Staff.

f) Office for the Engineer (Works costing above Rs.50 lakhs) :
The Contractor shall at his own cost and to satisfaction of the Engineer provide a temporary office at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, latrines, with doors, windows, locks, bolts and fastenings sufficient for security for the Engineer, and his subordinates, as close to the works from time to time in progress as can be conveniently arranged, and shall at his own cost furnish the office with such chairs, tables, lockers, locks and fastenings as may be required by the Engineer, and no expense of any kind in connection with the erection or upkeep of the offices or fittings shall be borne by the Corporation, but all such work shall be carried out by the Contractor and the expenses thereof defrayed by him. The Contractor shall also make water connections and fit up stand pipe with a bib tap at each office. The latrines and the water connections shall be subject to all the conditions herein elsewhere laid down for temporary water connection and latrines generally with all requisite equipments for e-governance and electronic and digital communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance. Also, for staff working beyond working hours the contractor has to provide conveyance.

g) Permission for provision and removal of office on completion of work: The tenderer shall obtain permission for provision of site office, cement go-down, store, etc. on payment of necessary cost implication. The cement go-down, Watchman cabins, etc. shall be provided as directed and shall be removed by the Tenderers on completion of the work at their cost. It is binding on the Tenderer to fulfill requirements of Environmental Authorities. The location of such office shall be finalized and got approved from the

Engineer before erection/commencement work.

h) Contractor's office near works : The Contractor shall have an office near the works at which notice from the Commissioner or the Engineer may be served and shall, between the hours of sunrise and sunset on all working days, have a clerk or some other authorized person always present at such office upon whom such notices may be served and service of any notices left with such clerk or other authorized person or at such office shall be deemed good service upon the Contractor and such offices shall have pre-requisite facilities for e-governance.

69. Official Secrecy :
The Contractor shall of all the persons employed in any works in connection with the contract that the India Official Secrets Act 1923 (XIX of 1923) applies to them and will continue to apply even after execution of the said works and they will not disclose any information regarding this contract to any third party. The contractor shall also bring into notice that, any information found to be leaked out or disclosed the concern person as well as the Contractor will be liable for penal action; further the G.S.M.C. & K.E.M.H.will be at liberty to terminate the contract without notice.

70. Subsequent Legislation:
If on the day of submission of bids for the contract, there occur changes to any National or State stature, Ordinance, decree or other law or any regulation or By-laws or any local or other duly constituted authority or the introduction of any such National or State Statute, Ordinance, decree or by which causes additional or reduced cost to the Contractor, such additional or reduced cost shall, after due consultation with the Contractor, be determined by the concerned Engineering Department of DEAN(G.S.M.C. & K.E.M.H.) and shall be added to or deducted from the Contract Price with prior approval of competent authority and the concerned Engineering Department shall notify the Contractor accordingly with a copy to the Employer. DEAN(G.S.M.C. & K.E.M.H.) reserve the right to take decision in respect of addition/reduction of cost in contract.

Patent, Right and Royalties:
The contractor shall save harmless and indemnify the G.S.M.C. & K.E.M.H.from and against all claims and proceedings for or on account of infringement of any Patent rights, design trademark or name of other protected rights in respect of any constructional plant, machine work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works or any of them.

Payments, Tax and Claims:
a) The limit for unforeseen claims
Under no circumstances whatever the contractor shall be entitled to any compensation from DEAN(G.S.M.C. & K.E.M.H.) on any account unless the contractor shall have submitted a claim in writing to the Eng-in-change within 1 month of the case of such claim occurring.
b) No interest for delayed payments due to disputes, etc:
It is agreed that the or its Engineer or Officer shall not be liable to pay any interest or

damage with respect of any moneys or balance which may be in its or its Engineer's or officer's hands owing to any dispute or difference or claim or misunderstanding between the Municipal G.S.M.C. & K.E.M.H.of Greater Bombay or its Engineer or Officer on the one hand and the contractor on the other, or with respect to any delay on the part of the Municipal G.S.M.C. & K.E.M.H.of Greater Bombay or its Engineer or Officers in making periodical or final payments or in any other respect whatever.

Settlement of Disputes:

a) Termination of contract for death

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the legal representative of the individual Contractor or the proprietor of the proprietary concern and in case of partnership, the surviving partners, are capable of carrying out and completing the contract, the Commissioner shall be entitled to cancel the contract as to its uncompleted part without the G.S.M.C. & K.E.M.H.being in any way liable to payment of any compensation to the estate of the deceased Contractor and or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Commissioner that the legal representative of the deceased Contractor or surviving partners of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the Commissioner shall not hold estate of the deceased Contractor and or surviving partners of the Contractor's firm liable in damages for not completing the contract.

b) Settlement of Disputes:

If any dispute or differences of any kind whatsoever other than those in respect of which, the decision of any person is, by the Contract, expressed to be final and binding) shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with or arising out of the Contract or carrying out of the Works (Whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract) it, the aggrieved party may refer such dispute within a period of 7 days to the concerned Addl. Municipal Commissioner who shall constitute a committee comprising of three officers i.e. concerned Deputy Municipal Commissioner or Director (ES&P), Chief Engineer other than the Engineer of the Contract and concerned Chief Accountant. The Committee shall give decision in writing within 60 days. Appeal on the Order of the Committee may be referred to the Municipal Commissioner within 7 days. Thereafter the Municipal Commissioner shall constitute a Committee comprising of three Addl. Municipal Commissioners including Addl. Municipal Commissioner in charge of Finance Department. The Municipal Commissioner within a period of 90 days after being requested to doso shall give written notice of committee's decision to the Contractor. Save as herein provided such decision in respect of every matter so referred shall be final and binding upon both parties until the completion of the works, and shall forthwith be given effect to by the Contractor who shall proceed with the works with due diligence, whether he requires arbitration as hereinafter provided or not. If the Commissioner has given written notice of the decision to the Contractor and no Claim to arbitration has been communicated within a period of 90 days from receipt of such notice the said decision shall remain final and binding upon the Contractor.

Arbitration and Jurisdiction:

If the Commissioner shall fail to give notice of the decision as aforesaid within a period of 90 days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then and in any such case the Contractor may within 90 days after receiving notice of such decision or within 90 days after the expirations of the first named

period of 90 days (as the case may be) require that the matter or matters in dispute be referred to arbitration as hereinafter provided. All disputes or differences in respect of which the decision (if any) of the Commissioner has not become final and binding as aforesaid shall be finally settled by Arbitration as follows: Arbitration shall be effected by a single arbitrator agreed upon the parties. The arbitration shall be conducted in accordance with the provisions of the Arbitration Act, 1996 or any statutory modifications thereof, and shall be held at such place and time within the limits of Brihan Mumbai as the arbitrator may determine. The decision of the arbitrator shall be final and binding upon the parties hereto and the expense of the arbitration shall be paid as may be determined by the arbitrator. Performance under the Contract shall, if reasonably be possible, continued during the arbitration proceedings and payment due to the Contractor by the Employer shall not be withheld unless they are the subject matter of arbitration proceedings. The said arbitrator shall have full power to open up, review and revise any decision, opinion, direction, certification or valuation of the Commissioner and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the Commissioner for the purpose of obtaining his said decision. No decision given by the Commissioner in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matters whatsoever relevant to the disputes or difference referred to the arbitrator as aforesaid. All awards shall be in writing and for claims equivalent to 5,00,000 or more such awards shall state reasons for amounts awarded. The expenditure of arbitration shall be paid as may be determined by arbitrator.
In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

Copyright:
The copyright of all drawings and other documents provided by the Contractor under the contract shall remain vested in the Contractor or his sub-contractors as the case may be the employer shall have a license to use such drawings and other documents in connection with the design, construction, operation, maintenance of the works. At any time the Employer shall have further license without additional payment to the Contractor to use any such drawings or documents for the purpose of making any improvement of the works or enlargement or duplication of any part thereof, provided that such improvement, enlargement, or duplication by itself or in conjunction with any other improvements, enlargements or duplications already made in accordance with the further license does not result in the duplication of the whole works.

Receipts to be signed in firm’s name by any one of the partners:
Every receipt for money which may become payable or for any security which may become transferable to the Contractor under these present shall, if signed in the partnership name by any one of the partners, be a good and sufficient discharge to the Commissioner and Municipal G.S.M.C. & K.E.M.H.in respect of the money or security purporting to be acknowledged thereby, and in the event of death of any of the partners during the pendency of this contract, it is hereby expressly agreed that every receipt by any one of the surviving partners shall, if so signed as aforesaid, be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the Commissioner or the G.S.M.C. & K.E.M.H.may hereafter have against the legal representatives of any partners 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 prejudicial or affect the respective rights or obligations of the

Contractors and of the legal representatives of any deceased Contractors interest.

Proprietary data :
All documents and other information supplied by the Authority or submitted by an Applicant to the Authority shall remain or become the property of the Authority. Applicants are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Application. The Authority will not return any Application or any information provided along therewith.

Correspondence with the Applicant :
Save and except as provided in this TENDER, the Authority shall not entertain any correspondence with any Applicant in relation to the acceptance or rejection of any Application.

Price Variation Clause :
The Contractor shall be reimbursed or shall refund to the G.S.M.C. & K.E.M.H.as he case may be the variation in the value of the work carried out from time to time, depending on whether the prices of material and labour as a whole rise or fall, and the method adopted for such computations shall be as given below, it being clearly understood that the contractor shall have no claim for being reimbursed on the ground that the price of a particular material or group of materials have risen beyond the limits of the presumptions made in the following paras, however, no price variations shall be made applicable for contracts upto 12 months:
A) Controlled materials: Price variations shall be permitted in respect of these materials the price level of which is controlled by the Government or its agency. The rate ruling on the date of submission of the tender shall be considered as the basic price of such material for adjustment. Any variation in this rate shall be considered for reimbursement to the contractor or refund to be claimed from the contractor as the case may be. The contractor shall, for the purpose of adjustment submit in original the relevant documents from the suppliers.
B) Labour and other materials: For the purpose of this contract and for allowing reimbursement of refund on account of variation of prices of (i) labour, and (ii) materials other than materials mentioned in A above, computation will be based on the formula enunciated below which is based on the presumptions that :
The general price level of labour, rises or falls in proportion to the rise or fall of consumer price index number 9 (general) for working class in Mumbai.
The general price level of materials rises or falls in proportion to rise or fall of whole-sale price index as published by 'Economic Adviser to Govt. of India'.
And that the component of labour is to the extent of 30 percent of 88 percent and the component of materials is to the extent of 70 percent of 88 percent of the value of the work carried out. The remaining 12 percent being the presumptive profit of the contractor.
aa) Formula for Labour component:

$$VL = \frac{(0.88\ R) \times 30}{100} \times \frac{(I - IO)}{IO}$$

b) Formula for Material component :

$$VM = \frac{(0.88\ R \times 70 - C)}{100} \times \frac{(W - WO)}{WO}$$

Where –
VL = Amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of index referred to above.
I = Consumer Price Index number of working class for Mumbai (declared by the

Commissioner of Labour and Director of Employment, Mumbai) applicable to the period under reference (base year ending 2004-05 as 100 i.e. new series of
IO = Consumer price index number for working class for Mumbai (declared by the Commissioner of labour and Director of Employment, Mumbai) prevailing, on the day of 28 days prior to the date of submission of the tender.
VM = The amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of wholesale price index for period under reference.
W = Average wholesale price index as published by Economic Adviser to Govt. of India applicable to the period under reference.
WO = Wholesale price index as stated above prevailing on the day of 28 days prior to the date of submission of the tender.
R = Total value of the work done during the period under reference as recorded in the Measurement Book excluding water charges and sewerage charges but including cost of excess in respect of item upto 50 percent
C = Total value of Controlled materials used for the works as recorded in Measurement Book and paid for at original basic rate plus the value of materials used .
I) The quantity of the Controlled material adopted in working out the value of 'C' shall be inclusive of permitted wastages as / if mentioned in specifications.
II) The basic rate for the supply of controlled material shall be inclusive of all the components of cost of materials excluding transport charges incurred for bringing the material from place of delivery to the site.
Computations based on the above formula will be made for the period of each bill separately and reimbursement will be made to (when the result is plus) and refund will claimed from (when the result is minus) the contractor's next bill. The above formulae will be replaced by the formulae in Annexure-I as and when mentioned in special conditions of contract
The operative period of the contract for application of price variation shall mean the period commencing from the date of commencement of work mentioned in the work date when time allowed for the work specified in the contract for work expires, taking into consideration, the extension of time, if any, for completion of the work granted by Engineer under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contractor.
The decision of the Engineer as regards the operative period of the contract shall be final and binding on the contractors.
Where there is no supply of controlled items to contractor the component 'C' shall be taken as zero.

Adjustment after completion: If the Contractor fails to complete the works within the time for completion adjustment of prices thereafter until the date of completion of the works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices whichever is more favorable to the employer, provided that if an extension of time is granted, the above provision shall apply only to adjustments made after the expiry of such extension of time.

Price variation will be calculated similarly and separately for extra items and / or excess quantities and provisional sums calculated under Sub Clause 10 (b)A (i)&(ii) and Sub Clause 10 (b) B(ii) based on the above formula/formulae in Annexure-I as and when mentioned in Special conditions of contract; IO and WO being the indices applicable to the date on which the rates under Sub Clause 10 (a)A (i)&(ii) and Sub Clause 10 (a) B(iii) are fixed. No price variation shall be admissible for FAIR items created during execution.

Maximum Price Variation shall be as follows:

Time Period of Project	Maximum limit of Price Variation
Up to 12 months	No variation allowed
Above12 months to 24 months	5%
Above 24 months	10%

* Approval of AMC/MC shall be obtained before invitation of tender in case of any changes in above.

Note : 1) The extension in time period for the projects originally estimated including monsoon results in change of price variation slabs as mentioned above i.e.from first slab to second slab or from second slab to third slab, then the maximum limit of original slab will prevail.

2) Operative period shall mean original or extended time period of contract.

For example :

Extension of Time period	Maximum Price Variation
If original period of 11 months including monsoon extends to 16. The operative period will be 11+5 months	No variation allowed
If original period of 11 months excluding monsoon extends to 16. The operative period will be 11+5 months	Maximum 5% variation allowed

Price Variation during Extended Period of Contract:

I) Extension Due To Modification & Extension for delay due to DEAN(G.S.M.C. & K.E.M.H.) :

The price variation for the period of extension granted shall be limited to the amount payable as per the Indices. In case the indices increases or decreases, above/below the indices applicable, to the last month of the original or extended period vide clause8(l)(a)(i) and (ii) of standard GCC

II) Extension Of Time For Delay Due To Contractor :

The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increase, above the indices applicable, to the last month of the original completion period or the extended period vide above clause 8(l)(a)(i) and (ii) of standard GCC.

(a) The price variation shall be limited to the amount payable as per the indices, in case the indices decrease or fall below the indices applicable, to the last month of original / extended period of completion period vide above clause 8(l)(b) of standard GCC, then lower indices shall be adopted.

(b) Extension of Time For Delay due to reasons not attributable to DEAN(G.S.M.C. & K.E.M.H.) and Contractor (Reference Cl.8(d) of Standard GCC):

(c) The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increases or decreases, above/below the indices applicable, to the last month of the original period.

81. Payment:

Interim Payment :

I) Interim bills shall be submitted by the Contractor from time to time (but at an interval of not less than one month) for the works executed. The Engineer shall arrange to

have the bill s verified by taking or causing to be taken, where necessary, the requisite measurement of work.

II) Payment on account for amount admissible shall be made on the Engineer certifying the sum to which the Contractor is considered entitled by way of interim payment for all the work executed, after deducting there from the amount already paid, the security deposit / retention money and such other amounts as may be deductible or recoverable in terms of the contract.

III) On request, the contractor will be paid upto 75 percent of the value of the work carried out as an adhoc payment in the first week of next month after deducting there from recoveries on account of advances, interest, retention money, income tax etc. The balance payment due will be paid thereafter.

IV) No interim payment will be admitted until such time the Contractor have fully complied with the requirement of the Condition no.8 (g) and 8 (h) concerning submission and approval of Network Schedule for the works, as detailed in Condition 8 (h). A fixed sum shall be held in abeyance at the time of next interim payment for non-attainment of each milestone in the network and shall be released only on attainment of the said milestone.

V) An interim certificate given relating to work done or material delivered may be modified or corrected by a subsequent interim certificate or by the final certificate. No certificate of the Engineer supporting an interim payment shall of itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract.

82. Banning / De-Registration of Agencies of Construction works in DEAN(G.S.M.C. & K.E.M.H.) ::

The regulations regarding Demotion/ Suspension Banning for specific period or permanently / De-Registration shall be governed as per the respective condition in Contractor Registration Rules of DEAN(G.S.M.C. & K.E.M.H.).

83. JOINT VENTURE

In case if Joint Venture is allowed for the Project, the guidelines for JV as follows shall be incorporated in the Tender Document :

Joint Venture should be allowed only when the number of identifiable different works is more than one and/or the estimated cost of tender is more than Rs.100 Crores. JV shall also be allowed for complex technical work below Rs.100 Crores with the approval of concerned AMC

Separate identity / name shall be given to the Joint Venture firm.

Number of members in a JV firm shall not be more than three in normal circumstances, if the work involves only one discipline (say Civil or Electrical). If number of members in JV is required to be more than three, then approval of concerned AMC needs to be sought.

A member of JV firm shall not be permitted to participate either in individual capacity or as a member of another JV firm in the same tender.

The tender form shall be purchased and submitted in the 'name of the JV firm or any constituent member of the JV.

Normally EMD shall be submitted only in the name of the JV and not in the name of constituent member. However, EMD in the name of lead partner can be accepted subject to submission of specific request letter from lead partner stating the reasons for not submitting the EMD in the name of JV and giving written confirmation from the JV partners to the effect that the EMD submitted by the lead partner may be deemed as EMD submitted by JV firm.

One of the members of the JV firm shall be the lead member of the JV firm who shall

have a majority (at least 51%) share of interest in the JV firm. The other members shall have a share of not less than 20% each in case of JV firms with up to three members and not less than 10% each in case of JV firms with more than three members. In case of JV firm with foreign member(s), the lead member has to be an Indian firm with a minimum share of 51%.

A copy of Letter of Intent or Memorandum of Understanding (MoU) executed by the JV members shall be submitted by the JV firm along with the tender. The complete details of the members of the JV firm, their share and responsibility in the JV firm etc. particularly with reference to financial technical and other obligation shall be furnished in the agreement.

Once the tender is submitted, the agreement shall not be modified/altered/terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited. In case of successful tenderer, the validity of this agreement shall be extended till the currency of the contract expires.

Approval for change of constitution of JV firm shall be at the sole discretion of the DEAN(G.S.M.C. & K.E.M.H.). The constitution of the JV firm shall not be allowed to be modified after submission of the tender bid by the JV firm except when modification becomes inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. In any case the Lead Member should continue to be the Lead Member of the JV firm. Failure to observe this requirement would render the offer invalid.

Similarly, after the contract is awarded, the constitution of JV firm shall not be allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract condition.

On award of contract to a JV firm, a single Performance Guarantee shall be required to be submitted by the JV firm as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization advance, machinery Advance etc. shall be accepted only in the name of the JV firm and no splitting of guarantees amongst the members of the JV firm shall be permitted.

On issue of LOA, an agreement among the members of the JV firm (to whom the work has been awarded) has to be executed and got registered before the Registrar of the Companies under Companies Act or before the Registrar / Sub-Registrar under the Registration Act, 1908. This agreement shall be submitted by the JV firm to the DEAN(G.S.M.C. & K.E.M.H.) before signing the contract agreement for the work. (This agreement format should invariably be part of the tender condition). In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited and other penal actions due shall be taken against partners of the JV and the JV. This joint venture agreement shall have, interalia, following clauses :-

Joint and several liability - The members of the JV firm to which the contract is awarded, shall be jointly and severally liable to the Employer (DEAN(G.S.M.C. & K.E.M.H.)) for execution of the project in accordance with General and Special conditions of the contract. The JV members shall also be liable jointly and severally for the loss, damages caused to the DEAN(G.S.M.C. & K.E.M.H.) during the course of execution of the contract or due to no execution of the contract or part there-of.

Duration of the Joint Venture Agreement -It shall be valid during the entire period of the contract including the period of extension if any and the maintenance period after the work is completed.

Governing Laws - The Joint Venture Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.

Authorized Member -Joint Venture members shall authorize one of the members on be-half of the Joint Venture firm to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV firm.
No member of the Joint Venture firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the employer in respect of the said tender/contract.
Documents to be enclosed by the JV firm along with the tender:
(I) In case one or more of the members of the JV firm is/are partnership firm(s), following documents shall be submitted:
a) Notary certified copy of the Partnership Deed,
b) Consent of all the partners to enter into the Joint Venture Agreement on a stamp paper of appropriate value (in original).
c) Power of Attorney (duly registered as per prevailing law) in favor of one of the partners to sign the MOU and JV Agreement on behalf of the partners and create liability against the firm.
(II) In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:
a) Affidavit on Stamp Paper of appropriate value declaring that his Concern is a Proprietary Concern and he is sole proprietor of the Concern OR he is in position of "KARTA" of Hindu Undivided Family and he has the authority, power and consent given by other partners to act on behalf of HUF.
(III) In case one or more members is/are limited companies, the following documents shall be submitted:
a) Notary certified copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement, authorizing MD or one of the Directors or Managers of the Company to sign MOU, JV Agreement, such other documents required to be signed on behalf of the Company and enter into liability against the company and/or do any other act on behalf of the company.
b) Copy of Memorandum and articles of Association of the Company.
c) Power of Attorney (duly registered as per prevailing law) by the Company authorizing the person to do/act mentioned in the para (a) above.

All the members of the JV shall certify that they have not been black listed or debarred by DEAN(G.S.M.C. & K.E.M.H.) from participation in tenders/contract in the past either in their individual capacity or the JV firm or partnership firm in which they were members / partners.
Credentials & Qualifying criteria: Technical and financial eligibility of the JV firm shall be adjudged based on satisfactory fulfilment of the following criteria:

Technical eligibility criteria : In case of Work involving single discipline, the Lead member of the JV firm shall meet at least 35% requirement of technical capacity as stipulated in tender document.
OR
In case of composite works (e.g. works involving more than one distinct component such as Civil Engineering works, M&E works, Electrical works, etc. and in the case of major bridges, substructure and superstructure etc.), atleast one member should have satisfactorily completed 35% of the value of any one component of the project work so as to cover all the components of project work or any member having satisfactorily completed 35% of the value of work of each component during last seven financial years.

In such cases, what constitutes a component in a composite work shall be clearly defined as part of the tender condition without any ambiguity.
Financial eligibility criteria : The contractual payments received by the JV firm or the arithmetic sum of contractual payments received by all the members of JV firm in any one of the previous three financial years and shall be at least 100% of the estimated value of the work as mentioned in the tender.

84. Compensation for delay:
If the Contractor fails to complete the works and clear the site on or before the Contract or extended date(s) / period(s) of completion, he shall, without prejudice to any other right or remedy of Municipal G.S.M.C. & K.E.M.H.on account of such breach, pay as agreed compensation, amount calculated as stipulated below (or such smaller amount as may be fixed by the Engineer) on the contract value of the whole work or on the contract value of the time or group of items of work for which separate period of completion are given in the contract and of which completion is delayed for every week that the whole of the work of item or group of items of work concerned remains uncompleted, even though the contract as a whole be completed by the contract or the extended date of completion. For this purpose the term 'Contract Value' shall be the value of the work at Contract Rates as ordered including the value of all deviations ordered:
Completion period for projects (originally stipulated or as extended) not exceeding 6 months : to the extent of maximum 1 percent per week.
Completion period for projects (originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: to the extent of maximum ½ percent per week.
Completion period for projects (originally stipulated or as extended) exceeding 2 years : to the extent of maximum ¼ percent per week.

When the delay is not a full week or in multiple of a week but involves a fraction of a week the compensation payable for that fraction shall be proportional to the number of days involved.
Provided always that the total amount of compensation for delay to be paid this condition shall not exceed the undernoted percentage of the Contract Value of the item or group of items of work for which a separate period of completion is given.
Completion period (as originally stipulated or as extended) not exceeding 6 months: 10 percent.
Completion period (as originally stipulated or as extended) exceeding 6 months and not exceeding 2 years : 7½ percent.
Completion period (as originally stipulated or as extended) exceeding 2 years : 5 percent.
The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the Municipal Corporation.

Action And Compensation Payable In Case Of Bad Work And Not Done As Per Specifications ::
All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Vigilance Department of the DEAN(G.S.M.C. & K.E.M.H.) or any organization engaged by the DEAN(G.S.M.C. & K.E.M.H.) for Quality Assurance and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the

contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or to the officer of Vigilance Department, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 8.e. of the general condition of contract in section 9 of tender document (for Compensation for delay) for this default. In such case the Engineer-in Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Engineer in charge may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.
If the penalisation amount exceeds maximum limit with respect to Clause 8.e of Standard General Conditions of Contract, then a show cause notice shall necessarily be issued to the contract as to why the contract should not be terminated.

The above clause is summarized to make it easy to understand as follows:
The Engineer-in-charge shall issue notice to the contractor for rectifying the defects or redoing of the work if necessary, within specific time to achieve the desired quality and quantity of the work and this should be governed by clause 8.f and 9.b of Standard General Conditions of Contract.
2. If the contractor fails to comply the same, only then, the contractor shall be liable to pay compensation at the same rate as under clause 8.e of the Standard General Condition of Contract (for Compensation for delay) for this default.
3. If the penalization amount exceeds the maximum limit, then the contractor will be liable for being banned/ deregistered from business dealings with DEAN(G.S.M.C. & K.E.M.H.) and this shall be governed by relative provision in Registration Rules of DEAN(G.S.M.C. & K.E.M.H.) and Standard General Conditions of Contract.
4. This penalization shall be levied only on account of delay in work, unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of quality inferior to that contracted for or otherwise not in accordance with the contract.

86. Contractor remain liable to pay compensation :
In any case in which any of the powers conferred upon the Engineer In-charge by the relevant clauses in documents that form a part of contract as exercised or is exercisable in the event of any future case of default by the Contractor, he is declared liable to pay compensation amounting to the whole of his security deposit. The liability of the Contractor for past and future compensation shall remain unaffected.

In the event of the Executive Engineer taking action against these relevant clauses, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of site thereof or belonging to the Contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Executive Engineer, may after giving notice in writing to the Contractor or his staff of the work or other authorized agent require him to remove such tools and plants, materials or stores from the premises within a time to be specified in such notice and in the event of the Contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractors expense of sell them by auction or private sell on account of the Contractor at his risk in all respects and certificate of the Executive Engineer as to the expense of any such removal and the amount of the proceeds an expense of any such sell be final and conclusive against the Contractor.

No Claim To Any Payment Or Compensation Or Alteration In Or Restriction Of Work :
(a) If at any time after the execution of contract documents, the Engineer shall for any reason whatsoever, desires that the whole or any part of the works specified in the Tender should be suspended for any period or that the whole or part of the work should not be carried out, at all, he shall give to the Contractor a Notice in writing of such desire and upon the receipt of such notice, the Contractor shall forthwith suspend or stop the work wholly or in part as required after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury the work already done or endanger the safety thereof, provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor.
The Contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.
b) Where the total suspension of Work Order as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving 10 days prior notice in writing to the Engineer within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineering to record the final measurement of the work already done and to pay final bill. Upon giving such Notice, the Contractor shall be deem to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such Notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.
(c) Where the Engineer required to Contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the Contractor shall be entitled to apply to the Engineer within 30 days of the resumption of the work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remained ideal on the site of on the account of his having an to pay the salary of wages and labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect of any such suspension whatsoever occasion by unsatisfactory work or any other default on his part, the decision of the

Engineer in this regard shall be final and conclusive against the contractor.

88. Contractor to supply plant, ladder, scaffolding, etc and is liable for damages arising from non provision of lights, fencing, etc. ::
The Contractor shall supply at his own cost all material, plant, tools, appliances, implements, ladders, cordage, tackle scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original altered or substituted form and whether included in the specification of other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Eng-In-Charge as to any matter as to which under these conditions is entitled to be satisfied, or which is entitled to require together with the carriage therefore to and from the work.
The Contractor shall also supply without charge, the requisite number of person with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurements of examination at any time and from time to time of the work or materials, failing which the same may be provided by the Engineer In-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or offers sufficient portion thereof.
The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defense of every suit, action or other legal proceedings, that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with the consent of the contractor be paid for compromising any claim by any such person.

89. Prevention of Fire :
The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the Engineer In-charge. When such permit is given, and also in all cases when destroying cut or dug up trees brushwood, grass, etc., by fire, the contractor shall take necessary measure to prevent such fire spreading to or otherwise damaging surrounding property. The Contractor shall make his own arrangements for drinking water for the labour employed by him.

90. Compensation for all damages done intentionally or unintentionally by contractor’s labour whether in or beyond the limits of DEAN(G.S.M.C. & K.E.M.H.) property including any damage caused by spreading the fire shall be estimated by the Engineer In-charge or such other officer as he may appoint and the estimate of the Engineer in-charge to the decision of the Dy. Chief Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the Contractor as damages or deducted by the Engineer In-charge from any sums that may be due or become due from DEAN(G.S.M.C. & K.E.M.H.) to contractor under this Contract or otherwise. Contractor shall bear the expenses of defending any action or other legal proceedings that may be brought to prevent the spread of fire and he shall pay any damages and costs that may be awarded by the Court in consequence.

91. In the case of Tender by partners, any change in the constitution of the firm shall be forthwith, notified by the contractor through the Engineer In-charge for his information.
92. Action where no specifications :
In the case of any class of work for which there is no such specifications, such works

shall be carried out in accordance with the specifications and in the event of there being no such specifications, then in such case, the work shall be carried out in all respects in accordance with all instructions and requirements of the Engineer In-charge.

93. Safety and medical help :

(I) The Contractor shall be responsible for and shall pay the expenses of providing medical help to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by DEAN(G.S.M.C. & K.E.M.H.), the same shall be recoverable from the contractor forthwith and be included without prejudice to any other remedy of DEAN(G.S.M.C. & K.E.M.H.) from any amount due or that may become due to the Contractor.

(II) The contractor shall provide necessary personal safety equipment and first-aid box for the use of persons employed on the site and shall maintain the same in condition suitable for immediate use at any time.

(III) The workers shall be required to use the safety equipments so provided by the contractor and the contractor shall take adequate steps to ensure the proper use of equipments by those concerned.

(IV) When the work is carried on in proximity to any place where there is risk or drawing all necessary equipments shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.

94. No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance of works, on account of ant delay in according to sanction of estimates.

95. Anti-malaria and other health measures:

Anti-Malaria and other health measures shall be taken as directed by the Executive Health Officer of DEAN(G.S.M.C. & K.E.M.H.). Contractor shall see that mosquitogenic conditions are created so as to keep vector population to minimum level. Contractor shall carry out anti-malaria measures in the area as per the guidelines issued by the Executive Health Officer of DEAN(G.S.M.C. & K.E.M.H.) from time to time.

In case of default, in carrying out prescribed anti-malaria measures resulting in increase in malaria incidence, contractor shall be liable to pay DEAN(G.S.M.C. & K.E.M.H.) on anti-malaria measures to control the situation in addition to fine.

SPECIFICATIONS

&

SELECTION OFMATERIAL

~~SPECIFICATIONS & SELECTION OF MATERIAL~~

~~**The tender is prepared on the basis of Unified Schedule of Rates and specifications 2013. The specifications of the items of USOR are available on DEAN(G.S.M.C. & K.E.M.H.) portal http://portal.DEAN(G.S.M.C. & K.E.M.H.).gov.inunder the Tender tab. Hence the deserving contractor shall either download the same from DEAN(G.S.M.C. & K.E.M.H.) portal or the same may be collected in the soft copy format at the time of purchasing the tender from this office.**~~

SELECTION OF MATERIAL

1) All materials brought on the site of work and meant to be used in the same, shall be the best of their respective kinds and to the approval of the Engineer. The Engineer or his representative will accept that the materials are really the best of their kinds, when it is proved beyond doubt that no better materials of the particular kind in question are available in the market.
2) The contractor shall obtain the approval of the Engineer of samples of all materials to be used in the works and shall deposit these samples with him before placing an order for the materials with the suppliers. The materials brought on the works shall conform in every respect to their approved samples. Fresh samples shall be deposited with the Engineer when-ever the type or source of any material changes.
3) The contractor shall check each fresh consignment of materials as it is brought to the site of works to see that they conform in all respects to the Specifications of the samples approved by the Engineer, or both.
4) The Engineer will have the option to have any of the materials tested to find out whether they are in accordance with the Specifications and the Contractor will bear all expenses for such testing. All B bills, vouchers and test certificates, which in the opinion of the Engineer or his representative are necessary to convince him as to the quality of the

materials or their suitability shall be produced for his inspection when required.

5) Any materials that have not been found to conform to the specifications will be rejected forthwith and shall be removed from the site by the contractor at his own cost within 24 hours.
6) The Engineer shall have power to cause the Contractors to purchase and use such materials from any particular source, as may in his opinion be necessary for the proper execution of the work.
7) Notwithstanding the source, the sand shall be washed using sand washing machine before use.

LIST OF APPROVED BANKS

LIST OF APPROVED BANKS

The following Banks with their branches in Greater Mumbai and in suburbs and extended suburbs up to Virar and Kalyan have been approved only for the purpose of accepting Banker's guarantee from 1997-98 onwards until further instructions.

The Bankers 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 Bank, within the Mumbai Limit categorically endorsing thereon that said bankers Guarantee is binding on the endorsing Branch of the bank within Mumbai limits and is liable to be on forced 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 and its subsidiary Banks**
1	State Bank Of India.
2	State Bank Of Bikaner & Jaipur.
3	State Bank Of Hyderabad.
4	State Bank Of Mysore.
5	State Bank Of Patiyala.
6	State Bank Of Saurashtra.
7	State Bank Of Travankore.
B	**Nationalized Banks**
8	Allahabad Bank.
9	Andhra Bank.
10	Bank Of Baroda.

11	Bank Of India.
12	Bank Of Maharashtra.
13	Central Bank Of India.
14	Dena Bank.
15	Indian Bank.
16	Indian Overseas Bank.
17	Oriental Bank Of Commerce.
18	Punjab National Bank.
19	Punjab & Sindh Bank.
20	Syndicate Bank.
21	Union Bank Of India.
22	United Bank Of India.
23	UCO Bank.
24	Vijaya Bank.
24A	G.S.M.C. & K.E.M.H.Bank.
C	**Scheduled Commercial Banks**
25	Bank Of Madura Ltd.
26	Bank Of Rajasthan Ltd.
27	Banaras State Bank Ltd.
28	Bharat Overseas Bank Ltd
29	Catholic Syrian Bank Ltd.
30	City Union Bank Ltd.
31	Development Credit Bank.
32	Dhanalakshmi Bank Ltd.
33	Federal Bank Ltd.
34	Indsind Bank Ltd.
35	I.C.I.C.I Banking G.S.M.C. & K.E.M.H.Ltd.
36	Global Trust Bank Ltd.
37	Jammu & Kashmir Bank Ltd.
38	Karnataka Bank Ltd.
39	KarurVysya Bank Ltd.
40	Laxmi Vilas Bank Ltd.
41	Nedugundi Bank Ltd.
42	Ratnakar Bank Ltd.
43	Sangli Bank Ltd.
44	South Indian Bank Ltd.
45	S.B.I G.S.M.C. & K.E.M.H.&Int Bank Ltd.

46	Tamilnadu Mercantile Bank Ltd.
47	United Western Bank Ltd.
48	Vysya Bank Ltd.
D	**Schedule Urban Co-op Banks**
49	Abhyudaya Co-op Bank Ltd.
50	Bassein Catholic Co-op Bank Ltd.
51	Bharat Co-op Bank Ltd.
52	Bombay Mercantile Co-op Bank Ltd.
53	Cosmos Co-op Bank Ltd.
54	Greater Mumbai Co-op Bank Ltd.
55	JanataSahakari Bank Ltd.
56	Mumbai District Central Co-op Bank Ltd.
57	Maharashtra State Co-op Bank Ltd.
58	New India Co-op Bank Ltd.
59	North Canara G.S.B. Co-op Bank Ltd.
60	Rupee Co-op Bank Ltd.
61	Sangli Urban Co-op Bank Ltd.
62	Saraswat Co-op Bank Ltd.
63	ShamraoVithal Co-op Bank Ltd.
64	Mahanagar Co-op Bank Ltd.
65	Citizen Bank Ltd.
66	Yes Bank Ltd.
E	**Foreign Banks**
67	ABM AMRO (N.Y.) Bank.
68	American Express Bank Ltd.
69	ANZ Grindlays Bank Ltd.
70	Bank Of America N.T. & S.A.
71	Bank Of Tokyo Ltd.
72	Bankindosuez.
73	BanqueNationale de Paris.
74	Barclays bank.
75	City Bank N.A.
76	Hongkong& Shanghai banking Corporation.
77	Mitsui Taiyokbe Bank Ltd.
78	Standard Chartered Bank.
79	Cho Hung Bank.

FORM OF TENDER

To,
The Municipal Commissioner for Greater Mumbai
Sir,

I/ We have read and examined the following documents relating to the work of:

Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital.

Notice inviting tender.

i. Directions to tenderers (Important and special)
ii. General condition of contract for M&E Works of the as amended up to date.
iii. Special conditions relating to work
iv. Special conditions of contract.
v. Agreement Form
vi. Scope of work and Technical specifications.
vii. Schedule of quantities.
viii. Annexure A, B and C.

1A. I/We_____
_____
(full name in capital letters, starting with surname), the Proprietor/ Managing Partner/ Managing Director/ Holder of the Business, for the establishment / firm / registered company, named herein below, do hereby offer to
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Referred to in the specifications and schedule to the accompanying form of contract of the rates entered in the schedule of rates sent herewith and signed by me/ us" (strike out the portions which are not applicable).

1B. I/We do hereby state and declare that I/We, whose names are given herein below in details with the addresses, have not filled in this tender 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 the establishment /firm or any other person, who have filled in the tender for the aforesaid work."

2. I/We hereby tender for the execution of the works referred to in the aforesaid documents, upon the terms and conditions, contained or referred to therein and in accordance with the specifications designs, drawings and other relevant details in all respects.

* At the rates entered in the aforesaid Bill of Quantities and Rates.

3. According to your requirements for payment of Earnest Money amounting to Rs._____/- (Rs._____ _____)

   I/We have deposited the amount through online payment gateways with the DEAN of the G.S.M.C. & K.E.M.H .not to bear interest

4. I/We hereby request you not to enter into a contract with any other person/s for the execution of the works until notice of non/acceptance of this tender has first been communicated to me/us, and in consideration of yours agreeing to refrain from so doing I/we agree not to withdraw the offer constituted by this tender before the date of communication to me/us of such notice of non/acceptance, which date shall be not later than ten days from the date of the decision of the Standing Committee or Education Committee of the Corporation, as maybe required under the Mumbai Municipal G.S.M.C. & K.E.M.H Act, not to accept this tender.(Subject to condition 5 below).

5. I/We also agree to keep this tender open for acceptance for a period of 180 days from the date fixed for opening the same and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.

6. I/We agree that the G.S.M.C. & K.E.M.H.shall, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely, if.

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

b. I/We fail to execute the formal contract or make the contract deposit when called upon to do so.

c. I/we do not commence the work on or before the date specified by the Engineer in his work order.

7. I/We hereby further agree to pay all the charges of whatsoever nature in connection with the preparation, stamping and execution of the said contract.
8. I/We further agree that, I/we shall register ourselves as 'Employer' with the Bombay Iron and Steel Labour Board' and fulfill all the obligatory provisions of Maharashtra Mathadi, Hamal and other Manual workers (Regulation of Employment and Welfare) Act 1969 and the Bombay Iron and Steel unprotected workers Scheme 1970.
9. "I/We…….…….. have failed in the accompanying tender with full knowledge of liabilities and, therefore, we will not raise any objection or dispute in any manner relating to any action, including forfeiture of deposit and blacklisting, for giving any information, which is found to be incorrect and against the instructions and directions given in this tender.
10. "I/We further agree and undertake that in the event it is revealed subsequently after the allotment of work/contract to me/us, that any information given by me/us in this tender is false or incorrect, I/We shall compensate the for any such losses or inconvenience caused to the G.S.M.C. & K.E.M.H.in any manner and will not resist any claim for such compensation on any ground 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 Corporation,"

Address Yours faithfully,

…….

…….……

Digital Signature of the Tenderer or the Firm

1…….

2…….

3…….

4…….

5…….

Full Name and private residential address
of all the partners constituting the Firm

A/c No.

…. …….

1. …….. Name of Bank
2. …….. ……
3. …….. Name of Branch
4. …….. …….
5. …….. Vender No. ……

AGREEMENT FORM

Tender / Quotation dated ……. 20…….

Standing Committee / Education Committee Resolution No. ……..…….

CONTRACT FOR THE WORKS

Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital This agreement made this day of …….……..……

Two thousand ……....…..……..……..……

Between ……...……...…….…….……
…
……..…….……..……..…
inhabitants of Mumbai, carrying on business at……...…..……
…
……...……
…….……
in Bombay under the style and name of Messrs. ……
……...
……...……...……
…… (Hereinafter called "the contractor of the one part and Shri. ……
…….……
…….…….

the Director(ME & MH) (hereinafter called "the commissioner" in which expression are included unless the inclusion is inconsistent with the context, or meaning thereof, his successor or successors for the time being holding the office of Director (ME & MH) of the second part and the (hereinafter called "the Corporation") of the third part, WHEREAS the contractor has tendered for the construction, completion and maintenance of the works described above and his tender has been accepted by the Commissioner (with the approval of the Standing Committee/Education Committee of the G.S.M.C. & K.E.M.H.NOW THIS

THIS AGREEMENT WITNESSETH as follows:-

1) In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract for works hereinafter referred to:-

2) The following documents shall be deemed to form and be read and constructed as a part of this agreement viz.

   a) The letter of Acceptance
   b) The Bid:
   c) Addendum to Bid; if any
   d) Tender Document
   e) The Bill of Quantities:
   f) The Specification:
   g) Detailed Engineering Drawings
   h) Standard General Conditions of Contracts (GCC)
   i) All correspondence documents between bidder and DEAN(G.S.M.C. & K.E.M.H.)

3) In consideration of the payments to be made by the Commissioner to the contractor as hereinafter mentioned the contractor hereby covenants with the Commissioner to construct, complete and maintain the works in conformity in all respects with the provision of the contract.

4) The Commissioner hereby covenants to pay to the Contractor in consideration of the construction, completion and maintenance of the works the contract sum, at times and in the manner prescribed by the contract.

IN WITNESS WHERE OF the parties hereto have caused their respective common seals to be herein to affixed (or have hereunto set their respective hands and seals) the day and year above written.

Signed, Sealed and delivered by the contractors

_____	_____
_____	_____
_____	_____
In the presence of	Trading under the name and style of

_____ _____

_____ _____

Full Name
Address

Contractors

Signed by the Dean (KEMH) in the presence of

_____

_____
Dean (KEMH)

The Common seal of the)
Municipal G.S.M.C. & K.E.M.H.of)
Greater Mumbai was affixed on)
The____ Day of __ 20___In the)
Presence of _____)
1 _____)
2 _____)
Two members of the Standing)
Education Committee of the)
Municipal G.S.M.C. & K.E.M.H.of)
Greater Mumbai)

Witness:)
_____)
Office Superintendent,)
Municipal Secretary's Office)

Assistant
Engineer (M&E)

K.E.M .HOSPITAL

Contract examined with the Quotation Tender and the Resolution No.____

Dated_____ of the Standing/Education Committee/Municipal Commissioner's Sanction No. _____ dated _____ etc. And found correct.

Head Clerk(M&E)

K.E.M. HOSPITAL

N.B. Rates should be legibly written, Erasures or Correction in figures without tenderer's initials, will render the tender liable to rejection. The tenderers are also expected to extend the figures in the column of amount to note total on each page and to work out finals at the end of the tender. Any irregularity by on this point may justify the rejection of the tender.

ANNEXURE " A "

Name of work: **"Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital"**

1. **The Engineer for this work:** Assistant Engineer (M&E)KEMH

2. **Estimated cost of Tender:** 1,48,94,000.00

Sr No	Description of work	Total Amount Rs.
1	Turn key work	Rs. 1,48,94,000.00

3. Earnest Money (2% of the Estimated cost) Rs. 3,00,000.00

4. Time Period

   1. Contract as a whole Period completion 3 Months (I.M.)

   2. Part or Groups of items

i)	i)
ii)	ii)
iii)	iii)

Percentage to be charged as supervision charges for the work got executed through other means 10 percent.

The “Actual cost of the work” shall mean in the case of percentage rate contracts the actual cost of the work executed at the rates as mentioned in the Contract Schedule adjusted by the Contractor's percentage rate and cost of extra and excess, but excluding the cost on account of Water Charges and Sewerage Charges if any, payable by the contractor and also excluding cost on account of price variation claims as provided in price variation clause as amended up to date.

1. In case of item rate contracts the actual cost calculated for the work executed at the rates mentioned in the contract schedule for different items including cost of excess and extra items of the work excluding the cost of water charges and sewerage charges if any, payable by the contractor and excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.

In case of lump sum contract the cost of the work actually carried out as per break up and programme of the work and the schedule of payment included in the contract including cost of any excess and/or extra items, of the work, excluding the cost on account of water charges and sewerage charges and also excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.

Annexure- B

PRE-CONTRACT INTEGRITY PACT

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:-

1. The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the DEAN(G.S.M.C. & K.E.M.H.), connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
2. The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the DEAN(G.S.M.C. & K.E.M.H.) or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.

3. The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

4. The Bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

5. The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the DEAN(G.S.M.C. & K.E.M.H.) or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

6. The Bidder shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the DEAN(G.S.M.C. & K.E.M.H.) as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder also undertakes to exercise due and adequate care lest any such information is divulged.

7. The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

8. The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

9. The Bidder and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process

For the purposes of this Clause 9, the following terms shall have the meaning herein after respectively assigned to them:

1. “fraudulent practice” means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process ;

2. “coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;

“undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and

"restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

Signature of Tenderer/Bidder

Annexure- C

(On Rs. 500/- Stamp Paper)

DECLARATION CUM INDEMNITY BOND

I, _____ of _____, do hereby declared and undertake as under.

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

(Monitoring) at the time of registration of my firm/company _____ and there is no change in the contents of the certificates that are submitted at the time of registration.

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

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

4.I further declare that if I am allotted the work and I failed to carry out the allotted work in accordance with the terms and conditions and within the time prescribed and specified, DEAN(G.S.M.C. & K.E.M.H.) is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the contract.

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

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

Signature of Tenderer/Bidder

BANKERS GURANTEE IN LIEU OF CONTRACT DEPOSIT

THIS INDENTURE made this _____day of _____ BETWEEN

THE _____BANK incorporated under the English/Indian Companies Acts and carrying on business in Mumbai (hereinafter referred to as 'the bank' which expression shall be deemed to include its successors and assigns)of the first part _____ ___ inhabitants carrying on business at _____ in Mumbai under the style and name of Messer's _____(hereinafter referred to as 'the consultant') of the second part Shri. _____ THE MUNICIPAL COMMISSIONER FOR GREATER MUMBAI (hereinafter referred to as 'the commissioner' which expression shall be deemed, also to include his successor or successors for the time being in the said office of Municipal Commissioner) of the third part and THE (hereinafter referred to as 'the Corporation') of the fourth part WHEREAS the consultants have

submitted to the Commissioner tender for the execution of the work of "_____and the terms of such tender /contract require that the consultants shall deposit with the Commissioner as/contract deposit/ earnest money and /or the security a sum of Rs._____(Rupees _____) AND WHEREAS if and when any such tender is accepted by the Commissioner, the contract to be entered into in furtherance thereof by the consultants will provide that such deposit shall remain with and be appropriated by the Commissioner towards the Security - deposit to be taken under the contract and be redeemable by the consultants, if they shall duly and faithfully carry out the terms and provisions of such contract and shall duly satisfy all claims properly chargeable against them there under AND WHEREAS the consultants are constituents of the Bank and in order to facilitate the keeping of the accounts of the consultants, the Bank with the consent and concurrence of the consultants has requested the Commissioner to accept the undertaking of the Bank hereinafter contained, in place of the contractors depositing with the Commissioner the said sum as earnest money and /or security as aforesaid AND WHEREAS accordingly the Commissioner has agreed to accept such undertaking NOW THIS AGRREMENT WITHNESSES that in consideration of the premises, the Bank at the request of the consultants (hereby testified) UNDERTAKES WITH the commissioner to pay to the commissioner upon demand in writing , whenever required by him , from time to time , so to do ,a sum not exceeding in the whole Rs._____(Rupees_____)under the terms of the said tender and /or the contract .The B.G. Is valid upto _____"Notwithstanding anything what has been stated above, our liability under the above guarantee is restricted to Rs._____only and guarantee shall remain in force upto _____ unless the demand or claim under this guarantee is made on us in writing on or before _____all your right under the above guarantee shall be forfeited and we shall be released from all liabilities under the guarantee thereafter"

IN WITNESS WHEREOF

WITNESS(1) _____

Name and _____

address_____

WITNESS(2)_____

Name and _____ the duly constituted Attorney Manager

address _____

the Bank and the said Messer's _____

_____ (Name of the Bank)

WITNESS(1)_____

Name and _____

address_____

WITNESS(2)_____

Name and _____

For Messer's _____

address _____

have here into set their respective hands the day and year first above written.

The amount shall be inserted by the Guarantor, representing the Contract Deposit in Indian Rupees.

Annexure-D

Rate Analysis

Item Description :

.....

Sr. No.	Description of rate analysis parameters	Unit	Quantity	Rate	Amount
1	Basic Material (Rate should be inclusive of all taxes)				
2	Machinery Hire Charges				
3	Labour Type (labour components)				
4	Total of all components				
5	Overhead & Profit 15% on 4				
6	Total Rate (4+5)				
7	Per unit rate				

Sign & Seal of the Tenderer

VARIOUS PROFORMAS

PROFORMA I ::

The list of similar works as stated in para 'A' of Post qualification during last three years–

PROFORMA- I					
No.	**Name of project**	**Name of Employer**	**Stipulated date of completion**	**Actual date of completion**	**Actual cost of work done**
1	**2**	**3**	**4**	**5**	**6**

NOTE:

Scanned Attested copies of completion/performance certificates from the Engineer-in-Charge for each work should be annexed in the support of information furnished in the above proforma. Works shall be grouped financial year-wise.

PROFORMA II ::

Yearly turnover during the last five years.

PROFORMA- II					
No.	**Financial year**	**Annual turnover of works**	**Updated value to current year**	**Average of last 5 years**	**Page No.**
1	**2**	**3**	**4**	**5**	**6**
1					
2					
3					
4					
5					
TOTAL					

NOTE: The above figures shall tally with the audited balance sheets uploaded by the tenderers duly certified by Chartered Accountant.

PROFORMA - III ::

At least similar work, as stated in para 'A' of **Post qualification.**

PROFORMA- III							
Name of project	**Name of Employer**	**Cost of Project**	**Date of issue of PO**	**Specified Date of Completion**	**Actual Date of Completion**	**Actual cost of work done**	**Remarks / reasons for delay, if any**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

Note: Scanned Attested copies of completion/performance certificates from the Engineer-in-charge for each work should be annexed in support of information furnished in the above proforma.

PERSONNEL ::

PROFORMA- IV					
No.	**POST**	**NAME**	**QUALIFICATIO N**	**WORK EXPIRIENCE**	
		(Prime Candidate)		**No. of years**	**Name of Project**
1	Project manager				
2	Quality Control Engg.				
3	Site Engineer				
4	Site Supervisor				

NOTE: Scanned Attested copies of qualification certificates and details of work experience shall be submitted /uploaded.

MACHINERY (For Special Work only) ::

PROFORMA- V-A			
No.	**Equipment**	**Number**	**Owned / Leased / Assured access**
1	**2**	**3**	**4**

PROFORMA- V-B			
No.	**Equipment**	**Number**	**Owned**
1	**2**	**3**	**4**

N**ote:** The tenderer(s) shall furnish/upload the requisite Scanned Attested documentsof ownership/leased of machinery. The undertaking from the suppliers will not be accepted.

PROFORMA- VI-A

Details of existing commitments and ongoing works -

PROFORMA- VI-A							
Description of work	**Place**	**Contract No. & date**	**Name & Address of employer**	**Value of contract in Rs.**	**Scheduled date of completion**	**Value of work remaining to be completed**	**Anticipated date of completion**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

Note: Scanned Attested copies of completion/performance certificates from the Engineer-in-Charge for each work should be annexed in the support of information furnished in the above proforma.

PROFORMA- VI-B

Details of works for which bids are already uploaded -

PROFORMA- VI-B							
Description of work	**Place**	**Contract No. & date**	**Name & Address of employer**	**Value of contract in Rs.**	**Time period**	**Date of which decision is expected**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

Note: Scanned Attested copies of certificates from the Engineer-in-charge for eachwork shall be annexed.

PROFORMA- VII

Information on Litigation History in which the applicant is involved.

PROFORMA - VII				
Other Party (/Parties)	Employer	Cause of Dispute	Amount involved	Remarks showing Present Status.
1	2	3	4	5

Note: Scanned Attested copies of completion / performance certificates from the Engineer-incharge
for each work should be annexed and uploaded.
Note: "Chapter XXI- Miscellaneous, section 171(1) of GST Act, 2017 governs the 'Anti Profiteering Measure' (APM).
As per the provision of this section, 'Any reduction in rate of tax on any supply of goods or services or the benefit of input tax credit shall be passed on the recipient by way of
commensurate reduction in prices'
Accordingly the contractor should pass on the complete benefit accruing to him on account of reduced tax rate or additional input tax credit, to DEAN(G.S.M.C. & K.E.M.H.).

Further, all the provisions of GST Act will be applicable to the tender."

Annexure-A

Irrevocable Undertaking

(on Rs.500/-Stamp Paper)

I Shri/Smt.....aged,.....years Indian Inhabitant. Proprietor/Partner/Director of M/s..... resident at ..... do hereby give Irrevocable undertaking as under;

1) I say & undertake that as specified in section 171 of CGST Act, 2017, any reduction in rate of tax on supply of goods or services or the benefit of input tax credit shall be mandatorily passed on to MCGM by way of commensurate reduction in prices.
2) I further say and undertake that I understand that in case the same is not passed on and is discovered at any later stage, MCGM shall be at liberty to initiate legal action against me for its recovery including, but not limited to, an appeal to the Screening Committee of the GST Counsel.
3) I say that above said irrevocable undertaking is binding upon me/my partners/company/other Directors of the company and also upon my /our legal heirs, assignee, Executor, administrator etc.
4) If I fail to compliance with the provisions of the GST Act, I shall be liable for penalty/punishment or both as per the provisions of GST Act.

Whatever has been stated here in above is true & correct to my/our own knowledge & belief.

Solemnly affirmed at DEPONANT

This day of BEFORE ME

Interpreted Explained and Identified by me.

SCOPE OF WORK

SCOPE OF WORK

Sub: Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital

The scope in detail includes following:

A) To create following Functional Areas
1) Specimen Receiving
2) Serology
3) Pre PCR DNA Isolation
4) Pre PCR RNA Isolation
5) PCR Room
6) Reagent Room
7) Part PCR Room
8) Reporting Room
9) Autoclave Room
10) Immunology Lab
11) Store Room
12) Conference Room

B) To provide electrical connections, lighting fixtures, intercom/ telephone points, LAN etc.

C)To implement necessary fire safety measures.

D) S.I.T.C. of computers, printers, refrigerator, microwave oven, laboratory furniture etc.

E) S.I.T.C. of 19 nos of essential equipments as listed below in technical specifications.

F) To take away all the debris/ waste material out of KEMH campus.

Sd/-
A.E.(M&E)KEMH

TECHNICAL SPECIFICATIONS AND SCOPE OF WORK

K.E.M. HOSPITAL, PAREL, MUMBAI-12.

PART-2: Bid Details

TECHNICAL SPECIFICATIONS AND SCOPE OF WORK

Name of the work: Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital.

Quantity:- As per Schedule of Quantities.

1. **Period of contract**: - 04 months
2. **Work place**: - Department of Microbiology, 7th floor, M.S. Building, K.E.M Hospital.

3. **Scope of work :** The scope in detail includes following:

A) To create following Functional Areas
1) Specimen Receiving
2) Serology
3) Pre PCR DNA Isolation
4) Pre PCR RNA Isolation
5) PCR Room
6) Reagent Room
7) Part PCR Room
8) Reporting Room
9) Autoclave Room
10) Immunology Lab
11) Store Room
12) Conference Room

B) To provide electrical connections, lighting fixtures, intercom/ telephone points, LAN etc.
C)To implement necessary fire safety measures.
D) S.I.T.C. of computers, printers, refrigerator, microwave oven, laboratory furniture etc.
E) S.I.T.C. of 19 nos of essential equipments as listed below in technical specifications.
F) To take away all the debris/ waste material out of KEMH campus.

The site of installation being hospital successful tenderer shall have to take necessary permissions well in advance as well as when required during each & every important stage of this work. Shutdown / Closure period with proper permissions from the concerned department, the Dean and other concerned department need to be taken. The tenderer thus should be able to organize a shut down. The supply of water the above said gases should not be interrupted to avoid inconvenience to patient / hospital, hence alternative arrangement/supply to be provided. The care must be taken that the working area is cleaned properly by removing all debris, waste material, etc. on completion of area-wise installation as well as before handing over the system to the Concerned Department / hospital authority.

Trial runs of the system shall be done to check the performance, in the presence of the staff of engineer in charge, if insisted.

The scope of this tender includes comprehensive maintenance contract for proposed system after free maintenance (warranty) period.

Visit to the site: -

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

1.4 GUARANTEE PERIOD

The specified system supplied, installed shall be under free maintenance for a period of 12 (twelve) months from the date of handing over of specified unit/s to user department. The B.G. in lieu of Security Deposit / Performance guaranty enact be renewed from time to time up to the end of guaranty period.

1.4 SECURITY DEPOSIT :

The successful bidder should submit security deposit, equivalent to 5% of contract cost, in the form of bank guaranty / demand draft drawn in favour of Municipal Commissioner, immediately after receipt of work order. The same shall be kept in force till the completion of free maintenance period.

GS-2 ELIGIBILITY/ QUALIFICATION CRITERIA

The Tenderers fulfilling the following criteria are eligible to apply for this tender.

1.The Work should be carried out to the specifications stated under however not limited to the same.
2.The Bidder should have in the last 7 years, successfully completed as a prime contractor at least one similar work of Government institute.

And also having experience of completed 3 similar type of work of any research lab / pharma lab / institute.
Copies of Completion certificates issued by the clients should be submitted along with the bid

3. The Laboratory shall be delivered fit for the purposes for which it is intended to as per the requirement and Satisfaction of the Client and further shall satisfy all norms of VRDL Lab prescribed by competent authority.
4. Furnishing of design, drawings from the competent authorities shall be part of the scope of the work.
5.Bidders must have an ISO 9001: 2015, CE & GMP Certifications.

6.The intending tenderer should offer site visit to similar & equivalent installation carried out by them, before submitting tender.

Tenderer must upload documentary evidences regarding above information specified in the Schedule of Post Qualification.

7. The Bidder should have an average annual turnover of at least Rs.45 Lakh or above in the last 3 consecutive financial years And Annual Turnover per year should minimum 30 lakhand should be profit making during the last two years. Copies of the following documents should be submitted along with the Technical Bid.

(a) Audited Balance Sheet including Income and Expenditure statement, Profit and Loss Account of last two years i.e. 2016-17, and 2017-18, duly certified by Chartered Accountant shall be submitted.

(b) Goods & Service Tax registration certificate.

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

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

8. The Tenderer should have the Registered / Branch Office /service facility in Mumbai / Navi Mumbai / Mumbai Metropolitan Region.

9. To verify eligibility criteria the tenderer has to submit satisfactory performance certificates from institutions where he has worked during last two years.

Note: The M.C.G.M. reserves the right to cancel the tender without assigning any reason for which no compensation shall be payable.

GS-3 <u>COMPLETION PERIOD</u> : The work completion period shall be as follows ;

Submission of system design and/or concerned drawings as per tender specs.	:	**7days** after date of receipt of work order by tenderer.
Erection / installation of system as per approved system design and/or concerned drawings	:	**21 days** after approval of drawing

GS- 4 <u>GENERAL INSTRUCTIONS</u>

1 The contractor shall give the following documents (certified copies wherever necessary).

i) Company inG.S.M.C. & K.E.M.H./ registration certificate.

ii) The list of Plant & Machinery at manufacturer's work.

iii) The Post Qualification Criteria Schedule and documents as required in Post Qualification Criteria.

iv) Signed copy of Pre-Bid Meeting held, if any.

v) Copies of all schedules, Technical Specifications and Deviations, if any, drawings, literature, brochures and floppy format of the documents submitted with the Tender Documents.

2. The contractor shall carry out the work strictly as per Technical Specifications and Schedule. However, anything specifically not covered under the same but required to successfully complete the work by all means, shall be in the Scope of Work, for which no extra payment shall be admissible to the contractor. The rate should be offered accordingly.

The prices shall be firm. No price variation will be admitted during the contract period.

3 ACQUAITANCE WITH SITE AND WORK CONDITIONS ETC. :

In case of doubts about any item or data included in the tender or otherwise, it shall be got clarified in pre-bid meeting, if any. Once the tender is accepted, it shall be concluded that the contractor has verified and made himself conversant with all the details required for completing the work as per conditions and specifications.

4 SUBMITTAL :

The successful tenderer should submit the necessary details like mechanical & electronic drawings in soft & hard formats, operation manual, catalogues, test certificates, etc. along with the other needful as & when insisted & required.

5 OTHER CONDITIONS :

A. The plant / unit shall be designed with latest modern practices with class I workmanship and conforming to relevant standards and statutory regulations.

B. No work place shall be provided for the manufacturing/fabrication of plant / unit components at K.E.M Hospital.

C. It is essential on the part of the contractor to collect full details / specifications of the material to be supplied and the work to be executed from the office of the concerned department. It is essential on the part of the contractor to inspect the site before submitting their offer and no claim arising out of ignorance will be entertained later on.

D. The Successful tenderer shall be solely responsible for any breakdown of Municipal Property, accidents and injuries to Human life of Contractor, laborers or Municipal Staff on account of above work.

E. The Successful tenderer shall submit plant/system layout and other necessary drawings and design details if any, to the department for approval.

F. All fitting, accessories or apparatus or any items which may not have been specifically mentioned but which are necessary shall be deemed to be included and shall be provided by the successful tenderer without any extra charge to MCCM.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS OF TRUNKEY PROJECT FOR ESTABLISHING VIRAL RESEARCH & DIAGNOSTIC LABORATORY

A) TECHNICAL SPECIFICATIONS FOR LAB SET UP

1) Wall Partition 60 mm **Qty : 180 Sq Mtrs**

- Supply of Panel should be in 60 mm thick Overall section of 0.6 mm thick. TGGIPP sheet should be on outer skin infill with PUF of 40Kg/m3 density.
- External facing should be bacteriostatic, dense and non-porous material. The panel should be made of a durable and uniform material that should be easy to clean and extremely hygienic.
- Should have Internal balancing core with suitable geometry to ensure the maximum rigidity.
- The Panels should be resistant to water, detergents & hydrogen peroxide disinfectant normally used. Reaction to fire class 1 norm.
- Panel should be produced in a single full height floor-to ceiling piece in order to create a smooth uninterrupted surface between adjacent panels.
- Wall Panels should comply with any one applicable international safety /Quality certification. Color & view of inner surface wall of LAB shall be finalized after approval of CLIENT.

2) Clean Room Doors **Qty : 19 Nos**

- Clean room Solid Steel Doors should be made up of 0.8mm thick GI sheet, Door leaf should be 44mm thick, and door frame of 1.2mm thick G I sheet, with PUF insulation as infill material with PU Painted finish with Hardware as mentioned below, with vision glass and with installation.

  Clean Room Doors 900 L
- Should be Single Leaf Door: 900 x 2200 mm Door

  Hardware for Doors :
- Should be SSS Roll bearing Hinges,
- Should be SS D handle Back to back / SS D Handle one side and one side SS push Plate,
- Should be with Dead lock Both Side Key operation,
- Should be with SS Kick plate 0.8 mm thick up to 300 mm height,
- Should be provided with Concealed type Bottom Drop seal
- Should provide with Door closer TS 1000 C STD ARM, Door stopper, Double glazed view panel of 400*600 mm with 6 mm thick toughened glass, Door seal Groove Type

COUPLE Lock Door System

- Should be with Couple lock door systems for clean rooms, containment suites, laboratories - in fact any critical area that requires door access control with additional security.
- It should be USER PROGRAMMABLE,
- Should have Master-Slave Configuration and can be configured up to maximum 2 doors in loop.
- The unit should be flexible and can be configured on site by the user for required door locking logic

3) View Panels **Qty : 20 Nos**

- Should be double glaze view panels for modular wall panels with 5 mm Toughened glass with all accessories like double adhesive tape , silicon sealant and silica gel with installation

4) Electrical Connections **Qty : 1850 Sq ft L. S.**

- Should provide wiring for light point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface / recessed concealed medium class PVC conduit
- Should be with modular switch, modular plate,
- Should provide suitable Gl box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. (Avg Legth upto 9 mtr)
- Make: Legrand
- Should provide Power Point 15/16A for supplying and fixing suitable size box with Three modular plate and cover in front on surface or in recess concealed, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.
- Should have wiring for circuit/ sub main wiring along with earth wire with the 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire of FRLS PVC insulated copper conductor, single core cable in surface/ recessed concealed medium class PVC conduit as required for power point.
- Should provide supplying and fixing of 4 way single/ double door surface/ recess/ concealed mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)
- Should provide supplying and fixing of 63 amps four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.
- Should provide supplying and fixing of following rating, 240/415 volts, “C” curve, miniature circuit breaker suitable for Laboratory Equipment load (inductive load) of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.

Telephone Point

- Should provide supplying and fixing 1or2 modular GI box alongwith telephone socket, modular plate & switch box including connections etc. as required.
- Should provide supplying and drawing 2 pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the surface/ recessed concealed PVC conduit as required.
- Dismantling the existing POP, Switches, sockets, fittings, piping, fan, fixtures etc and depositing the same at engineering dept should be done.
- Access Control System for main door should be provided for supply, installation, testing & commissioning of time attendance machine with access control, access through RFID card & pin, biometric/proximity type of reader and magnetic locks with min 10 Proximity cards, software, power supply etc for installation Complete Job.
- NOTE : Client Need to Provide only a three Phase Copper wire of 25 Sq.mm upto LAB

5) Panel LED Light **Qty : 23 Nos**

- Should be 2'x2' Sized Led Slim Recessed Panel Lights

- Should be environment friendly and retrofit solution
- Should be good colour
- Should be ceilings mounted Lights
- Should be fitted in any type of false ceiling.
- Make : SYSKA

6) Local Area Network (LAN) Qty : 10 Nos

- Should provide connection of the computers and peripherals with each other on a Local Area Network for sharing the documents and data easily.

7) Intercom Qty : 10 Nos

- Should provide for communicating within the lab members in separate rooms

8) Computers Qty : 2 Nos

- Intel core i5 processor(quad core)
- 8 GB RAM
- Solid state hard drive with 256 GB
- Operating System : Windows 10(64 bit encryption)

9) Printers Qty : 3 Nos

- Printer Type : Inkjet
- Functionally – All inOne (Print, Scan,Copy)
- Scanner type flatbed
- Printer output : Color
- Connectivity – USB
- Pages per minute – 8 Pages(Black), 4 Pages(Color) As per Standard

10) Projector Screen Qty : 1 Nos

- Should be easy to use and low maintenance,
- Should be 6 Feet (Width) x 4 Feet (Height),
- Should be In 4:3 Format, 84 Inches/7 Feet Diagonal Length,
- Should be with 1080 P 3D and 4K Ready Technology

11) White Board Qty : 1 Nos

- Should be with Super White' Writing Grade Hard Melamine Surface (Marker Sheet) as per IS:2046/1997.
- Should not be Used For Sticking Magnets
- Board Size should be : 3X4 Feet (90x120 CM).
- Should works well with Any Whiteboard Marker

12) Refrigerator Qty : 1 Nos

- Should be 165 L Refrigerator

13) Microwave Oven Qty : 1 Nos

- Should be 20 L Solo Microwave Oven

14) Ultraviolet Germicidal Irradiation Qty : 1 Nos

- Should be provided with UVGI which has been used to scrub carrying inside the CAFD System.
- Ultraviolet Germicidal Irradiation should be efficacious to varying degrees in controlling the circulation of airborne infectious particles.

- Ultraviolet Germicidal Irradiation should disinfects approximately 80% of the Air entering in the classified area.
- Should help to prevent the classification recommended in a Lab.

15) Static Passbox **Qty : 4 Nos**

- Should be SS 304 with Matte Finishing Double Skinned
- Should have precision designing and finish.
- Should be with high grade stainless steel construction.
- Provided with choice of mechanical or electrical interlocked.
- Should be provided with maximum chemical resistance construction.
- Should provide Indicating lamp to know the door lock-unlock condition.
- Doors should have interlock mechanism one Opening at one time.
- Should be provided with LED Light/UV Light.

16) LAB FUNITURE

Jet Black Granite **Qty : 300 Sq ft**

- Should be with top 18 MM THICK with Zero water absorption, high temperature, chemical and stain resistance and can be repolished.
- Should have drawer units that are placed below the wall bench and should be removable.

Drawer Units **Qty : 30 Nos**

- Should be (600 mm wide 2 Shutter 1 Drawer End Unit) 600 mm wide, 550 mm deep.
- Should be 850 mm height lab storage unit having drawer of 125 mm in height with two telescopic channels.
- Should provide below drawer with two shutters that are mounted with SS hinges and having one shelf in side.
- Should have 100mm toe space at bottom, complete unique.
- Should be with complete CRCA furniture is pretreated with 8 tank pickling process further chemoxy powder coated by maintaining 70 to 80 micron film thickness.

Cross Over Bench **Qty : 1**

- Should be provided with high end Stainless Steel 304/316
- Should be like movable table which is attractive to look and comes with durable services.
- Should be thin and movable and comprises of small rollers attached with the legs so that it can fit anywhere without creating any problem.
- Should be high tensile strength
- Should be robust structure
- Size should be: 350mm x 1200mm

Should Provide

- **Office Table** **Qty : 02 Nos**
- **Office Chairs** **Qty : 25 Nos**
- **Laboratory Stools** **Qty : 19 Nos**
- **Racks** **Qty : 02 Nos**
- **Cupboards** **Qty : 09 Nos**
- **Dustbins** **Qty : 05 Nos**
- **Discard Trolley** **Qty : 01 Nos**
- **Shoe Rack** **Qty : 01 Nos**

POWER TRUNKS **Qty : 39 R Mtrs**

- Should be with 1200 mm in length : 1200 mm wide, 120 mm deep, 120 mm Height table mounted Raceways.
- Should be with electrical Switch & Sockets Fitted (With Wiring).
- Should be with complete CRCA furniture which is pretreated with 8 tank pickling process and further provide with chemoxy powder coated by maintaining 70 to 80 micron film thickness.
- Should be provided with switch & sockets

SINK Unit **Qty : 4 Nos**

- Should be Stainless Steel 304.
- Should be Maximum Chemical Resistance.
- Should provide O3 Gasket / 'O' Ring Nitrail Rubber to Avoid Leakage.
- Should provide Outlet Connection: 1 1/2"B.S.P.
- Should be with Standard Colour i.e., Black.
- Should be easy to Install & Easy to Clean.

Hand wash Sink **Qty : 1 Nos**

- Should be with Mirror and a shelf with compartment

FAUCET **Qty : 4 Nos**

1. **Raw Material:**
   - Should be Brass as per IS: 319 (I) (Machining Grade).
   - Should be Brass as per BS: 218 (M) (Forging Grade).
   - Should provide Pipe as per IS: 407 (CuZn37).
   - Should provide Nylon / ABS Knob.
   - Should provide All Gasket / 'O' Ring Nitrile Rubber.
   - Should provide Inlet Connection 1/2" B.S.P.
   -
2. **Testing:**
   - Pneumatic Test at 250 PSI.
   - Hydraulic Test at 125 PSI.
   - Bursting Test at 500 PSI.
3. **Powder Coating:**
   - Should be Epoxy Fusion Bond.

17) Anti- Static Chemoxy Flooring **Qty : 1100 Sq Ft.**

- Should be chemical resistance and remarkable toughness
- Should be designed to withstand high traffic conditions and the offered coatings should be developed from premium grade materials and to be accessed with varied pigments.
- Coving should be 50mm- 75 mm in height.
- Should avoid corner dust deposits.
- Flooring in each Classified rooms should be seamless with perfectly curved flash-covings, resistance to mechanical stress and dynamic load sand having ESD/EMI (conductive) protection characteristics, 2mm thick, washable.
- Should be provided with the copper strip of 2' x 2' grid to the nearby earthing .
- Should be self leveling compound with thickness ranging from 1mm to 3mm.

18) Air Curtains **Qty : 2 Nos**

- Should be high quality Air Curtains
- Should be made up of Galvanized Powder Coated Sheets,

- Should be provide with Hepa filter (0.3 micron) installed above the main Entrance/Door of the lab to restrain the outside air into the laboratory at the time of entry or exit.

19)PU paint **Qty : 2500 Sq Ft**

- Should be optimum chemical resistance which is best suited for industrial and commercial Structures

20) Flooring Tiles **Qty : 900 Sq Ft**

- Should be antiskid high quality Flooring Tiles

21) Aluminum Sliding Windows **Qty : 10 Nos**

- Should be powder coated aluminum sliding windows with Clear Glass and accessories

22) Sign Board **Qty : 01 Nos**

- Should be Lab Sign Board outside the Lab.
- Should be 4 x 6 Ft On Commercial Ply Board Duly Painted

21) Safety Aspects :- **Qty : 1 Package**

Should provide Smoke Detectors & Fire Alarms

- Should sense smoke, typically as an indicator of fire.
- Should signal to a fire alarm control panel as part of a fire alarm system, while household smoke detectors, also known as smoke alarms, generally issue a local audible or visual alarm from the detector itself.

Should provide Fire Extinguishers:

- Should be standard dry powder extinguishers that are also called 'ABC' extinguishers because they tackle class A, B and C fires, however they are not recommended for use in enclosed spaces.
- Should provide ABC powder extinguishers that can also be used on some electrical fires. Specialist dry powder extinguishers are used for flammable metals.

Should provide PANIC BARS :- (DORMA 9000 Series)

- Should be anti Microbial protected Coating.
- Should be BHMA certified to ANSI. A156 .3 for Grade 1 exit devices.
-

Sr. No.	ITEM Description	QTY
1	**Wall Partition 60 mm:** Supply of Panel in 60 mm thick Overall section of 0.6 mm thk. TGGIPP sheet on outer skin infill with PUF of 40Kg/m3 density. External facing should be bacteriostatic, dense and non-porous material. The panel should be made of a durable and uniform material that should be easy to clean and extremely hygienic. Internal balancing core with suitable geometry to ensure the maximum rigidity. The Panels should be resistant to water, detergents& Hydrogen peroxide disinfectant normally used. Reaction to fire class 1 norm. In order to create a smooth uninterrupted surface between adjacent panels, thereby preventing the risk of the accumulation of dust and bacteria in gaps, the panel should be produced in a single full height floor-to ceiling piece. Wall Panels should comply with any one applicable international safety /Quality certification. Color & view of inner surface wall of LAB shall be finalized after approval of CLIENT.	180 Sq Mtr

2	**Clean Room Doors :-** Clean room Solid Steel Doors made up of 0.8mm thick GI sheet, Door leaf 44mm thick,and door frame of 1.2mm thick G I sheet, with PUF insulation as infill material with PU Painted finish with Hardware as mentioned below, with vision glass and with installation. **Clean Room Doors 900 L** Single Leaf Door: 900 x 2200 mm Door Hardware for Doors SS Roll bearing Hinges SS D handle Back to back / SS D Handle one side and one side SS push Plate Dead lock Both Side Key operation SS Kick plate 0.8 mm thick up to 300 mm height Concealed type Bottom Drop seal Door closer TS 1000 C STD ARM Door stopper Double glazed view panel of 400*600 mm with 6 mm thick toughened glass Door seal Groove Type **COUPLE Lock Door System: - .** CLDS is designed and manufactured state-of-the-art door Couple lock systems for clean rooms, containment suites, laboratories - in fact any critical area that requires door access control with additional security. It is an USER PROGRAMMABLE Couple lock Door System, This system is designed to suit modern door Couple locking requirements. CLDS has Master-Slave Configuration and can be configured up to maximum 2 doors in loop. The unit is flexible and can be configured on site by the user for required door locking logic	19 Nos
3	**View Panels** Double Glaze view panels for modular wall panels with 5 mm Toughened glass with with all accessories like double adhesive tape , silicon sealant and silica gel with installation	20 Nos
4	**Electrical Connections :-** Wiring for light point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface / recessed concealed medium class PVC conduit, with modular switch, modular plate, suitable Gl box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. (Avg Legth upto 9 mtr) Make: Legrand Power Point 15/16A: Supplying and fixing suitable size box with Three modular plate and cover in front on surface or in recess concealed, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required. Wiring for circuit/ sub main wiring along with earth wire with the 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire of FRLS PVC insulated copper conductor, single core cable in surface/ recessed concealed medium class PVC conduit as required for power point Supplying and fixing of 4 way single/ double door surface/ recess/ concealed mounting,	1850 Sq Ft L.S.

	vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted,complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) Supplying and fixing of 63 amps four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. Supplying and fixing of following rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for Laboratory Equipment load (inductive load) of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Telephone Point: Supplying and fixing 1or2 modular GI box alongwith telephone socket, modular plate & switch box including connections etc. as required. Supplying and drawing 2 pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the surface/ recessed concealed PVC conduit as required. Dismantling the existing POP, Switches, sockets, fittings, piping, fan, fixtuers etc and depositing the same at engineering dept. Access Control System for main door: Supply, installation, testing & commissioning of time attendance machine with access control, access through RFID card & pin, biometric/proximity type of reader and magnetic locks with min 10 Proximity cards, software, power supply etc for installation Complete Job. NOTE : Client Need to Provide only a three Phase Copper wire of 25 Sq.mm upto LAB .	
5	**Panel LED Lights** 2'x2' Sized Led Slim Recessed Panel Lights are energy efficient, environment friendly and retrofit solution for high power consuming traditional lights. Offers versatile features for industrial application. Good colour Rendering. Ceilings Mounted Lights. Can be fitted in any type of false ceiling. Make : SYSKA	23 Nos
6	**Local Area Network (LAN)** To Connect the Computers and peripherals with each other on a Local Area Network for sharing the documents and data easily.	10 Nos
7	**Intercom** Communicating within the lab members in separate rooms made easy with the use of an Intercom	10 Nos
8	**Computers**	2 Nos
9	**Printers**	3 Nos
10	**Projector Screen** Easy to use and Low Maintenance, 6 Feet (Width) x 4 Feet (Height), In 4:3 Format, 84	1 Nos

	Inches/7 Feet Diagonal Length Comes with 1080 P 3D and 4K Ready Technology	
11	**White Board** Super White' Writing Grade Hard Melamine Surface (Marker Sheet) as per IS:2046/1997. Cannot be Used For Sticking Magnets Board Size: 3X4 Feet (90x120 CM). Suitable for Use at Home, Offices and Schools. Works Well with Any Whiteboard Marker.	1 Nos
12	**Refrigerator** 165 L Refrigerator	1 Nos
13	**Microwave Oven** 20 L Solo Microwave Oven	1 Nos
14	**Ultraviolet Germicidal Irradiation :-** (UVGI) has been used to scrub carrying inside the CAFD System. Ultraviolet Germicidal Irradiation is known to be efficacious to varying degrees in controlling the circulation of airborne infectious particles. Ultraviolet Germicidal Irradiation disinfects approximately 80% of the Air entering in the classified area. This helps to prevent the classification recommended in a Lab.	1 Nos
15	**Static Passbox:** SS 304 with Matte Finishing Double Skinned Precision designing and finish. High grade stainless steel construction. Choice of mechanical or electrical interlocked. Maximum chemical resistance construction. Indicating lamp to know the door lock-unlock condition. Doors having interlock mechanism one Opening at one time. LED Light/UV Light	4 Nos
16	**LAB FUNITURE :-** **Jet Black Granite:** - Top 18 MM THICK with Zero water absorption, high temperature, chemical and stain resistance and can be repolished. The drawer units are placed below the wall bench and should be removable. **Drawer Units** Specifications: - 1) Drawer Unit (600 mm wide 2 Shutter 1 Drawer End Unit) 600 mm wide, 550 mm deep. 2) 850 mm height lab storage unit having drawer of 125 mm in height with two telescopic channels. 3) Below drawer two shutters are mounted with SS hinges. Unit is having one shelf in side. 4) Unit is also having 100mm toe space at bottom, complete unique. 5) Complete CRCA furniture is pretreated with 8 tank pickling process further chemoxy powder coated by maintaining 70 to 80 micron film thickness. **Cross Over Bench:**	300 Sq Ft 30 Nos

	We offer high end Stainless Steel Cross Over Benches like movable table which is attractive to look and comes with durable services. This product is thin and is movable as it comprises of small rollers attached with the legs. As this is thin, therefore it can fit anywhere without creating any problem. Features: High tensile strength Robust structure Specifications: General Use: Commercial Furniture Material: Stainless Steel 304/316 Appearance: Modern Size: 350mm x 1200mm	1 Nos
	Office Tables	
	Office Chairs	
	Laboratory Stools	2
	Racks	25
	Cupboards	19
	Dustbins	2
	Discard Trolley	9
	Shoe Rack	5
		1
	POWER TRUNKS :-	1
	1) POWER TRUNKS (1200 mm in length)1200 mm wide, 120 mm deep, 120 mm Height table mounted Raceways. 2) Electrical Switch & Sockets Fitted (With Wiring). 3) Complete CRCA furniture is pretreated with 8 tank pickling process further chemoxy powder coated by maintaining 70 to 80 micron film thickness. Switch & sockets Are fixed as recommended from client.	39 R. Mtr
	SINK Unit: - 1. Material of Construction: Stainless Steel 304. 2. Maximum Chemical Resistance. 3. O3 Gasket / 'O' Ring Nitrail Rubber to Avoid Leakage. 4. Outlet Connection: 1 1/2"B.S.P. 5. Standard Colour: Black. 6. Easy to Install & Easy to Clean.	4 Nos
	Hand wash Sink: - Hand wash Sink with Mirror and a shelf with compartment	
	FAUCET :- **4. Raw Material:** a. Brass as per IS: 319 (I) (Machining Grade). b. Brass as per BS: 218 (M) (Forging Grade). c. Pipe as per IS: 407 (CuZn37). d. Nylon / ABS Knob. e. All Gasket / 'O' Ring Nitrile Rubber. f. Inlet Connection 1/2" B.S.P. **5. Testing:** a. Pneumatic Test at 250 PSI. b. Hydraulic Test at 125 PSI. c. Bursting Test at 500 PSI. **6. Powder Coating:** Epoxy Fusion Bond.	1 Nos 4 Nos

17	**Anti- Static Chemoxy Flooring :-** The offered flooring system features optimum chemical resistance and remarkable toughness which is best suited for industrial and commercial floors. Designed to withstand high traffic conditions the offered coatings are developed from premium grade materials and can be accessed with varied pigments. Coving 50mm- 75 mm in height. Fitted to avoid corner dust deposits. Flooring in each Classified rooms seamless with perfectly curved flash-covings, resistance to mechanical stress and dynamic load sand having ESD/EMI (conductive) protection characteristics, 2mm thick, washable. However the sample may be got approved from engineering-in-charge at site. Provided with the copper strip of 2' x 2' grid to the nearby earthing . Flooring is laid on self leveling compound with thickness ranging from 1mm to 3mm	1100 Sq Ft
18	**Air Curtains:** High Quality Air Curtains made up of Galvanized Powder Coated Sheets, consisting of Hepa filter (0.3 micron) are installed above the main Entrance/Door of the lab to restrain the outside air into the laboratory at the time of entry or exit.	2 Nos
19	**PU paint:** PU Paint features optimum chemical resistance which is best suited for industrial and commercial Structures	2500 Sq Ft
20	**Flooring Tiles** Antiskid high quality Flooring Tiles	900 Sq Ft
21	**Aluminum Sliding Windows** Powder Coated Aluminum Sliding Windows with Clear Glass and accessories	10 Nos
22	**Sign Board** Lab Sign Board outside the Lab. 4 x 6 Ft On Commercial Ply Board Duly Painted	1 Nos
23	**Safety Aspects :-** **Smoke Detectors & Fire Alarms:** A smoke detector is a device that senses smoke, typically as an indicator of fire. Commercial security devices issue a signal to a fire alarm control panel as part of a fire alarm system, while household smoke detectors, also known as smoke alarms, generally issue a local audible or visual alarm from the detector itself. **Fire Extinguishers:** Standard dry powder extinguishers are also called 'ABC' extinguishers because they tackle class A, B and C fires, however they are not recommended for use in enclosed spaces. This is because the powder can be easily inhaled, and also the residue is very difficult to clean up after. ABC powder extinguishers can also be used on some electrical fires. Specialist dry powder extinguishers are used for flammable metals.	1 Set

	PANIC BARS :- (DORMA 9000 Series) Anti Microbial protected Coating. BHMA certified to ANSI. A156 .3 for Grade 1 exit devices. This premium exit device is built for high impact applications such as classified labs, schools, universities and other institutional or commercial buildings. All standard devices and trim are designed for 1-3/4”- 2-1/4” thick doors. For door thickness greater than 2-1/4”, consult DORMA Technical Service.	

B) <u>TECHNICAL SPECIFICATIONS FOR S.I.T.C.OF EQUIPMENTS</u>

WARRANTY: All the equipment shall have warranty of 2 years and 1 year free AMC after warranty period.

1) THERMAL CYCLER Qty : 1Nos

Maximum Block Ramp Rate	6° C/Sec
Block Temperature Range	4° C to 99° C
Temperature Accuracy	± 0.2° (@ 95° C)
Temperature Uniformity	± 0.4° (@ 95° C)
Gradient	Yes
Gradient Temperature Range	30° C to 99° C
Maximum Gradient	30° C
Volume Capacity	10-100 µL
Memory Capacity	10,000 protocols
Pre-loaded Protocols	Yes
PCR Wizard	Yes
Display Size	7 inches
Display Resolution	800 x 480
Display Type	Full Touch Screen
Ports	2 x USB 2.0
Dimensions	26 x 41 x 27 cm
Weight	12.4 kg

- Should provide volumes from 10 to 100 µL
- Should be with highest speed and flexible reaction volumes

For 96- and 384-Well Blocks on One System

- Should be interchangeable 96-well format to the higher volume 384-well modules

For Superior Uniformity and Gradient

- Should be with excellent gradient functionality for unique applications as well as faster protocol development

Should be Simple–to-Use Interface

- Should have Remote monitoring and access without extra software or hardware
- Should be High-resolution 7” touch screen
- Should provide PCR wizards to improve start-up time and quickly create new protocols tailored to your research
- Should provide Pre-loaded protocols and easily add new protocols

2) RT PCR MACHINE Qty : 1Nos

General

- Weight should be approx. 27 kg
- Dimensions should be : W x D x H: 40 x 40 x 53 cm
- Noise level during run 43 dB(A)
- Should provide electrical approvals CE, ICE, UL
- Reaction volumes 10–50 µl sample format 96-well plates, 8-tube strips
- Should provide Runtime < 40 min for 3-step 40 cycles PCR< 1,5 h for HRM

Hardware

- Should have thermal cycling system Peltier-based, 96-well block calibration-free for all applications including HRM
- Should have Max ramp rate heating 4.4 °C
- Should have average ramp rate cooling 2.2 °C
- Should have programmable temperature range 37–98 °C
- Should have Temperature accuracy ±0.2 °C of target temperature
- Should have TM uniformity Range (max–min) 0.4 °C, SD<0.1 °C
- Should have gradient operational range 37–98 °C
- Should have gradient programmable span Max. 20 °C
- Should have excitation High-power broad spectrum LED
- Should provide measurement (integration time) Simultaneous data acquisition for all positions in 10–1000 ms

Detection

- Should provide CCD camera
- Should have optical system Fixed fiber optics with four excitation and four emission filters
- Should be no moving scanning elements
- Should have Cq uniformity Range (max–min) 0.8, SD < 0.2(enabling resolution of 2-fold concentration differences)
- Should have maintenance and support no routine maintenance required
- Should provide IQOQ available on request
- Should provide analysis software
- Should have Operating systems Win XP, Win 7 and Win 8
- Should have Data analysis Absolute and Relative Quantification, TM Calling, Endpoint Genotyping, High Resolution Melting (HRM), Qualitative Detection, Data import and export from and to .txt or .csv files
- Should have Failure flagging Automated flagging for critical Controls (e.g., positive control is negative)

Run Mode

- Should be Stand alone Large 10" touchscreen, adjustable for optimal pressure points
- Should be with Online fluorescence display
- Should be Generation of instrument pdf report including heat maps
- Should have Storage of up to 50 runs on the instrument
- Should provide auto backup function to network server
- Should be PC connected Programming, monitoring and analysis
- Should have Visualization of Cq values as bar chart with standard deviations
- Should have LAN connected
- Should support online monitoring using LAN connection
- Should support remote Roche service
- Should support external barcode scanner using USB connection

- Should have instrument active communication
- Should be provided with Email notification, with success or failure messaging and optional experiment file attachment

Applications

- Should be Dynamic range 10 orders of magnitude
- Should be Range of excitation/ emission wavelengths (nm)
- Should be 470/514 (SYBR, FAM, Reso Light dye)
- Should be 533/572 (VIC, Hex, Yellow555)
- Should be 577/620 (Red610, Texas Red), 645/697 (Cy5)
- Should be with detection formats
- Should be with intercalating dyes; UPL probes

Multiplex analysis

- Should be Up to 4 channels; pre-calibrated color
- Should be compensation (no user interaction necessary): Passive reference dyes: N

3) Biosafety Cabinet Qty : 1 Nos

BSC Class II Type A2 (Inner SS)

- Should be An ISO 9001 : 2015
- Should be CE Marked
- Should be GMP Certified
- Applicable Standards - EN ISO 14971:2012,EN ISO 13485 : 2012 , EN 980:2008 , EN 1041 : 2008 , EN 61010-1:2010, EN 61326-1:2013, EN 12469:2000
- Size Should be: L X D X H : 3’x2’x2’/4’x2’x2’
- Should be Constructed in Mild Steel with epoxy powder coated
- Should be Seamless ,Scratch-free, high quality 18 gauge stainless steel, grade 304
- Working tray should be - Autoclavable & Removable stainless steel work surface for easy cleaning.
- Inner Surface : Back Wall and Side Wall should be made of Stainless Steel SS 304
- Air Flow : 70% recirculation through HEPA filter & 30% exhaust through HEPA filter
- Should be provided with filter Type – HN 14HEPA filter with integral metal guards & frame gaskets. Supply of HEPA filter 99.997% at 0.3 micron.
- Should have ergonomic Tilt- Exceptionally comfortable 10 deg ergonomic design.
- Should have front control panel to avoid exposure of UV Light & Lamp outside, making eyes more comfortable.
- Should be provided with front sash door - Manual sliding sash door made up of Imported poly carbonate sheet or toughened glass with sloping front
- Front sash door height should be easily adjusted as per required by end-user.
- Should have air Velocity - 100 ft/min ± 10
- Should have air Volume - Up to 500 CFM
- Should have LCD Display – Digital Microprocessor Control System for Operating Fluorescent, Uv Light & Blower.
- Should Continuously display true value of differential pressure of HEPA filter for inflow as well as down flow velocity.
- Should have Sleep Mode Operation – Automatically blower speed reduced up to 30%, this will help to save energy as well as help to maintain sterile work area during Biosafety Cabinet is not in operation
- Should have Intelligence Alarm System – Safety purpose Audio & Visual alarm for air fluctuation and for life of the HEPA filter and UV light

- Should have Ultra violet tube light - Germicidal i.e. 254 nm
- Should have Ultra violet life meter- Continuously display UV Hour on display
- Should have UV Light programming - Available with timer & UV Hour meter to avoid operator risk
- Should have Interlocking UV - The closing/opening of front door is integrated with the UV ON/OFF. The UV will automatically switch "OFF" when the sash door is opened & switch "ON" when door is closed to avoid accidental exposure of UV light to the operator.
- Should have electrical socket - Internal socket inside the chamber,5/15 Amp
- Should have working Noise level - Low/ should be < 65 dB
- Should have heat Emission - Heat Emission at 25°C.Ambient BTU/hr (kW)
- Should have power supply - 230 V ± 15%, 50 Hz ± 3%
- Should have weight approximately 200 kg
- Should have arm rest bar
- Should have drainage Port
- Should have Blower-Motor Assembly - Dynamically & statistically balanced aluminum centrifugal impeller driven by single phase, 2800 RPM motor
- Virus Burn Out Unit should be provided
- Ducting should be provide
- Performance Certificates - IQ,OQ & PQ. Calibration & Traceability certificates should be provide
- Factory tested DOP certificate should be provide

4) Bench top Refrigerated centrifuge Qty : 1 Nos

- Should have Max RPM: 17850 / RCF 30279
- Should be fits in. Stands out. Secure, push-button Auto-Lock rotor exchange in less than 3 seconds delivers: Trouble-free rotor installation and removal
- No tools are required, No complicated rotor changing procedures
- Should be clear chamber access for cleaning convenience.
- Should have quick switch between applications – from conical tubes to blood tubes, and from microtubes to microplates – and the flexibility to evolve with the changing needs.
- Should be reliable quality, safe operation.
- Should have biocontainment sealing options, including certified1. Click Seal lids for glove-friendly, one-handed
- Should be chemical resistance with exceptional strength for durability and reliability and Quiet performance (<61 dBA) provides a safe, stress-free environment
- Should conforms to the latest clinical and safety standards, such as UL, CE and IVD2, 3
- Should optimize bench space with maximized capacity n8 x 50 mL swinging bucket rotor capacity or 4 microplates for research needs Clinical processing up to 24 x 5/7 mL blood tubes per run Sample-ready.
- Should be user-friendly.
- Should have one-touch operation with pre-saved protocols. and password protection.
- Should be highly visible backlit display for easy reading of parameters across the lab.

- Should have optional indicators at end of run, including automatic lid opening, flashing display or audible signal
- Should have glove- and detergent-friendly.
- Should have multilingual instructions – English, Dutch, French,German, Italian, Russian and Spanish — on programming, run conditions, alerts and service messages.

5) Vertical Autoclave – Single lever Fully Automatic – Top Loading Qty : 1 Nos

- Should have no flynuts tightening - New Safe & user-friendly lid locking - 'Single Lever Lock'.

4. Should be easy lifting & closing of the LID with assisted support.
5. Should be patented gasket design - ensures leakproof sealing.
6. Should have lid switch - for safe operation.
1. Should have lid interlock for residual pressure.

- Should be easy to access all critical components due to its square modular design.
- Should be smart microprocessor based temp. controller (LCD Display)
- Should have temperature : Range up to 122.0ºC in 0.1ºC resolution and a control accuracy of +0.5ºC.
- Should be provided with timer: 1-99 minutes
- Should have spring loaded safety valve
- Should have independent over temperature cut off.
- Should have audio & visual alarms for sensor break and low water level alarm.
- Should be supplied with Test Report/ Calibration cert. traceable upto national standards.
- Should be provide with one spare gasket

6) Deep Freezers -20 Qty : 1 Nos

- Should be upright solid door freezers
- Should have capacity of 344 L
- Should have dimensions in Inches : W X D X H : 23" X 23" X 73"
- Should have temperature range: -17°C ~ -24°C
- Should have wheels,locks
- Should have defrost : manual
- Should have rated Load, Wattage : 140
- Should be provided with baskettes / shelves : 8
- Should be provided with lids / doors : 1
- Type of door should be : Solid Door
- Power Supply Required : 230 Volts,50 Hz, Single Phase
- Should be provided with low power consumption

7) Deep Freezer -70 Qty : 1 Nos

- Should be 368 ltr**s**
- Should have temperature range: -50 ºC to -86ºC
- Should have Capacity: 13 cu. ft. (368.1L); Single door
- Should hold 240 boxes; 24000 2ml Vials
- 230V/50Hz; 12A
- Should have centralized, eye level information center, including microprocessor control and monitoring system;
- Should be single-hand operation: easy-to-use, padlock-compatible, ergonomic door handle with integrated key lock

- Should be constructed in 5″ (127mm) foamed-in-place, polyurethane insulation that reduces power consumption, maintains temperature set point, triple-point door gasket, provides longer holding time in the event of a door opening rugged, heavy gauge, cold-rolled steel cabinets resist chipping and rust free 1″ (25mm) access ports: Allow for the use of inexpedient probes or instrumentation
- Should have four inner doors reduce cold air loss and improve temperature recovery after door closings
- Should provide UL Listed and CE Marked Certifications/Compliance
- Data Outputs : RS-485, 4-20mA, dry contacts - standard, PT100 probe

8) ELISA PLATE WASHER Qty : 2 Nos

- Should be provided with large color display
- Should be provided with internal software is available in eight languages (English, French, German, Spanish, Portuguese, Russian, Japanese, and Chinese) adding more convenience of use.
- Should be provided with color-coded tube fittings and liquid level sensor cables
- Should be provided with removable priming vessel and built-in maintenance program for easy maintenance.
- Should be provided with number of wash buffers 1Bottles: 2lwash bottle, 2lwaste bottle
- Should be provided with wash heads: 1×8and 1×12 wash head
- Plate types: 96-well plates
- Wash volume: 50-1000µl
- Prime volume: 5-100ml
- Rinsing volume: 5-100ml
- Dispensing volume: 50-400µl
- Residual volume: ‹1.5µl
- Data connection: USB port
- Dimensions(H×W×D) 345×385×240mm

9) ELISA PLATE READER Qty : 2 Nos

- Should have Optical measurement: 8 Channel
- Should have Plate type : U, V and Flat bottom Plates
- Should have Filter type: Narrow band Interference
- Should have Standard filters: 405nm, 450nm, 492nm, 630nm
- Should have Filter Wheel Position: 8 Position
- Should have Filter half bandwidth: 10nm ± 2nm
- Should have Filter selection : Automatic by Stepper Motor
- Should have Linear measurement range : 0.000 to 3.000 Absorbance Units(A)
- Should have Machine interface Touch Panel / Keypad
- Should have Photometric accuracy ± 2% or 0.005 whichever is higher, from 0 to 1.5 A ± 3% from 1.5 A to 3.0 A
- Should have Display: 6" Graphics LCD, Negative Blue, STN
- Should have Lamp: Xenon
- Should have On board memory
- Should have 125 open channels and 2500 patient results, additional 10 microplate data
- Should have Curve plotting Graphical Representation on Printer

- Should have Plate carrier movement Precisely through the stepper motor
- Should have Analysis mode
- Should have Absorbance Cut - off
- Should have Multi - Standard % Absorbance
- Should have Storage condition
- Should have Relative Humidity up to 80 %
- Should have Operating conditions
- Should have Temperature From + 18°C to 35° C
- Should have Relative Humidity up to 80 %
- Should have Interface USB and RS232
- Should have Power :Wattage 50 Watts, Voltage 115 - 230 Volts ± 10%, 50Hz.
- Should have Printer Built in Thermal Printer 52 columns
- Should have Size (cm) & weight 36X36X 22 (Ixbxh); 10 Kg (approx)

10) Plate Incubator **Qty : 1 Nos**

- Should be compact ideal for plates and Petri dishes, Laminar flow air circulation Digital setting and display of temperature.
- Should have convenient upward opening door
- Should be Stainless steel interior
- Should have a water tray to increase the humidity within the chamber.
- Should be with bright LED display indicates temperature and the encoder control allows rapid and accurate temperature setting.
- Should be with integral over-temperature protection system automatically tracks the set temperature and controls the heater in the event of a fault.
- Should have acrylic upwards opening door
- Should have stainless steel chamber with 4 shelves each accommodating 6 plates (or 12 stacked in 2 layers).
- Shelves should be captive and slide out for easy loading.

Nominal capacity	20 litres
Temperature range	Ambient + 8°C to 80°C
Temperature fluctuation (at 37°C)	±0.5°C
Temperature variation	±0.5°C
Display type	LED
Display resolution	0.1°C
Internal dimensions (w x d x h)	250 x 230 x 200mm
Internal dimensions (w x d x h)	250 x 230 x 200mm
Overall dimensions (w x d x h)	380 x 380 x 435mm

11) REFRIGERATED MICROFUGE **Qty : 1 Nos**

- Should have 24 x 1.5/2.0mL rotor with Click Seal biocontainment lid
- Should have Capacity: 24 x 1.5/2mL
- Should have Max. RCF: 21,100 x g
- Should have Max. Speed: 14,800rpm
- Should have Temperature Range: -9° to +40°C
- Should have Run Time: 1 to 99min (1min increments); HOLD
- Should have Net Weight: 62.0lb. (28.0kg)
- Should have Noise Level: 50dbA

- Should provide Certifications/Compliance: CSA, CE, IVD
- Should have Electrical Requirements: 230V 50/60Hz
- Should have Standards: IEC 61010-1, IEC 61010-2-020

12) Pan Electronic Weighing Balance Qty : 1 Nos

- Should have Maximum capacity 4200g
- Should have Weighing Platform dimension (WxD) not less then 180x180mm
- Readability Should 0.1g Repeatability 0.1 g
- Should have Linearity 0.2 g Settling Time not more then 1.0s
- Should have Sensitivity temperature drift 3.0ppm/0C
- Should have Weight of balance 3.8 Kg (ME)/3.2 Kg (ME-E)
- Should have Solid metal base Reinforced body Overload protection up to 100 Kg Date and
- Should have Time stamp (ISO/GLP) Internal adjustment Intuitive interface 10 built –in application
- Should have Rounded edges and smooth surfaces are easy-to clean

13) PCR WORKSTATION Qty : 1 Nos

- Should be Made in Mild Steel with epoxy Powder Coated
- Tray Should have Made in stainless steel 304 grade
- Should have HEPA Filter with Efficiency of 99.997 % at 0.3 micron
- Should have Washable Primary filter positioned on top.
- Should have Germicidal in built Ultra violet light with_ 254 nm
- Should have UV light to prevent cross contamination
- Should have Safety shield to prevent exposure to UV light , as well as the PCR Workstation as a built-in Uv sterilizer.
- Should have Fluorescent Light positioned at front side is situated in such position to reduce operator fatigue while working
- Should have 10 degree slope/tilt to reduce back pain & work comfortably
- Should have Polycarbonate Door , Prevent accidental exposure of UV light to the operator.
- Should have Blower Motor Assembly : Dynamically & Statistically balance centrifugal blower
- Should have Vibration : Low
- Should have Power supply : 230 V ± 15%, 50 Hz ± 3%
- Should provide ISO 9001 : 2008 & CE Certificate

14) MICRO PIPETTE SINGLE CHANNEL Qty : 5 Set

- 0.5-5 µl
- 1-10µL
- 10-100µL
- 10-1000µL

MICRO PIPETTE MULTI CHANNEL

- 8 Channel

15) CYCLOMIXERS / VORTEX MIXERS Qty : 1 Nos

- **Designed for mixing liquids in Schools, Laboratories & Factories**
- **Touch/ Continuous Operation mode Selection through bi-directional Switch**
- **Speed Regulation through knob provided on the control panel**
- **Interchangeable mixing heads for use with variety of tubes**
- **Supplied with all interchangeable mixing heads**

Power (W)	**32**	
Shaking Movement	**Orbital**	
Orbital Diameter (mm)	**4**	
Motor Type	**Shaded-Pole Motor**	
Permissible ON time	**100% power 30mins**	
Speed range (rpm)	**0-2500**	
Run Type	**Continuous / touch operation**	
Dimensions (mm)	**127 x 130 x 160**	**178 x 141 x 148**
Weight (kg)	**2.8**	**3.6**
Protection Class acc. To DIN 60529	**IP 21**	**–**

16) Heating Block Qty : 1 Nos

- Should have LCD display
- Should have Peltier design
- Should have Multi blocks interchangeable to provide a lot of test tube wells; and customized blocks are available
- Should have Beep-signal / Stop after program completion
- Should have Temp. Setting Range -5~105
- Should have Temp. Control Range -10~100
- Should have Timing Range 1 min ~ 99h59min
- Should have Temp. Control Accuracy ≤ ± 0.5
- Should have Display Accuracy 0.1
- Should have Temperature uniformity across the block ≤ ± 0.5
- Should have Heating Rate ≤25min (20 to 100)

17) WATER BATH Qty : 1 Nos

- Should be rectangular double walled in construction.
- Should have Inner chamber made of stainless steel & outer body made of mild steel duly powder coated.
- Should have Temperature range 5ºC above ambient to 95ºC
- Should have Fitted with immersion type heater
- Should have Operating on 230 V AC. Fitted with circular pump with stirrer to re-circulate water at constant temperature

18) CENTRIFUGE (MICRO CENTRIFUGE) Qty : 1 Nos

- Should have standard rotor runs 24 tubes in a single row with equalized g-forces for reproducibility, from 1.5 to 2.0 mL tubes to mini-preps and spin columns
- Should Eliminate the need for adapters with the unique dual row rotor, which holds 18 tubes of both 1.5/2.0 mL and 0.5 mL in the same run }

- Should Maximize your micro-volume capacity with the new 10 x 5 mL rotor with Click Seal biocontainment lid, separating samples at g-force up to 20,326 x g } Should have wide variety of rotors support 0.5 mL microtubes, 0.2 mL PCR tubes and hematocrit capillary tubes Save time with fast sample processing: }
- Should provide fast one-click centrifuge lid closure.
- Should have ClickSeal biocontainment lids that shorten retrieval time with one click opening, compared to screw-on lids }
- Should have transparent PPSU rotor lids enable viewing for added safety and convenience

19) Incubator **Qty : 1 Nos**

- Should be double walled with the outer and inner body fabricated with mild steel
- Inner body should be lagged with glass wool & the temperature controlled by capillary type thermostat, temperature range 5ºC above ambient to maximum 60ºC with accuracy range of ± 2ºC.
- Should have glass door
- Should have digital temperature indicator cum Controller
- Should have digital timer with Temperature Controller

Sr. No.	Description of Product	QTY
1	**THERMAL CYCLER** Maximum Block Ramp Rate: 6° C/Sec Block Temperature Range: 4° C to 99° C Temperature Accuracy: ± 0.2° (@ 95° C) Temperature Uniformity: ± 0.4° (@ 95° C) Gradient: Yes Gradient Temperature Range: 30° C to 99° C Maximum Gradient: 30° C Volume Capacity: 10-100 µL Memory Capacity: 10,000 protocols Pre-loaded Protocols: Yes PCR Wizard: Yes Display Size: 7 inches Display Resolution: 800 x 480 Display Type: Full Touch Screen Ports: 2 x USB 2.0 Dimensions: 26 x 41 x 27 cm Weight: 12.4 kg **The Easy Choice for Speed and Volume** • Volumes from 10 to 100 µL • Highest speed and flexible reaction volumes • Agilent's enzymes with Fusion technology perform with the speed of the instrument to produce faster and better results **The Easy Choice for 96- and 384-Well Blocks on One System** • Interchangeable 96-well format to the higher volume 384-well modules **The Easy Choice for Superior Uniformity and Gradient** • Excellent gradient functionality for unique applications as well as faster protocol development **Simple–to-Use Interface** • Remote monitoring and access without extra software or hardware	1

	• High-resolution 7” touch screen • PCR wizards to improve start-up time and quickly create new protocols tailored to your research Pre-loaded protocols and easily add new protocols	
2	**RT-PCR MACHINE** Technical Specifications **General** Weight approx. 27 kg Dimensions : W x D x H: 40 x 40 x 53 cm Noise level during run 43 dB(A) Electrical approvals CE, ICE, UL Reaction volumes 10–50 µl Sample format 96-well plates, 8-tube strips Runtime < 40 min for 3-step 40 cycles PCR < 1,5 h for HRM **Hardware** Thermal cycling system Peltier-based, 96-well block calibration-free for all applications including HRM Max ramp rate heating 4.4 °C Average ramp rate cooling 2.2 °C Programmable temperature range 37–98 °C Temperature accuracy ±0.2 °C of target temperature TM uniformity Range (max–min) 0.4 °C, SD<0.1 °C Gradient operational range 37–98 °C Gradient programmable span Max. 20 °C Excitation High-power broad spectrum LED Measurement (integration time) Simultaneous data acquisition for all positions in 10–1000 ms **Detection** CCD camera Optical system Fixed fiber optics with four excitation and four emission filters No moving scanning elements Cq uniformity Range (max–min) 0.8, SD < 0.2 (enabling resolution of 2-fold concentration differences) Maintenance and Support No routine maintenance required IQOQ available on request Analysis Software Operating systems Win XP, Win 7 and Win 8 Data analysis Absolute and Relative Quantification TM Calling Endpoint Genotyping High Resolution Melting (HRM) Qualitative Detection Data import and export from and to .txt or .csv files Failure flagging Automated flagging for critical controls (e.g., positive control is negative) **Run Mode** Stand alone Large 10" touchscreen, adjustable for optimal pressure points Flexible experiment programming and execution Online fluorescence display Generation of instrument pdf report including heat maps Storage of up to 50 runs on the instrument Auto backup function to network server PC connected Programming, monitoring and analysis Visualization of Cq	**1**

	values as bar chart with standard deviations LAN connected Support of online monitoring using LAN connection Support of remote Roche service External devices Support of external barcode scanner using USB connection Instrument active Communication Email notification, with success or failure messaging and optional experiment file attachment Applications Dynamic range 10 orders of magnitude Range of excitation/ emission wavelengths (nm) 470/514 (SYBR, FAM, ResoLight dye) 533/572 (VIC, Hex, Yellow555) 577/620 (Red610, Texas Red), 645/697 (Cy5) Detection formats Intercalating dyes; UPL probes **Multiplexanalysis** Up to 4 channels; pre-calibrated color compensation (no user interaction necessary): Passive reference dyes: N	
3	**ClassII, Type A2 Biological Safety Cabinets** An ISO 9001 : 2015 Certified Company CE Marked : CE marked product GMP Certified product Applicable Standards - EN ISO 14971:2012,EN ISO 13485 : 2012 , EN 980:2008 , EN 1041 : 2008 , EN 61010-1:2010, EN 61326-1:2013, EN 12469:2000 Size : L X D X H : 3’x2’x2’/4’x2’x2’ Cabinet Provides the Product, Person and Environmental protection Class II Biohazard Safety cabinet should provide personnel, product & environment protection. Class II Cabinets differ in proportion as 70% air is re-circulated within the cabinet through high efficiency particulate air (HEPA) filtration. Velocity of airflow to the work zone creates an class 100 environment for product protection, where the remaining exhaust air is discharged out through (HEPA). Air barrier at the work opening & the contaminated air plenum under positive pressure. An air barrier between the operator & the work zone maintained by a flow of room air through a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface & is exhausted to the outside environment through a HEPA filter. Main body - Constructed in Mild Steel with epoxy powder coated Work Surface –Seamless ,Scratch-free, high quality 18 gauge stainless steel, grade 304 Working tray - Autoclavable & Removable stainless steel work surface for easy cleaning. Inner Surface : Back Wall and Side Wall Made in Stainless Steel SS 304 Air Flow : 70% recirculation through HEPA filter & 30% exhaust through HEPA filter Filter Type – HN 14HEPA filter with integral metal guards & frame gaskets. Supply of HEPA filter 99.997% at 0.3 micron. Ergonomic Tilt- Exceptionally comfortable 10 deg ergonomic design improves comfort, prevents user fatigue & promotes safe working techniques.	**1**

	Front Control Panel -Provided to avoid exposure of UV Light & Lamp outside, making eyes more comfortable. Front Sash Door - Manual sliding sash door made up of Imported poly carbonate sheet or toughened glass with sloping front for better access of samples Front sash door height can be easily adjusted as per required by end-user. The transparent sash door maximizes light & visibility inside the cabinet, providing a bright & open working environment. Air Velocity - 100 ft/min ± 10 Air Volume - Up to 500 CFM LCD Display – Digital Microprocessor Control System for Operating Fluorescent, Uv Light & Blower. Continuously display true value of differential pressure of HEPA filter for inflow as well as down flow velocity. Conveniently located display on outside of the Biosafety Cabinet for easy use & also easy to reach from a seated working position Sleep Mode Operation – Automatically blower speed reduced up to 30%, this will help to save energy as well as help to maintain sterile work area during Biosafety Cabinet is not in operation Intelligence Alarm System – Safety purpose Audio & Visual alarm for air fluctuation and for life of the HEPA filter and UV light Ultra violet tube light - Germicidal i.e. 254 nm Ultra violet life meter- Continuously display UV Hour on display UV Light programming - Available with timer & UV Hour meter to avoid operator risk Interlocking UV - The closing/opening of front door is integrated with the UV ON/OFF. The UV will automatically switch “OFF” when the sash door is opened & switch “ON” when door is closed to avoid accidental exposure of UV light to the operator. Electrical Socket - Internal socket inside the chamber,5/15 Amp Illumination of Work surface- Fluorescent tube light (intensity > 600 lux) provides excellent illumination for work surface & reduces operator fatigue. Fluorescent tube light in set behind front control panel. Working Noise level - Low/ should be < 65 dB Electronic / Electrical panel- From clean chamber to give better contamination free results. Electrical Safety - Electrical components used are standard for better electrical safety for the operator Heat Emission - Heat Emission at 25°C.Ambient BTU/hr (kW) Power supply - 230 V ± 15%, 50 Hz ± 3% Weight – Cabinet Net weight approximately 200 kg Arm Rest Bar - To avoid contamination from outside to inside contamination & for easy working with comfort.Secure & comfortable armrests enhance your comfort during extended work sessions Drainage Port- Provide beneath work surface to facilitate easy & better cleaning of the interior & handling of spillage inside the chamber Blower-Motor Assembly - Dynamically & statistically balanced aluminum centrifugal impeller driven by single phase, 2800 RPM motor Double inlet blower fitted in such a way to reduces vibration & noise. Blower is positioned in such a way that, to create an even filter loading, it helps to prolong the life of HEPA filters. Provide uniform airflow by adjusting working voltage of fan Virus Burn Out Unit should be provided Ducting should be provided	

	Performance Certificates - ISO 9001 : 2015 CE Marked : CE Certificate GMP Certificate EN ISO 14971:2012 Applicable Standards IQ,OQ & PQ. Calibration & Traceability certificates Factory tested DOP certificate Applicable Standards - EN ISO 14971:2012,EN ISO 13485 : 2012 , EN 980:2008 , EN 1041 : 2008 , EN 61010-1:2010, EN 61326-1:2013, EN 12469:2000	
4	**4)Bench top Refrigerated centrifuge** **Thermo Scientific™** **Sorvall™ ST 8R Bench top Refrigerated centrifuge** **Max RPM: 17850 / RCF 30279** **Fits in. Stands out.** Secure, push-button Auto-Lock rotor exchange in less than 3 seconds delivers: Trouble-free rotor installation and removal **No tools are required** No complicated rotor changing procedures Clear chamber access for cleaning convenience Quick switch between applications – from conical tubes to blood tubes, and from microtubes to microplates – and the flexibility to evolve with the changing needs of your laboratory **Reliable quality.** **Safe operation.** Biocontainment sealing options, including certified1 Click Seal lids for glove-friendly, one-handed Chemical resistance with exceptional strength for durability and reliability and Quiet performance (<61 dBA) provides a safe, stress-free environment Conforms to the latest clinical and safety standards, such as UL, CE and IVD2, 3 **Optimize bench space with maximized capacity** n8 x 50 mL swinging bucket rotor capacity or 4 microplates for research needs Clinical processing up to 24 x 5/7 mL blood tubes per run **Sample-ready.** **User-friendly** One-touch operation with pre-saved protocols and password protection available. Highly visible backlit display for easy reading of parameters across the lab Optional indicators at end of run, including automatic lid opening, flashing display or audible signal Glove- and detergent-friendly Multilingual instructions – English, Dutch, French, German, Italian, Russian and Spanish — on programming, run conditions, alerts and service messages	**1**
5	**Vertical Autoclave – Single lever Fully Automatic – Top Loading** **AUTOCLAVE VERTICAL LABORATORY TYPE** **Make: BIOXIA** In Autoclave the Inner chamber is made up of thick stainless steel (304) & the Outer body is made up of thick Mild Steel / Stainless Steel. The chamber is absolutely leak proof & can be operated at any selected point in between 5 to 20 pounds per sq.inch. Size: **35cmx55cm** **14”x22” inch** **LITRES Capacity: 52 ltr** Rating Watts : 3000	**1**

6	**Deep Freezers -20 degree celcius** **Make : Celfrost/Vestfrost** **Deep Freezers** **Upright Solid Door Freezer** **Model : BFS-345-S** Capacity in Litres : 344 L Dimensions in Inches : W X D X H : 23” X 23” X 73” Temperature Range: -17°C ~ -24°C Defrost : Manual Rated Load, Wattage : 140 No of Baskets / shelves : 8 No of Lids / doors : 1 Type of Door: Solid Door Power Supply Required : 220 Volts,50 Hz, Single Phase Low power consumption	**1**

7	**Deep Freezer -70**
	THERMO SCIENTIFIC FORMA -86ºC ULT Deep Freezer 902 GP ULTS
	Upright model - 902 (368 ltrs)
	Temperature range: -50 ºC to -86ºC
	Description
	Capacity: 13 cu. ft. (368.1L); Single door
	Holds 240 boxes; 24000 2ml Vials
	230V/50Hz; 12A
	Features
	  Centralized, eye level information center, including
	microprocessor control and monitoring system; all controls and displays are easy to reach and read
	  Improves temperature control and increases reserve BTUH capacity, resulting in a more stable temperature sample
	  Single-hand operation: easy-to-use, padlock-compatible, ergonomic door handle with integrated key lock
	Construction:
	  5″ (127mm) foamed-in-place, polyurethane insulation: Reduces power consumption, maintains temperature set point
	  Triple-point door gasket, provides longer holding time in the event of a door opening
	  Rugged, heavy gauge, cold-rolled steel cabinets resist chipping and rust free
	1″ (25mm) access ports: Allow for the use of inexpedient probes or instrumentation
	  Four inner doors reduce cold air loss and improve
	temperature recovery after door closings
	  UL Listed and CE Marked
	Certifications/Compliance
	cULus, CE listed
	Data Outputs
	RS-485, 4-20mA, dry contacts - standard, PT100 probe Optional
	Amperage 12A
	Display Push Button LED
	Dimensions (L x D x H) 32.9 x 33.3 x 77.9 in.
		1

8	**ELISA Plate Washer** Make: Thermo Scientific Model: Well wash The large color display makes the thermo scientific wellwash very easy and convenient to use. The user interface is logical and intuitive, requiring minimal training so that protocols can be developed quickly. A context-sensitive help feature is included in both instruments. The internal software is available in eight languages (English, French, German, Spanish, Portuguese, Russian, Japanese, and Chinese) adding more convenience of use.	**2**

	Color-coded tube fittings and liquid level sensor cables enable fast instrument set-up. The removable priming vessel and built-in maintenance program offer easy maintenance. A quick change of manifolds facilitates thru use of different plate types and applications. **Feature's** Number of wash buffers1 Bottles: 2lwash bottle,2lwaste bottle Wash heads: 1×8and 1×12 wash head Plate types: 96-well plates Wash volume: 50-1000µl Prime volume: 5-100ml Rinsing volume: 5-100ml Dispensing volume: 50-400µl Residual volume: ‹1.5µl Data connection: USB port Dimensions(H×W×D) 345×385×240mm	
9	**ELISA Plate Reader** **Make: Thermo, Model Labserv** **Optical measurement:** 8 Channel **Plate type :** U, V and Flat bottom Plates **Filter type:** Narrow band Interference **Standard filters:** 405nm, 450nm, 492nm, 630nm **Filter Wheel Position:** 8 Position **Filter half bandwidth:** 10nm ± 2nm **Filter selection :** Automatic by Stepper Motor **Linear measurement range** : 0.000 to 3.000 Absorbance Units(A) Machine interface Touch Panel / Keypad **Photometric accuracy** ± 2% or 0.005 whichever is higher, from 0 to 1.5 A ± 3% from 1.5 A to 3.0 A **Display:** 6" Graphics LCD, Negative Blue, STN **Lamp:** Xenon **On board memory** 125 open channels and 2500 patient results, additional 10 microplate data Curve plotting Graphical Representation on Printer Plate carrier movement Precisely through the stepper motor Analysis mode Absorbance Cut - off Multi - Standard % Absorbance Storage condition **Relative Humidity** up to 80 % **Operating conditions** Temperature From + 18°C to 35° C Relative Humidity up to 80 % Interface USB and RS232 Power : Wattage 50 Watts, Voltage 115 - 230 Volts ± 10%, 50Hz. Printer Built in Thermal Printer 52 columns Size (cm) & weight 36X36X 22 (Ixbxh); 10 Kg (approx)	**2**
10	**PLATE INCUBATOR** **Features** LCD displays set and actual temperature and time simultaneously User friendly touch operation interface Sleak design offers small footprint and easy cleaning Heats microplates from top and bottom to ensure uniformity Alarm signal after the operation ends **Specifications** 4 plate capacity	**1**

	Maximum plate height: 40mm 5°C above ambient to 60°C temperature range Heating time: <25mins from 20-70°C Timer: 99h 59m <0.3°C accuracy	
11	**Refrigerated Microfuge** **Thermo Scientific Sorvall Legend Micro 21R Centrifuge, Refrigerated Includes** 24 x 1.5/2.0mL rotor with ClickSeal biocontainment lid Capacity: 24 x 1.5/2mL Max. RCF: 21,100 x g Max. Speed: 14,800rpm Temperature Range: -9° to +40°C Run Time: 1 to 99min (1min increments); HOLD Net Weight: 62.0lb. (28.0kg) Noise Level: 50dbA Certifications/Compliance: CSA, CE, IVD Electrical Requirements: 230V 50/60Hz Refrigerated: Yes Standards: IEC 61010-1, IEC 61010-2-020 (refer to manual for more details)	**1**
12	Pan Electronic Weighing Balance Color: White **Product Description** As a leading supplier, wholesaler and trader of **Mettler Electronic Balance**, we have been recognized as a trusted name in the market at the present scenario. This balance from our side generate current proportional to the displacement of the pan and are ideal for general purpose weighing applications. These also feature all digital design with digital readouts coming with latest in electronics and analytical balance technology. We make these available in different models for meeting different end application needs. **Features:** • Quick response time • Built-in calibration • Accuracy in balancing **Specifications:** • Accuracy: 20g • Pan material: stainless steel or 304 S.S. • Frame: standard steel pipe welded • Capacity: 300kg	**1**
13	PCR WORKSTATION Main body : Made in Mild Steel with epoxy Powder Coated Tray : Made in stainless steel 304 grade HEPA Filter with Efficiency of 99.997 % at 0.3 micron Washable Primary filter positioned on top. Germicidal in built Ultra violet light with_ 254 nm UV light to prevent cross contamination Safety shield to prevent exposure to UV light, as well as the PCR Workstation as a built-in UV sterilizer. Fluorescent Light positioned at front side is situated in such position to reduce operator fatigue while working 10 degree slope/tilt to reduce back pain & work comfortably Polycarbonate Door, Prevent accidental exposure of UV light to the operator. Blower Motor Assembly : Dynamically & Statistically balance centrifugal blower Vibration : Low Power supply : 230 V ± 15%, 50 Hz ± 3% PCR Workstation reduces the risk of contamination.	**1**

14	Multichannel Pipettes 8 Channel, Make: Finnpipette Thermo Unichannel Pipette 01 Make: Finnpipette Thermo 0.5-5 µl 02 Make: Finnpipette Thermo 1-10µL 03 Make: Finnpipette Thermo 10-100µL 04 Make: Finnpipette Thermo 10-1000µL	**5 Set**
15	CYCLOMIXERS / VORTEX MIXERS Dimensions: 140 x 140 x 190 mm Frequency: 50 / 60 Hz. Speed Range: 0 - 2500 RPM Voltage: 220 - 240 V Permissible Ambient Temperature: 5 - 40 Deg Product Description **Features:** • Variable speed mixer to eliminate hand mixing • Suitable for short-time operation (touch function) • activated by pressing shaker attachment or continuous operation • Compact Design • Stable at high speeds thanks to a sturdy MS base for vibration damping • Suitable for continuous operation with low self heating thanks to self ventilation of motor • Interchangeable adapter **Technical Data:** • Type of Movement: Orbital • Operation Mode: Continuous Operation • Touch Function: Yes • Permissible Relative Moisture: 80% • Speed Display: None	**1**
16	HEATING BLOCKS Temperature range ambient to 100 C controlled to + 1.0 C by Digital display with microprocessor based PID Controller display using PT 100 as sensor. The body made of heavy M.S. painted with Epoxy Powder Paint. The front panel is provided with an Acrylic door with lock and key. Heating Block with 3 nos. interchangeable aluminum blocks of 75*50*50 mm size for accommodating 0.5 ml. 1.5 ml Eppendorf & 12 mm test tubes.	**1**
17	WATER BATH Dimension: 35X25X10CM Material: Stainless Steel Material Grade: inner made of S.S & outer made of mild steel powder coated/S.S Controller: THERMOSTATE Phase: Single Power Source: Electric Voltage: 220 V Frequency Rate: 1.0KW Temperature: Ambient to 100 deg Celsius Product Description Doubled walled inner made of S.S & outer made of mild steel powder coated/S.S. Temp is controlled by thermostat. Lid will be supplied with 6/12 holes at 3” Dia with concentric rings.	**1**
18	CENTRIFUGE • Should have standard rotor runs 24 tubes in a single row with equalized g-forces for reproducibility, from 1.5 to 2.0 mL tubes to mini-preps and spin columns • Should Eliminate the need for adapters with the unique dual row rotor, which holds 18 tubes of both 1.5/2.0 mL and 0.5 mL in the same run } • Should Maximize your micro-volume capacity with the new 10 x 5 mL rotor with	**1**

	Click Seal biocontainment lid, separating samples at g-force up to 20,326 x g } Should have wide variety of rotors support 0.5 mL microtubes, 0.2 mL PCR tubes and hematocrit capillary tubes Save time with fast sample processing: } • Should provide fast one-click centrifuge lid closure. • Should have ClickSeal biocontainment lids that shorten retrieval time with one click opening, compared to screw-on lids } • Should have transparent PPSU rotor lids enable viewing for added safety and convenience	
19	INCUBATOR Should be double walled with the outer and inner body fabricated with mild steel Inner body should be lagged with glass wool & the temperature controlled by capillary type thermostat, temperature range 5ºC above ambient to maximum 60ºC with accuracy range of ± 2ºC. With glass door also have digital temperature indicator cum Controller and with digital timer with Temperature Controller	**1**

Before quoting the rates, Tenderer shall inspect all the system installations. No extra claim whatsoever will be entertained later on during the contract period.

TS-2) General Requirements.

The contractor shall visit the site to see the existing infrastructure i.e. electrical fixtures, Electrical panel rooms, floors, wards, bed capacity, layout of UGPG hhostel, Main oy's hostel and other Buildings and hospital campus & to access the quantum of work involved and specifically state the items which are not included in the schedule of quantities, and hence need to be included to carry out the work. No extra item/ excess will be permitted later on & contractor will have to carry out the work at their cost for extra / excess items.

TS-3) Special Payment Conditions:

1. Advance payment - Payment of 50% of the contract value.
2. Supply of material - Payment of 30% of the contract value.
3. Commissioning of the lab and equipment.- Payment of 20% of the contract value.

TS-3) <u>OTHER GENERAL TERMS & CONDITIONS:</u>

1) It is essential on part of the Tenderer to collect full details/ specifications of material to be supplied/ work to be executed from the office of A.E. (M&E) KEMH. It is also essential on part of the Tenderer to inspect all the infrastructure of the hospital before submitting their offer and no claim arising out of ignorance will be entertained later on. Material used for the work shall be new & from fresh stock.
2) The Tenderer shall note that while executing the work, if any additions/alterations/omissions are required to be carried out then the prior approval of A.E. (M&E) KEMH for each item shall be obtained before proceeding further. It

shall be incumbent on the part of the Contractor to carry out any additions/alterations/omissions only after approval of A.E. (M&E) KEMH.

3) The work shall be carried out strictly as per the specification & as directed by the engineering staff at site.
4) All material used for the work shall be new & from fresh stock and free from surface defects.
5) All the material, tools, machines &labor required for this work shall be arranged by the contractor.
6) The contractor shall have to carry out the work at site at his risk & cost with safety precautionary measures & there shall be no liabilities on the M.C.G.M. on what so ever account.
7) The contractor shall visit the site before submitting the offer to get acquainted with the scope of work & no claim will be entertained later on due to ignorance of site conditions.
8) The contractor shall fill up the schedule of quantity on item rate basis and the payment will be made on actual measurement after completion of work.
9) The tenderer shall include all taxes, duties, and levies in the total cost. No charges will be paid extra due to ignorance on the part of the Tenderer.
10) The Municipal Commissioner reserves the right to accept the lowest or any offer or reject any or all offers as deem fit.

11. The Bidder shall study carefully, the materials, chemicals, machines, equipments, specifications, schedule of quantities, the frequencies of different operations and conditions of the tender documents to fully appreciate the scope of work before quoting his rates.

12. The contractor shall work in close coordination with officials of A.E. (M&E) KEMH section .

13. The information & site data mentioned in the tender documents are being furnished for general information & guidance only. The DEAN(G.S.M.C. & K.E.M.H.) in no case shall be held responsible for the accuracy thereof or any interpretations or conclusion drawn therefore. The contractor shall verify such data to his entire satisfaction before quoting the rates.

14. The contractor shall take at his own cost, if required, necessary insurance cover in respect of staff and other personnel to be employed or engaged by him in connection with the afore mentioned services to be rendered to DEAN(G.S.M.C. & K.E.M.H.) and shall comply with all relevant labour laws as applicable to the area as existing or as may be mentioned during the contract period and shall indemnify DEAN(G.S.M.C. & K.E.M.H.) against all acts of commissions, fault, breaches and or any claim or demand, loss injury and expenses to which DEAN(G.S.M.C. & K.E.M.H.) may be party or-involved as a result of the contractors failure to comply and of the obligation under the relevant act law which the contractor is to follow.

Sd/-

A.E. (M&E) KEMH

BOQ

K.E.M.HOSPITAL, PAREL, MUMBAI - 400 012.

Subject:- Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital

SCHEDULE OF QUANTITIES/SPECIFICATIONS

Sr. No.	Description	Quantity & Unit		Rate/Unit(Rs.)	Amount(Rs.)
1	Establishing a VRDL as per specifications and BOQ mentioned in technical specifications.	1.00	No. Job.		
2	SITC of19 nos. of essential equipment as per list and technical specifications. 1.THERMAL CYCLER Qty : 1Nos 2.RT PCR MACHINE Qty : 1Nos 3. Biosafety Cabinet Qty : 1 Nos 4. Bench top Refrigerated centrifuge Qty : 1 Nos 5. Vertical Autoclave – Single lever Fully Automatic – Top Loading Qty : 1 Nos 6. Deep Freezers -20 degree Celsius Qty : 1 Nos 7. Deep Freezer -70 degree Celsius Qty : 1 Nos 8. ELISA PLATE WASHER Qty : 2 Nos 9. ELISA PLATE READER Qty : 2 Nos 10. Plate Incubator Qty : 1 Nos 11. REFRIGERATED MICROFUGE Qty : 1 Nos 12. Pan Electronic Weighing Balance Qty : 1 Nos 13. PCR WORKSTATION Qty : 1 Nos 14. MICRO PIPETTE SINGLE CHANNEL and MICRO PIPETTE MULTI CHANNEL Qty : 5 Set 15. CYCLOMIXERS / VORTEX MIXERS Qty : 1 Nos 16. Heating Block Qty : 1 Nos 17. WATER BATH Qty : 1 Nos 18. CENTRIFUGE (MICRO CENTRIFUGE) Qty : 1 Nos 19. Incubator Qty : 1 Nos	1.00	No.Job.		

Total amount In Words: Rs.

Rates shall be inclusive of all taxes and duties.

Vendor No: Bidder's Name, Address & seal

Bidder's Signature:

DEVIATION SCHEDULE

G.S.M.C. & K.E.M.H.

K.E.M. HOSPITAL, PAREL, MUMBAI- 400012

DEVIATION SCHEDULE

Subject: Up gradation of labs in Microbiology department by establishing VRDL on turnkey basis along with furnishing and S.I.T.C. of essential equipment at K.E.M. Hospital. [Bid no. 6735]

Tenderers / Quotationers
Full address & Telephone No.,
Vendor Regd. No., if any…
…….
…….

Tenderer's Seal / Office Stamp
Signature & Office Stamp