MUNICIPAL CORPORATION OF GREATER MUMBAI

566, N.M.JOSHI MARG, BYCULLA (W), MUMBAI – 400 011.



DOCUMENTS FOR PROCUREMENT OF "3 T MRI MACHINE" WITH COMPREHENSIVE MAINTENANCE CONTRACT

AT THE

NAIR AND LTMG HOSPITAL

MUMBAI

BID NO-7200038362

This tender document consists of:

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SECTION 1:

E-TENDER NOTICE

MUNICIPAL CORPORATION OF GREATER MUMBAI

<u>CENTRAL PURCHASE DEPARTMENT</u> 566, N.M. JOSHI MARG, BYCULLA (WEST) MUMBAI - 400 011.

e- PROCUREMENT TENDER NOTICE

No.CPD/Dy. Ch. Eng./Advt /40/AE-6 Dated- 20.10.2022

The Commissioner of Municipal Corporation of Greater Mumbai (BMC) invites e-tenders as given below in three Packet systems i.e. Packet –A (Administrative), Packet-B (Technical) & Packet-C (Commercial) from the firms dealing in the lines of Medical Equipments. The tender copy can be downloaded from BMC's portal (mcgm.gov.in) under e – procurement section after the online payment of scrutiny fee.

All interested bidders whether already registered or not registered in BMC are mandated to get registered with BMC for e-tendering process & obtain login credentials to participate in the online bidding process. The details of the same are available on the above mentioned portal under 'Tenders' tab. For registration enrolment for digital signature certificates and user manual, please refer to respective links provided in 'Tenders' tab.

The bidders can get digital signature from any one of the Certifying Authorities (CA's) licensed by controller of certifying authorities namely, Safes Crypt, IDRBT, National informatics centre, TCS, CUSTOMS, MTNL, GNFC and e-Mudhra CA. BMC has also opened a Help-desk at the CPD's office to help the vendors in this regard.

Sr.	Description	E- Tender	EMD	Start Date and	End Date and
No		Price	(Rs.)	Time of online	Time Of online
		(Rs.)		Bid	Bid Submission
			16 X	Downloading	
1.	Supply, Installation, Testing	10400	20,00,000/-	21.10.2022 at	15.11.2022 t
	and Commissioning of 3T	+1872	C '	11.00 Hrs	16.00 Hrs
	MRI machine along with	(18%			
	Standard Accessories and	GST)=Rs.) `		
	CMC for radiology dept				
	NAIR AND LTMG	12272			
	Hospital.				
	Bid No.7200038362				

Note: Last date for payment of Earnest Money Deposit (EMD) on line is on or before due date and time prescribed.

The pre-bid meeting will be held on **01.11.2022 at 3:00 pm** venue of the same is at Conference Hall near A.M.C.'s office, 2nd floor, Municipal Head Office Annex Building, Municipal SabhagruhMarg, Mumbai-400 001.

The tender document is available on BMC portal (http://www.BMC.gov.in) along with this tender notice. However, the tenderer shall have to pay "e-tender price" through online payment gateway before downloading and uploading the tender document in SRM Module.

Earnest Money Deposit (EMD) shall be paid on line through payment gateway on or before due date and time prescribed. The vendors having standing deposit shall also have to pay full EMD amount online.

The Authority (BMC) 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.

The Municipal Commissioner reserves the right to reject all or any of the e-Tender(s) without assigning any reason at any stage.

Tenders shall note that any corrigendum issued regarding this tender notice will be published on the BMC portal only. No corrigendum will be published in the local newspapers.

By Order of the Municipal commissioner Brihanmumbai Municipal Corporation Sd/-Dy. Chief Engineer (C.P.D.)

Address for Communication and Venue for opening of bid :

Office of Dy.Ch. E.(C.P.D.)

566, N.M.JOSHI MARG, BYCULLA (W),

MUMBAI – 400 011.

Tel. No. 022-23083161 extn 205 e-mail:- ae06.cpd@BMC.gov.in

For detailed tender document please scroll down

Section 2: **PREAMBLE**

The Municipal Corporation of Greater Mumbai invites Tenders from the manufacturer (Indian or Foreign)

Or

100% Indian subsidiary of foreign manufacturer duly registered in India / Subsidiary of principle Foreign Manufacturer duly registered in India / sister concern of Foreign manufacturer duly registered in India /Associate of Foreign manufacturer duly registered in India / joint venture of Foreign manufacturer duly registered in India / affiliate of Foreign manufacturer duly registered in India

Or

Distributor /Dealer / Importer /Traders/agent appointed directly by foreign manufacturer for the supply, installation, testing and commissioning of **3T MRI machine** to various BMC Hospital in Greater Mumbai as per the specification attached separately with this document and as per the terms and conditions as mentioned herein and as per the provisions of the M.M.C. Act, 1888 as amended till date.

	ΓΙΟΝ 3 : Instructions to Vendors participating in e-Tendering for the supply of ical equipment and plants and machinery to BMC.			
1.	The e-Tendering process of BMC is enabled through its Portal 'http://BMC.gov.in'.			
2.	All the tender notices including e-Tender notices will be published under the 'Tenders' section of BMC Portal.			
3.	All the information documents are published under the 'e-Procurement' section of BMC Portal.			
4.	All interested vendors, are required to be registered with BMC for e-Tendering process. Vendors not registered with BMC before can apply on-line by clicking the link 'Vendor Registration' under the 'e-Procurement' section of BMC Portal, Vendors already registered with BMC need to contact helpdesk to extend their registration to e-Tendering process.			
5.	Manual offers sent by post/Fax or in person will not be accepted against e-tenders even if these are submitted on the Firm's letter head and received in time. All such manual offers shall be considered as invalid offers and shall be rejected summarily without any consideration.			
6.	Please read carefully the document 'Instructions and Articles of Agreement for supply of medical equipment' available in 'e-Procurement' section of BMC Portal. As BMC has switched over to e-Tendering, if any references in this tender document are found as per manual bidding process like Packets A, B, C etc. may please be ignored. All documents that are required to be submitted as part of eligible & technical bid, need to be uploaded in the Packets provided for this purpose and commercial bid need to be filled online.			
7.	This document (Instructions to vendors) and the 'Articles of Agreement' document which are available in e-Tendering section of BMC portal make part of all tender documents unless stated otherwise in the tender document			
8.	Affixing of digital signature for the bid document while submitting the bid, shall be deemed to mean acceptance of the terms and conditions contained in the tender document as well as confirmation of the bid/bids offered by the vendor which shall include acceptance of special directions/terms and conditions if any, incorporated.			
9.	All the documents and data submitted by vendors online shall be digitally signed. The system will prompt for digital signature certificate. It is mandatory for the vendors willing to participate in e-Tender to procure digital signature certificate of class-2/class-3 and 'Company' Type.			
10.	Digital Signature Certificates : Vendors can procure digital signature certificate from any of the certifying authorities (CA) in India. However, for the convenience of the vendors, a team from one of the certifying authorities is made available to help them for obtaining digital signature certificates. Interested vendors may approach helpdesk for details.			
11.	The browser settings required for digitally signing the uploaded documents are listed in the document 'Browser Settings' in e-Procurement section.			
12.	In order to participate in an e-Tender, the registered vendors need to follow the steps given below. A. Open the e-Tendering application by clicking the link available in 'e-Tendering' section of BMC portal.			
	B. Download the 'Browser Settings' document and carry out the necessary settings and root certificates installation as mentioned in the document. Vendors to note that the computer user should have administrative rights to the computer to be able to work with e-Tendering application.			
	C. Login to the application with his credentials and follow the instructions given in the document 'User Manual for Vendors - Bidding Process' which is available in the 'e-Procurement' section of BMC			

		Portal.		
	D.	Make payment of tender price online and download the tender document and other relevant information documents.		
	E.	Pay EMD and other charges, where applicable, as per the instructions given in the Tender Notice and / or Tender Document.		
	F.	Upload the administrative & technical bid documents. System will prompt for digital signature certificate while uploading the document.		
	G.	Ensure that documents are uploaded properly by downloading them after uploading.		
	H.	Submitting the commercial bid by filling in the values on the screen. All the inputs given on this screen need to be digitally signed.		
	I.	The administrative, technical and commercial bids can be submitted only online on or before the due date and due time mentioned for submission of bids.		
	J.	The bids can be modified till the end date and time for bid submission. However, if a new version of a document is to be uploaded, please ensure to delete the old version.		
	K.	Ensure that bid is submitted by ensuring that the 'status' of the bid in the initial bids listing screen is 'Bid submitted'.		
13.	tryi: syst	dors should ensure to submit their bids well in advance before the due date and due time. Vendors ng to submit the bid at last moment just before due date and due time and failing to do so due to the problems at their end, internet problems, User Id locking problems etc. shall note that no applaints in this regard will be entertained.		
14.	It is the responsibility of the vendors to maintain their computers, which are used for submitting their bids, free of viruses, all types of malware etc. by installing appropriate anti-virus software and regularly updating the same with virus free signatures etc. Vendors should scan all the documents before uploading the same.			
15.		administrative, technical and commercial evaluation documents will be available for all the icipating vendors after completion of the evaluation.		
16.		litional information can be availed by referring to FAQs in the e-Procurement section of BMC portal.		
17.	For	any help, in the e-Tendering process, can be availed by dialling help-desk number 022-24811275/76 MC IT Cell) from 11.30 AM to 5.00 PM on all working days of BMC.		

SPECIAL NOTE:

TENDERERS ARE REQUESTED TO GO THROUGH THE e- TENDER GUIDELINES ON BMC PORTAL (http://BMC.gov.in).

All interested vendors, whether already registered or not registered in BMC, are mandated to get registered with BMC for e-Tendering process & get Login Credentials to participate in the Online bidding process on the above-mentioned portal under "e-Procurement"

For registration, enrolment for digital signature certificate & user manual, please refer to respective links provided in e-tendering tab. The vendors can get digital signature from any one of the Certifying Authorities (CA's) licensed by the Controller of Certifying Authorities namely Safes crypt, IDRBT, National Informatics Centre, TCS, Customs, MTNL, GNFC and e Mudhra.

SECTION	4: FLOW OF ACTIVITIES OF TENDER
1.	Issue of Tender notice in the newspapers and tender notice along with tender documents on M.C.G.M. Portal.
2.	Download the tender documents from the Tender section of M.C.G.M. SRM Module after paying online requisite tender price.
3.	Pre-bid meeting, as mentioned in tender notice.
4.	Earnest Money Deposit (EMD) shall be paid on line through payment gateway on or before due date and time prescribed.
5.	Simultaneous online submission of tender documents with details as specified in the tender & proforma in Annexure shall be done by bidder as per the section No5 of this tender document.
6.	Administrative offer, i.e. Packet 'A' will be opened online on the due date and due time as stated in the Header Data in SRM.
7.	Technical offer, i.e. Packet 'B' of only those bidders who are found to be responsive in the evaluation of administrative offer will be opened online.
8.	Commercial bids i.e. Packet 'C' of only those bidders who are found to be responsive in the evaluation of administrative & technical offers will be opened online.
9.	Demonstration of equipment quoted by successful bidder.
10.	Recommendations to higher authorities and Standing Committee for sanction to award the contract.
11.	After sanction of higher authorities or Standing Committee, issuance of the acceptance letter to successful bidder.
12.	Payment of Contract Deposit, Legal Charges & Stationery Charges within period of thirty days from the date of receipt of Acceptance Letter by successful bidder for execution of written contract with payment of requisite stamp duty.
13.	Supply, installation, testing and commissioning of equipments described in the specifications and as per terms & conditions.

SECTION 5: <u>IMPORTANT GENERAL CONDITIONS AND INSTRUCTIONS TO</u> THE TENDERERS

Before filling in the tender, tenderers are requested to go through the "General Instructions to Tenderers", the "Mandatory conditions", all "Annexures" and the "Articles of Agreement" very carefully, wherein the tender conditions and contract conditions are clearly mentioned.

1. Who can quote:

A) Who can quote:

A. Only direct manufacturer(Indian or foreigner)

or

B.100% Indian subsidiary of foreign manufacturer / subsidiary of Principle foreign manufacturer / sister concern of Foreign manufacturer /Associate of Foreign manufacturer / joint venture of Foreign manufacturer/ affiliate of Foreign manufacturer (all duly registered in India) would be allowed to participate in the tender

or

C. only foreign manufacturer will be allowed to appoint his distributor if he wishes to do so for complying with the order as per tender conditions and supply the equipment.

Foreign manufacturer **and /or** the 100% Indian subsidiary of foreign manufacturer /subsidiary of Principle foreign manufacturer /sister concern of Foreign manufacturer /Associate of Foreign manufacturer /joint venture of Foreign manufacturer/ affiliate of Foreign manufacturer (all duly registered in India) would be directly responsible for all the tender related issues including quality and quantity of supply of equipment.

Foreign manufacturer **and /or** the 100% Indian subsidiary of foreign manufacturer /subsidiary of Principle foreign manufacturer /sister concern of Foreign manufacturer /Associate of Foreign manufacturer /joint venture of Foreign manufacturer/ affiliate of Foreign manufacturer (all duly registered in India) shall supply equipment and raise the bill directly.

If the foreign Manufacturer came forward for specific tender and specific medical equipment and requested to allow their Distributor /Dealer / Importer /Traders/agent to submit tender on their behalf, Distributor /Dealer / Importer /Traders/agent will be allowed to participate in the tendering process subject to,

- 1. Manufacturer shall issue the certificate stating the date from which said distributor is their Distributor /Dealer / Importer /Traders/agent for the assigned tender.
- 2. Manufacturer along with Distributor /Dealer / Importer /Traders/agent has to enter in to "Tri-Party Agreement" (As per Annexure 3-A) with Municipal Corporation of Greater Mumbai.
- 3.The responsibility of supply, installation, testing and commissioning of medical equipments along with 3 years warranty and 5 years Comprehensive Maintenance Contract / Annual Maintenance Contract (As applicable) shall be of Manufacturer and bidderjointly as well as severally.
- 4.Distributor /Dealer / Importer /Traders/agent should have NO previous transgressions occurred in the last 3 years and should declare so. (In Annexure-3-A)

Note:100% Indian subsidiary of foreign manufacturer / subsidiary of Principle foreign manufacturer /sister concern of Foreign manufacturer /Associate of Foreign manufacturer /joint venture of Foreign manufacturer/ affiliate of Foreign manufacturer (all duly registered in India) are not allowed to appoint any distributor/Dealer/Importer/Trader/Agent to participate in tender on behalf of them.

B) **Turnover**:

The average annual turnover of the bidder during preceding three financial years shall be minimum **Rs.22,45,04,000.00** /- Evidence in the form of certificate issued by Auditor of firm/ Chartered Accountant shall be uploaded during the submission of the tender (PACKET-'A' Administrative).

C) Experience:

The bidder/manufacturer shall have adequate experience of successful supply, installation,

commissioning & repairs & maintenance of **3T MRI machine** during last five years from due date of the tender. Experience Certificate shall be uploaded during the submission of the tender (Annexure –10)

Bidder/Manufacturer shall provide certified copies of the executed purchase orders along with completion certificates in support of the experience as provided in this clause without disclosing the rates.

The tender shall be uploaded only by the tenderer with his own digital signature or authorized representative, in whose name the tender documents is downloaded.

Authorization letter of authorized representative shall be uploaded in packet 'A'.

D) Details of Litigation history.

The Bidder shall disclose the litigation history in Annexure-13 to be submitted in Packet 'A'.

If there is no litigation history, the bidder shall specifically mentioned in Annexure-13 that there is no litigation history as per the clause of litigation history for the period of 5 years prior to due date of the tender.

In case there is litigation history, litigation History must cover in Annexure-13 .Any action of blacklisting, debarring, banning, suspension, deregistration and cheating with BMC, State Govt., Central Govt. or any authority under State or Central Govt./Govt. organization initiated against the company, firm, directors, partners or authorized signatory shall be disclosed for last 5 years from the date of submission of bid. Also, bidder must disclose the litigation history for last 5 years from the date of submission of bid about any action like show cause issued, blacklisting, debarring, banning, suspension, deregistration and cheating with BMC and BMC is party in the litigation against the company, firm, directors, partners or authorized signatory for carrying out any work for BMC by any authority of BMC and the orders passed by the competent authority or by any Court where BMC is a party.

Depends upon the gravity of the submission made by the bidder in Annexure-13 for litigation history, DMC (CPD) or Director as the case may be will take suitable decision whether to consider the bid for further process or not.

2. Call

1st Call (Fresh Call)

1st Call (Fresh Call) is a Tender that is published for the first time for a particular e-procurement project or item.

2nd Call

2nd Call is referred to issuing a amended/modified/corrected Tender Document for the same project / procurement with revised tender Conditions like Eligibility, Pre-Qualification Criteria, Technical Evaluation Criteria, Scope of Work, Technical Specifications, Payment Terms, and so on including revised Bidding Schedule.

3. Extension.

1st Extension

1st Extension is extension of bid submission date and time to the 1st Call/2nd call without changing Tender Conditions except for Bidding Schedule.

1st Extension is provided in following cases:

a. After due date and time of submission of packet A of bid -if response is less than 3 bidders or any technical reasons.

2nd Extension

2nd Extension is extension of bid submission date and time after end of the 1st Extension without changing Tender Conditions except for Bidding Schedule. 2nd Extension is provided in following cases:

a. After due date and time of submission of packet A of bid -if response is less than 3 bidders or any technical reasons

3rd Extension.

 3^{rd} Extension is extension of bid submission date and time after end of the 2^{nd} Extension without changing Tender Conditions except

for Bidding Schedule. 3rd Extension is provided in following cases:

a. After due date and time of submission of packet A of bid -if response is less than 3 bidders or any technical reasons.

The Municipal Commissioner reserves right to extend or open bids of tenders without assigning any

	reasons.
4.	Amendment to tender documents
	Before deadline for uploading of tender offer, the BMC may modify any tender condition included in this
	tender document by issuing addendum/corrigendum/clarification and publish it in the news papers and/or on
	the portal of BMC. Such addendum/corrigendum/clarification so issued shall form part of the tender
	documents. All tenderers shall digitally sign such addendum/corrigendum/clarification and upload it in
5.	Packet 'A'. The tenderers are advised to physically apprise themselves with installation Conditions and working areas if
5.	required. They are advised to physically apprise themselves with installation Conditions and working areas if required. They are advised to get sufficient acquaintance with the actual nature of installation if required,
	prevalent conditions and facilities available.
6.	This tendering process is covered under Information Technology ACT & CYBER LAWS AS
	APPLICABLE.
7.	The tenderer shall offer the best prices for the subject supply/work as per the present market rates and that
	the bidder should not have offered less prices for the subject supply/work to any other outside agencies
	including Govt./Semi Govt. agencies and within the BMC also. Further, the tenderer has to fill in the
	accompanying tender with full knowledge of the above liabilities and therefore they 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 behalf in this tender.
	In the event, if it is revealed subsequently after the allotment of work/ contract to tenderer, that any
	information given by tenderer, in this tender is false or incorrect, he shall compensate the Municipal Corporation of Greater Mumbai for any such losses or inconveniences caused to the Municipal Corporation,
	in any manner and will not resist any claim for such compensation on any ground whatsoever.
	Tenderer/tenderers shall agrees and undertake that he/they shall not claim in such case any amount, by way
	of damages or compensation for cancellation of the contract given to them or any work assigned to them if
	it is withdrawn by the Corporation."
	Affidavit shall be uploaded in this respect as per annexure –3.
8.	Bidder / his principle manufacturer shall not have been debarred/ black listed by M.C.G.M. / Central Govt. /
	State Govt. / Public sector undertaking/any other Local body. If in future, it comes to the notice of BMC / if it is brought to the notice of BMC during the currency of this contract, that any disciplinary/penal action is
	taken against the bidder / principle manufacturer due to violation of terms and conditions of the tender
	allotted to Bidder / his principle manufacturer which amounts to cheating /depicting of malafide intention
	anywhere in M.C.G.M. or either by any of central Govt. / state Govt. / Public sector undertaking/any other
	Local body, BMC will be at discretion to take appropriate action as it finds fit.
9.	<u>Tender Price</u> Tender price is mentioned in tender notice and shall not be refundable.
10.	<u>Validity</u> The validity of the offer should be for at least 180 days from the date of the opening of the tender.
11.	Payment of Earnest Money Deposit (E.M.D.).
	The tenderer shall have to pay EMD of Rs. 20,00,000 /- online only. The vendors having standing deposit
	shall also have to pay the full EMD amount online. Link for e-payment gateway for payment of EMD will
	be given in SRM.
12.	Refund of E.M.D.
	EMD of hidden around 1.1 and 1.2 will be refunded after finalization of Dealest Consolution Harmon
	E.M.D. of bidder except L1 and L2 will be refunded after finalization of Packet C evaluation. However refund of EMD, such bidder will not have any claim for award of contract. EMD of second lowest bidder
	will be refunded after issuance of letter of acceptance to lowest responsive bidder.
	However in the case of successful tenderer, if tenderer agrees then the EMD shall be retained and adjusted
	against the 5% contract deposit for due execution of the contract.
	OR
	The EMD of the tenderer who have been awarded the contract will be refunded only after 5% contract
	deposit is paid to BMC.
	In case of successful bidders paying 5% contract deposit in cash, their EMD will be refunded after
	in case of successful ordates paying 370 contract deposit in easily dien EMD will be refulled after

submission of the receipt in this respect along with the contract document. Whereas, the successful bidders who have submitted BG in lieu of 5% contract deposit, the EMD of such bidders will be refunded only after the confirmation letter of the Bank issuing this BG is received and verification of the same along with contract documents by C.A.'s office. **13. Acknowledging communications** Every communication from the Dy.Ch.E.(C.P.D.), Municipal Corporation of Greater Mumbai to the tenderer should be acknowledged by the tenderer / quotationer / Supplier with the signature of authorized person and with official rubber stamp of the tenderer / quotationer / supplier. 14. Where and how to submit the tender The tender documents with details as specified in the tender notice must be submitted online in tender section of M.C.G.M. as per the instructions available on M.C.G.M Portal for online submission of e- tender. 15. **Documents to be uploaded:** Original scanned documents or self attested photocopies of specific documents shall be scanned and uploaded. The documents shall be attested from Gazzetted officer of the State/Central Government or from the Officer of MUNICIPAL CORPORATION OF GREATER MUMBAI not below the rank of Assistant Engineer/Administrative Officer before scanning & uploading the same in Packet - A & B. 16. **Authentication for documents** The responsibility to produce correct and authenticate documents rests with the tenderer. If any document is detected to be forged, bogus etc., the tender shall be rejected and the tender deposit shall be forfeited. Any contract entered under such conditions shall also be liable to be cancelled at any time during its currency and further penal action like criminal prosecution, blacklisting etc. against the said contractors and/or the partners shall be instituted. The Municipal Commissioner shall also be entitled to recover the damages/losses occurred if any from the contractors' dues. 17. **Translation of certificates** If the certificate issued by any statutory authority is in language other than English, Hindi or Marathi, then a translated copy of certificate in one of the languages mentioned above and certified by the official translator shall have to be uploaded along with a copy of the original certificate. 18. Sign and seal ixing of digital signature while uploading/submission the bid shall be deemed to be signed by the bidder and mean acceptance of the terms, conditions and instructions contained in this tender document as well as confirmation of the bid/bids offered by the bidder which shall include acceptance of special directions/terms and conditions if any, incorporated. If a tender is submitted by a proprietary firm, it shall be digitally signed by the proprietor of the said i) firm or authorised representative only. ii) If a tender is submitted by a partnership firm, it shall be digitally signed by person/partner holding the power of attorney on behalf of the said firm or authorised representative only. iii) If a Limited Company/ Sansthas/Societies /Trust /Govt. Undertaking / Semi-Govt. Undertaking submits and uploads a tender, it shall be digitally signed by a person holding power of attorney or authorised representative only. 19. Name of Partners All tenderers must disclose the names and addresses of their partners, if any, in the particular contract. Any tenderer failing to do so shall render him liable to have his EMD forfeited and the contract, if entered into, cancelled at any time during its currency. Further, it shall invite penal action including black-listing. 20. Firms with common proprietor /partners or connected with one another either financially or as master and servant or with proprietor/partners closely related to each other such as husband, wife /father/mother and minor son/daughter and brother/sister and minor brother/sister shall not tender separately under different names for the same contract.

If it is found that firms as described in clause 20 have tendered separately under different names for the same contract, all such tender(s) shall stand rejected and tender deposit of each such firm/ establishment shall be forfeited. In addition, such firms/establishments shall be liable, at the discretion of the Municipal Commissioner, for further penal action including blacklisting. (B) If it is found that closely related persons as in clause 20 have submitted separate tender/quotations under different names of firms/establishments but with common address for such establishments/firms and/or if such establishments/firms, though they have different addresses, are managed or governed by the same person/persons jointly or severally, such tenders shall be liable for action as in clause no. 20 (a) including similar action against the firms/establishments concerned. (C) If after award of contract it is found that the accepted tenderer violated any of the clauses (20, 20(A) or 20(B)) the contract shall be liable for cancellation at any time during its currency in addition to penal action against the contractors as well as related firm/establishments. 21. **Unconditional offer** Tenderers shall quote a firm & unconditional offer. Conditional offers shall not be considered and shall be treated as non-responsive. Bonus/complimentary / discount offer given with condition will also be rejected. Bonus/complimentary / discount offer given without any condition will not be considered for evaluation of comparative assessment. The net price quoted will only be considered for determining the lowest bidder irrespective of unconditional Bonus/complimentary / discount offer. 22. Contradictory Clause in tender Tenders containing contradictory, onerous and vague stipulations and hedging conditions such as "subject to prior sale""offer subject to availability of stock""Order subject to confirmation at the time of order""Rates subject to market fluctuations" etc. will be rejected outright. 23. **Alternative clauses in tender** No alteration or interpolation will be allowed to be made in any of the terms or conditions of the tender & contract and / or the specifications and /or in the schedule of quantities. If any such alteration or interpolation is made by the tenderer, his tender shall be rejected. 24. Rejection:tender may be considered incomplete, irregular, invalid and liable to be rejected Unless, It is signed/digitally signed by the proprietor, named managing partner or all partners or by the party or parties stating specifically their position and status at the following places: i) Tender from and annexures as stipulated in Packet A, Packet B, item data in packet 'C'. ii) Name and Address of all the partners as given in the tender. A certified copy of the Goods and Service tax Registration certificate is produced along iii) with the tender if applicable. Past performance report is furnished in packet 'B'. iv) v) The drawings/ literature brand, make and year of manufacturers, ISI registration number as applicable are furnished. B) Stipulated validity period less than 180 days. C) Stipulated its own terms and conditions. D) Particular furnished by tenderer are found materially incorrect or misleading, such tender shall be rejected and their EMD shall be forfeited and shall be liable for further action like black-listing etc. Any change occurring within their institute like change in name of firm, change of partner, change in the constitution, change in brand name of the product, merger with any other institutions, contract work, if any, allotted to another firm, any freshly initiated court case should be promptly intimated to the BMC. If the tenderer fails to submit such information during the tenure of the contract, that shall invite legal action and black-listing as well.

25. A. Quoted Currency.

- 1. If the bidder is Indian manufacturer of equipment has to quote in INR.
- 2. If the bidder is foreign manufacturer of equipment then allowed to quote in foreign currency only.
- **3.** If bidder is 100% Indian subsidiary of foreign manufacturer duly registered in India / Subsidiary of principle Foreign Manufacturer duly registered in India / sister concern of Foreign manufacturer duly registered in India /Associate of Foreign manufacturer duly registered in India / affiliate of Foreign manufacturer duly registered in India then allowed to quote in **foreign or Indian currency.** If quoted in foreign currency then for import supply payment will be done directly to manufacturer of equipment.
- **4.** If bidder is Distributor/Dealer/Importer/trader/agent appointed by foreign manufacturer then for import supply payment will be done directly to manufacturer of equipment only.

Such tenders cannot be quoted in INR.

A. Firm price

The prices quoted shall be firm and no variation will be allowed on any account whatsoever.

26. Variation in rate

Tenderers are requested to fill in the tender carefully after noting the items and its specifications. No variation in rates etc. shall be allowed on any grounds such as clerical mistake, misunderstanding etc. after the tender has been submitted.

27. Product Names

The tenderer must state the brand name of the product, if any.

28. The Three Packet system

The tenderer should upload tender in three Packets (Packets) system as below, so as to have fair, transparent and timely completion of tendering process. Bidders are requested to submit all required documents while submitting tender itself.

Additional Folder 'C' is provided in the system to upload the 'List of the HSN/SAC codes of the items quoted.'.

A. Packet – 'A' Administrative Bid':

Documents to be submitted by Indian/Foreign Bidders:-

The Packet 'A' shall contain the following:-

Valid Bank Solvency Certificate for minimum of **Rs. 30 Lakhs** issued by The Nationalised/Scheduled/Foreign Bank. The date of issue of such certificate shall not be more than **06** months prior to the date of submission of tender and the same shall be considered valid for 12 months from the date of issue.

SOLVENCY CERTIFICATE CHART:-

Sr. No.	Estimated Cost in Lakhs	Solvency Certificate Vaule
1	Above 300	30 Lakhs
2	Above 100 to 300	20 Lakhs
3	Above 50 to 100	15 Lakhs
4	Above 25 to 50	10 Lakhs
5	Above 10 to 25	05 Lakhs
6	Above 05 to 10	02 Lakhs
7	Upto 05	01 Lakhs

- b) Goods and Service Tax Registration Certificate in Maharashtra or equivalents.
- c) The 'PAN' documents and photographs of the individuals, owners, Karta of Hindu Undivided

	Family, firms, Private Limited Companies, Registered Co- operative Societies, Partners of Partnership firm and at least two directors, if number of directors are more than two in case of Private Ltd. Companies as the case may be. However PAN Documents will not be insisted in							
	case of Public Limited Companies, Semi Government undertaking, Government undertaking.							
d)	Certified copy of latest partnership deed in case of partnership firm.							
e)	Firm/Company/Sanstha Registration Certificate.i.e.							
	i) Power of attorney in case of Partnership firm/Public Limited Company/Private Limited Company/Society/Government undertaking.							
	ii) Company Registration Certificate/Partnership Deed, duly registered with Registrar, Articles of Association, Society Registration Certificate as the case may be.							
	Note: The Registered Power of Attorney if any registered with Chief Accountant (BMC) will be accepted.							
f)	The tenderer shall have to submit valid registration certificate under Employees Provident Fund and Miscellaneous Provision act of 1952 (EPF and MP Act.1952) if applicable. Also they shall have to submit registration certificate under Employees State Insurance Corporation Act.1948 if applicable. If not applicable an undertaking shall be submitted as provided in Annexure 3.							
g)	Valid and correct e-mail ID of the bidder for communication in respect of this bid shall be provided in Annexure 1.							
h)	Tenderer shall download tender document along with the tender form and all annexures i.e. annexure 1,2,3 & 3-A,4,9(A,B,C),11,12,13, 14, and 15 only from BMC SRM Module to participate in tendering process. Bidder shall fill in the requisite details, sign wherever necessary, scan the same documents, upload and submit online.							
i)	Chartered Accountant's Certificate for turnover of the tenderer for preceding three financial years.							
j)	Import /Export license in the name of bidder/ Manufacturer issued by competent authority.							
k)	Agreement of Integrity Pact as per Annexure-14 (duly signed and stamped on Rs.200/- stamp paper)							
NT.								

Note: Documents mentioned at Sr. No. (b), (c) & (f) above shall not be applicable in case of foreign bidders.

Note:

- (Scrutiny of this Packet will be done strictly with reference to only scanned copies of documents uploaded online)
- The bidder shall upload the original documents duly scanned on or before the due date and time of the submission.
- The bidder must ensure that the uploaded documents shall be clean and readable.
- The bidder shall not disclose/quote the rates of items in Packet 'A'. In case of such indication of
 rate by the bidder in this packet, the tender shall be rejected out rightly and the EMD will be
 forfeited.
- If the tenderer has not uploaded all the required and necessary documents as prescribed in Packet 'A', then the tenderer shall be intimated to comply with the said requirements within 7 days by e-mail on e-mail ID provided by the bidder. Tenderer in return reply by e-mail can upload self attested, signed, scanned copies of the documents asked for. Bidder shall be noted that the penalty of Rs.2000/- per shortfall document will be imposed for not uploading all required documents as called for in writing through email correspondence.
- If the information of shortfall documents sent by concerned BMC officer by e-mail on the bidders e-mail ID is not complied or in return reply e-mail of short fall is not received by BMC, for such lapses within given period, BMC shall not be responsible and it will be treated as non compliance of the shortfall from the bidders end and **their offer will be treated as non responsive.**
- Non submission of required documents even after informing to submit the same, it amounts to

deliberately non submission of the shortfall documents. In such cases 20% EMD amount will be forfeited as penalty. If bidder doesn't want to deduct penalty from EMD then Bidder also have option to pay penalty amount directly to any CFC centre of BMC and to produce the payment receipt physically.

B) Packet 'B' (Technical Bid):

Documents to be submitted (Common for Indian as well as Foreign Bidders) :-

The e- Packet 'B' shall contain the copies of the following documents:-

- 1. Technical offer with scope of supply without indicating price (Annexure 5,6,7,8,10,16)
- 2. Copy of valid CE certificate with directives for medical devices issued by European Conformity notified body having European address and /or copy of valid US FDA approval as mentioned in general conditions of technical specifications as per CE / US FDA policy. The Bidder shall fill the details of CE / US FDA in Annexure 16 along with the certificates which is compulsory.
- 3. Scan copy of original Technical Brochure's for quoted model and all other allied equipment's having technical specifications shall be uploaded.

Scan copy of original Technical Brochure's for quoted model shall be signed and stamped by Original Equipment manufacturer.

The quoted product shall be available on the current official website of the manufacturer; otherwise the quoted product shall be considered obsolete/ redundant. Bidders will not be allowed to substitute any other technical Brochure during clarification stage.

Note:-

- (Scrutiny of this packet will be done strictly with reference to only the scanned copies of original documents uploaded on-line e- tenders)
- The tenderer shall not disclose/quote the rates of items in Packet 'B'. In case of such indication of rate by the tenderer in this packet, the tender shall be rejected out rightly and the EMD will be forfeited.
- The tenderer must scan and upload the above currently valid documents on/or before the due date and due time of tender.
- If the tenderer has not uploaded all the required and necessary documents as prescribed in Packet 'B', then the tenderer shall be intimated to comply with the said requirements within 7 days by e-mail on e-mail ID provided by the bidder. Tenderer in return reply by e-mail can upload self attested, signed, scanned copies of the documents asked for. Bidder shall be noted that the penalty of Rs.2000/- per shortfall document will be imposed for not uploading all required documents as called for in writing through email correspondence.
- If the information of shortfall documents sent by concerned BMC officer by e-mail on the bidders e-mail ID is not complied or in return reply e-mail of short fall is not received by BMC, for such lapses within given period, BMC shall not be responsible and it will be treated as non compliance of the shortfall from the bidders end and **their offer will be treated as non responsive.**
- Non submission of required documents even after informing to submit the same, it amounts to deliberately non submission of the shortfall documents. In such cases 20% EMD amount will be forfeited as penalty. If bidder doesn't want to deduct penalty from EMD then Bidder also have option to pay penalty amount directly to any CFC centre of BMC and to produce the payment receipt physically.

C) Packet – 'C' (Commercial Bid)

<u>Documents to be submitted (Common for Indian as well as Foreign Bidders) :</u>

Bidders shall upload Goods and Services tax structure $\overline{\&}$ details of the HSN/SAC code for all the items quoted as per annexure-B on company letterhead' in PDF format in the Folder 'C' only.

The bidder/tenderer shall upload the undertaking as per annexure A in folder C.

The commercial bid is to be submitted online by filling the rates using the user ID, password and using digital signature.

Packet 'C' will be automatically generated as per item data. Tenderer(s) shall fill item wise rates for all the items mentioned in the item data tab. Tenderer(s) shall also give the breakup of tax structure loaded in the quoted prices in tender Packet C i.e. the percentage of various taxes & duties without disclosing the basic price for the machine/equipment.

Accordingly, the prices quoted should be in the same currency for all the items quoted i.e. Equipment, Accessories, CMC/AMC, Turnkey projects, cost per test if any etc. failing which tenders will be rejected. While quoting the prices for the medical equipments manufactured in India, prices should be quoted in Indian currency only and tax structure shall be mentioned for all taxes like GST, all duties, levies etc. in force i.e. the percentage of various taxes & duties without disclosing the basic price for the machine/equipment in packet C. Even though local supply is imported, the tax structure shall be mentioned for all taxes like GST, all duties, levies, Basic custom duty, etc. in packet C.

In case of import supply, rates shall be quoted in Foreign Currency only and payment shall be made by opening Letter of Credit (L.C.) in the name of Principle Manufacturer (L.C. is to be opened by BMC). Taxes such as Basic custom duty, stamp duty, GST will be paid by BMC. However same will be taken into consideration for evaluation and price comparisons along with AMC/CMC /Indian items /Turnkey Work/ cost per test /cost of reagents/cost of consumables as the case may be.

However Indian Subsidiary may quote in Indian currency and rates shall be inclusive of all taxes.

Exception is given for the firms as mentioned at clause 25 (3) 'quoted currency'.

The conversion rate of the foreign Currency will be as per the exchange rate on the date of the opening of commercial bid mentioned in the header data in SRM.

The rates quoted should be Cost Insurance and freight (CIF) and delivery with installation per unit basis mentioned in the enquiry document and should be comprehensive incorporating the cost of the instrument / equipment and accessories required as part of the equipment and shown as such in the enquiry document. In case any item is required as an essential accessory for equipment, it must be mentioned clearly in Packet B and its rates must be included in the rates for the equipment. If such essential accessories are not specifically mentioned, it will be presumed that the cost of essential accessories is included in the cost of equipment and no separate payment for the same will be made thereafter under any circumstances. If any accessory is demanded as mandatory in the tender enquiry, under no circumstances it should be shown as an optional accessory and quoted separately. The price of the product offered must include the accessories required for operation of the instrument and no separate payment will be made even if such an accessory is not included in the offer. Only those accessories which are specifically recommended by the manufacturer of the instrument / equipment should be offered as part of the equipment and under no circumstances a cheaper variety of an accessory not approved / recommended by the manufacturer should be offered.

The charges towards Third party inspection, Insurance, Transportation shall be included in the quoted cost.

Cost For CMC:

Cost of the Comprehensive Maintenance Contract (CMC) for each year will be fixed to 5% of the ordered value of the equipment*

*Order value of the equipment:

- (1) If quoted price of equipment is in INR by a bidder (which includes all taxes to be paid by bidder) then same will be considered as ordered value of equipment.
- (2) If quoted price of equipment is in foreign currency (which does not include taxes to be paid by bidder) then converted price in INR + Basic Custom Duty, bank clearance charges, Cess etc. (as per prevailing rates) + GST (as per prevailing rates) + cost of local supply is considered as ordered value of equipment.

29. TAXES & DUTIES

- 1. All the rates quoted by the tenderer should be inclusive of all taxes, i.e G.S.T. and other state levies/cess which are not subsumed under GST. The tenderer shall quote the rates inclusive of all taxes & duties clearly & understood that MCGM will not bear any additional liability towards payments of any Taxes & duties.
- 2. If the services to be provided by the Tenderers falls under Reverse Charge Mechanism, the price quoted shall be exclusive of GST, however same shall be inclusive of taxes /Duties/Cess other than GST, if any.
- 3.Rates accepted by MCGM 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 and if there is any subsequent change (after submission of bid) in rate of GST applicable on the work/services to be executed as per tender, i.e. any increase will be reimbursed by BMC whereas any reduction in the rate of GST shall be passed on to BMC as per the provisions of the GST act.

For compliance of the same, the bidder/tenderer shall upload the undertaking as per annexure A in folder f C.

Cost of local supply items shall be quoted inclusive of taxes(as applicable).

30. Spare Parts: (Applicable in case of Annual Maintenance Contract only)

Tenderer shall have to submit list of the spare Parts required as a document in Packet B, without displaying the rates. (As per the Annexure – 6)

The rate quoted for spares shall be freezed for 8 years and cost of one spare each shall be considered for evaluation and BMC is not binding to accept the rates quoted for spares.

The rate shall be quoted in commercial bid (ITEM DATA) in e-tender.

31. Consumables /Accessories / Instruments: Tenderer shall have to submit the rate for the consumables mentioned in Annexure-7 in commercial bid (ITEM DATA) in e-tender.

The Tenderer shall have to quote only one rate which will remain constant throughout the Warranty for three years and Annual /Comprehensive maintenance (AS applicable) contract period for five years i.e. for total eight years. However if the value of foreign currencies at the time of supply of consumable items w.r.t. Indian Rupees increases by 25% than on the date of opening of commercial bid in such cases, difference in excess of 25% would be paid to bidder.

The rate quoted for consumables shall be freezed for 8 years and cost of one consumable each shall be considered for evaluation and BMC is not binding to accept the rates quoted for consumable.

Apart from mentioned consumables cost of no other consumables will be paid by BMC and same shall be covered under warranty and CMC.

Payment for Consumables/Accessories/spares during 3 years warranty and 5 years CMC-

Rates for consumables / spares / accessories shall be quoted excluding taxes if any(GST only). GST will be paid at actual as per prevailing rates.

For those bidders who are importing consumables/accessories/ spare parts during 3 years warranty and 5 years CMC, the LC will not be opened by BMC for the same and only cost of GST will paid at actual, no other duties will be paid by BMC on consumables/ accessories/ spare parts during 3 years warranty and 5 years CMC.

32. Pre-bid Meeting: If required by BMC and depending upon the nature of work, the pre-bid meeting will be held at the date, time and venue mentioned in the e-Tender Notice.

Tenders shall note that any corrigendum issued regarding this tender notice will be published on the BMC portal only. No corrigendum will be published in the local newspapers.

The prospective tenderer(s) should submit their suggestions/observations if any, in writing minimum 2 days

before Pre-bid meeting.

Only suggestions/observations received in writing will be discussed and clarified in pre-bid meeting and any modification of the tendering documents, which may become necessary as a result of pre-bid meeting, shall be made by BMC exclusively through the issue of an addendum/corrigendum. The tender uploaded shall be read along with any modification. Authorized representatives of prospective tenderer(s) can attend the said meeting and obtain clarification regarding specifications, works & tender conditions. Authorized representatives should have authorization letter to attend the pre-bid meeting.

Non-attendance at pre-bid meeting shall not be a cause for disqualification of a tenderer. The suggestions / objections received in pre-bid meeting may not be considered, if the same are not in consonance with the requirements of the tender/project. BMC reserves the right to reject the same.

33. Procedure for the opening of the tender:

Packet-'A' (Administrative bid) and packet 'B' (Technical Bid) will be opened online simultaneously on the due date and due time as stated in the header data in SRM when the tenderer or his authorized representative will be allowed to remain present.

Bidders or their authorized representative will be allowed to see the details of all the documents submitted by other bidders and if requested in writing will be allowed to obtain soft copy Annex 1, annex 3A, CA Certificate, Annex 5,6,7,8, technical brochure, CE/USFDA certificates only of other competitive bidders. Bidders will be given 7 working days' time to go through documents of other bidders and raise any objection/queries if any in writing.

After this no bidder will be allowed to raise any objection, if raised BMC will not consider it and may disqualify that bidder for delaying tendering process.

Packet 'C' will be opened only if the administrative & technical offer in Packet 'A & B' is acceptable. In case the administrative and technical offer in Packet 'A' & 'B' is found not acceptable or found incomplete, then Packet 'C' will not be opened and offer will be kept out of consideration.

The date and time of the opening of Packet 'C' will be intimated to the responsive tenderer via mail. <u>No</u> complaint for non receipt of such intimation will be entertained.

34. Acceptance of Tender:-

The decision of the Municipal Commissioner shall be final and binding and Municipal Commissioner do not pledge himself to accept the lowest or any tender. The Municipal Commissioner reserves the right to split the quantity amongst the eligible bidders and to relax/stringent any of the conditions of the tender without assigning any reasons. The Municipal Commissioner reserves right to reject any or all tenders without assigning any reasons.

35. Demonstrations:-

Demonstration is compulsory for lowest bidder and he should arrange for the demonstration in India of the equipment quoted for in the tender within 7 days from the date of intimation of the request for demonstration preferably in Mumbai in the hospital. However, if complete system of quoted model/complete system is not available in Mumbai, demonstration may be arranged outside Mumbai/India in any mutually agreed upon hospital or manufacturing plant at bidder's cost. Demonstration must be given within 7 days time from the date of receipt of letter from BMC if planned in India and within 15 days if abroad, otherwise liable for penalty/legal action like forfeiture of EMD, blacklisting. If demonstration / testing of equipment offered by lowest bidder is found non-satisfactory, then his offer will not be considered and 25% of EMD will be forfeited.

The demonstration of equipment should be attended by HoD/Professor/Associate Professor of the Major Hospital only. Demonstration in the presence of subordinate authorities like Resident Doctors / Lecturers will not be allowed. The video recording of the demonstration shall be mandatorily done. Soft copy of the Video Recording shall be handed over to the representative of BMC who witnessed the demonstration. Arrangement of Video Recording shall be done by the bidder at their own cost. The demonstration report shall be prepared on same day and signed by all present including representatives of bidder / Head of

	_	ment and the report of the demonstration should be scanned and mailed to Dy. Chief Engineer									
36.	(C.P.D.) / Director (M.E.&M.H.) on his/her office mail I.D. on the same day. Purchase Order:-										
30.	The user department will place purchase orders within 15 days from the date of receipt of rate circular subject to availability of budget provision and site is ready for installation.										
37.											
	i.	All outside India charges on beneficiaries (i.e. bidder) account.									
	ii.	Partial shipment will not be allowed. If it is to be allowed, all the charges including clearing custom duty, GST etc. should be borne by bidder.									
	iii.	In case of Warranty replacement – all charges including clearing, custom duty, GST etc, should be borne by bidder.									
	iv.	Country of Origin - Bidder should not be allowed to change the Country of Origin mentioned in Original tender i.e. in Packet 'A' at later stage (As mentioned in Annexure- I).									
	v.	Place of Port of Shipment should be mentioned.									
	vi.	Name & Address of Beneficiary, Bidder/Manufacturer Bank details i.e. Name, Branch, Account No., IFSC, SWIFT Code etc.									
	vii.	In case amendments in L.C. are required to be made due to reasons related to contractor, delivery period will be considered from the date of opening of original LC and request for such amendments will be entertained up to 15 days from opening of LC after payment of necessary amendment charges.									
	viii.	To open L.C. in the name of associates/affiliates/financial arm of manufacturer, undertaking on Rs. 500/- notorized stamp paper should be submitted duly signed with stamp by bidder, manufacturer and their associates/affiliates/financial arm.									
38.	indigen i) Thi ii) Pac iii) Cou iv) Insu v) Ori vi) Bill vii) Bill	ing documents are required at the time of shipment of consignment in case of supply of tous as well as imported equipment and same shall be mentioned in the L.C.:- rd party inspection report reking List:- untry of Origin Certificate (For foreign manufacturer) urance Certificate ginal Invoice of lading / Airway bill of entry party inspector/Firm shall verify following:									
	The firm accredit party in	m/agency doing third party inspection need necessarily be accredited by competent authority. The tation letter/certificate issued by the competent authority shall be given by Firm/Agency. The third aspection firm/agency shall prior to shipment inspect the equipment physically in accordance to the specifications and certify the following things:- The equipment is new and made of virgin material; it is not reconditioned /retrofitted.									
	ii.	The name of the equipment manufacturer, model and serial nos. of equipments& country of manufacturer.									
	iii.	Third party inspector shall clearly mention in his report the purchase order no., date and name of consignee i.e. Municipal Corporation of Greater Mumbai.									
	iv. Packing List:- It shall be issued by original manufacturer in 4 sets. One set should be kept in equipment of Two sets should be sent with original invoice to user department and one set shall be sen for information.										
	V.	Country of Origin Certificate (For foreign manufacturer):- It shall be issued by competent authority of that Country (Chamber of commerce of concerned Country) mentioning Name of manufacturer, consignee, name of equipment, invoice No., Qty.etc.									
		Also, Certificate of Origin issued by the manufacturer and certified by the Chamber of Commerce									

	of respective country.				
vi.	Insurance Certificate:- It shall be issued by the Insurance company and shall contain name, model, serial nos. of equipment being supplied. Also it shall contain the mode of transport, location from manufacturers site i.e. from factory warehouse to warehouse of user department / port of destination i.e. Mumbai and period of insurance.				
vii.	Original Invoice issued by bidders/manufacturer should contain following details:				
	a) The name of the equipment manufacturer, model and serial nos. of the equipments.				
	b) Name of the consignee i.e. Municipal Corporation of Greater Mumbai.				
	c) Purchase order number and date issued by Municipal Corporation of Greater Mumbai.				

39. Bill of entry

It shall be issued by Custom authority of India indicating Invoice number and date, of manufacturer, name and model of the equipment, quantity, country of origin, Consignee details. This document shall be obtained by user department from Custom Clearing Agent.

40. Bill of lading or Airway Bill – Bidder has to submit bill of lading or Airway bill after dispatch of equipment/machine. The user department has to verify before making payment to bidder.

41. Delivery, Installation & Commissioning:-

The tenderer should give free delivery, at BMC Hospital, within 90 days from the date of placing of purchase order. In case of import purchase, delivery of Equipment to concerned hospitals must be made within 90 days from the opening of Letter of Credit by coordinating with clearing agent appointed by BMC.

It is mandatory that the 100% Indian subsidiary of foreign manufacturer duly registered in India / Subsidiary of principle Foreign Manufacturer duly registered in India / sister concern of Foreign manufacturer duly registered in India /Associate of Foreign manufacturer duly registered in India / joint venture of Foreign manufacturer duly registered in India / affiliate of Foreign manufacturer duly registered in India

or Distributor/Dealer/Importer/trader/agent appointed by foreign Manufacturer shall

- 1. Import the equipment from Principal foreign manufacturer directly in the name of BMC only after receipt of Purchase Order only after the receipt of purchase order.
- 2. Raise invoice in the name of BMC hospital.
- 3. Import equipment directly to Mumbai port.
- 4. Supply to the BMC Hospitals in Mumbai without unloading the material elsewhere during transportation.

Also the tenderer shall provide one additional packing list indicating details of supply to be delivered to the concerned hospital in advance so that it will be easier for the authority of concerned hospital to confirm supply in the packed consignment as per the purchase order.

Installation & commissioning shall be done within 30 days from delivery of the equipment/machine.

42. Training

The successful tenderer shall have to give sufficient training at his cost to the staffs of the Hospital and Engineers of Medico Electronics Cell to operate the Medical Equipment. Also it shall be provided as and when required if asked by user department.

43. Penalty

If the successful tenderer fails to comply with work/purchase the order within the delivery period stipulated, the municipal Commissioner/ D.M.C.(C.P.D)/ Dean of Hospital/ Intending Officer shall exercise his discretionary power either:-

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

OR

To cancel the contract and orders and forfeiture of EMD, contract

Deposit and blacklisting the firm/company along with their partners/ directors.

44. Consequence of inferior supply

If the equipment supplied is found of inferior quality or not as per specifications, the contractor shall replace the equipment within one month from the date of intimation at the cost & risk of the contractor and also liable to pay the fine imposed by the Municipal Commissioner, failing which Earnest Money Deposit & Contract Deposit of the contractor shall be forfeited & the tenderer shall be liable for penal action including black-listing etc. In addition to the forfeiture of the Earnest Money Deposit & Contract Deposit, if any fine is imposed by the Municipal Commissioner, the same shall be payable by the supplier immediately on demand, failing which the same shall be recovered from other dues to the contractor from the Municipal Corporation.

45. Replacement of Rejected Materials

Tenderer/contractor shall have to replace rejected Material with approved one. The supplier should remove the rejected Material within 15 days failing which the same will be disposed off by M.C.G.M. at the risk and cost of contractors without any further correspondence in this regards.

46. Risk & Cost Purchase

In case the Contractor/s, shall at any time during the continuance of these presents fail to supply satisfactorily the equipment within the prescribed time as herein provided and or in case shall fail at once to replace any part/s that may have been rejected as herein provided with other of approved quality, the Municipal Commissioner shall be at liberty forthwith to procure the same in the open market at the risk and cost of the contractor/s. Similarly if the work underlying the contract is not executed satisfactorily within the stipulated period or after the same having been disapproved wholly or partly is not rectified or re-done to the satisfaction of the Officer in Charge within the said specific period, the Commissioner shall get the same executed or rectified or re-done through any other agencies, at the entire risk of the contractor/s as to cost and consequences. The extra cost thereof (if any) and all expenses thereby incurred, which shall include charges of 5% minimum to a maximum of 15 % shall be payable by and/or may be deducted from any moneys due or become due to the Contractor/s under this or any other contract/s between the Contractor/s and the Corporation. The Commissioner may, however fix such other subsequent date as he may think fit by which the delivery of the said article and or execution of the said work shall be completed.

47. Blacklisting

The firm shall be black-listed, if it is found that:-

i) Forged documents are submitted

OR

ii) If it becomes responsive on the basis of submission of bogus certificate/information.

OR

iii) In case of non-supply of equipment / accessories or supply of substandard quality or supply of equipment / accessories found to have been previously used or having reconditioned parts.

48. | Contract:

Contract means the Contract Agreement entered into between the Purchaser, henceforth called Municipal Corporation of Greater Mumbai or BMC, and the Supplier, together with the Contract Documents. The Contract and the term 'The Contract' shall in all such documents be construed accordingly.

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

The Contract Agreement means the agreement entered into between the BMC and the Supplier. The date of the Contract Agreement shall be recorded in the signed form.

Tenderer must distinctly understand:

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

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

49. Contract Deposit:-

1) Successful tenderer shall have to pay Contract Deposit @ 5% of total contract cost either in the form of

Demand Draft (DD) or in the form of Bankers' Guarantee. Bankers Guarantee shall be issued from the Banks listed by Reserve Bank of India on their website:-

'rbidocs.rbi.org.in/rdocs/publications/pdfs/84656.pdf'.

The B.G. shall be acceptable from these banks and all branches of these banks situated within Mumbai limit and up to Kalyan and Virar.

- 2) The Banker's Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Banker's Guarantee is countersigned by the Manager of a Branch of the same bank, within the Mumbai City limit categorically endorsing thereon, that, they said Banker's Guarantee is binding on the endorsing Branch of the Bank within Mumbai limits and is liable to be enforced against the said Branch of the Bank in case of default by the contractor/supplier furnishing the banker's guarantee. The B.G. shall be retained 6 months after completion of contract period.
- 3) The Bankers Guarantee shall be valid for the period of Three years initially (during warranty period) and thereafter it shall be renewed for further period of three years and again further renewed for the period of two and half years years.(During AMC/CMC period)
- 4) If Bankers Guarantee towards Contract Deposit is not renewed 3 months prior to expiry, then Bankers Guarantee will be forfeited without any notice to that effect and contractor shall be liable for penal action like blacklisting etc.

8. Refund of contract deposit

Contract deposit will be refunded after six months after completion of contract period of three years warrantee & 5 years AMC/CMC(as applicable) subject to satisfactory performance/ maintenance of equipment .

51. Execution of contract

In the event of the tender being accepted, the full amount of the contract deposit must be paid and the contract must be signed by proprietor of the firm in case of proprietary firm / all the partners of the firm. If one or more partners are not available for this purpose, the signatory must produce a power of attorney authorizing him to sign on behalf of the absent partners. Such power of attorney need be registered in the office of the Chief Accountant and Dy.Ch.E. (C.P.D.) should be informed accordingly.

In case of joint stock Company the contract must be sealed with the seal of the company in the presence of and signed by two Directors or by person duly authorized to sign the contract for the company by a power of Attorney. All such power of attorney must be registered in the office of the chief Accountant and Dy. Ch.E. (C.P.D.) should be informed accordingly.

Bidder shall pay contract deposit, legal stationery charges, stamp duty etc. and submit contract documents within 30 days from the date of receipt of tender acceptance letter.

Futher a fine of Rs.5000/- per day will be imposed for maximum 15 days for delay in submission of contract documents.

If the contract documents are not submitted within the above stipulated time (i.e. 45 days with inclusive of penalty of 15 days) EMD will be forfeited. Without the contract being executed, no bills shall be admitted for payment.

52. Payment of legal and stationery charges:

These charges are to be paid by the successful bidder on receipt of acceptance letter for the supply of the material as per prevailing circular.

This can change and the successful tenderer shall have to pay the applicable legal charges at the time of award of contract.

Contract Value (in Rs.)			Legal Charges and	
			Stationery Charges (in Rs.)	
10,001	То	50,000	Nil	
50,001	<u>To</u>	1,00,000	<u>6,290.00</u>	
1,00,001	<u>To</u>	3,00,000	<u>10,380.00</u>	
<u>3,00,001</u>	<u>To</u>	5,00,000	<u>12,470.00</u>	
5,00,001	<u>To</u>	10,00,000	14,510.00	
10,00,001	<u>To</u>	20,00,000	<u>16,570.00</u>	
20,00,001	<u>To</u>	40,00,000	<u>18,660.00</u>	
40,00,001	<u>To</u>	1,00,00,000	20,720.00	
1,00,00,001	<u>To</u>	10,00,00,000	<u>24,450.00</u>	
10,00,00,001	<u>To</u>	20,00,00,000	<u>28,220.00</u>	
20,00,00,001	<u>To</u>	30,00,00,000	31,980.00	

30,00,00,001	To	40,00,00,000	35,740.00	
40,00,00,001	<u>To</u>	50,00,00,000	39,470.00	
50,00,00,001	<u>To</u>	1,00,00,00,000	47,000.00	
1,00,00,00,001	<u>To</u>	2,00,00,00,000	58,270.00	
2,00,00,00,001	<u>To</u>	3,00,00,00,000	65,770.00	
<u>3,00,00,00,001</u>	<u>To</u>	4,00,00,00,000	75,120.00	
4,00,00,00,001	<u>To</u>	5,00,00,00,000	84,510.00	
Above 5,00,00,00,00	00		93,920.00	

53. Stamp duty:-

The contract agreement shall be adjudicated for the payment of stamp duty by successful bidder and accordingly the successful bidder shall have to pay the stamp duty on contract agreement as per the Government Directives.

The Stamp Duty payable on the Contract Value shall also be paid to Government at 24rorat and as per the provisions of "Stamp Duty Act 1958" (amended till date).

54. Contract Postponement:

Postponement of the payment of the full contract deposit or the execution of the contract will not be permitted by the reason of the Municipal Corporation of Greater Mumbai having in possession of other deposit on account of other tenders or contract, which deposits may be or become returnable to the tenderer and which they may wish to transfer as a contract deposit under this contract. Such transfers will not, under any circumstances, be permitted.

55. Secrecy

The contractor shall take all reasonable steps necessary to ensure that all persons employed in any work in connection with the contract, who obtains in the course of the execution of the contract, any matter whatsoever, which would or might be directly or indirectly of use to any person not connected with the contract, should treat it as secret and shall not at any time communicate it to any person. Any breach of above said condition shall be a sufficient cause to cancel the contract and The Municipal Commissioner shall be at liberty to purchase the same material at the risk and cost of the contractor.

56. Compliance with security Requirement

The Contractor shall strictly comply with the security Rule of the BMC in force and shall complete the required formalities including verification from Police and any other authorities if any, and obtain necessary prior permission for entry into the premises.

57. Confidential Information

The drawings, specifications, prototype, sample and such other information furnished to the contractor relating to the supply of equipment/plant shall be treated as confidential and shall not be divulged to any third party. It shall remain the property of BMC. If, during the process of execution of the contract, any improvement, refinement or technical changes and modifications are effected by the contractors, such changes shall not affect the title to the property and all the information, specifications, drawings etc. including the improvement/modifications effected by the contractor shall continue to be the property of the BMC.

58. Guarantee and repair during the guarantee period

The Contractor/s shall for a period of Thirty Six calendar months after the acceptance and satisfactory Installation and commissioning of the equipment, maintain, uphold and keep them in thorough repairs and working order at their own cost and expenses and to the entire satisfaction of the Municipal Commissioner or the Dean/Ch.M.S /E.H.O. or the purchasing Officer, the entire Machinery / Equipment and shall also be responsible for and be liable under the provisions of this clause to make good any defect that may during that period develop in the normal and proper working of the Machinery / Equipment. In case of repairs of Machinery / Equipment which is not manufactured in India, the manufacturer, 100% Indian subsidiary of foreign manufacturer duly registered in India / Subsidiary of principle Foreign Manufacturer duly registered in India / sister concern of Foreign manufacturer duly registered in India / Associate of Foreign manufacturer duly registered in India /joint venture of Foreign manufacturer duly registered in India / affiliate of Foreign manufacturer duly registered in India, Distributor/Dealer/Importer/trader/agent during the guarantee / warranty period shall bear all the taxes, custom duties, levies, to & fro cost of transportation etc. of the Machinery / Equipment while the same is taken away from India and returned to India (i. e. Municipal Hospital) duly repaired by the Manufacturer. During the entire period of guarantee the Tenderer shall replace the equipment and or part of the equipment entirely on its break down / non functional, which shall be at the cost of the Tenderer and includes the labour charges, transport charges and etc. shall also be borne by the Tenderer. The tenderer should assure an up-time guarantee of at least 96% (calculated on the basis of 24 hours a day and seven days a week). If this is not done, a penalty @ 1% per day of Contract Cost of equipment will be imposed on the tenderer and same will be recovered from Contract Deposit or payment due if any.

59. Maintenance contract (As Applicable)

A. Service and annual maintenance contract:

The successful tenderer shall have to enter into Annual Maintenance Contract for at least five years after the completion of warrantee period of 36 months at the rate of 3% of equipment cost per year, rate will be fixed for 5 years. The Annual Maintenance Contract shall include the repair and maintenance of equipment and plant and all accessories supplied by the tenderer as a part of this tender. It is the responsibility of the tenderer to see that the equipment and all accessories are maintained in proper functioning condition, whether any spare parts/accessories be manufactured by the tenderer or not.

- a) The tenderer should assure an up-time guarantee of at least 96% (calculated on the basis of 24 hours a day and seven days a week). During AMC period, the Service Engineers will have to make 04(four) compulsory Quarterly visits per year for preventive maintenance while breakdown calls (unlimited) will be attended within 72 hours (3 days) from the date & time of lodging of complaint with the Service Engineer through phone / fax/person/post/courier/e-mail. A service call shall be attended even on Sundays and Public Holidays. The complaint /message will be sent to the address given in this contract as well as in supply order.
- b) If the breakdown is attended and rectified within 120 hours (5 days) at our sits, no penalty/deduction will be made from the AMC bill.
- c) If it is not rectified within 120 hours (5 days) i.e. stipulated time by the Service engineer at our site, deduction will be made @ double the prorata basis AMC charges per day from the bill after allowing stipulated period of 120 hours i.e. 5 days.
- d) If the problems are required to be rectified at Service Centre site /workshop / premises, additional 7 days period will be allowed i.e. total 10 days from the day of initial breakdown report. Normal AMC charges for additional 7 days period will be deducted from the bill of AMC on prorata basis. If the equipment is not made available in all respect after rectification from the Service Centre site/ premises within 10 days, there will be a provision to deduct @ double the AMC charges/ day on prorate basis from the bills for delayed period.

If Only cost of spare parts and consumables will be paid separately as per the rate quoted for spares & consumable as per list uploaded while submission of tender

OR

B. Service and comprehensive maintenance contract:

The successful tenderer shall have to enter into comprehensive Maintenance contract for at least five years after the completion of warrantee period of 36 months at the rate of 5% of equipment cost per year, rate will be fixed for 5 years. The comprehensive Maintenance contract shall include the equipment and all accessories supplied by the tenderer as a part of this tender. It is the responsibility of the tenderer to see that the equipment and all accessories are maintained in proper functioning condition by providing spare parts where required, whether such spare parts/accessories be manufactured by the tenderer or not.

- a) The tenderer should assure an up-time guarantee of at least 96% (calculated on the basis of 24 hours a day and seven days a week). During CMC period, the Manufacturer's Service Engineers will have to make 04(four) compulsory Quarterly visits per year for preventive maintenance while breakdown calls (unlimited) will be attended within 72 hours (3 days) from the date & time of lodging of complaint with the Service Centre through phone / fax/person/post/courier/e-mail. A service call shall be attended even on Sundays and Public Holidays. The complaint /message will be sent to the address given in this contract as well as in supply order.
- b) If the breakdown is attended and rectified within 120 hours (5 days) at our sits, no penalty/ deduction will be made from the CMC bill.
- c) If it is not rectified within 120 hours (5 days) i.e. stipulated time by the Service Engineer at our site, deduction will be made @ double the 25rorate basis CMC charges per day from the bill after allowing stipulated period of 120 hours i.e. 5 days.
- d) If the problems are required to be rectified at Service Centre site / workshop / premises, additional 7 days period will be allowed i.e. total 10 days from the day of initial

		breakdown report. Normal CMC charges for additional 7 days period will be deducted from the bill of CMC on prorata basis. If the equipment is not made available in all respect after rectification from the Service Centre site/ premises within 10 days, there will be a provision to deduct @ double the CMC charges/ day on prorata basis from the bills for delayed period.
60.	Paymen	t condition:
	A)	In case of Supply of Indian Manufactured Medical equipment-
	,	a) 80% payment will be made within 30 days from the date of satisfactory supply of the equipment, submission of bills and submission of all documents as mentioned at clause no. 38 given elsewhere in tender document and documents for execution of written contract. Remarks regarding submission of all documents for execution of written contract from Central Purchase Department shall be obtained.
		b) The balance 20% payment will be released within 30 days after satisfactory installation commissioning of the equipment. The Performance Certificate of equipment shall be issued by competent authority/ Concerned HOD of respective hospital. Also user department shall obtain satisfactory inspection report from EE (MEC) and shall confirm that contract is executed before processing of the final bill from Central Purchase Department.
	B)	In case of imported medical equipments:
		a Payment will be made in the name of Principle Manufacturer by opening Letter of credit (L.C.). L.C. will be opened for 100 % CIF cost. However 80% payment will be released at sight only after satisfactory supply of equipment, submission of all documents for execution of contract and submission of all documents as mentioned at clause no. 38
		given elsewhere in tender document. In case to open L.C. in the name of associates/affiliates/financial arm of manufacturer, undertaking on Rs. 500/- notorized stamp paper should be submitted duly signed with stamp by bidder, manufacturer and their associates/affiliates/financial arm.
		The balance 20% payment will be released within 30 days after satisfactory installation commissioning of the equipment. The Performance Certificate of equipment shall be issued by competent authority/ Concerned HOD of respective hospital. Also user department shall obtain satisfactory inspection report from EE (MEC) and shall confirm that contract is executed before processing of the final bill from Central Purchase Department.
	C)	If the payment to be made to the bidder is delayed for the reason from bidder's side, any increase in exchange rate will be recovered from bidder i.e. (in Indian rupees)
	D)	The payment of AMC/CMC of the medical equipments shall be made on six monthly basis subject to satisfactory completion of maintenance and servicing activities.
	E)	Submission of documents / evidence showing details of the payment of GST has been made (if applicable).
3	F)	Tenderers are informed that the payment of the bills and other claims arising out of the contract shall be made in the name of their bank by account through ECS/RTGS/NEFT only. Successful tenderer, therefore, shall have to furnish the information as regards the name and complete address of their bank, its branch and their Bank A/c. No. etc. along with the tender documents. Such Bank account must be in any Nationalized Banks or Schedule Commercial Banks or Scheduled Co-Op. Banks or Foreign Banks in Mumbai jurisdiction. Contractor shall fill up vendor master creation.
		form and submit to C.A. (CPD) along with registration fee of Rs.100/- for creating Vendor's Master. They also have to submit fresh information when any subsequent change in the name of the firm and address of firm, the contractor/supplier must intimate such changes with relevant documents and a fee of Rs. 5000/- per change as administrative charges for effecting such changes in BMC records.
61.	In case	ction of courts of any claim, disputes or differences arising in respect of the contract, the causes of action thereat deemed to have arisen in Mumbai and all legal proceedings in respect of any such claim, disputes

	or differences shall be instituted in a Competent Court in the City of Mumbai only.
62.	M.C.G.M. has formed 'Internal Grievance Redressal Committee' under the chairmanship of retired High Court Justice for the Redressal of grievances of bidders/prospective bidders/ related to procurement. The bidders/complainants can approach 'Internal Grievance Redressal Committee' for Redressal of their grievances by paying fees of Rs.25000/ The details of 'Internal Grievance Redressal Committee' are given in Annexure-15. However, Municipal Commissioner has right to reject the request of bidder to allow to approach for Procurement Redressal Committee.
63.	The Municipal Corporation reserves its right to inspect the manufacturing premises of the company as and when required.
64.	All the above conditions should be strictly adhered to failing which the tender will be treated as non-responsive and no correspondence will be entertained in the matter.
65.	Quoted equipments shall be delivered at following locations. Hospital Quantity
	NAIR Hospital (Radiology) 1 No. LTMG Hospital (Radiology) 1 No. Note-Location of delivery of equipment may change.
66.	Third party inspection of the quoted equipments shall be carried out by the successful bidder for the equipments manufactured in India or abroad and report shall be submitted for the same at the time of delivery of equipments to BMC.
67.	The equipment shall be maintained under Comprehensive Maintenance Contract (CMC)after warranty after warranty period of 3 years.
	coltial.

Check list of Documents to be uploaded in PACKET A and PACKET B as per the order given below.

Sr.	PACKET A	Whether uploaded or not
No	Description of Document	
1	Annexure – 1 Particulars of the Tenderer	
2	Annexure – 2 Form of undertaking of Mandatory Conditions	
3	Annexure -3 Undertaking to be signed by the Tenderer	
4	Annexure -3A-Tri party agreement.	
5	Annexure-4 PRO-FORMA for uploading details of EMD, Annexure-3	
6	Annexure -9A/9B/9C Pro-forma for Authorization letter/Certificate.	
7	Annexure-11-Authorization letter for attending tender opening.	
8	Annexure -12 Instructions to the tenderer and Articles of Agreement duly signed	O
9	Annexure-13 Details of Litigation History	
10	Annexure-14 Pact of Integrity	^
11	Annexure-15 Grievance Redressal Mechanism	
12	Signed copy of Tender Document (Schedule of Specifications,	
	Mandatory Conditions)	
13	Firm/Company/ Sanstha Registration Certificates	
14	Partnership deed	
15	Solvency Certificate	OY
16	C.A.'s certificate for turn over of the tenderer	
17	Pan Card with Photograph.(Only for Indian Bidder)	/
18	GST registration Certificate. (Only for Indian Bidder)	
19	Import / Export license issued by competent authority	
20.	Valid Registration Certificate under EPF & M Act 1952	
21.	Valid Registration Certificate under ESIC Act 1948.	
22.	Power of Attorney to sign the tender	

Sr.	PACKET B	Whether uploaded or not
No	Description of Document	
1	Annexure -5 Technical Offer	
2	Annexure -7 Consumables recommended by tenderer.	
3	Annexure-6 Spare Parts recommended by tenderer.	
4	Annexure -8 Comparison of tender specification v/s equipment	
	specification	
5	Annexure-10 Experience Certificate	14
6	Copy of valid CE certificate as mentioned in General Conditions (Technical specifications) of the tender.	
7	copy of valid USFDA approval as mentioned in General Conditions (Technical specifications) of the tender.	
8	Technical brochure of quoted model	
9	Annexure-16 Details CE/US FDA certificate	

Sr.	PACKET C	Whether uploaded or not
No	Description of Document	
1	Annexure A	
2	Annexure-B	
	Whether bidder has quoted rates for all the item in Item data	

Full Signature of the tenderer with Official Seal & Address

ANNEXURE -1 Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

Particulars about the tenderer- (Specimen copy)

(To be uploaded in Packet 'A')

Date:-	 						_						
(T) 11		. •		1	•				· ·	ъ.		4 .	1 .

(Following information to be submitted along with tenders (in Packet 'A') as detailed herein below on the letterhead of the tenderer. Put a tick mark where applicable. Write N.A. where not applicable. All fields are necessary)

- 1. Name & Address of the tenderer.
- 2. Address of service centre.
- 3. Names and addresses of all the partners.
- 4. e-mail address of the firm.
- 5. Name of the Power of attorney holder
- 6. Name & address of the manufacturer
 - a. Places of Manufacturer (In case of firms having more than one place, mention the nearest).
 - b. Registered Head Office with Postal Address and Telephone Number of manufacturer
 - c. Mumbai Office address with Telephone Number of manufacturer.
 - d. Address with Telephone Number of service centre in Mumbai.

The detailed address and telephone numbers / mobile numbers / Fax Number are as below. The list of qualified service Engineers and staff working in our service centre has adequate experience of maintaining quoted equipments is given below.

Sr. No.	Name, Address, Telephone, Mobile Number, Fax Number of service engineers and staffs	Qualification	Designation

- 7. Total annual turnover in the last Financial Year of tenderer.
- 8. Is the tenderer registered under the Indian Companies Act-1 of 1956 or any other Act, in force?
 - a. If so, furnish photo state copy of Certificate of Registration.
 - In case of Limited Companies furnish a copy of the memorandum of Articles of Association.
 - c. In case of Proprietorship / Partnership firms, name of proprietors / Directors with address. (Two in order of % of shares).
 - d. Ownership status of the Firm. (Maharashtra Govt./ Other state Govt./ Central Govt./ Joint Sector / Co-Operative / B.S.I. / Private / Foreign Company).
- 9. Whether tender is Indian/Foreign Manafacturer (State your category and upload document to this effect in 9 A formats.)
- 10. Whether tenderer is the 100% Indian subsidiary of foreign manufacturer/ Subsidiary of principle Foreign Manufacturer registered in India / sister concern of Foreign manufacturer /Associate of Foreign manufacturer

- /joint venture of Foreign manufacturer/ affiliate of foreign manufacturer -all dully registered in India (State your category and upload document to this effect issued by Foreign Manafacturer in 9 B format)
- 11. Whether tenderer is Distributor /Dealer / Importer /Traders/agent of foreign manufacturer (State your category and upload document to this effect issued by Foreign Manafacturer in 9 C format)
- 12. Name and post of the Officer / Address, Phone Number who should be contacted by this office in case of emergency.
- 13. Location of other manufacturing works / factories owned by the firm (if any)
- 14. a) Name of equipment manufacturer(Make)-
- b) Model quoted for the said tender:
- c) Manufacturing place/Country of the equipment quoted for this tender:
- d) Place of supply from where the machine/equipment is to be supplied to BMC:
- 15. County of Origin
- 16. Port of Shipment.
- 17. Currency for the quoted equipment-
- 18. Bank Details:
 - a. Bank details of Manufacturer.
 - b. Bank details of tenderer as applicable.

I/We have carefully gone through the tender requirement/specifications, we are confident to fulfill the exact requirement asked for as a manufacturer along with the required documents to be provided along with the tender. I/We assure you for the same and accordingly I/we are participating in this tender process.

I/We have carefully gone through the tender documents and the term and conditions mentioned therein & are all acceptable & agreeable in entirely to me/us.

	List of Equipments for SITC 3 Tesla MRI						
Sr No	Description of Item	Name of Manufacturer	Make	Model	Manufacturing place	country of origin	shipment
1	3 TeslaMRI	41					
2	Workstation						
3	Anesthesia Machine						
4	Pressure Injector						
5	Patient Monitor						
6	Laser Jet Printer						
7	4 k LED smart TV						

Full Signature of the tenderer with Official Seal & Address

Note- Annexure-1 shall be uploaded on letter head of bidders

Annexure -2

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

Tender Form

(To be uploaded in PACKET A)

The Municipal Commissioner Municipal Corporation of Greater Mumbai

Sir,

- 1. I / We......(full name in capital letters starting with surname), the Proprietor /Managing Director / Holder of the business for the establishment / firm / registered company named herein below do hereby state that I / We have read, examined and understood the contents of following documents relating to
 - 1) Invitation to Tenderers
 - 2) Instructions to Vendors participating in e-Tendering Process
 - 3) Flow of activities of tender
 - 4) Important General Conditions and Instructions to tenderers
 - 5) Items Descriptions
 - 6) Scope of supply and Technical Specifications
 - 7) Contract Agreement form (Proforma for Article of Agreement)
 - 8) Annexures
 - 9) Details of the Item Data in SRM: (Rate to be filled by tenderer in commercial offer)
 - 10) Minutes of pre bid meeting,
 - 11) Corrigendum if any
- 2. I / We have examined the details/ specifications of supply to be made and noted all the terms and conditions and accordingly hereby e-tender for execution of the supply referred to in the aforesaid documents, at the rate quoted for respective item in the item data in SRM.
- **3.** I/ We have paid the Earnest Money Deposit (E.M.D.) online for INR...... and we are aware that this EMD shall not bear any interest till it is with BMC.
- **4.** I / We also agree to keep this e-tender open for acceptance for a period of **180 days** from the date for opening the same and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.
- **5.** I/We hereby further agree to execute agreement in the prescribed pro-forma and shall bear all the charges of whatsoever nature in connection with the preparation, Stamp Duty and execution of the said contract.
- **6.** I / we have offered our rates in the prescribed format and uploaded it along with the bid document.
- 7. I/We further state that I/We have separately furnished an undertaking / declaration in the form of Affidavit (Annexure-3) on the stamp paper of Rs.200/- (Rupees Two Hundred only) with regards to agreeing to the terms and conditions in corporate in the bid documents and various declarations as per requirement of BMC and I/We shall abide by them all respect throughout the period of contract.

Yours	faithfully.	

Address:

	Full Signature of the tenderer with
	Official Seal and Address.
	1.
Full Names and Residential Address	
of all the partners constituting	
The firm:	
1	A/c. No
	Name of the Bank
	Name of the Branch
2	
3	co^{3}
	X •

Rough

Annexure – 3

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

Undertaking to be signed by the tenderer

(To be uploaded in PACKET A) <u>AFFIDAVIT</u>

To	
The Mu	nicipal Commissioner
Municip	al Corporation of Greater Mumbai
Sir,	
Partner a	ne in capital letters, starting with surname, the Proprietor/ Managing Partner/Managing Director/ holder of allowing of M/s/ the Business/ establishment /firm/ registered company do hereby,
	nuation of the terms and conditions undertaking the Tender form and agreed to by me/us give the
	g undertaking.
1.	"I/We do hereby offer toreferred to in the specifications and schedule to the accompanying form of Contract at the rates entered in the schedule of rates sent herewith and signed by me/us" (strike out the portions which are not applicable)
2.	I/Wedo hereby state and declare that
	I/we, whose names are given hereinbelow in detail with the addresses, have not filled in this tender under any other name or under the name of any after 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.
3.	I/Wehave filled 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 blacklisting, for giving any
	information, which is found to be incorrect and against the instructions and directions given in this tender.
4.	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 it false or incorrect. I/we shall compensate the Municipal Corporation of Greater Mumbai for any such lapses or inconvenience caused to the Corporation in any manner and will not resist any claim for such compensation on any ground whatsoever. I /We further agree and undertake that I/We shall not claim in such case any amount by way of damage or compensation for cancellation of the contract given to me/us or any work assigned to me/us or is withdrawn by the Corporation."
5.	I/Wehereby confirm that I/We will be able to carry out and reply entered by me/us at
	the quoted rates as per specifications/ drawings indicated in the tender after compliance of all the required formalities within the specified time.
6.	I/We do hereby undertake that we have entered the best price for the subject reply as for the present market
	rates and that I/we have not entered less price for the subject reply in any other outside agencies including
	Govt./Semi Govt. agencies and within M.C.G.M. also in similar conditions.
7,	I / We agree to comply with fulfill the requirements of all labour laws or otherenactments applicable to this supply and abide them throughout the period of contract.
8.	I / We agree to abide the regulations of the BMC premises now in force or whichmay come into force,

9. I/We shall not sublet the work to any agency without prior approval of the BMC.

right and I/We shall abide by such decision being binding on us.

10. I / We understand and accept that our e-tender/contract is liable for rejection/termination and EMD paid by me/us shall be liable for forfeiture by the BMC if-

during the currency of the contract. I / We accept the right of BMC to stop any supervising staff/ labour employed by me / us from entering in the BMC premises if it is felt that the said person is an undesirable element or is likely to create nuisance. BMC will not be required to assign any reason while exercising this

a) I/We fail to keep the e-tender open as aforesaid,

- b) I / We fail to execute the formal contract or make payment of contract depositwhen called upon to do so,
- c) I/We do not commence the supply on or before the date specifiedby officer/ engineer in hiswork order/indent.
- d)I / We fail to produce required information, testimonials or a letter in original whenever called upon to do so or I/We fail to give satisfactory reason for non-production of such information, testimonials, letter etc. within a period of 6 days from receipt of such demand.

1	1. I/We		hereby further state and	
d	eclare that I/We are			
		ent any time in the past.		
			.C.G.M. / central Govt. / state Govt. / Pu	ıblic sector
		ther Local body from start		
		er the provision of IPC of e/us in any court of law.	r Prevention of Corruption Act., nor any crim	iinal case is
12. I	/ we do hereby agree that	if in future, it comes to the	e notice of BMC/ if it is brought to the notice of	of BMC that
			of terms and conditions of the tender which	
			the completion of the contract anywhere in M	
			blic sector undertaking/any other Local body, B	
	• •	opropriate action as its find		
13. T	-	• •	titute a binding contract between me / us and M	M.C.G.M.
			ubmitted by me regarding GST	
	If applicable) is true and co			
	ent if it is revealed subseq	_	<u> </u>	
	-		n by me/us is false or incorrect,	
		•	nders for BMC for 10 years.	
15. I	[/We,		who are proven and reputable	
	manufacturer of		(Name & description of	
	the goods offered in the	e tender) having factories a	at, hereby	
	certified that do hereby	state that I/We have a full	-fledged and well established service	
	centre in Mumbai.			
	····			
16. *			hereby declare that on our	
		ur firm under EPF & MP	abourers and as such it is not	
	mandatory to register o	ur min under Err & wir z	Act 1932.	
17. *	I/We	hereby	declare that we are using the	
	energy for production p	ourpose. However there are	e less than 10 employees / Labourers	
	on our establishment.			
	OR			
	I/We		nereby declare that we are not using the	energy for
	production purpose.	There are less than 20 e	employees / Labourers employed in producti	on activity.

35

18. I/ We hereby certify that M/s ----- (Name and address of Indian or foreign manufacturer bidder) submit offer and commit, sign finalize and execute order on our behalf. I/We will be directly responsible for all the tender related issues including quality and quantity of the supply.

for us to register the firm under ESIC Act 1948.

(* Strike out if not applicable)

As such, the provisions of ESIC Act 1948 are not applicable to our firm and it is not mandatory

I/We shall supply equipment and raise the bill directly. I/ We certify for adequacy of technical expertise of the product offered and we will give back up support towards supply, spare parts, technical updates and services during warranty, Annual / Comprehensive Maintenance Contract as applicable.

Or

1/	We hereby certify that M/s bidder) who				
is	s 100% Indian subsidiary of foreign manufacturer duly registered in India / Subsidiary of principle				
F	oreign Manufacturer duly registered in India / sister concern of Foreign manufacturer duly registered in				
India /Associate of Foreign manufacturer duly registered in India /joint venture of Foreign manufacture					
dι	uly registered in India / affiliate of Foreign manufacturer duly registered in Indiaof				
_	(Name and address of foreign manufacturer) are authorized to				
sı	submit offer and commit, sign finalize and execute order on our behalf is responsible for sales promotions				
of our entire range of the products in India. I/We will be directly responsible for all the tender related					
issues including quality and quantity of the supply. I/We shall supply equipment and raise the bill directly					
I/ We certify for adequacy of technical expertise of the product offer by M/s					
	(Name and Address of the Indian subsidiary) and we will give back up support towards				
sı	upply, spare parts, technical updates and services during warranty, Annual / Comprehensive Maintenance				
C	Contract as applicable.				

Or

I/ We hereby certify that M/s ----- (Name and Address bidder) who Distributor /Dealer / Importer /Traders/agent appointed by ______ (Name and address of foreign manufacturer) are authorized to submit offer and commit, sign finalize and execute order on our behalf and is responsible for sales promotions of our entire range of the products in India. I/We will be directly responsible for all the tender related issues including quality and quantity of the supply. I/We shall supply equipment and raise the bill directly. I/ We certify for adequacy of technical expertise of the product offer by M/s ----- (Name and Address of bidder) and we will give back up support towards supply, spare parts, technical updates and services during warranty, Annual / Comprehensive Maintenance Contract as applicable.

19. "I/We do hereby further undertake that, we have offered the best prices for the subject supply work as per the present market rates. Further, we do hereby undertake and commit that we have not offered/supplied the subject product / similar product / systems or suab systems in the past one year in the Maharashtra State for quantity variation upto -50% or +10% at a price lower than that offered in the present bid to any other outside agencies including Govt. /Semi Govt. Agencies and within M.C.G.M. also. Further, we have filled in the accompanying tender with full knowledge of the above 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 instruction and direction given in this behalf in this tender.

I/We further agree and undertake that in the event, if it is revealed subsequently after the allotment of work/ contract to me/us that any information given by me/us in this tender is false or incorrect, I/We shall compensate the Municipal Corporation of Greater Mumbai for any such losses or inconveniences caused to the Corporation, in any manner and will not raise any claim for such compensation on any grounds whatsoever. I/We agree and undertake that I/We shall not claim in such case any amount, by way of damages or compensation for cancellation of the contract given to me/us or any work assigned to me/us or is withdrawn by the Corporation."

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

In case, if the explanation submitted by me/us is unsatisfactory then action as stated above including forfeiture of deposit & blacklisting may be taken against me/us.

I/we solemnly confirm the compliance of all the requirements/ Conditions of the Tender documents.

Full name and complete add	ress with
Tel.Nos.& E-mail address of	f all partners(If applicable)
1	
2	
3.	

Signature with Date, Name, & designation of Manufacturer / 100% Indian subsidiary of foreign manufacturer duly registered in India / Subsidiary of principle Foreign Manufacturer duly registered in India / sister concern of Foreign manufacturer duly registered in India / Associate of Foreign manufacturer duly registered in India / joint venture of Foreign manufacturer duly registered in India / affiliate of Foreign manufacturer duly registered in India

OR

Distributor /Dealer / Importer /Traders/agent of foreign Manufacturer

(Office Stamp)
WITNESS:
(1) Full Name
And Address
Signature
(2) Full Name
And Address
Signature

Note:-To be filled in and signed by the tenderer and to be submitted on non judicial paper of Rs.200/-duly notarized by Notary Public / First Class Magistrate.) or Equivalent document.

Annexure — 3-A Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

(To be uploaded in Packet 'A')

(In case of bid submitted by Authorized Distributor /Dealer / Importer /Traders/agent for foreign Manufacturer)

TRI PARTY AGREEMENT BETWEEN BMC, MANUFACTURER AND BIDDER

This agreement made on this theday of, Two Thousand between **BMC**, having its registered office at CST, MUMBAI hereinafter referred to as the PURCHASER (1^{ST} Party) and **M/s**. , **India.** a firm (hereinafter referred to as the "SUPPLIER" which expression where the context admits shall include its successors in interest and assigns of the other part(2^{nd} party) and **M/s** (3^{rd} Party as Principle).

Whereas as the PURCHASER is desirous that Supply, Installation, testing and commissioning of the equipment & accessories be done by supplier or manufacturer as per the terms and conditions laid out in tender document of the PURCHASER. Purchaser will follow standard practices as per the terms and condition laid out in the tender document to evaluate the bids submitted by the suppliers or manufacturers. Bidders who unconditionally accept all the terms and conditions of the purchaser will be eligible to bid.

All the suppliers (distributors) have to be authorized by the manufacturers and manufacturers indemnifies that all the terms are acceptable to them as well.

Purchaser will be given 5% bank guarantee by the Manufacturer/ Distributor /Dealer / Importer /Traders/agent for foreign Manufacturer towards the performance of the supplied equipment for the product life cycle (3yrs warranty plus 5 years CMC/AMC) (8 years).

Manufacturer has accepted the bid terms and conditions submitted by his Distributor /Dealer / Importer /Traders/agent for the Comprehensive/Annual Maintenance Contract & Supply Order terms under reference and whereas the Distributor /Dealer / Importer /Traders/agent has agreed to execute the CMC/AMC on the quoted rate, terms and condition as hereinafter referred to at a comprehensive/ annual maintenance cost (Inclusive of taxes, Duties Levies, transportation, handling, insurance, GST etc.)

And whereas various General, technical & commercial negotiation/ correspondences took place between SUPPLIER & PURCHASER as a result of which SUPPLIER'S final offer has been accepted and whereas supply order has already been issued to the SUPPLIER by the PURCHASER vide Ref.no.______ which has been duly accepted by the SUPPLIER.

NOW THIS AGREEMENT WITNESSED & THE PARTIES AGREES AS FOLLOWS:

- 1. In pursuance of the agreement and in consideration of Rate only as payable to the Manufacturer/ Bidder, the Manufacturer/ Bidder shall start commence the work in the manner as stated in the agreement.
- 2. The parties hereunder shall respectively and faithfully abide by the terms and conditions and stipulations contained in this agreement and perform / discharge their part of the obligation of the agreement accordingly.
- 3. The agreement shall be executed within the purview of the Indian Laws.
- 4. In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of agreement herein before referred to.
- 5. The three sets of agreement shall be signed & 1 set of agreement shall remain with the PURCHASER, BIDDER and with Principle i.e. OEM.
- 6. IN WITNESS WHEREOF the parties have hereunto set their respective hand seals at Mumbai on the date, month and year first above written.
- 7. The Supplier has agreed for 5 years CMC/ AMC (with spares) for preventive and breakdown maintenance of the supplied equipment and it's accessories in order to ensure proper functioning of the equipment. The CMC/ AMC period will start only after successful completion of warranty period of three years which is further extendable as per DOWNTIME PENALTY clause stipulation as under:

During warranty period of 3 years i.e. 36 months from the date of satisfactory commissioning / installation of the equipment, log book will be maintained at the **Engineering/ User Department**. If the availability of the equipment, during warranty period, falls below 96% i.e. assuming 351 working days in the year of 365 days and similarly 1051 days in three years, the warranty period will be extended for the breakdown days the equipment remains breakdown minimum 96% availability of the equipment in terms of working days.

CMC/ AMC Charges: The CMC/AMC charge has been agreed by all the executors. The charges for CMC/AMC (with spares) for 5 years for total unit & will start after successful completion of 3 years warranty period.

- 8. **Scope Of Work:** The scope of work under this agreement for CMC/AMC will be as under:
- a) The CMC/AMC will be effective from the day after successful completion of warranty/ guarantee period. During CMC/AMC period, the Service Engineer will have to make 04 (four) compulsory Quarterly visits per year for preventive maintenance while breakdown calls (unlimited) will be attended within 72 hours (3 days) from the date & time of lodging of complaint with the supplier / principle through phone / fax/person/post/courier/e-mail. The complaint/message will be sent to the address given in this contract as well as in supply order.
- b) If the breakdown is attended and rectified within 120 hours (5 days) at our sits, no penalty/ deduction will be made from the CMC/AMC bill.
- c) If it is not rectified within 120 hours (5 days) i.e. stipulated time by the supplier at our site, deduction will be made @ double the prorata basis CMC/AMC charges per day from the bill after allowing stipulated period of 120 hours i.e. 5 days.
- d) If the problems are required to be rectified at Service Centre site/workshop/premises, additional 7 days period will be allowed i.e. total 10 days from the day of initial breakdown report. Normal CMC/AMC charges for additional 7 days period will be deducted from the bill of CMC/AMC on prorata basis. If the equipment is not made available in all respect after rectification from the Service Centre site/ premises within 10 days, there will be a provision to deduct @ double the CMC/AMC charges/ day on prorata basis from the bills for delayed period.
- e) The CMC/AMC will be comprehensive and it will include supply, fitment, Maintenance, repair of the equipment, its parts. Arrangement of spares will be the sole responsibility of the Principle Manufacturer and / or its Distributor /Dealer / Importer /Traders/agent (in case of imported item) for which no extra charges will be paid to the party by BMC as it has already been incorporated in CMC/AMC charges.
- f) In the event of failure of the Dealer/Indian distributor/importer/Trader/agent to execute the CMC/AMC as per agreed TENDER terms and conditions, the entire responsibility to execute the CMC/AMC will be on the Principle Manufacturer/OEM at the quoted cost only.
- g) In case the Principle Manufacturer changes the Distributor /Dealer / Importer /Traders/agent, it will be the sole responsibility of the Principle Manufacturer/OEM to communicate the same immediately to BMC management to get the CMC/AMC executed uninterrupted through their reappointed/nominated Distributor /Dealer / Importer /Traders/agent to ensure that there is no discontinuation of the CMC/AMC due to change/re-appointment of Distributor /Dealer / Importer /Traders/agent etc. DEAN OR DMC, CPD or authorized representative will represent BMC for agreement and its further renewals. Performance Bank Guarantee which will remain valid up to the end of 08 year which will be the responsibility of the Principle Company.
- h) The responsibility of supply, installation, testing and commissioning of medical equipments along with 3 years warranty and 5 years Comprehensive Maintenance Contract / Annual Maintenance Contract (As applicable) shall be of Manufacturer and Distributor /Dealer / Importer /Traders/agentJOINTLY AS WELLAS SEVERALLY.
- i) No advance payment will be made to the supplier on a/c of CMC/AMC rather; the payment of AMC/CMC of the medical equipments shall be made on six monthly basis subject to satisfactory completion of maintenance and servicing activities. In case of no Breakdown, failure in providing Quarterly Preventive Maintenance service will lead to nonpayment of proportionate CMC/AMC charges for that six months payment.
- j) This is a firm & fixed price agreement for CMC/AMC till CMC/AMC period. No taxes, duties etc, shall be reimbursed by the PURCHASER separately on this account and no variation/escalation shall be applicable during agreement period.

The CMC/AMC charges are exclusive of Service Tax/VAT which will be paid at actual by BMC separately during the CMC/AMC period.

undertaking/any other Local body from	
during the course of the execution. However BMC department, effort shall be made first to	
	equest in writing to the BMC for settlement of such disputes the cause of disputes/claim failing which no disputes/claims of pany.
If differences still persist, in case of partie sought in the Court of Law in Mumbai Jurisd	es other than Govt. agencies the redresses of the dispute may be liction only.
	ers of the State/ Central Govt. applicable to the work, payment Act, Contract Labour (R&A) Act etc. and shall be fully the same."
SIGNED, SEALED & DELIVERED	CCA
	By the said (1 st party)
By the said Supplier (2 nd party)	For BMC
For M/s .	Dean / DMC, CPD
Signature	
Name:-	Signature
Designation :	Name:
Address:	Designation:
× O	Address:
By the said (3 rd party)	
For MANUFACTURER/OEM	
IN THE PRES	SENCE OF (WITNESS)
Signature	Signature
Name:	Name:

Address:

Address:

ANNEXURE -4

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

PRO-FORMA for uploading details of EMD and Annexure-3 (To be uploaded in PACKET A)

			o be aploaded in There in Th	
1	Nar	ne of Tenderer		
2	Nar	ne of Supply		
3	Dep	partment	Central Purchase Department	
4	Bid	No. &		
	Due	e Date		
		Details	E.M.D.	Annexure-3 (Affidavit)
	a	Amount Rs.		-
5	b	On line Payment.	Yes	· ·
	С	Date		-
	d	Bank Details:-		-
	e	IFSC Code:-	c.O	-
6	Is o	riginal Annexure-3 uploaded?	-	Yes

Full Signature of the tenderer

with Official Seal & Address

NOTE: PRO-FORMA should be on letter head of the tenderer.

ANNEXURE -5

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

(Technical Offer)

(To be upload in Packet 'B')

Item Group No.	<u>Description of the Items</u> (Bidder shall quote the following items as per technical specifications)	Quantity
		1
1.	Import supply for SITC of 3 Tesla MRI System as per technical specifications (excluding the cost of accessories /consumables mentioned under Annexure-7A and 7B)	2 No.
	Make	
	Model	
2	Local supply for SITC of 3 Tesla MRI System as per technical specifications (excluding the cost of accessories /consumables mentioned under Annexure-7A and 7B)	2 No.
	Make	
	Model	
3	Import Supply for 1 Set of standard accessories to be supplied with tender as per annex 7A	2No.
<u>4</u>	Local Supply for Set of standard accessories to be supplied with tender as per annex 7A	2No.
<u>5</u>	Import Supply for Set of standard accessories to be supplied with tender as per annex 7B	2 No.
<u>6</u>	Local Supply for Set of standard accessories to be supplied with tender as per annex 7B	2 No.
7	Turnkey work (Civil BOQ) for NAIR Hospital	1 No.
8	Turnkey work (M &E BOQ) for NAIR Hospital	1 No.
9	Turnkey work (Civil BOQ) for LTMG Hospital	1 No.
10	Turnkey work (M &E BOQ) for LTMG Hospital	1 No.
11	Dismantling of existing (old) MRI scanner at LTMG	1 No.
	Consumables/ accessories (for which rates to be freezed for 8years)	
12	Films	1 No.
13	Sampling Lines	1 No.
14	Contrast	1 No.
15	Gauss Lines	1 No.
16	Syringes	1 No.

Note: 1) Price should NOT be quoted in this Annexure

- 2) Scope of Supply:- Bidder shall clearly mention the scope of supply Including standard, essential accessories and Local brands/supply of external monitor /cameras/computers/external cable, accessories etc as applicable if any along with make and model.
 - 3) Detailed Service Manual shall be provided with the Equipment.
 - 4) CMC at the rate of 5% will be calculated on item no 1/2 and 3/4

Full signature of the Tenderer

With Official Seal and Address

ANNEXURE - 6

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

(Technical Offer for Spares applicable in case of Annual Maintenance Contract)

(List of Spare parts)
(To be uploaded in Packet 'B')

Not Applicable

<u>ANNEXURE -7</u> Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

(List Of Consumables)

(To be uploaded in Packet 'B')

(List Of Consumables / accessories, for which rates will be freezed for 8 years.) (To be uploaded in Packet 'B')

Sr No	Items Description in Commercial Bid	Make and Model	OEM/ Proprietary	Open/ General
	CONSUMABLES			0
1	Films			
2	Sampling Lines			
3	Contrast			/
4	Gauss Lines			
5	Syringes		, AC/	

Bidder shall clearly mention the type of consumables/accesspries mentioned above i.e. OEM/Proprietary or Open/General with 'Yes' or 'No' comment against each consumables.

Any additional consumables other than these shall be covered under warranty & CMC.

The rate quoted for consumables shall be freezed for 8 years, shall be considered for evaluation.

Full signature of the Tenderer

With Official Seal and Address

ANNEXURE -7A

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

(List Of Accessories to be supplied along with machine and which are to be covered under CMC) (To be uploaded in Packet 'B')

Sr	Items Description in	Make and	OEM/ Proprietary	Open/ General
No	Commercial Bid		Ozna Hopficuly	Speni General
	Commercial Diu	Model	ļ	*
	ACCESSODIES			
	ACCESSORIES		Į i	
1	Pachargoahla Handhald			
1	Rechargeable Handheld metal detectors - 2 Nos.		Į i	, y
2	Walk through Metal detector			() /
<u> </u>	with multiple sensor and			
	multiple location LED, Zone III]	(7)
	type - 01 no			
3	MR compatible Patient monitor			
ر	- Annexure A and MR		_ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	compatible Syringe Infusion			
	pump - 2 Syringe Infusion			
	Volumes		coy	
4	High Standard Ferro Guard		XV	
T	should be installed at entrance			
	of MR room to detect/alert	. /		
	ferromagnetic articles.			
5	MR Compatible Dual Pressure		7	
5	injector - minimum 2000 Gauss		Į i	
	line	C()'		
6	MR compatible Anesthesia			
J	machine - Specifications are	Y		
	mentioned separately:	7	Į i	
	Annexure A)		
7	Two quantities: Non-magnetic	V	i	
•	IV stand			
8	MR compatible storage carts		i	
Ŭ	and wall mounted cabinets.			
9			i	
	Coil cabinets to be provided.			
10	MR compatible crash cart 1 no.		<u> </u>	
11	MR compatible instrument-			
-	trolley - 1 no.			
12	MR compatible patient trolley,			
	to transfer patient to the			
	magnet table, with both vertical			
	and horizontal movement with			
	hydraulic operation and should			
	take a minimum load of 150 Kg			
	in both vertical and horizontal			
	motion			
13	MR compatible wheelchair -	_		
	Wardray/equivalent model,		Į i	
	with cushion, backrest and anti-			
	rest - 1 no.			

14	Uninterrupted power supply UPS		
15	One high quality LED projector for conference room of reputed brand like Sony or		
16	Two Laptops with latest operating system		

Bidder shall clearly mention the type of Accessories / Instruments mentioned above i.e. OEM/Proprietary or Open/General with 'Yes' or 'No' comment against each.

These accessories and Any additional Accessories other than these shall be covered under warranty & CMC.

Full signature of the Tenderer With Official Seal and Address

ANNEXURE -7B

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

(To be uploaded in Packet 'B')

(List of consumables/accessories to be supplied aslong with machine, and which will not be covered under CMC)

Sr No	Items Description in Commercial Bid	Make and Model	OEM/ Proprietary	Open/ General
	CONSUMABLES			
1	Two quantities: Digital Patient Weighing Scale in the range between 0 to 200 kg			
2	Network cable and other required materials for the complete installation to be provided by the supplier		. (), O'
3	Ten chairs with arm rest with medium back without casters Godrej/Geeken make			
4	Table for the MRI console, MRI additional console/ Workstation. fMRI workstation.			
5	Necessary Desk, chair and Rack for the PACS Server & Workstation to be provided by the supplier	Ç		
6	All the necessary interconnecting interfaces, cables, modules and other hardware and software to fully integrate the system for full operational status.	1º		
7	Two quantity MR compatible oxygen cylinders for the anesthesia system	<i>y</i>		
8	Good quality air curtain at MRI entrance, for patient entry, to filter the dust and prevent the leakage of a/c.			

Bidder shall clearly mention the type of Accessories / Instruments mentioned above i.e. OEM/Proprietary or Open/General with 'Yes' or 'No' comment against each.

These Accessories /Consumables other than these shall be covered under warranty only.

Full signature of the Tenderer With Official Seal and Address

ANNEXURE -08 Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

(To be uploaded in Packet 'B') COMPARISION OF TENDER SPECIFICATION V/S EQUIPMENT SPECIFICATION

Tenderer should submit information in the following proforma.

- 1.Scan copy of original Technical Brochure's for quoted model and all other allied equipment's having technical specifications shall be uploaded. Scan copy of original Technical Brochure's for quoted model shall be signed and stamped by Original Equipment manufacturer.
- 2. The reference number asked in column(4) shall be specific to technical particulars asked in column(3). Vague answers such as "we comply", "same as', "at the time of DEMO" etc will not be accepted.

(To be uploaded in Packet B)

Sr	Tec	hnical part	ticulars/Description as	s per tender.	Technical	Catalogue
No				A P	particulars/ escription	
					offered	Reference
						/MNo.(Page
						beno./Item no.)
				.1		by (To be Filled
					Bidder)	by Bidder)
A	Naı	me of Equi	pment	Q^{γ}		
В	Naı	me of Man	ufacturer			
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		-				
D						
				CHNICAL SPECIFICATIONS		
				quote the latest 'state of the art' 3 Tesla MR System or		
			per the specifications			
				nched year 2016 onwards.		
			red model should be U e for the same to be a	JSFDA and European CE approved (authentic and legible nnexed).		
				e that the system supplied is not refurbished and the MR		
				t available model in the segment (3T MR scanner with 70		
		cm or more regard.	ore bore) quoted, at th	e time of delivery and should submit an undertaking in this		
			Tech	nical Specification as Per Tender		
		Sl. No.	Features	Essential Specification		
		1	Magnet	3Tesla (superconducting) Magnet with approximately 70		
				cm or more bore diameter.	<u> </u>	

The magnet should have display for information on oil connectivity, physicological curves, start Scan. Switching off alarms, automatic transfer from different positions. Magnet should be manufactured from USA/Europe / Japun Helium only 3T (superconducting) Magnet along with Facility for quick Shutdown of the magnet in case of emergency. b) Field Stability overtime (i) Should have active shielding, external interference shielding with good field stability. (ii) Mention the RF frequency of operation and the field drift. c) Homogeneity (ii) Mention the RF frequency of operation and the field drift. c) Homogeneity (iii) Mention the RF frequency of magnet by VRMS method should be given. Specify homogeneity in VRMS at 10 cm, 20 cm, 30 cm and 40 cm DSVand at max FOVachievable with the quoted scanner. (ii) Should be very good for Single voxel and CSI spectroscopy, Specify values (iii) Caradient, shim and RF cons. c) Active Shielding/Fringe field j) Ext. Shielding Ancestacian and RF cons. (iii) Caradient, shim and RF cons. (iv) The magnet should be supplied during warranty period and comprehensive AMC (iv) The vendor should include the Cold Head maintenance and replacement during warranty period and during Comprehensive AMC (iv) The vendor should include the Cold Head maintenance and replacement during warranty period and during Comprehensive AMC (iv) The vendor should include the provided (iv) The vendor should include the provided (iv) MRN), single voxel spectroscopy (MRS), and spectroscopic imagent in fell required for imaging (MRI) (MRN), single voxel spectroscopy (MRS), and spectroscopic imagent field required for imaging (MRI) (MRN), single voxel spectroscopy imaging (MRS) (iii) Specify the time). (iv) Specify the time). (iv) Specify the time). (iv) Specify the time). (iv) Specify number of shim coils including higher order. (iv) Specify						
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(ii) The vendor should supply fully motorized computer-		2	Patient Table			
controlled table, with movements in vertical and						
horizontal directions for the main MRT patient table.						
(iii) Subject table should be able to take at least 140 Kg				_		
load.						
(iv) Emergency manual Traction of the subject from the						
magnet.				magnet.		
b) Patient (i) Patient monitoring devices for ECG, respiratory, pulse			,			
monitoring rate, oxygen saturation, ETC02 at the console etc. A			monitoring			
comprehensive solution at patient side and at main						
console capable of gating the sequence protocols with						
respect to patient's heart (ECG) and respiratory rates.				respect to patient's neart (ECG) and respiratory rates.		

	c) Patient	(i) Two-way Patient communication with headphone,	
	Comfort Features	microphone and necessary accessories.	
		(ii) Patient audio alarm	
		(iii) Lighting	
		(iv) MR compatible Music system (complete) should be	
		able to play inside the gantry	
		(viii) Provide other standard patient comfort devices, with	
		quoted system (please specify)	
3	Gradient System a) General	(i) Actively shielded gradient system in X, Y, Z planes.	
		(ii) Minimum Gradient Strength should be 60mT/m or	
		more along each axis at a slew rate of 200 T/m/s in each axis.	
		Gradient Strength should be such that minimum	
		amplitude of atleast60mT/mat minimum slew rate of	
		200T/m/s with minimum rise time from 0 to60mT/m	
		should be 300µs.	
		Minimum rise time from 0 to 44mT/m should be 220µs.	
		The system should have 64 independent RF receiver	
		channels (which can be demonstrated)	
		(iii) Quote the Slew rate at the maximum gradient strength	
		(iv) Specify the linearity of the gradients at full FOV.	
		(v) 100% duty cycle for full FOV.	
	b) Resolution	(i) Specify the minimum and maximum FOV achievable	
	Parameters	for the quoted MR system (preferable to have 10 – 500	
	rarameters	mm FOV).	
		(ii) Specify min. slice thickness in 2D and 3D modes at	
		128x128. 256x256. 512x 512 and 1024x1024 matrices	
		(iii) The system should be capable of performing single	
		shot EPI in 64x64, 128x128, and 256 x 256 matrixes)	
		including Conventional and fluoroscopic imaging in the	
		three orthogonal and also oblique planes.	
		(iv) Effective cooling system for gradient coil and power	
		supply for uninterrupted operation during summers also.	
		The system should have efficient and adequate provision	
4	DE Tarres and the	for eddy current compensation.	
4	RF Transmitter,	The vendor should quote the latest RF transmit	
	Receiver, Coils	technology available with them globally, as per the	
	al DETERMINE	datasheet.	
	a} RF Transmitter	(i) A fully digital RF system capable of transmitting	
		enough power (please quote the value) (as per FDA	
		guidelines), and the operating frequency should cover 1H.	
	X O	(ii) Specify max. transmitter RF power available (at 50	
	1) PEP	ohm impedance)	
	b) RF Receiver	(i) Optical/ Digital RF receiver system with/ high efficient	
) ^	RF receiver system / or its equivalent located on the	
		magnet inside the shielded active room.	
		(ii) System should have 64 independent RF receiver	
7		channels (which can be demonstrated)	
		Please provide the list of coils/coil-combinations that use	
		this configuration.	
		(iii) Specify the RF receiver bandwidth for each channel.	
		(iv) The system should have necessary hardware to	
		support quadrature phased array and flex coils.	
	c) RF Transmit	(i) Latest RF transmit system (like Multi-transmit/ Multi	
	1		
	Technology	Drive transmit system/ Trueform) with at least two	
	Technology	independent output channels should be offered to improve	
	Technology		

		_			
		d) SAR limits	(i) SAR limits should be as per FDA guidelines. for all		
			protocols, including neuro/ abdominal imaging.		
		e) Coils	(i) The number of channels and number of elements for		
			each coil should be the maximum that the vendor has in		
			their Product list. All coils (other than coils for exclusive		
			spectroscopy, like surface coils) should be compatible for		
			parallel acquisition. In case the vendor does not have or		
			manufacture a particular coil, third party coil(s) can be		
			provided. However, it is the responsibility of the vendor to		
			provide necessary interface (both hardware and software)		
			to make the coil work with appropriate RF sequences, etc.		
			(ii) Head coil (48-channel or more)/ 64 Channel Head		
			Neck in single scannable FoVfor high resolution brain,		
			brachial plexus, nerve imaging, EPI/ DTI applications,		\supset
			Compatible with fMRI projection device quoted with the		
			system. The coil should have built in shim arrangement	Y	
			for high resolution.		
			(iii) Separate coil for Head neck at least 20 channels or		
			more for routine brain/ Neurovascular exams should also		
			be quoted as standard.		
			(iv) Spine array coil (32 Channel or more) with built in		
			sensor or equivalent for motion detection		
			(v) Body array coil <i>I</i> Phased Array coil with at least 44		
			Channel imaging for maximum Z-axis FOV of 50cms in		
			combination with spine and single or combination of anterior coils.: 2 Nos.		
			(vi) Dedicated Shoulder array coil (16 channel); If a		
			dedicated coil is not available with the vendor, then the		
			vendor has to quote equivalent coil (for e.g., if Flex coil is		
			offered, then the number should be in addition to the		
			previously quoted coil		
			(vii) Dedicated Wrist coil (16 channel)		
			(viii) Dedicated Knee imaging Transmit/Receive 15		
			Channel or more		
			(ix) Eye/ear coil		
			(x) Flex coils in available sizes (minimum 2) for		
			extremity imaging at least 16 channels		
			(xi) Dedicated foot/ankle coil, minimum 16channel or		
		0.0.11	more		
		f} Coil	(i) Integrated coil technology, latest as available with the		
		Technology	vendor to be quoted: Equivalent of TIM / GEM/ DStream		
			or equivalent to be offered.		
		g) Table	(ii) Bolus chasing with automatic/continuous moving		
		technology	table should be offered and should be available with		
			fluoro triggered MR angiography for manual and fast		
		7	switchover in less than 1 sec for CE-MRA.		
			(ii) Latest table technology available with the vendor		
			(globally) should be offered.		
	5	Computer Control	(i) The vendor should supply the latest computer system		
		System	along with the MR system, to handle all the latest		
			applications available on the MR platform.		
			(ii) During the warranty period, any software updates that		
		-	are Launched globally should be supplied and installed.		
		a) Host Computer	(i) latest state-of-art computer system with sufficient		
		and Array	RAM (32 GB or more) and computational speed to match		
		Processors	the single shot Echo Planar Imaging (EP1), interactive		
			angiogram, multi-planar Three-dimensional (3D)		
			reconstruction, surface rendering and dynamic imaging,		
			vascular imaging/angiography, and adequate storage for		

			•	
		images and other Applications.		
		(ii) Necessary image processor with sufficiently large		
		RAM		
		(iii) (4 GB or more) for ultra-fast image reconstruction,		
		capable of performing real time image reconstruction.		
		(iv) Total hard disk memory capable of storing a		
		minimum of 2,00,000 (two lakh) images		
		(v) Monitor 19" or more Medical grade monitor (3MP)		
		with enhanced graphics accelerator.		
		(vi) One measurement (Main) console capable of data		
		acquisition and all online calculations (as required for all	. 1	
		sequences in the tender, section 6), and Post processing		
		(as required for all applications in the tender, section 7).		
		(vii) Licenses for acquisition (as required for all		
		sequences in the tender, section 6), post processing and		
		for special packages should be given explicitly (as		
		required for all applications in the tender, section 7),		
		listing all the capabilities of the vendor's quoted product		
	D) 4.1": :	basic standard package, premium packages, etc)		
	B) Additional	SERVER SYSTEM: (A Client - Server Architecture		
	workstation	based solution, Minimum 40,000 concurrent slices, 2 no.		
		floating /concurrent user license for all applications		
		including advanced applications.		
		DICOM 3.0 compatibility and interfacing with other		
		modalities must be possible.		
		CONFIGURATION: 1 no. Server and 5 Clients/Nodes.		
		Licenses:		
		5 user licenses for basic applications to be provided as		
		standard.		
		2 Concurrent licenses with the capability to process all the		
		loaded software including ALL the advanced post		
		processing applications to be accessible and usable on		
		both the clients/ nodes simultaneously without any		
		processing delay. The software should also include a		
		reputed antivirus software of a perpetual type or renewed		
		by the supplier. Advanced post-processing Offered		
		applications including perfusion quantification, advanced		
		diffusion and DTI, advanced cardiac evaluation (EF,		
	\circ	Calculation, Wall motions, analysis) including perfusion		
	x O	analysis, processing of 2D/3D CSI data, with color		
		metabolite mapping, parametric images from the image		
		intensity variations over time, vascular analysis package,		
		two clients concurrently for each application.		
()		TI TI		
		Hardware: Each Client / Node: CPU unit, minimum 16		
		GB RAM, Two Medical grade monitors of 2MP		
		resolution & size - 21" or more in dual monitor setup,		
		mouse, keyboard.		
		Server Hardware: The server (single/dual configuration)		
		should have image storage capacity of at least 2.5 Tera		
		bytes, minimum 20,000 concurrent slice processing power		
		and at least 64GB RAM and 2.5 GhzCPU. 21" or more		
		TFT/LCD monitor.		
		Server should be vendor neutral with Compatibility with		

		data from other MRI systems for post processing.
		All latest available software for updates of the system for
		this centre should be available for free of cost for the next
		eight years.
	c) CD/DVD	(i) DVD RW drive for writing of images, spectra and raw
	archival	data along with the necessary software for reading the
		images
		and spectra on DVD/CD storing capabilities.
		(ii) Provision for archival of k space data and raw
		(unprocessed) Images.
	d) Networking	(i) The vendor should provide Level 3 network Switch
		(with 32 nodes) or latest, to integrate the network,
		(ii) Protocol Ethernet TCP/IP standards-based image
		transfer with D1COM 3.0 over standard Ethernet IEEE
		903 (DICOM send, receive and DICOM query modes).
		(iii) The vendor should provide the connectivity with
		PACS, with the user departments, as mentioned in Item
		No. 10 of this tender.
		(iv) The network speed and cables should match the latest
		industry standards (e.g. 10 BaseT/100BaseT/1 GB)
		(v) System should be configured with different IP series,
		so as not to clash with different equipment already
		existing in different departments.
		(vi) The vendor should provide necessary networking and
6	a) Data	configuration assistance with existing PACS, HIS, RIS.
6	a) Data Acquisition	(i) The system should be capable of 2D and 3D acquisitions in conventional, fast & ultra-fast spin echo
	Acquisition	and gradient echo modes so that real-lime online images
		ran lie observed if needed. All the sequences that are
		available with the vendor at the time of quote/ delivery
		should be provided as per their manual.
		(ii) 2D multi slice imaging should be possible in all planes
		(axial, sagittal, coronal, oblique and double oblique)
		(iii) Up to 1024 x 1024 matrix acquisitions preferred for
		all applications. Wherever 2048 matrix available, please
		mention.
		(iv) Half Fourier or other techniques to reduce scan
		acquisition lime while maintaining adequate SNR.
		(v) 3D volume, multiple contiguous slabs, multiple
		interleaved and multiple overlapping slabs
		(vi) Slice thickness in 2D and partition in 3D to be freely
	V () /	selectable.
		(vii) Dynamic acquisition (serial imaging) with capability
		to initiate scan sequences either from the magnet panel or
	7	from the console.
		(viii) Dynamic acquisition; number of repeat scans with
		delay time either identical time interval or selectable
	ı	(ix) Auto slice positioning from the localizer images.
*		
		(x) Maximum off-center positioning both anterior
		posterior and lateral direction and should be selectable.
		posterior and lateral direction and should be selectable. (xi) Gating: physiological signals like ECG, pulse,
		posterior and lateral direction and should be selectable. (xi) Gating: physiological signals like ECG, pulse, respiratory', External signal triggering (interlace for
		posterior and lateral direction and should be selectable. (xi) Gating: physiological signals like ECG, pulse, respiratory', External signal triggering (interlace for triggering input pulse from external source). The
Y		posterior and lateral direction and should be selectable. (xi) Gating: physiological signals like ECG, pulse, respiratory', External signal triggering (interlace for triggering input pulse from external source). The provision should be available at the console also (for
		posterior and lateral direction and should be selectable. (xi) Gating: physiological signals like ECG, pulse, respiratory', External signal triggering (interlace for triggering input pulse from external source). The provision should be available at the console also (for FMRI, EEG etc.).
		posterior and lateral direction and should be selectable. (xi) Gating: physiological signals like ECG, pulse, respiratory', External signal triggering (interlace for triggering input pulse from external source). The provision should be available at the console also (for

		possible while doing spectroscopy.		
		(xiv) Artifact reduction/imaging enhancement/image		
		filtering/ image subtraction/addition/		
		multiplication/division techniques:		
		(xv) Flow: 1st and 2nd order flow artifact compensation		
		(xvi) Presaturation slabs: a number of relocatable		
		saturation bands to be placed either inside or outside the		
		region of interest		
		(xvii) Fat saturation techniques: frequency selective RF		
		pulses to suppress fat signals in the measured image FOV.		
		ROI selective (regional) fat suppression should also tie	1	
		Riven.		
		(xviii) Magnetization transfer saturation: Off resonance		\
		RF pulses to suppress signals from stationary tissue in	\wedge	
		FOV	, y	
		(xix) Phase contrast capability in 2D and 3D mode.		
		(xx) Image intensity correction		
		(xxi) Breath hold acquisition		
		(xxii) EPI mode]]	
		(xxiii) DTI with MDDW or equivalent with a minimum of	1	
		12 and selectable up to 128 direction encoding		
		(xxiv) Data acquisition in all three standard planes (axial,		
		sagittal, coronal and oblique and double oblique planes or		
		more oblique planes.		
		(xxv) Higher matrix acquisition capability in single shot		
		EPI. Acquisition time. TR, TE and slice thickness should		
		be clearly mentioned and supported by data sheet		
		reference.		
		(xxvi) The vendor should offer multi coil acquisition in		
		order to Optimize throughput increase and increased		
		effective FOV.		
		Individual acquisition elements of every coil should be		
		Mentioned.		
		(xxvii) 4 phase water and fat composed images with phase		
		in and phase out technique (IDEAL DIXON or		
		equivalent) should be included.		
	b) Imaging Pulse	(i) All standard and special pulse sequences available at		
	sequences	the time of quote/ delivery should be offered and quoted		
		in the bid. If the vendor does not have any particular		
		sequence/s but offers a work in progress (WIP)		
		sequence/s, then it should be provided without any pre-		
		condition like asking the Institute to sign any agreement		
	X O	for this purpose. This also applies to any post - processing		
		software that is offered which is WIP.		
		(ii) The system should be capable of selecting TR and TEs		
)	as per requirement in majority of the pulse sequences.		
		(iii) Spin echo (SE): multi-slice single echo, multi-slice		
		multi-echo (8 echo or more), SE with symmetrical and asymmetrical echo intervals and fast spin echo. MT-SE		
		imaging sequence.		
		(iv) Inversion recovery (IR): including short Tl modified		
		IRSE, FLAIR, DIR (Double Inversion Recovery).		
		(v) Gradient echo (GE): with transverse gradient/RF		
		spoiling, and transverse gradient re phasing, e.g., GRASE		
		or equivalent etc. 3D gradient echo with shortest TR and		
		TE, free choice of flip angle selection, while maintaining		
		SNR.		
	Fast sequences	(i) Fast spin echo and GE sequences in 2D and 3D mode		
		with T1, T2 and PD contrast capable of acquiring		

		maximum	
		number of slices with a given TR a minimum TE, echo	
		train should be at least 128 or more in fast spin echo mode	
		(ii) Half Fourier acquisition capabilities should be	
		available with/without diffusion gradients and in	
		combination with fast spin echo	
		(iii) Fast inversion recovery with spin echo	11
		(iv) Fast gradient spin echo IR multi-slice multi- echo	11
		mode with maximum ETL. Sequences should incorporate	
		RF focusing to acquire ultra-fast gradient spin echo.	
		(v) Fast gradient echo sequence should incorporate RF	
		spoiling and other technique to acquire images in ultra-	
		fast 2D and 3D modes.	
<u> </u>			-
		(vi) Fat and water suppressed imaging sequences.	
		(vii) EPI optimized sequences (with and without fat	
		suppression)	
		(viii) For T1, T2, PD imaging, perfusion, regular diffusion	
		values (at least 5b,3 directions) EPI FLAIR. EPI-IR. EPI	
		FLAIR diffusion tensor, EPI MT FLAIR, tensor diffusion	
		at least 16 b values, and 128 directions) and diffusion	
		studies. Suitable artifact/ fat suppression techniques to be	
		incorporated in the sequence to have optimum image	
		quality.	
		(ix) There should be capability of calculating ADC map	
		(isotropic and anisotropy from the regular diffusion and	
		tensor data).	
		(x) Optimized sequences for special applications.	1
		(xi) Multi-band EPI: Simultaneous Multi Slice Accelerate	1
		Advance applications for Neuro & Body.	
		(xii) System should be offered with SENSE / SMASH / I-	1
		PAT Plus/ ASSET/GRAPPA or equivalent technique with	
		up to factor 4 or better in 2D and 3D of real acquisition	
		time reduction in all sequences. Please specify	
		compatibility with sequences, Scan techniques and gating	
		techniques clearly	
	Optimized	Mention all available packages	1
	sequence		
	Packages		
	c) Neuro	(i) All T1 (2D, 3D), T2 (2D, 3D), IR (2D, 3D), Dual IR	1
	c) reare	(2D, 3D) sequences	
		(ii) Sequence for internal ear imaging for visualization of	1
		fine structures like cranial nerves (appropriate sequences	
		like CISS, etc. or equivalent. Mention the sequences	
	X	provided.	
		(iii) 3D sequences for internal auditory canal imaging	-
			
) '	(iv) Dynamic imaging of pituitary using appropriate	
	/	sequence	4
		(v) Whole spine T1, T2, IR sequences	4
		(vi) Whole neuro examination with automatic planning,	
		scanning and post processing, with single localizer	
		positioning, without changing the coils/ repositioning	4
		(vii) SMS (Simultaneous Multi Slice Imaging)	4
<u> </u>		(viii) 2D /3D ASL	<u> </u>
		(xi) T1 Permeability with IAUC, kTRANSetc	.
		(x) T2* Perfusion imaging of brain and other body parts	
		with automated software for rCBV, rCBF, TTP etc	
		analysis with color map generation.	
		(xi) Susceptibility weighted imaging equivalent to	
		SWAN-II/SWI/SWIp] [
•			

		(xii) Quantitative Brain image analysis software for	
		volumetry of brain based on tissue segmentation (Gray	
		mater, white mater, myelin)- Fully automated volumetric	
		software like neuro quant/ morphometry/ Synthetic MR to	
		be provided including the necessary sequences.	
		(xiii) T2 Relaxometry and volumetry for Hippocampus-	
		Fully automated volumetric software like neuro quant/	
		morphometry to be provided.	
		(xiv) Advanced Spine Applications package for nerve root	
		analysis. Auto spine labelling software.	
		(xv) MR neurography software Nerve view/3D Space	
		Neurogram/3D Cube STIR/Cube Flex	
		(xvi) Complete FMRI Software and Hardware package	
		including paradigm generator and accessories.	
	1) A	'. M	
	d) Angiography	i) MR angiography: 2D/3D TOF, 2D/3D Phase contrast	
		with and without gating) and magnetization transfer	
		saturation, black blood angiography for cerebral,	
		pulmonary, abdominal and peripheral vessels.	
		(ii) For peripheral moving table angiography should he	
		offered covering hip to limbs to be examined in one go	
		with high resolution and high SNR.	
		(iii) Bolus tracking software package.	
		(iv) Sequences for breath hold angiography with contrast	
		enhancement.	
		(v) Sequences for time resolved angiography with contrast	
		Kinetics.	
		(vi) ECG triggered non contrast angiography.	
		(vii) Contrast bolus tracking (including single shot whole	
		body MRA, interactive and automatic tracking, etc.).	
		(viii) Perfusion study in organ systems like kidney, brain,	
		etc. with T1 perfusion with permeability maps, and	
		quantitation of rCBF/ rCBV, MTT, etc., with color maps.	
		(ix) Contrast as well as Non contrast enhanced peripheral	
		angiography for arterial flow with Native/Trance/inhance	
		sequences.	
	e) Diffusion /DTI	(i) Sequence package for diffusion including DTI	
		(tractography) study in organs like brain, kidney, muscle,	
		heart, spine, breast, etc.	
		(ii) There should be capability of calculating ADC map	
		(isotropic and anisotropic from the regular diffusion and	
<u> </u>		tensor data).	
	V ' () '	(iii) MR diffusion tensor imaging package with	
		tractography.	
^		(iv) Application for high resolution for small FOV	
	Y	diffusion imaging	
		(v) Whole body diffusion weighted imaging with	
		background suppression (DWIBS)	
7		(vi) B value of at least 10000 or more in at least 32	
		directions	
	f) Body Imaging	(i) Flow quantification in vessels and CSF, hepatobiliary	
	1, Doug magning	system	
		(ii) Fly through facility with Flow analysis including	
		display of various velocity values.	
		(iii) Optimized breath hold sequences for abdominal	
		studies including angiogram.	
		(iv) MR Cholangiography and Pancreatography:	
		Specialized sequences and processing to perform MRCP.	
l]	specialized sequences and processing to perform MRCP.	

		(v) Pulmonary 2D/3D MRA sequence, including single		
		breath hold sequence.		
		(vi) MR ventriculography, cisternography, myelography.		
		(vii) Single sequence to acquire four different contrast (in		
		phase, out of phase water only, fat only). The same		
		technique should be used in other sequences, for dynamic		
		portography/ T1 quantitative analyses.		
		(viii) Advanced Parallel acquisition techniques including		
		new sequences. Specify the technique used and the factor		
		by which the acquisition time is reduced for similar		
		acquisition with and without parallel imaging technique.	4	
		Mention the sequences.		
		(ix) Flow quantification packages for CSF with dynamic)
		CSF flow imaging, aqueduct and spinal canal.		
		(x) Radial/Spiral pulse sequences for ultrafast imaging.		
		(xi) Suitable artifact/fat suppression techniques to be		
		incorporated in all the sequences to have optimum image		
		quality.		
		(xii) A sequence for differentiation of fluid and carriage in		
		ortho applications (sequence like DESS or equivalent)		
		(xiii) Susceptibility artifact correction techniques to be		
		incorporated in all the sequences to have optimum image		
		quality.		
	g) SWI	(i) Sequences for susceptibility imaging		
	h) Prostate	(i) Sequences for imaging of prostate including diffusion,		
	Imaging	multiphasic dynamic contrast enhancement,		
		spectroscopy.		
	i) Whole Body	DWIBS OR equivalent, whole body imaging using		
	Diffusion and	Inversion recovery sequence, Whole body MR		
	STIR,	angiography		
	Angiography	(i) Provide sequences like m-Dixon for all applicable		
	j) m-Dixon	sequences, m Dixon - HD or 3 Point DIXON.		
	k) Motion	(i) Sequence for in-line motion correction for		
	Correction	uncooperative patients/ children (with software and		
	Correction	acquisition sequences like BLADE. PROPELLAR,		
		Multivane or equivalent.		
		(ii) Sequence with ultra-short TE		
		(iii) Sequence for nullifying CSK pulsation artifacts		
		(v) Whole body imaging (using body coil and surface		
		coils)		
		(vi) Whole body diffusion weighted imaging (using body		
		coil and surface coils)		
		(vii) Automated fusion and composing for the above two		
		(without any artifacts)		
	7	(viii) Volume acquisitions for Neuro applications		
	l) MR	(i) System should have capability to perform multi planar]	
	Spectroscopy	proton spectroscopy.]	
7		(ii) Proton MRS Sequence for single-voxel acquisition,		
		with selectable fat /lipid saturation bands, options of water		
		saturation (e.g. VAPOR, CHRSS, etc.) with all post-		
		processing software,		
		(iii) Proton Multi-voxel CSI 2-D and 3-D] acquisition and		
		metabolite mapping with all necessary RF sequences (and		
		post processing algorithms) with all post processing		
		software		
		(iv) If separate coils are needed for carrying out MRS, it		
		should be provided.		

			(v) RF sequences for prostate, liver, musculoskeletal and	
			brain (if there are any specialized / optimized sequence	
			available, the same should be offered)- with all post	
			processing software	
			(vi) Water and lipid suppression in automated sequences.	
			(viii) Full post-processing for single voxel MRS, CS1	
			(multi-voxel MRS), metabolite mapping with color	
			coding (metabolic images) etc., for brain, prostate and for	
			other applications. Post processing should include FFT,	
			base line correction, curve optimization, automatic phase	
			correction, metabolite imaging, spectral mapping,	. 1
			magnetic- resonance spectroscopic imaging (molecular	
			imaging) with naming and peak integral values for all in	
		m) Cardiac	vivo metabolites.	
		package	Complete cardiac package including advanced software	
		раскадс	VCG gating with Arrhythmia rejection techniques,	
			Morphology/wall motion,Cine perfusion imaging and	
			Myocardial viability imaging,	
			Advanced automatic Cardiac Ventricular Measurement	
			Analysis, Cine Cardiac Tagging Techniques , Coronary	
			artery techniques, 2D/3D fast field echo/balanced/steady	
			state techniques, T1, T2 AND T2* MAPPING	
			Complete cardiac evaluation package to be included in the	
			workstation.	
-		n) Breast Package	Complete breast package including advanced software	
		ii) Brouser wemage	and Breast coil	
			Advance package including diffusion, spectroscopy and	
			perfusion with time intensity curve and biopsy.	
			perfusion with time intensity curve and biopsy.	
		o) Hepatobiliary	Hepatobiliary	
		package	Sequences and evaluation software for Fat Quantification	
		рискиде		
			in Liver and Iron Quantification to be provided. 2 point&	
			3 point DIXON ie. MDIXON Quant.	
			THRIVE, LAVA XV, VIBE or equivalent for multiphasic	
			liver studies to be offered.	
			Liver imaging with DISCO/ FREEZE WITH TIST VIBE /	
			D Sense Factor or equivalent should be included.	
		p) MRI	Complete MRI Elastography software and hardware	
		Elastography	package including all advanced post processing software.	
	7	Post Processing	(i) Licenses of all the post processing and evaluation	
		and evaluation	packages should be provided for the main and additional	
		7	console/ Workstation.	
			(ii) Specify clearly number wise the algorithms that need	
			licenses and a statement whether these have been	
			provided in both the main console and the additional	
		Consist.	workstation (Satellite console/ extended workspace).	
		Special	(i) The vendor must provide their specialized and	
		Application Packages.	optimized imaging sequences In the Main Acquisition Console; Post processing packages in the Main	
		1 ackages.	Acquisition Console and additional workstation.	
			a) Neuro (Smart exam/Ready Suite/ Smart Brain/ etc.),	
			b) Body	
			c) Oncology,	
			d) Angio (including DSA approach, capturing arterial,	
				1

	T	capillary and venous phases in a single acquisition with a	
		single bolus)	
		e) Ortho and MSK, Advanced version of Metal artifact	
		reduction software should be provided as standard for	
		imaging of joints with prosthesis and implants.	
		Cartilage mapping with color coding and parametric maps	
		should be provided.	
		f) Liver (including 3D T1 Fat sat for dynamic liver	
		imaging)	
		g) Pediatric	
		h) Breast	1
		i) Prostate	1
		j) Necessary composing software for whole body	
		applications. Smart Exam/ Smart Brain/ Ready	\wedge
		Suite/Brain Dot Engine/ equivalent technique should be	
		quoted in all available imaging packages.	
	i) MPR	(i) Multi planar reconstruction (MPR) in any arbitrary	
		plane including curved planes with freely selectable slice	
		thickness tend slice increments.	
		(ii) Surface Reconstruction and evaluation on	
		reconstructed images with minimum time.	
		(iii) MIP in displaying in cine mode 2D and 3D mode,	
		Targeted/segmented MIP in any orthogonal axis with	
		minimum processing lime and capable of displaying in	
		cine mode.	
	ii) ADC,	(i) Evaluation and display of diffusion images, ADC map,	
	perfusion, etc.	fMRI in reference of EPI optimized sequence.	
		(ii) Perfusion image evaluation with time intensity graph	
		and other statistical parameters.	
		(iii) Evaluation package for calculating rCBV, rCBF,	
		MTT, perfusion map, corrected CBV calculation; Fusion	
		of perfusion map with Contrast enhanced 3D T1 images etc.	
		Mention the package /software offered with brochure.	
		(iv) Flow quantification and evaluation far vascular (high	
		&. low) CSF, bladder outlet and cine display.	
	iii) Arterial Spin	2D / 3D ASL processing and quantification package in	
	Labeling	main console/additional workstation	
	iv) Liver	Automatic Liver segmentation and volumetric analysis	
	Segmentation	software.	
	v) Tractography	Post-processing package for DTI and Tractography,	
		estimation of ADC, FA (Lambda parallel, perpendicular	
		separately and combined), Fiber tracking, fiber statistics,	
		and display of fiber tracts on anatomical images	
	vi) Image	(i) Measurement of distance, area, volume, angle, mean,	
	statistics	SD, image addition, subtraction, multiplication, division,	
		interpolation, segmentation, threshold, histogram.	
		(ii) Image filtering and Image fusion software.	
7		(iii) Software for co registering MRI/ fMRI/ MRS/	
		Metabolite mapping images with images from CT, PET,	
		and SPECT.	
		(iv) Evaluation features like zoom, rotation, scroll,	
		roaming, image synthesis, multi point Tl and T2	
		calculation (more than 8) window stretching, text	
		dialogues graphics, sorting, search, archiving, recalling	
	::\ A.1 1	etc.	
	vii) Advanced	Any advanced organ specific imaging with automatic planning, scanning and post-processing application should	
	organ specific imaging	be quoted.	
	mugmg	To quoicu.	

	viii) Silent MRI	Silent MRI for neuro protocols including T1W, T2W imaging without any loss of image quality on all	
		sequences (like Neuro Silent/ Sllenz, or equivalent), with	
		noise less than 80 db. The quiet scanning should be without loss of SNR.	
	ix) Advanced	System should have the Advanced Compressed Sensing	
	Compress	Imaging for high speed image acquisition for brain, body,	
	Sensing imaging	MSK. Also offer simultaneously multi slab acquisition for	
		diffusion and fmri of the brain.	
8	UPS and Voltage	The system should be provided with an appropriate	
	Stabilizer	capacity UPS and Voltage Stabilizer system with batteries	
		for the Main system and chiller with at least 30 minutes	
		back up with another appropriate capacity (at least 40	
		KVa) UPS and Voltage stabilizer with 30 mins backup for	
		the other local supply items/equipment's.	
9	RF Cabin	The system should be supplied with the RF cabin with RF	
		room shielding, RF Door, RF window, and Interiors for	
1.0	G 6	the same should be carried our suitably.	
10	Safety	(i) The magnet system should include an	
	features, Quality	Emergency Ramp Down unit (ERDU) for	
	assurance and phantoms	fast reduction of the magnetic field with ramp Down time below 3 minutes	
	phantoms	(ii) The magnet should have quench bands that	
		contain the fringe fields to a specified value	
		in the event of a magnet quench	
		(iii) Real time SAR calculation should be performed	
		by software to ensure that RF power levels	
		comply with regulatory guidelines and are	
		displayed on each image	
		(iv) The system shall have manual override of the	
		motor drive for quick displayed of the	
		patients for the magnet bore	
		(v) Temperature sensor (built in) for magnet	
		refrigeration efficiency must be provided	
		(vi) A CCTV system with color LCD/LED display to	
		observe the patient transfer should be	
		provided in the magnet room. (vii) Phantoms for routine quality assurance for all	
		coils (including body coil)	
		(viii) Fire Fighting System, Smoke Detectors in	
		all rooms (except RF cabin) and 6 Fire	
		Extinguishers all MRI Compatible	
	α	(ix) Door / wall mounted Zone 4 Ferromagnetic	
	XO	detectors before entry into the magnet	
		room: 1 set.	
		(x) Physical barrier / bollards to prevent direct entry	
)	of external metal objects into zone 3 / 4 : 2	
		sets	
11	G: 1 13 507	(NR 1 11 H 11 11 11 1 1 1 1 1 1 1 1 1 1 1	
11	Standard MRI	(i) Rechargeable Handheld metal detectors (2 Nos.)	
	Accessories	(ii) Walk through Metal detector with multiple sensor and	
		multiple location LED (Zone III type) - 01 no	
		(iii) MR compatible Patient monitor and MR compatible	
		Syringe Infusion pump. (2 Syringe Infusion Volumes)	
		(Annexure A1)	
		(
		(iii) High Standard Ferro Guard should be installed at	
		entrance of MR room to detect/alert ferromagnetic	
			

		articles.
		(iv) MRI Compatible Dual Syringe Pressure Injector:
		Independent dual Syringe Pressure Injector:
		Features; Non-ferrous, automatic syringe size detection,
		performs single and dual phase contrast Injections,
		provides Saline flush delivery. (100 Nos of 50 ml
		Syringes with 100 nos. of tube connectors should be
		provided) Must be able to observe progress of Injection
		and view injection result at the working console.
		(v) MR compatible anesthesia machine (Specifications are mentioned separately: Annexure A)
		(vi) Two quantity: Non-magnetic IV stand
		(vii) Two quantity: Digital Patient Weighing Scale (in the
		range between 0 to 200 kg)
		(viii) MR compatible storage carts and wall mounted
		cabinets.
		(ix) Adequate number of Coil cabinets to be provided.
		` ' •
		(x) Network cable and other required materials for the
		complete installation to be provided by the supplier
		(xi) MR compatible crash cart 1 no.
		(xii) MR compatible instrument-trolley - 1 no.
		(xiii) MR compatible patient trolley (to transfer patient to
		the magnet table) with both vertical and horizontal
		movement with hydraulic operation and should take a
		minimum load of 150 Kg in both vertical and horizontal
		motion (Model: Adjustable Height Trolley: MR5501 of
		Wardray Premise Ltd. U.K or Adjustable Height Trolley,
		Femo, UK or equivalent) - 2 no.
		(xiv) MR compatible wheelchair (Wardray/equivalent
		model) (with cushion, backrest and anti-rest) - 2 no.
12	Antivirus s/w	(i) All the Servers and Workstations in the network (MRI
	and Web	console, additional workstation, PACS workstation, fMRI
	updates	workstation, etc.) that is supplied by the vendor should be
	apaaces	provided with antivirus software (periodically updated)
		for the entire life of the system.
		(ii) The vendor should provide antivirus updates for entire
		life of the system and make sure of the updated antivirus
		every week using automatic- updates with internet facility
		by the vendor
		(iii) The vendor should ensure that all the above
		modalities include necessary connection, image & work
		list send/receive, image and data storage, scheduling,
	X , OY	patient registration, and synchronization functions as per
		DICOM standards for smooth and effective integration to
		RIS/PACS
	7	
	1	
13	Other accessories	(i) Ten chairs with arm rest with medium back without
		casters (Godrej/Geeken make)
		(ii) Table for the MRI console, MRI additional console/
		Workstation. fMRI workstation.
		(iii) Necessary Desk, chair and Rack for the Image Server
		& Workstation to be provided by the supplier
		(iv) All the necessary interconnecting interfaces, cables,
		modules and other hardware and software to fully
		integrate the system for full operational status.
<u> </u>		(v) Uninterrupted power supply (UPS) with sufficient

capacity (appropriate rating as required for MRI and chiller) for 30 minutes back up of the full load MR system and its accessories during patient MR imaging. (vi) Two (quantity) MR compatible oxygen cylinders (for the anesthesia system) (vii) Good quality air curtain att MRI entrance (for patient entry), to filter the dust and prevent the leakage of aic. (viii) Two high quality LED projector for conference romo for reputed brand like Sony orequivalent. (ix) Four Laptops with latest operating system (specifications to be discussed with department of Radiology) for viewing the images, reporting and making teaching presentations. (x) 2 Qty - Osirix Medical Images Viewer (FDA Approved), with Apple iMac 24 inch screen (16GB RAM, 512GB SSD, Radeon ProGraphics 5500, 4GB GiDBR, Magic keyboard, Mouse) and Osirix MP software with two licences. (xi) Dry chemistry camera DICOM compatible of DPF 500 or more of any reputed make Three active film trays including one for 14" x 17" films, 300 hos of 14 x 17 inches size films to be provided. The Dry Chemistry camera should be of a make whose films are available on rate contract schedule of MCGM. (xii) Adequate coverage of the MRI installation by CCTV camerasteminimum 5 nos) (xiii) MRI Compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xiv) MRI compatible Bagill forceps: Adult & pediatric size-Two each. (xv) Stylet for endotracheal tube: Adult, pediatric size-Two each. (xv) MRI compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xix) LED - 4 films view box for 14" X 17" film size - 5 No. s (xxii) MRI Compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI mage gating) (xix) LED - 4 films view box for 14" X 17" film size - 5 No. s (xxii) Two dehumidifiers for an area of 700 Rg feet (xxiii) 2 black and white paper laser printer cum scanner. (xxii) 4 black and white paper laser printer cum scanner. (xxii) 7 loclour paper printer (xxiii) 1 loclour paper printer (xxiii) 2 black and white paper					
and its accessories during patient MR imaging. (vi) Two (quantity) MR compatible oxygen cylinders (for the anexthesia system) (vii) Good quality air curtain at MRI entrance (for patient entry), to filter the dust and prevent the leakage of aic. (viii) Two high quality LED projector for conference room of reputed brand like Sony orequivalent. (ix) Four Laptops with latest operating system (specifications to be discussed with department of Radiology) for viewing the images, reporting and making teaching presentations. (x) 2 Qiy - Osirix Medical Images Viewer (IPDA Approved), with Apple iMac 24 inch screen (16GB RAM, 512GB SSD), Radeon Profraphics 5500, 4GB GDDR6, Magic keyboard, Mouse) and Osirix MD software with two liceness. (xi) Dry chemistry camera DICOM compatible of DPI 500 or more of any reputed make. Three acrive film trays including one for 14" x 17" films 500 nos of 14 x 1 inches size films to be provided, The Dry Chemistry camera should be of a make whose films are available on rate contract/ schedule of MCGM. (xii) Adequate coverage of the MRI installation by CCTV cameras(minimum 5 nos) (xiii) MRI Compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xiv) MRI compatible Bagill forceps: Adult & pediatric size—Two each. (xiv) MRI compatible ECG learnygoscope (xvii) MRI compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xiv) MRI compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xiv) MRI compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xiv) MRI compatible Loamps 2 Nos: Either towel clip or artery forceps. (xvii) MRI compatible ECG electrodes (100 Nos., Disposable Electrodes for MRI Image gating) (xiv) MRI compatible paper laserjet printers. (xxi) Gleans of the entire period of use of MRI machine (xxii) Jeans of the paper laser printer cum scanner. (xxii) Jeans and white paper laserjet printers. (xxii) High and the paper laser printer cum scanner. (xxii) Jeans and			capacity' (appropriate rating as required for MRI and		
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webinar and seminars.					
]	
14 Training Advanced training to be provided by the vendor at the site	14	Training			
for Faculty, Residents, students and Radiographers, so as					
to Benefit the latest applications available on the system.					
The Training should be minimum period of 12 weeks,	1 1				

- 1		1		T
	1.7	0 1	staggered.	
	15	Special	Please see Annexure for special conditions, including	
		Conditions	warranty and CMC.	
		1	Original Product Datasheet of main unit and all	
			accessories, including third party items to be provided.	
			All agreements should be binding on Principal. The	
			principals should be responsible for any lacuna or deficit	
		2	in service or supply. All items in the supply order should be supplied during	
		2		
		2	the time of installation. No exceptions will be allowed.	
		3	Items under Research Agreement should be finalized well	
			in advance after receipt of supply order), so that there is	
			no delay in delivery of software or coil or any other accessories.	
		4		
		4	Software updates [where hardware upgrades are not required) should be provided within one month after	7
			release worldwide (any country, viz. North America /	
			Europe / Germany, etc.). In case, the same is not provided	
			in time, the parent company should undertake the	
			responsibility to implement the same. This is to make sure	
			that the machine stays updated with similar products for	
			entire life of the system.	
		5	System should be regularly maintained at latest	
			computing platform. If hardware required for the same,	
			should be provided at no cost during entire life of system.	
		6	Any exclusive items available with the vendor should be	
			quoted as an option. The price of the same will not be	
			considered for L1 purposes.	
		WARRANTY		
		PERIOD	, Y	
		5	The warranty period of the 3T MRI system should be 3	
			years and commences from the date of handing over	
			(from the date of issue of Inspection Note) of the fully	
			functional unit. All coils and the accessories supplied	
			(such as UPS including batteries replacement as when	
			required, AC, Generator etc.) including third party items	
			such as MR compatible infusion pump, patient monitor	
			with probes, MR compatible anesthesia machine should	
			be under warranty against Manufacturing defects of	
			material and workmanship. The Helium Supply and cold head repairs (including replacement, if needed) should be	
			included in the warranty period.	
		6	Note: any Liquid Helium filling, due to quenching or due	
			to any other causes during the warranty period shall be	
			borne by the firm. (except purchaser fault)	
		POST GUARANT	EE ANNUAL COMPREHENSIVE MAINTENANCE	
		CONTRACT (CM		
		7	The post- warranty (after 3 years) CMC should be	
			comprehensive and should include helium and cold head	
	Ţ.		(repair and / or replacement) + labour + spares for the	
			complete system which includes all the accessories	
			supplied such as UPS, Generator, AC, etc. (including all	
			consumables like batteries for UPS, and maintenance for	
			another 5 years after expiry of the warranty.	
			All third party accessories and supplied items, including	
			hardware, software, antivirus etc are covered under the	
			CMC. If a 3 rd party item cannot be serviced or repaired	
			during the CMC period, the same shall be replaced with a	
			new equivalent or better model by the bidder at no	

			additional cost to MCGM.	
		8	Note any Liquid Helium filling due to quenching or due to	
			any other causes during the CMC period shall be borne by	
			the firm. (Please review – will be a costly affair)	
16	5	MRI COMPATIBL	LE ANAESTHESIA MACHINE, MRI COMPATIBLE	
		INFUSION PUMP	&MRI COMPATIBLE MONITOR – as per Annexure A1.	
17	7	SITE MODIFICAT	ION WORK - 3 T MRI SYSTEM – as per Annexure A2.	
18	}	SITE MODIFICAT	TCATION – Drawing – as per Annexure A3 (attached separately)	

ANNEXURE A1

SPECIFICATION FOR MRI COMPATIBLE ANAESTHESIA MACHINE, MRI COMPATIBLE MONITOR AND MRI COMPATIBLE INFUSION PUMP

MRI COMPATIBLE ANAESTHESIA MACHINE SPECIFICATIONS (**Drager/Damaica /Penlon/ GE or equivalent)**

Should be MRI compatible at 3 T, antistatic, heavy frame & base with good quality castors with front brakes, with following features:

- 1. Three gas model, viz Oxygen, Nitrous oxide and Air
- 2. Should be compact, ergonomic, easy to use and easy to maintain.
- 3. Should have separate fresh gas outlet for use in open circuit.
- 4. Machine should have flow matters for Oxygen, Nitrous oxide and air. Emergency oxygen flush should be available. There should be facility to select oxygen air or oxygen nitrous oxide with the help of a separate switch or knob.
- 5. Dural flow sensing capability at inhalation and exhalation ports.
- 6. Should have paramagnetic /galvanic cell oxygen sensors. In case of galvanic cell sensors, the firm should supply free sensors for the entire warranty period of 3 years. In case of paramagnetic sensors, the firm shall ensure that there is no down time during repair of these sensors (if necessary) and provide a standby alternative.
- 7. Shall have back-up O₂ control which provides an independent fresh gas source and flow meter control in case of failure.
- 8. Pressure regulators shall be of modular design.
- 9. Should have oxygen fall-safe device & an auxiliary built in oxygen flow meter.
- 10. Electronic or Mechanical Hypoxic Guard to ensure minimum 25% O₂ across all O₂ N₂ O mixture and Oxygen Failure Warning.

Vaporisers:

11. Facility of mounting minimum two Vaporizers, latest technology, key filler, selected type, tool free installation, meaning any vaporizer of our choice can be mounted at will with interlocking facility. It should be preferably of the same make as that of machine.

- 12. Temperature, pressure and flow compensated with high accuracy of delivered concentration of volatile anesthetic agent, should be maintenance free.
- 13. Two vaporizers should be supplied (Isoflurane, Sevoflurane)

Ventilator:

- 14. The machines should have an integrated Anesthesia Ventilator system, facility to vary respiratory parameters and should be able to ventilate adult and pediatric patients including infants.
- 15. Ventilator should have Controlled, manual, spontaneous modes and provision for PEEP
- 16. Tidal volume (inspired and expired), respiratory rate, I: E ratio, minute volume, Airway pressure, & FiO2 should be continuously displayed.
- 17. Should have Tidal volume and fresh gas compensation mechanism
- 18. Audio-visual Alarms for high and low settings of pressure, volume and disconnection should be present.
- 19. Tidal Volume (VT) 20-1500ml. (Volume Control). Rate at least 4-80 BPM.
- 20. Inspiratory /Expiratory ratio (I:E) 2.1 to 1.6, & Peak Flow 100 to 1201/min.
- 21. Ventilator should have at least 30 min rechargeable battery backup for ventilator.
- 22. Machine should have an integrated breathing circuit with circle absorber of good quality, easy to clean, autoclavable, fewer parts to reduce leaks.
- 23. Machine should have mounting capability of one O_2 and one N.O pinindexed cylinder.
- 24. Adult (2 sets) breathing circuits & one pediatric circuit to be provided.

MRI COMPATIBLE MONITOR

Specifications for MRI compatibility:

- 1. Monitor should be equipped with MRI shielding and set to Remote Communication Mode.
- 2. Should be MRI safe at 5,000 Gauss, 3.0 Tesla and 4 W/Kg SAR
- 3. System should include fiber optic SPo2 finger sensor, MRI compatible ECG Patient Leads and electrodes, NIBF cuffs, hoses and etCO2 sampling kit and temperature probe

General specifications for monitor:

- 1. The monitor should have adult and neonatal applications and should be user friendly.
- 2. It should be capable of monitoring ECG, noninvasive blood pressure, oxygen saturation (SpO₂), ETCO2 and temperature
- 3. It should have an internal battery which should last for 30-40 min.
- 4. It should be operational at wide temperatures (10°C to 40°C) and humidity (20% to 90%)

- 5. It should have a facility of 24 hours data storage of trended parameters and trend graph of 1, 2, 3, 6, 12 or 24 hours display format.
- 6. Should have a facility to deactivate all the alarms if necessary.

ECG monitoring: Essential specifications:

- 1. Available leads: I, II, III, V, AVR, AVL, AVF with facility for recording 12 lead ECG.
- 2. Should display one or all the selected leads at a time
- 3. Accuracy of +5% of the rate.
- 4. Monitor Mode: Digital Signal Processing (DSP)
- 5. T-wave suppression for high field MRI
- 6. Should have arrhythmia monitoring facility:
- 7. Should have user selectable alarms.
- 8. Heart rate measuring range 15-300 beats/min.

Pulse Oximeter (SpO₂)

- 1. Should provide a digital value of the arterial oxygen saturation as well as diagnostic plethysmography pulse waveform.
- 2. Measurement range: 0% to 100%
- 3. User selectable upper and lower alarm limits.
- 4. Probes with finger and ear sensors for adult, pediatric and neonatal use.
- 5. Should be sensitive and function accurately even at low perfusion states of low blood pressure or hypothermic conditions.

ETCO2: monitoring:

- 1. Should have side stream CO₂ module and display both graphically and numerically.
- 2. Single beam, non-dispersive infrared (NDIR) absorption, radiometric measurement, no moving parts
- 3. Initialization time less than 10 seconds, full specifications within 1-2 minutes
- 4. CO₂ range should be 0 to 152 mm Hg barometric pressure supplied by module itself
- 5. Should be able to detect breath rate in the range of 20-150 BPM
- 6. Respiratory rate accuracy should be + 1 breath
- 7. Barometric Pressure auto compensated from 400 mm Hg to 850 mm Hg Operator selectable O2, N2O, HE and Agent compensation.
- 8. No routine user calibration required. An offset calibration should run automatically when the ambient temperature is not stable.
- 9. Sampling line should have both nasal sampling line and extension sampling line
- 10. Warm up time 10 seconds

Tempe	rature monitoring:
1.	Measuring range: 5 to 50 ^o C
2.	Accuracy + 1°C
3.	User selectable upper and lower limit of alarm.
4.	Core and skin probes
Nonin	vasive blood pressure (NIBP) monitoring:
1.	Should automatically sense infant/adult cuffs and set appropriate inflation pressure and safety limits.
2.	Operating Modes: Automatic, Manual Stat
3.	Accessories, NIBP cuff: a. Adult for thigh and arm b. Pediatric
	5. 1 Chimin

Specifications of MRI Compatible Syringe Infusion pump are as follows:

c. Neonatal

1	The MR Safe pump should be adaptable both as a syringe pump as well as a volumetric pump.
2	It should be designed for use in MR environment and not adopted for the purpose (should not be a non MR pump in an RF cage).
3	It should have a non magnetic ultrasonic motor to provide accurate fluid delivery from infants to adults with capability of delivering two drugs simultaneously.
4	It should come with a 10 digit keypad entry system for ease of programming.
5	It should be 5000 Gauss compliant so that it can be placed anywhere in the MR room.
6	It should have a large LCD display providing high visibility.
7	Expanded delivery range of the pump should be 0.1—1400 ml / hr.
8	It should have a longlife lithium polymer battery pack for more than 10 hours back up once fully charged.
9	The syringe set should be self vented type with a very low priming volume.
10	The system should be field upgradable to pulse oximeter monitoring.

	11	The downstream occlusion pressure should be adjustable from 1—10 psi to suit various cannula sizes and viscosity of the drug to be infused.		
	12	There should be an air inline ultrasonic bubble detector.		
	13	It should have a 360° visible green / red bright flashing alarm light indication sufficiently big to be observed from control room itself in event of any alarm situation or for regular drug delivery confirmation.		
	14	MR Safe free standing IV pole with mounting of pump for easy operation)
	15	It should be CE marked and FDA approved.	9,	
	Monitor (in 1. Adu 2. Infa 3. Larg 4. Ped 5. Sma 6. NIE 7. Reu 8. Reu 9. Reu 10. Neo 11. Reu 12. ECO 13. EtC 14. Adu 15. Ped	accessories /consumables to be supplied with MR compatible Patient acluding the standard supply) - alt Reusable Cuff (27 -35 cm) - 2 qty and Reusable Cuff (9-15 cm) -2qty are Adult Reusable Cuff (34-44 cm) 2 qty artic Reusable Cuff (14 - 21.5 cm) - 2 qty all Adult Reusable Cuff (20.5 -28.5 cm) -2 qty all Adult Reusable Cuff (20.5 -28.5 cm) -2 qty asable Adult SPO2 Probe- 2qty asable Pediatric SPO2 Probe- 2qty sable Neonatal SPO2 Probe- 2qty anatal Disposable SpO2 wraps - 100 qty asable Temperature probe/Sensor- 2 qty G electrodes - 500 qty O2 Filtered samaple line extension - 50 qty alt Oral/Nasal cannula - 50 qty attric Oral/Nasal Cannula - 50 qty		
		nt Nasal Cannula – 50 qty noline Agent Sample Line (2.0 m)- 50 nos.		
Co				
A	materials. from the shall not of the mocase the before the inspection	above equipments shall be new and manufactured from virgin All the requirements of this supply shall be necessary sourced original equipment manufacturer of the model quoted which be necessary sourced from the original equipment manufacturer odel quoted but should be compatible with the quoted model. In machine is imported one no import substitution is permitted neither award nor after the award for any part or accessory. "Third party in certificate should be applied from the port of origin of shipping of it (from the parent companies country of origin).		
В	Equipmen	t shall operate on 230 V, single phase, 50 Hz electric supply. The		

necessary protective relaying / circuitry shall be there with the machines. The

		1	
	mains supply voltage variation may be max. $\pm 10\%$ and frequency variation maximum $\pm 3\%$.		
C	1)The quoted CT Scan equipment shall have CE mark from European		
	Conformity (EC) notified bodies issued from European address and valid US		
	FDA approval and documentary evidence to that effect shall be uploaded.		
	2) The following accessories viz. anesthesia workstation with ventilator,		
	patient monitor, dual head pressure injector, Dry Chemistry Imager shall be		
	having valid CE and US FDA approval. Documentary evidence to that effect		
	shall be submitted in packet B.	1	
	Shan be submitted in packet B.		
	3) Rest of the accessories should have valid CE or USFDA approval.		
	Documentary evidence to that effect shall be submitted in packet B.	O) y	
	Bidders are requested to go through the European CE and US FDA policy		
	document for submission of CE and US FDA approvals as mentioned		
	elsewhere in tender document.		
D	The equipments shall be having warranty of three years as described in the		
	tender document elsewhere. The warranty and CMC shall cover all the spare		
	parts for total 8 years (warranty 3 years and CMC 5 years). The manufacturer		
	shall supply of spares, consumables for at least two years after the contract		
	period of eight years is over.		
	The successful bidder has to ensure that all the required spares and services are		
	available during the period of CMC and 2 years after the contract period of eight years.		
	All third party accessories and supplied items, including hardware, software,		
	antivirus etc are covered under the CMC. If a 3 rd party item cannot be serviced		
	or repaired during the CMC period, the same shall be replaced with a new		
	equivalent or better model by the bidder at no additional cost to MCGM.		
Ε	The equipments should be provided with one hard copy in original of the		
	detailed service manual and operation manual. Further, a soft copy is also		
	required.		
F	The equipment must be tropicalized as below:		
	Operating room temperature: upto 40° C Storage room temperature: upto 60° C		
	Relative Humidity: upto 90% Non-condensing		
	relative framety, upto 70% from condensing		
G	Among the other things, the responsiveness of the bid will be based on		
	successful demonstration of the offered model of the equipments to MCGM		
	officials as mentioned elsewhere in the tender specifications.		
H	The bidder has to submit users list with address & contact telephone number/s.		
I	Prospective tenderers should have a full-fledged and well-established service		
	centre in Mumbai with engineers qualified in servicing of 3T MRI System. Please provide details of the same in Annexure – 1.		
	Makes and Models of Local Equipment quoted.		
	1		
	2		
	3		

4	
5	

Note:-The quoted product shall be available on the current official website of the manufacturer and the website link/ web address shall be provided in Annexure- 8

I/We have gone through all the details tender specification of BMC and offered our specification as mentioned above.

I also undertake o supply the equipment as per same specification quoted by me.

Full Signature of the tenderer with Official Seal & Address

Annexure-9A

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

PRO-FORMA FOR MANUFACTURER'S LETTER

(If tender is submitted by Indian or foreign manufacturer)
(To be uploaded in PACKET A)

To,	
Municipal Con	nmissioner,
M.C.G.M. Mur	
Sir,	
Reference: - Y	our E-Tender Document No dated
I/ We ,	who are an established and reputed manufacturer of (name
of medical equ	who are an established and reputed manufacturer of (name uipment) having factory/factories at, hereby state that we have (name of
medical equipn	ment) manufacturing unit/units as per tender condition. We hereby agree to manufacture the (name of ment) as per the tender specification.
	lare that our manufacturing unit has output of units /year and during previous five years units, year wise breakup is as follows.
1	<u>-</u>
2	_
	$\mathcal{C}_{\cdot}\mathcal{O}_{\cdot}^{y}$
3	_
	O Y
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5	
We also hereby	y extend our full warranty, Annual Maintenance Contract, Comprehensive Maintenance Contract as
	he goods and services offered for supply of medical equipment against this tender document.
11	
	.1
	Yours faithfully
	Tours faithfully
	(G'
	(Signature with Date, Name, & designation and stamp.)
	of manufacturer i.e. M/s
Note:1)	This letter shall be on the letter head of the manufacturing firm in same format and shall be signed
2) 0.:::	by a person competent and having the power of attorney to legally bind the manufacturer.
2) Origin	nal letter shall be uploaded during the submission of Tender.

Annexure-9B

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

PRO-FORMA FOR MANUFACTURER'S LETTER

(For foreign manufacturer's only) (To be uploaded in PACKET A)

To,
Municipal Commissioner,
M.C.G.M. Mumbai.
Sir,
Reference: - Your E-Tender Document No dated
I/ We, who are an established and reputed manufacturer of (name
I/ We, who are an established and reputed manufacturer of (name of medical equipment) having factory/factories at, hereby state that we have (name of
medical equipment) manufacturing unit/units as per tender condition.
Our 100% Indian subsidiary / subsidiary of Principle foreign manufacturer /sister concern/associate/affiliate/joint venture- registered in India (In case of Foreign Manufacturer only) are submitting this tender against your requirement as contained in the above referred tender document for the above materials. We hereby agree to manufacture the (name of medical equipment) as per the tender specification.
I/We state that the price quoted by M/s $_$ Our 100% Indian subsidiary / subsidiary of Principle foreign manufacturer /sister concern/associate/affiliate/joint venture- registered in India for this tender is reasonable and not higher than what we would have quoted, had we participated in this tender.
Also I/we declare that our manufacturing unit has output of units /year and during previous five years manufactured units, year wise breakup is as follows.
1
2
3
4
5.
We also hereby extend our full warranty, Annual Maintenance Contract, Comprehensive Maintenance Contract as
applicable for the goods and services offered for supply of medical equipment against this tender document.
Yours faithfully
Tours faithfully
(Cionativa with Data Nama & designation and stamp)
(Signature with Date, Name, & designation and stamp.)
of manufacturer i.e. M/s
Note:1) This letter shall be on the letter head of the manufacturing firm in same format and shall be signed by a person competent and having the power of attorney to legally bind the manufacturer.
Original letter shall be uploaded during the submission of Tender.

Annexure-9C

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

PRO-FORMA FOR MANUFACTURER'S LETTER

(For foreign manufacturer's only) (To be uploaded in PACKET A)

To, Municipal Commissioner,

M.C.G.M. Muml	bai.	
Sir,		
Reference: - Yo	ur E-Tender Document No	dated
I/ We ,		who are an established and reputed manufacturer of (name
of medical equi	pment) having factory/factories at _	, hereby state that we have (name of
medical equipme	ent) manufacturing unit/units as per t	ender condition.
I/We ourselves h	nereby certify that M/s	Distributor /Dealer / Importer /Traders/agent appointed by
		ent as contained in the above referred tender document for the (name of medical equipment) as per the tender specification.
I/We state that the	he price quoted by M/s	Distributor /Dealer / Importer /Traders/agent appointed
by us in India f	or this tender is reasonable and not h	igher than what we would have quoted, had we participated in
this tender.		
	re that our manufacturing unit has units, year wise breakup is as follo	output of units /year and during previous five years ows.
1 2		
3.		A Y
4		
5.	C. (
We also hereby	extend our full warranty. Annual Ma	aintenance Contract, Comprehensive Maintenance Contract as
-	The state of the s	ly of medical equipment against this tender document.
applicable for the		ours faithfully
		ours faithfully
		(Signature with Date, Name, & designation and stamp.)
	of manufacturer	i.e. M/s
Note:1)	This letter shall be on the letter head	d of the manufacturing firm in same format and shall be signed
•	by a person competent and having the	he power of attorney to legally bind the manufacturer.
2) Origina	l letter shall be uploaded during the s	ubmission of Tender.

ANNEXURE -10 Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362 (To be uploaded in Packet B)

EXPERIENCE CERTIFICATE

"M/s	have supplied their model	to our
institution inadequate".		e service support is
Signature and designation of the Authorized officer issuing certific	ate	
NOTE: 1) Experience Cert	rificate in respect of supply of a	
unit to State Government / Centra	l Government or their undertaking / Semi	
Government Bodies / Local bodie	s / Large Corporate hospitals - more than 200	
beds (without disclosing rates then mentioned format.	rein) should be supplied in the above	
2) The above mentioned certificate	es which must be valid and current on the due	
date should be uploaded.	3	
3) Experience Certificate should b	oe in the name of Bidder or Manufacturer.	
Scanned copies sha	ll be uploaded in the Packet "B".	
Bidder/Manufactu	rer shall provide certified copies of the Executed	
purchase orders al	long with completion certificates in support of the	

PROFORMA FOR Statement of experience Certificate

(For the period of last five years)

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362 (To be uploaded in Packet 'B')

Tender Reference No.:	
Date of Opening:	
Time :	
Name & Address of the Tenderer:	
Name & Address of manufacturer:	

Order placed by (Full address of Purchase/ Consignee)	Description and quantity of ordered goods and services	(attached documentary proof)**
1	2	3
	*C,	
	*	
	¢O ^y	

Signature & seal of the Tenderer

Note: Experience Certificate should be in a name of the bidder <u>or</u>manufacturer.

Bidder/Manufacturer shall provide certified copies of the Executed purchase orders along with completion certificates in support and performance certificates of the experience.

Specify how much quantity of products were supplied to the State Government / Central Government or their undertaking / Semi Government Bodies / Local Bodies/ Large Corporate hospitals - more than 200 beds as shown below. (Use separate sheet, if necessary)

ANNEXURE -11

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

(To be uploaded in Packet 'A') AUTHORISATION LETTER FOR ATTENDING TENDER OPENING

	To,
Γh	me Municipal Commissioner, M.C.G.M.
	Subject: Tender No
	due on
	Sir,
	Mr has been authorized to be present at the time of opening of above tender due or at 16:00 hrs on my/our behalf.
	Yours faithfully, Signature and seal of the tenderer
	Specimen Signature of representative
	Note:- Photo ID of Representative is compulsory

<u>Annexure – 12</u>

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

(To be uploaded in Packet 'A')

Pro-forma of 'Articles of Agreement' for Hospital,	the purchase of	of equipment at t	he		M.C.G.M.
Quotation / Tender due on					
Standing Committee Resolution Commissioner's/DMC's Sanction No		_ Dated		Addl.	Municipal
Contract for Supply / work of :					
	·			O	
Case No of			~6		
During the period fromto					
THIS AGREEMENT MADE ON THIS	Day of _		16 /		
Two ThousandBetween		c. Ó			
(Partner /Proprietor's Full Name) in habitar	nt/s of Mumbai,	carrying on busi	iness at		
		1			
Municipal Commissioner (C.P.D.) in which context or meaning therefore include D Corporation of Greater Mumbai authorize their successors & assign / assignee for the Corporation of Greater Mumbai (Hereina WHEREAS the Municipal Commissioner of the Mumbai Municipal Corporation Act 1	dministrators a Shri/Smt. h expressions a y. Municipal ed by the Dy. he time being h after called 'the For Greater Mun 888 his powers	re included unle Commissioner (Municipal Comr olding office, of e Corporation') o mbai has interalli	ss such inclusion C.P.D.) and any missioner (C.P.D. the SECOND Paf the THIRD PAF a deputed under duties under the	is inconsing officers and shall ART and section 56 provisions	the Dy. stent with the of Municipal l also include the Municipal and 56 (b) of a contained in
Chapter III of the Mumbai Municipal Corpo	-			•	
AND WHEREAS the Dy. Municipal Commprovision of the Mumbai Municipal Corporativited Tender / Quotation for supply of specification here to annexed.	oration Act 188	88 and in accord	ance with the pr	ovision of	the said Act,
AND WHEREAS the contractor/s has/have and his / their said Tender was accepted by hereinafter specified.					
AND WHEREAS the said Contractor			of Rs		as Contract
Deposit for the due and faithful performante Guarantee for Rs. (Rs.					

of Bank, for the payment interallia of the said amount of the Contract Deposit in the office of Dy. Municipal Commissioner (C.P.D.) for the due and faithful performance of this contract.

NOW THESE PRESENTS WITNESS and it is hereby agreed and declared between and by the parties hereto as follows:

1. Contract Peri	loa	l
------------------	-----	---

That this Contrac	t shall be deemed to have commence as from and after	Day of	Two Thousand
an	d shall continue in force, subject to the power of the Dean/	Ch.M.S./E.H.O	for the time being to
determine the sa	me previously as hereinafter mentioned until	Day of	Two
Thousand	Or until such time as the Supply / work h	erein mentioned	and shall have been
completed and co	ertified for by the Dean/ Ch.M.S./E.H.O. / purchasing Off	icer as being of	good quality and in
good working or	der.		

2. Contract deposit:

Successful tenderer shall have to pay a contract deposit @ 5% of the total contract cost in the form of Bankers' Guarantee from the Bankers approved by the Municipal Corporation of Greater Mumbai & same will be retain upto completion of AMC/CMC period.

3. Supply to be made according to the Order

The Contractor/s during the continuance of this contract shall supply the Equipment as per the specification of the Tender Form and/or carry out any and/or works specified in the Tender Form as per the order by the Dean/Ch.M.S./E.H.O.or any other Officer of the Corporation authorized in this behalf. (Such order to be in writing and signed by the said Officer) to the entire satisfaction of the Dean/Ch.M.S./E.H.O.or purchasing Officer, within stipulated period after receipt of the respective Order / opening of Letter of Credit.

3(a). Failure to execute Orders

If the Contractor/s fail to comply with the orders and / or carry out the work within the period stipulated, the Municipal Commissioner / Dean/ Ch.M.S./E.H.O./ purchasing Officer shall exercise his discretionary power to recover from the Contractor/s as agreed, liquidated damage or by way of penalty as may deem reasonable under the circumstance and the same shall be recovered from any dues of the Contractor/s.

3(b). Period

Unless otherwise stated elsewhere in this Contract, Equipment shall be delivered by the Contractor/s within stipulated period from the date of receipt of Order / Opening of Letter of Credit by the Corporation.

4. Place of Delivery

The Equipment ordered for shall be delivered by the Contractor/s at BMC. Hospital, or at such other Office or Establishment of the Corporation, situated within the limits of Greater Mumbai as may mentioned in the respective Order. All charges for carriage and / or delivery thereof and/or stacking at such place/s shall be borne by the Contractor/s. The said Equipment to be supplied shall be new and of sound quality and to be in proper working condition. The defective and / or damaged part and / or any other non-working functional part of the said Equipment shall be replaced forthwith by the Contractor/s and for which no charge of any nature whatsoever, shall be paid by the Municipal Corporation of Greater Mumbai.

5. Quality

The Equipment supplied by the Contractor/s in accordance with the contract, shall be new and of the best quality and in working condition of their respective kinds, in accordance with the Municipal specifications, if any and of the exact size, kind and description required and shall be subject to the approval of the party or parties signs the same and in case of their not being approved shall be liable to be rejected.

6. Penalty for Inferior Supply

If the equipment supplied is found of inferior quality or not as per the specification, the Contractor shall replace

the Equipment within one month from the date of intimation at the risk & cost of the Contractor and also liable to pay the fine imposed by the Municipal Commissioner, failing which Earnest Money Deposit & Contract Deposit of the Contractor shall be forfeited & the Tenderer shall be liable for penal action, including Blacklisting & etc. In addition to forfeiture of Earnest Money Deposit & Contract Deposit, if any fine is imposed by the Municipal Commissioner the same shall be payable by the contractor immediately on demand, failing which the same shall be recovered from other dues of the Contractor by the Corporation.

7. Risk & Cost Purchase

In case the Contractor/s, shall at any time during the continuance of these presents fail to supply satisfactorily the equipment within the prescribed time as herein provided and or in case shall fail at once to replace any part/s that may have been rejected as herein provided with other of approved quality, the Commissioner shall be at liberty forthwith to procure the same in the open market at the risk and cost of the contractor/s. Similarly if the work underlying the contract is not executed satisfactorily within the stipulated period or after the same having been disapproved wholly or partly is not rectified or re-done to the satisfaction of the Officer in Charge within the said specific period, the Commissioner shall get the same executed or rectified or re-done through any other agencies, at the entire risk of the contractor/s as to cost and consequences. The extra cost thereof (if any) and all expenses thereby incurred, to a maximum of 15 % shall be payable by and/or may be deducted from any moneys due or become due to the Contractor/s under this or any other contract/s between the Contractor/s and the Corporation. The Commissioner may, however fix such other subsequent date as he may think fit by which the delivery of the said article and or execution of the said work shall be completed.

8. Submission of Bill

The Contractor/s on completion of the delivery of the Equipment and after satisfactory Installation and commissioning of the Equipment and / or completion of the work mentioned in the respective order, shall present his/their bills in duplicate to the purchasing Officer within 8 (eight) days after satisfactory commissioning of the said Equipment.

9. Monetary dealings with the Municipal Employees

The Contractor/s shall not lend to or borrow from, or have or enter into any monetary dealings or transactions, either directly or indirectly, with any Municipal Employees, and if he / they or any of them shall do so, the Municipal Commissioner shall be entitle to terminate this contract forthwith and forfeit the Earnest Money Deposit / Contract Deposit without prejudice to the other rights and remedies of the Corporation, claim damages from the Contractor/s for the breach of the Contract.

10. **Breach of Contract**

11. **Dissolution of the Contract**

The Contractor/s shall not at any time dissolve partnership in respect of this contract or otherwise, change or alter their respective interests therein or assign, sublet or make over the present contract or the benefit thereof or any part thereof to any person/s whomsoever without the previous consent in writing of the Municipal Commissioner for the time being. In case the Contractor/s shall at any time commit any breach of this covenant then the Earnest Money Deposit / Contract Deposit shall be forfeited to the Corporation and shall be retained by the Corporation as and for liquidated damages.

12. Disputes etc to be decided by the Commissioner

If any dispute or difference shall arise between the Dean (Hospital) or other officer aforesaid on the one hand and the Contractor on the other hand, concerning the supplies to be made by the contractor/s under these present or any of them or the quantity or quality thereof the delivery, stacking measurement, weighment for making thereof or other action taken, or purchasing respectively to have been imposed or taken under these presents or regarding any default or alleged default or illegal or improper action on the part either of the Contractor or of the Dean/ Ch.M.S./E.H.O.or other Officer aforesaid or the mode of carrying out any giving effects to provisions of these presents, or concerning the meaning or intention of this contract or any part thereof or concerning any certificate or order made or purporting to have been made hereunder, or in any way whatsoever relating to interest of the Corporation or of the contractor, every such dispute and difference shall from time to time be referred to and be settled and decide by the Commissioner, who shall be competent to enter upon the subject matter of such dispute or difference with or without formal reference or notice to the Contractor or others concerned, or any of the and the Municipal Commissioner shall decide the same.

13. Commissioner's direction & decisions to be final and binding

The directions, decisions, certificates, orders and awards given and made on such reference as aforesaid of the Commissioner (which said direction, decisions, certificates, orders and awards respectively may be made from time to time) shall be final and binding upon the Corporation and the Contractor and shall not be set aside on account of any technical or legal defects therein or in the Contract, or on account of any formality, omission, delay or error of proceedings or on any ground or for any pretence, suggestion, charge insinuation of fraud, collusion and etc.

14. The Commissioner not compellable to defend or answer any suit relating to any certificate or award made by him.

The Commissioner shall not be made party to be required to defend or answer any action, suit or proceeding at the instance of the Corporation or the Contractor nor shall be compellable by any proceeding whatsoever to answer or explain and matter relating to any certificate or award made by him or to state or show how or why or on what grounds he settle, ascertained or determined or omitted to settle, ascertain or determine in any manner whatsoever, nor shall he be compellable to state or give his reasons for any proceeding whatsoever which he may take or direct to be taken in or about, or show to any person or persons for any purpose whatsoever any document whatsoever or any calculations or memoranda whatsoever in his possession or power relating thereto.

15. Corporation's lien over all moneys due to the Contractor or his deposit

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

16. Termination of the Contract

These presents in every clause matter and thing herein contained shall cease and determined on the expiry of the guarantee period on installation and satisfactory commissioning and performance of the said Machine. (Unless the same shall have been previously determined by the Commissioner as hereinbefore provided) except only as to the rights and remedies of the parties hereto in respect of any clause or thing herein contained which may have been broken or not performed.

17. Return of the Contract

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

18. Banker's Guarantee

In the event of the said deposit of Rs._____ having been made by the Contractor/s by delivery to the Commissioner of the General Undertaking and Guarantee of the Bankers of the Contractor/s under any of the provision of this Contract becoming subject to or liable for any penalty or damages liquidated or unliquidated or of the said deposit of Rs._____ becoming forfeited as hereinbefore mentioned and in any such case the amount of any such penalty or damages and the deposit so forfeited if not previously paid to the Commissioner shall immediately on demand be paid by the said Bankers to and may be forfeited by the Commissioner under and in terms of the said General Undertaking and Guarantee. If no penalty or damage or forfeiture of deposit claimable from or against the Contractor/s and Bankers shall at the expiration of this contract be freed and released from the obligations of the said General Undertaking and Guarantee in respect of this contract without prejudice, however, to the continuing liability of the Contractor/s and of the said Bankers and the right of the Commissioner and / or the Corporation to claim subsisting Tender or Contract entered into by the Contractor/s with Commissioner and / or the Corporation.

19. **Partnership**

Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these present shall if signed in the partnership name by any one of the Contractor/s be of a good and sufficient discharge to the Commissioner and Corporation in respect of the money or security purporting to be acknowledged thereby and in the event of the death of any contractors, during the pendency of this contract it is thereby expressly agreed that every receipt by any of the surviving Contractor/s shall if so signed as aforesaid, be a good and sufficient discharge as aforesaid. PROVIDED that nothing in this clause contained shall be deemed to prejudice or affect any claim which the Commissioner or Corporation may hereafter have against the legal representatives of any Contractor/s so dying or in respect of any breach of any of the conditions hereof. PROVIDED ALSO that nothing in this clause contained shall be deemed to prejudice or affect the respective rights or obligations of the Contractor/s and of the legal representatives of any deceased Contractor/s inter se.

20. Charges

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

21. Singular – Plural

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

22. <u>Meaning</u>

The Word 'The Municipal Commissioner' or 'Commissioner' wherever they occur in this Tender or in the Contract shall be construed to mean 'Additional Municipal Commissioner'.

23. Acknowledgement

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

24. Penalty

If the contractor fails to comply with the order within the delivery period stipulated, the municipal Commissioner/ D.M.C.(C.P.D) / Dean/ Ch.M.S./E.H.O./ Intending Officer shall exercise his discretionary power either :-

To recover from contractor as agreed, the liquidated damages or by way of penalty half percent of the price of the equipment which the contractors has failed to deliver as aforesaid per week or part thereof during which the delivery of such equipment may be in arrears subject to maximum limit @ 10% of the balance amount of the stipulated price of the equipment undelivered. Such penalty is to be deducted always by the consignee from the contractors balance bill, B.G. or EMD or any money due to the contractor from BrihanmumbaiMahanagarpalika.

OR

To cancel the contract and orders and forfeiture of EMD, contract Deposit and blacklisting the firm/company

along with their partners/ directors.

25. Guarantee and repair during the guarantee period

The Contractor/s shall for a period of Thirty Six calendar months after the acceptance and satisfactory Installation and commissioning of the equipment, maintain, uphold and keep them in thorough repairs and working order at their own cost and expenses and to the entire satisfaction of the Municipal Commissioner or the Dean/Ch.M.S /E.H.O. or the purchasing Officer, the entire Machinery / Equipment and shall also be responsible for and be liable under the provisions of this clause to make good any defect that may during that period develop in the normal and proper working of the Machinery / Equipment. In case of repairs of Machinery / Equipment which is not manufactured in India, the manufacturer, the 100% Indian subsidiary of foreign manufacturer, Subsidiary of principle Foreign Manufacturer / sister concern of Foreign manufacturer / Associate of Foreign manufacturer / joint venture of Foreign manufacturer duly registered in India / affiliate of Foreign manufacturer duly registered in India

Distributor /Dealer / Importer /Traders/agent during the guarantee / warranty period shall bear all the taxes, custom duties, levies, to & fro cost of transportation etc. of the Machinery / Equipment while the same is taken away from India and returned to India (i. e. Municipal Hospital) duly repaired by the Manufacturer. During the entire period of guarantee the Tenderer shall replace the equipment and or part of the equipment entirely on its break down / non functional, which shall be at the cost of the Tenderer and includes the labour charges, transport charges and etc. shall also be borne by the Tenderer. The tenderer should assure an up-time guarantee of at least 96% (calculated on the basis of 24 hours a day and seven days a week). If this is not done, a penalty @ 1% per day of Contract Cost of equipment will be imposed on the tenderer and same will be recovered from Contract Deposit or payment due if any.

26. Maintenance contract:

i. Service and annual maintenance contract:

The successful tenderer shall have to enter into Annual Maintenance Contract for at least five years after the completion of warranttee period of 36 months at the rate of 3% of equipment cost per year, rate will be fixed for 5 years. The Annual Maintenance Contract shall include the repair and maintenance of equipment and plant and all accessories supplied by the tenderer as a part of this tender. It is the responsibility of the tenderer to see that the equipment and all accessories are maintained in proper functioning condition, whether any spare parts/accessories be manufactured by the tenderer or not.

a) The tenderer should assure an up-time guarantee of at least 96% (calculated on the basis of 24 hours a day and seven days a week). During AMC period, the Service Engineers will have to make 04(four) compulsory Quarterly visits per year for preventive maintenance while breakdown calls (unlimited) will be attended within 72 hours (3 days) from the date & time of lodging of complaint with the Service Engineer through phone / fax/person/post/courier/e-mail.

A service call shall be attended even on Sundays and Public Holidays. The complaint /message will be sent to the address given in this contract as well as in supply order.

- **b)** If the breakdown is attended and rectified within 120 hours (5 days) at our sits, no penalty/ deduction will be made from the AMC bill.
- c) If it is not rectified within 120 hours (5 days) i.e. stipulated time by the Service engineer at our site, deduction will be made @ double the prorata basis AMC charges per day from the bill after allowing stipulated period of 120 hours i.e. 5 days.
- d) If the problems are required to be rectified at Service Centre site /workshop / premises, additional 7 days period will be allowed i.e. total 10 days from the day of initial breakdown report. Normal AMC charges for additional 7 days period will be deducted from the bill of AMC on prorata basis. If the equipment is not made available in all respect after rectification from the Service Centre site/ premises within 10 days, there will be a provision to deduct @ double the AMC charges/ day on prorata basis from the bills for delayed period.

If Only cost of spare parts and consumables will be paid separately as per the rate

quoted for spares & consumable as per list uploaded while submission of tender.

OR

ii. Service and comprehensive maintenance contract:

The successful tenderer shall have to enter into comprehensive Maintenance contract for at least five years after the completion of warrantee period of 36 at the rate of 5% of equipment cost per year, rate will be fixed for 5 years. The comprehensive Maintenance contract shall include the equipment and all accessories supplied by the tenderer as a part of this tender. It is the responsibility of the tenderer to see that the equipment and all accessories are maintained in proper functioning condition by providing spare parts where required, whether such spare parts/accessories be manufactured by the tenderer or not.

- a) The tenderer should assure an up-time guarantee of at least 96% (calculated on the basis of 24 hours a day and seven days a week). During CMC period, the Manufacturer's Service Engineers will have to make 04(four) compulsory Quarterly visits per year for preventive maintenance while breakdown calls (unlimited) will be attended within 72 hours (3 days) from the date & time of lodging of complaint with the Service Centre through phone / fax/person/post/courier/e-mail. A service call shall be attended even on Sundays and Public Holidays. The complaint /message will be sent to the address given in this contract as well as in supply order.
- **b**) If the breakdown is attended and rectified within 120 hours (5 days) at our sits, no penalty/ deduction will be made from the CMC bill.
- c) If it is not rectified within 120 hours (5 days) i.e. stipulated time by the Service Engineer at our site, deduction will be made @ double the prorata basis CMC charges per day from the bill after allowing stipulated period of 120 hours i.e. 5 days.
- d) If the problems are required to be rectified at Service Centre site / workshop / premises, additional 7 days period will be allowed i.e. total 10 days from the day of initial breakdown report. Normal CMC charges for additional 7 days period will be deducted from the bill of CMC on prorata basis. If the equipment is not made available in all respect after rectification from the Service Centre site/ premises within 10 days, there will be a provision to deduct @ double the CMC charges/ day on prorata basis from the bills for delayed period.

27. Scope of the Contract

And where it is further hereby agreed between the parties of all the parts herein that the Terms and conditions of the Instruction to the Tenderers including the Annexures thereof and the specification of the equipment shall form parts & parcel of these Contract Agreement.

28. Operation of the Contract Clauses

The D.M.C.(C.P.D.) / Dean/ Ch.M.S./E.H.O.or his / her successor/s for the time being holding the office of the D.M.C.(C.P.D.) / Dean/ Ch.M.S./E.H.O. shall be the competent officer to operate the various clauses under this contract and to sign and serve notices under the various clauses of the said contract. All such notices signed by the Dean/ Ch.M.S./E.H.O.shallbe deemed to have been signed by the Municipal Commissioner or the Additional Municipal Commissioner.

IN WITNESS WHEREOF the Contractors and D.M.C.(C.P.D.)have hereunto set hands and seal of the Corporation has been hereunto affixed.

SIGNED, SEALED AND DELIVERED
Ву
Of
In the presence of
1)

By	۷)	CONTRACTOR
D.M.C.(C.P.D.) in the presence of D.M.C.(C.P.D.) D.M.C.(C.P.D.) D.M.C.(C.P.D.) D.M.C.(C.P.D.) The Common Seal of the Municipal	SIGNED, SEALED AND DELIVERED	
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Municipal Secretary Contract examined with the Tender and Resolution of the Standing Committee No of and found correct.	Mumbai.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
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Contract examined with the Tender and Resolution of the Standing Committee No of and found correct.	Municipal Secretary	
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Annexure - 13

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362 (To be uploaded in Packet 'A')

DETAILS OF LITIGATION HISTORY

I M/s.		participa	ting in the above subject Bid,	here by declared t
there is	no litigation hist	tory against me during the las	t 5 years, prior to due date of the	e tender.
		Or		
I M/s.		participat	ing in the above subject Bid, he	ere by declared that
litigatio	on history against	t me during the last 5 years, p	rior to due date of the tender, is	as under
Sr. No.	Year	Action taken	Name of the Organization	Remarks
1.			46,	
2.			86,	
3.		~	C'	
4.			/	
5.		80.		

I further declared that information furnished above is correct, and in future, if BMC finds that information disclosed is false or in complete, then BMC can directly disqualify my bid and can initiate penal action including blacklisting of the firm.

Full Signature of the tenderer with Official Seal and Address

(The above undertaking shall be submitted by the bidder on Rs 200/- stamp paper)

ANNEXURE – 14

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362 (To be uploaded in Packet 'A') FORM OF INTEGRITY PACT

This Agreement (nereinafter called the integrity Pact) is entered into onady of themonth of
20 between Municipal Corporation of Greater Mumbai acting through Shri
(Name and Designation of the officer) (hereinafter referred to as the "M.C.G.M." which expression shall
mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and
M/s(Name of the company) represented by Shri
, Chief Executive Officer / Authorised signatory (Name and Designation of the officer) (hereinafter called
as the "Bidder / Seller" which expression shall mean and include, unless the context otherwise requires, his
successors and permitted assigns) of the Second Part.
WHEREAS THE BMC invites for the
(Name of the Stores / Equipment / Service, Tender No. & Date) and the Bidder /Seller is
willing to submit bid for the same and
WHEREAS the BIDDER is a private Company / Public Company/ Government Undertaking / Partnership

Firm / Ownership Firm / Registered Export Agency, constituted in accordance with the relevant law in the matter and the BMC is Urban Local Body.

NOW, THEREFORE

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the BMC to obtain the desired said stores / equipment / services / works at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling SERVICE PROVIDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BMC will commit to prevent corruption, in any form, by its officials by following transparent procedures. In order to achieve these goals, the BMC will appoint an external independent monitor who will monitor the tender process and execution of the contract for compliance with the principles mentioned above.

The parties hereto agree to enter into this Integrity Pact and agree as follows:-

1. COMMITMENTS OF THE M.C.G.M.

- 1.1 M.C.G.M. commits itself to take all measures necessary to prevent corruption and follow the system, that is fair, transparent and free from any influence / prejudice prior to, during and subsequent to the currency of the contract to be entered into to obtain stores / equipments / services at a competitive prices in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement.
- 1.2 The M.C.G.M. undertakes that no employee of the BMC, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

- 1.3 M.C.G.M. will during tender process treat all service providers with equity and reason. The M.C.G.M. before and during tender process provide to all service providers the same information and will not provide to any bidder any confidential / additional information through which the bidder could obtain an advantage in relation to the tender process or execution of contract.
- 1.4 In case any such proceeding misconduct on the part of such official(s) is reported by the Bidder to the BMC with full and verifiable facts and the same is prima facie found to be correct by the Municipal Corporation of Greater Mumbai, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BMC and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BMC the proceedings under the contract would not be stalled.

2. COMMITMENTS OF THE SERVICE PROVIDERS / CONTRACTORS

- 2.1 The Bidder commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract states in order to secure the contract or in furtherance to secure it.
- 2.2 The Service providers will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BMC, connected directly or indirectly with the bidding process or to any BMC person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 2.3 The Bidder further undertakes that it 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 BMC 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 BMC for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with BMC.
- 2.4 The Service providers/ Contractors will not enter with other service providers into any undisclosed agreement or understanding, whether formal or informal, in particular regarding prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.5 The Service providers / Contractors will not commit any offence under relevant anti corruption laws of India. Further, the service providers will not use improperly, for purposes of competition for personal gain or pass on to others, any information or document provided by BMC as part of the business relationship regarding plans, technical proposals and business details including information obtained or transmitted electronically.
- 2.6 The Service providers/ Contractors of foreign origin shall disclose the names and addresses of agents /representatives in India, if any, and Indian bidder shall disclose their foreign principles or associates.
- 2.7 The Bidder shall not lend to or borrow any money from or enter into any monitory dealings or transactions, directly or indirectly, with any employee of the BMC.
- 2.8 The Bidder will not bring any Political, Governmental or diplomatic influence to gain undue advantage in its dealing with BMC.
- 2.9 The Bidder will promptly inform the Independent External Monitor (of M.C.G.M.) if he receives demand for a bribe or illegal payment / benefit and If he comes to know of any unethical or illegal practice in M.C.G.M.
- 2.10 The Service providers / Contractors will disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract while

presenting his bid.

- 2.11 The Service providers / Contractors shall not lend to or borrow any money from enter into any monetary dealings directly or indirectly, with any employee of the M.C.G.M. or his relatives.
- 2.12 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.
- 2.13 The Service providers / Contractors will undertake to demand from all sub contractors a commitment in conformity with this Integrity Pact.
- 2.14 The service providers / Contractors will not instigate third persons to commit offences outlined above or be an accessory to such offences.

3. PREVIOUS TRANSGRESSION

- 3.1 The Bidder declares that no previous transgressions occurred in the last 3 years immediately before signing of this Integrity Pact, with any other company in any country or with Public Sector Enterprises in India in respect of any corrupt practices envisaged hereunder that could justify BIDDER's exclusion from the tender process.
- 3.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract if already awarded, can be terminated for such reasons.
- 4. DISQUALIFICATION FROM TENDER PROCESS AND

EXCLUSION FROM FUTURE CONTRACTS

If the Service providers/ Contractors or anyone employee acting on his behalf whether or without the knowledge of the Bidder before award of the contract has committed a transgression through a violation of aforesaid provision or in any other form such as put his reliability or credibility into question, the M.C.G.M. is entitled to exclude the bidder from the tender process or to terminate the contract if already signed and take all or any one of the following actions, wherever required..

- 4.1 To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the Bidder. Further, the proceedings with the other Service providers would continue.
- 4.2 The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit / Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the M.C.G.M. and M.C.G.M. shall not be required to assign any reasons therefore.
- 4.3 To immediately cancel the contract, if already signed, without giving any compensation to the Bidder.
- 4.4 To recover all sums already paid with interest thereon at 5% higher than the prevailing Base rate of State Bank of India.
- 4.5 If any outstanding payment is due to the Bidder from M.C.G.M. in connection with any other contract, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- 4.6 To encash any advance Bank Guarantee and performance bond/warranty, if furnished by the Bidder, in order to recover the payment already made by M.C.G.M. along with interest.
- 4.7 To cancel all other contracts with the Bidder. The Bidder shall be liable to pay compensation for any loss or damages to the M.C.G.M. resulting from such cancellation / rescission and the M.C.G.M. shall be entitled to deduct the amount so payable from the money due to the Bidder.
- 4.8 Forfeiture of Performance Bond in case of a decision by the M.C.G.M. to forfeit the same without assigning

any reason for imposing sanction for violation of the Pact.

- 4.9 The decision of M.C.G.M. to the effect that the breach of the provisions of this Pact has been committed by the Bidder shall be final and conclusive on the Bidder.
- 4.10 The Bidder accepts and undertakes to respect and uphold the absolute right of BMC to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack of any hearing before the decision to resort to such exclusion is taken.
- 4.11 To debar the Service providers/ Contractors from participating in future bidding process of M.C.G.M. for a minimum period of three years.
- 4.12 Any other action as decided by Municipal Commissioner based on the recommendation by Independent External Monitors (IEMs).

5. FALL CLAUSE

5.1 The Bidder undertakes that it has not supplied similar products / systems or subsystems in the past six months in the Maharashtra State for quantity variation upto -50% or +10%, at a price lower than that offered in the present bid in respect of any other Ministry / Department of the government of India or PSU or BMC and if it is found at any stage that similar products / systems or sub systems was supplied by the BIDDER to any other Ministry / Department of the Government of India or a PSU or BMC at a lower price, then that very price will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BMC, if the contract has already been concluded, else it will be recovered from any outstanding payment due to the bidder from BMC.

6. EXTERNAL INDEPENDENT MONITOR / MONITORS

- 6.1 The M.C.G.M. appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the Parties comply with the obligations under this Agreement.
- 6.2 The Monitor is not subject to instructions by the representatives of parties and perform his functions neutrally and independently and report to the Municipal Commissioner / concerned Additional Municipal Commissioner.
- 6.3 Both the parties accept that the IEM has the right to access, without restriction, to all documentation relating to the project / procurement, including minutes of meetings.
- 6.4 The Bidder shall grant the IEM upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to sub contractors.
- 6.5 The IEM is under contractual obligation to treat, the information and documents of the Bidder/Contractor/sub-contractor, with confidentiality.
- 6.6 The BMC will provide to the IEM sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the IEM the option to participate in such meetings.
- As soon as the IEM notices, or believes to notice, a violation of this Agreement, he will so inform the Additional Municipal Commissioner. The IEM can in this regard submit non-binding recommendations. If Additional Municipal Commissioner has not, within a reasonable time, taken visible action to proceed against such offence, the IEM may inform directly to the Municipal Commissioner.
- 6.8 The IEM will submit a written report to the Municipal Commissioner / Additional Municipal Commissioner within 8 to 10 weeks from the date of service or intimation to him by M.C.G.M./ Bidder and should the occasion arise, submit the proposal for correcting problematic situations.

- 6.9 The word "IEM" would include both singular and plural.
- 6.10 Bothe parties accept, that the recommendation of IEM would be in the nature of advise and would not be legally binding. The decision of Municipal Commissioner in any matter/ complain will be the final decision.

7. VALIDITY OF THE PACT

- 7.1 The validity of this Integrity Pact shall be from the date of its signing and extend upto two years or the complete execution of the contract to the satisfaction of both the M.C.G.M. and BIDDER / Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 7.2 If any claim is made/lodged during the validity of this contract, such claim shall be binding and continue to be valid despite the lapse of this pact unless it is discharged / determined by the Municipal Commissioner / Additional Municipal Commissioner of the M.C.G.M.

8. FACILITATION OF INVESTIGATION

In case of any allegation of violation of any provisions of this Pact or payment of commission, the BMC or its agencies OR Independent External Monitor shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible health for the purpose of such examination.

9. MISCELLANEOUS

- 9.1 This Agreement / Pact is subject to the Indian Laws, place of performance and jurisdiction is the registered office of the M.C.G.M. i.e. Mumbai and the actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extent law in force relating to any civil or criminal proceedings.
- 9.2 If the Contractor is a partnership, this Agreement must be signed by all partners members.
- 9.3 Should one or several provisions of this Agreement turn out to be invalid, the remainder of this Pact remains valid. In this case, the Parties will strive to come to an Agreement to their original intentions.
- 10. The Parties hereby sign this Integrity Pact at -----on-----on-----

BMC	BIDDER/SELLER	
Signature	<u> </u>	
Name of officer		
Designation		
Name of Compan		
Address		
Dated		

Signature	WITNESS-I(BMC)	Witness-I(BIDDER/SELLER)	
Designation	Signature		
Name of Company Address Dated	Name of officer		
Address	Designation		
Dated	Name of Company		
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ANNEXURE - 15

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

INTERNAL GRIEVANCE REDRESSAL MECHANISM

M.C.G.M. has formed an internal Grievance Redressal Mechanism for redressal of bidder's grievances. Any Bidder or prospective Bidder aggrieved by any decision, action or omission of the procuring entity being contrary to the provisions of the tender or any rules or guidelines issued therein, in Packet "A", "B" & "C" can make an application for review of decision of responsiveness in Packet "A", "B" & "C" within a period of 7 days or any such other period, as may be specified in the Bid document.

While making such an application to procuring entity for review, aggrieved bidders or prospective bidders shall clearly specify the ground or grounds in respect of which he feels aggrieved.

Provided that after declaration of a bidder as a successful in Packet "A" (General Requirements), an application for review may be filed only by a bidder who has participated in procurement proceedings and after declaration of successful bidder in Packet "B" (Technical Bid), an application for review may be filed only by successful bidders of Packet "A". Provided further that, an application for review of the financial bid can be submitted, by the bidder whose technical bid is found to be acceptable / responsive.

- 1) If a Bidder is not satisfied with the decision of responsiveness/ non responsiveness in Packets 'A', 'B' or 'C', by the concerned HOD, he may appeal to D.M.C.(C.P.D.) by paying fee of Rs. 25,000/-.
- 2) D.M.C.(C.P.D.) will assign the work of co-ordination of various activities and administration work to G.C.R. to nominated Registrar.
- 3) The Committee for hearing grievances and passing orders will be constituted as follows;
 - (a) The Committee will comprise of D.M.C./ Director/ Jt.M.C. of tender inviting department and D.M.C./ Director / Jt.M.C. of the department for which tender is being invited.

For example, if tender is invited by C.P.D. dept, for K.E.M. Hospital then the Committee will be of DMC(CPD) and DMC(PH).

(b) In case the tender inviting department and department for which tender is being invited are same then the concerned DMC/ Director/ Jt.M.C. of the same department and DMC (CPD) will be the members of the Committee.

For example, if tender is invited by Dean(KEM) for KEM Hospital then the Committee will be DMC (PH) and DMC (CPD).

In tabular format:

Tender inviting Department	Work belonging Department
DMC(CPD) or DMC/ Director / Jt.M.C. of concerned Department	Concerned DMC/ Director / Jt.M.C.

- 4) In case the work is pertaining to various departments then concerned DMC / Director/Jt.M.C. having major contribution of work will be one of the member of the Committee.
- 5) The Committee will hear the grievances of bidder within 30 days on receipt of bidder's application and will pass an order within 45 days.
- 6) If Bidder is not satisfied with the decision of the above Committee, he may appeal to the concerned Addl.

Municipal Commissioner of Tender Inviting Department. The Addl. Municipal Commissioner will hear the case within 45 days from the date of receipt of application for second appeal from the bidder and will pass the order within 60 days.

No application shall be maintainable before the redressal Committee in regard of any decision of the M.C.G.M. relating to following issues:

- Determination of need of procurement
- The decision of whether or not to enter into negotiations.
- Cancellation of a procurement process for certain reasons.

Additional Municipal Commissioner and/or Grievance Redressal Committee, if found, come to the conclusion that any such complaint or review is of vexatious, frivolous or malicious nature and submitted with the intention of delaying or defeating any procurement or causing loss to the procuring entity or any other bidder, then such complainant shall be punished with fine, which may extend to Five Lac rupees or two percent of the value of the procurement, whichever is higher.

Full Signature of the tenderer with Official Seal and Address

ANNEXURE – 16

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23

Bid No. 7200038362

(To be uploaded in packet B) Details of CE/US FDA Certificate

Bidder shall submit the details of CE and/or US FDA certificate along with documentary evidences.

Bidders are requested to note that as per required certificates as mentioned in specification, the relevant data from concerned certificate shall be filled properly in below format with signature of bidder.

For Medical device and In vitro Diagnostics Medical Device

"The equipment must have CE marked from European confirmatory (EC) notified body issued from European address and / or USFDA and documentary evidences to that effects shall be uploaded".

A) CLASSIFICATION: CLASS Is, Im, IIa, IIb & Class III

Description	Whether complies	Specify
1. CE certificate issued from EU notified body is must for devices under class Is, Im, IIa, IIb & Class III.	or not	
This certificate shall be on letter head of Notified bodies with	**	
a) Body identification number and address of Notified Body		
b) Certificate number and validity of certificate		
c) Product name/line (Quoted product category etc.)	,	
d) Name of appropriate directives		
e) Name and address of manufacturer,		
f) Product classification, Name of EU representative if any		

2. If CE certificate as mentioned (1) above is not for the quoted model and issued for Product specific or general product line, then

Description	Whether complies or not	Specify
a. Shall be accompanied with Declaration of conformity by manufacturer or EU representative of Manufacturer for the quoted model		
b. Endorsed (By notified Body) technical documents submitted to notified body mentioning model/s no./s		
or		
List of model/s approved by notified body with classification if any on letter head of notified body		

3. If CE certificate as mentioned (1) above is for the quoted model then also

Description	Whether complies or not	Specify
a. Shall be accompanied with Declaration of conformity by manufacturer		
or		
EU representative of Manufacturer for the quoted model		

Note: For equipment where other equipments also are part of the main equipment

Description	Whether complies or not	Specify
a) Documentary evidence to show all such equipment/s is/are covered by single certificate is required from notified body additional to above Sr. No. (A) -1 & 2 or 3.		
or		
b) Individual certification for each equipment as mentioned in Sr. No. (A)-1 & 2 or 3 above is required		14
c) If equipment manufacturer by different /other manufacturer is part of supplied equipment as per OEM agreement, then CE certificate issued to manufacturer is required from notified body as mentioned in sr. no. (A) $-$ 1,2,3 along with the copy of OEM agreement		OIL
	s exeric	
	,	
Rottal		
Rottal		
Rottal		

B) CLASSIFICATION: CLASS I only.

This route is self-declaration or self-certification and is described in Annex VII Module A, EC Declaration of Conformity. The manufacturer ensures and formally declares, via a written statement, that the products meet the applicable provisions of the Directive.

Following Documents are required

Description	Whether complies or not	Specify
a. Declaration of conformity by manufacturer or EU representative of Manufacturer for the quoted model.		
b. Documentary evidence regarding firm registered with EEA (European Economic Area) Competent authority is required		O
or		
European Representative registered with EEA (EUROPEAN ECONOMIC AREA) Competent authority appointed by firm is required	-OC	
or		
Other documents like certificates from notified body along with declaration of conformity is required		

Declaration of Conformity

The declaration of conformity should have following:-

Description	Whether complies or not	Specify
a) the name and address of manufacturer		
b) Notified body Name and address if any with certificate No.		
c) EU representative of manufacturer if any		
d) identification of the product allowing traceability		
e) list of relevant directives & Harmonized standards.		
f) Declaration statement, name and position/job title of person signing (This should be someone with enough responsibility to ensure the declaration is true which is affirmed by their signature and date)		

CE CERTIFICATION REQUIREMENT FOR PRODUCTS UNDER IVD (98/79/EC) CLASSIFICATION :1)DEVICE FOR SELF TESTING, LIST 'B' & LIST 'A' DEVICES

Description	Whether complies or not	Specify
CE certificate issued from EU notified body is must		
This certificate shall be on Letter head of Notified Bodies with		
a) Body identification number and address of Notified Body		.1
b) Certificate number and validity of certificate		
c) Product name/line (Quoted product category etc.),		
d) Name of appropriate directives		
e) Name and address of manufacturer		
f) Product classification, Name of EU representative if any		
Shall be accompanied with Declaration of conformity by manufacturer or EU representative of Manufacturer.		

CLASSIFICATION: GENERAL IVD

This route is self-declaration or self-certification. The manufacturer ensures and formally declares, via a written statement, that the products meet the applicable provisions of the Directive.

Description	Whether complies or not	Specify
a. Declaration of conformity by manufacturer or EU representative of Manufacturer for the quoted model.		
b. Documentary evidence regarding firm registered with EEA (EUROPEAN ECONOMIC AREA) Competent authority is required		
or		
European Representative registered with EEA (EUROPEAN ECONOMIC AREA) Competent authority appointed by firm is required		
or		
Other documents like certificates from notified body along with declaration of conformity is required.		

Declaration of Conformity

The declaration of conformity should have following:-

Description	Whether complies or not	Specify
a) the name and address of manufacturer,		
b) Notified body Name and address if any with certificate No		
c) EU representative of manufacturer if any		4
d) identification of the product allowing traceability		14
e) list of relevant directives & Harmonized standards		
f) Declaration statement, name and position/job title of person		O
signing (This should be someone with enough responsibility to		
ensure the declaration is true which is affirmed by their signature		
and date).		

US FDA

	Description	Whether complies or not	Specify
US FDA Certificate			

Documents required to be submitted in support of USFDA Certification

Following documents are required for confirmation of USFDA approval certificate

Description	Whether complies or not	Specify
a) Approved 510 (k) notification documents for equipment offered model is required.		
or		
b) Documents to establish the firm and offered model register with US FDA is required		

Manufacturer on their letter head needs to provide the link of notified body and / or USFDA for concerned certificate/s submitted as per specification, so that same can be verified from website of Notified body/USFDA

Note:

Competent Authority

Under the terms of the Medical Device Directive a competent authority is nominated by the Government of each member state to monitor and ensure compliance with its provisions.

Notified Body

The organization which will check whether the appropriate conformity assessment procedures have been followed is known as the Notified Body. It is a certification organization which the Competent Authority, of a Member State designates to carry out one or more of the conformity assessment procedures described in the annexes of the Directives.

List of approved Notified body under 93/42/EEC (Medical devices) is available on

http://ec.europa.eu/growth/tools-databases/nando/index.cfm?fuseaction=directive.notifiedbody&dir_id=13 and

under 98/79/EC (Invitro Diagnostic medical devices is available on

http://ec.europa.eu/growth/tools-databases/nando/index.cfm?fuseaction=directive.notifiedbody&dir_id=20

Authorized Representative

A non-EU Manufacturer's European Authorized (Authorised) Representative is the one who will represent the manufacturer to deal with the CE Marking vigilance authorities from the Member States. It is required by the EU legislation that a non-EU manufacturer of Medical Devices must print its European Authorised Representative name, address & contacting details on the packaging/labeling of the medical devices sold onto the EEA (EU & EFTA) market.

EU:- European Union.

EFTA:- European Free Trade Association.

EEA:-European Economic Area.

ANNEXURE - A

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Page Bid No. 7200038362 (To be uploaded in folder 'C')

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Forma For Irrevocable Undertaking

(on ₹ 500/- Stamp paper)

	I Shri/ Smt year Indian inhabitant.
Pro	opritor/Partner/ Director of M/s
Res	sident atdo hereby give Irrevocable undertaking as under.
1)	I say & undertake that as specified in section 171 of GST 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 BMC 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 later stage, BMC 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.
Sol	lemnly affirmed at DEPONANT
Thi	is day of BEFORE ME
Int	erpreted Explained and Identified by me

<u>Annexure-B</u> Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

(It shall be uploaded in Folder C)

Sr. /HS			inclusive of all taxes and	Bidder To Indicate The Amount Of Applicable Taxes.							
	SAC /HSN	Item/Work Description			CGST		SGST		IGST		er Taxes f Any
	Code			%	Amount	%	Amount	%	Amount	%	Amount
											>
										7	
Total									0.		

Note-1)Bidder shall submit tax structure for all items including taxes on CMC rates.

²⁾ Annexure B shall be certified by Chartered Accountant.

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

TECHNICAL SPECIFICATIONS

The manufacturer/bidder must quote the latest 'state of the art' 3 Tesla MR System or better as per the specifications below.

The quoted model must be launched year 2016 onwards.

The offered model should be USFDA and European CE approved (authentic and legible certificate for the same to be annexed).

Also, the vendor will guarantee that the system supplied is not refurbished and the MR system quoted is the latest best available model in the segment (3T MR scanner with 70 cm or more bore) quoted, at the time of delivery and should submit an undertaking in this regard.

		Technical Specification as Per Tender
Sl.	Features	Essential Specification
No.		
1	Magnet	3Tesla (superconducting) Magnet with approximately 70 cm or
		more bore diameter.
		The magnet should have display for information on coil connectivity,
		physiological curves, start Scan. Switching off alarms, automatic
		transfer from different positions.
	a) Field	Magnet should be manufactured from USA/Europe / Japan
	· ·	Helium only 3T (superconducting) Magnet along with Facility
	Strength b) Field	for quick Shutdown of the magnet in case of emergency.
	Stability	(i) Should have active shielding, external interference shielding
	overtime	with good field stability. (ii) Montion the DE frequency of energian and the field drift
		(ii) Mention the RF frequency of operation and the field drift.
	c)	(i) Guaranteed homogeneity of magnet by VRMS method should
	Homogeneity	be given. Specify homogeneity in VRMS at 10 cm, 20 cm, 30 cm and 40 cm DSVand at max FOVachievable with the quoted
		scanner.
		(ii) Should be very good for Single voxel and CSI spectroscopy,
		Specify values
	d) Magnet Bore	(i)70 cm or more magnets bore diameter, after positioning of
	d) Wagnet Bore	gradient, shim and RF cons
	e) Active	(i) Quote values for 5 Gauss and 1 Gauss line.
	Shielding/	
	Fringe field	
	f) Ext.	Ext. Interference shield (sufficient to house the Magnet,
	Shielding	Anesthesia and Physiologic monitors should be provided
	g) Magnet	(i) The magnet should be having zero boil off rate.
	Cooling	(ii) Devices for helium level monitoring in the magnet should be
	System	supplied.
		(iii) Liquid helium should be supplied during warranty period and
		Comprehensive AMC
		(iv) The vendor should include the Cold Head maintenance and
		replacement during warranty period and during Comprehensive
		AMC
	(h) Shim	(i) High performance and highly stable shim system with global
	System	and localized manual and auto shimming for high homogeneity

		magnetic field required for imaging (MRI/ fMRI), single voxel
		spectroscopy (MRS), and spectroscopic imaging (MRS), 3D
		shimming for volume imaging and CSI.
		(ii) Auto shim (global and voxel shim) should take minimum time
		to shim the magnet with patient in position (specify the time).
		(iii) Specify number of shim coils including higher order.
		(iv) Second order /High order shimming should be standard
2	Patient Table	(i) Computer controlled subject table movement in vertical and
		horizontal direction.
		(ii) The vendor should supply fully motorized computer-
		controlled table, with movements in vertical and horizontal
		directions for the main MRT patient table.
		(iii) Subject table should be able to take at least 140 Kg load.
		(iv) Emergency manual Traction of the subject from the magnet.
	b) Patient	(i) Patient monitoring devices for ECG, respiratory, pulse rate,
	monitoring	oxygen saturation, ETC02 at the console etc. A comprehensive
	momtoring	solution at patient side and at main console capable of gating the
		sequence protocols with respect to patient's heart (ECG) and
	\ D	respiratory rates.
	c) Patient	(i) Two-way Patient communication with headphone, microphone
	Comfort	and necessary accessories.
	Features	
		(ii) Patient audio alarm
		(iii) Lighting
		(iv) MR compatible Music system (complete) should be able to
		play inside the gantry
		(viii) Provide other standard patient comfort devices, with quoted
		system (please specify)
3	Gradient	(i) Actively shielded gradient system in X, Y, Z planes.
	System	
	a) General	
		(ii) Minimum Gradient Strength should be 60mT/m or more
		along each axis at a slew rate of 200 T/m/s in each axis.
		Gradient Strength should be such that minimum amplitude of
		atleast60mT/mat minimum slew rate of 200T/m/s with minimum
	α	rise time from 0 to60mT/m should be 300µs.
	X O	<u>'</u>
		Minimum rise time from 0 to 44mT/m should be 220µs.
		The system should have 64 independent RF receiver channels
7		(which can be demonstrated)
		(iii) Quote the Slew rate at the maximum gradient strength
		(iv) Specify the linearity of the gradients at full FOV.
		(v) 100% duty cycle for full FOV.
	b) Resolution	(i) Specify the minimum and maximum FOV achievable for the
	Parameters	quoted MR system (preferable to have 10 – 500 mm FOV).
		(ii) Specify min. slice thickness in 2D and 3D modes at 128x128.
		256x256. 512x 512 and 1024x1024 matrices
		(iii) The system should be capable of performing single shot EPI
		in $64x64$, $128x128$, and 256×256 matrixes) including
	1	Conventional and fluoroscopic imaging in the three orthogonal

		and also oblique planes.
		(iv) Effective cooling system for gradient coil and power supply
		for uninterrupted operation during summers also. The system
		should have efficient and adequate provision for eddy current
		compensation.
4	RF Transmitter,	The vendor should quote the latest RF transmit technology
4	Receiver, Coils	available with them globally, as per the datasheet.
	a} RF	(i) A fully digital RF system capable of transmitting enough
	Transmitter	power (please quote the value) (as per FDA guidelines), and the operatingfrequency should cover 1H.
		(ii) Specify max. transmitter RF power available (at 50 ohm impedance)
	b) RF Receiver	(i) Optical/ Digital RF receiver system with/ high efficient RF
		receiver system / or its equivalent located on the magnet inside
		the shielded active room.
		(ii) System should have 64 independent RF receiver channels
		(which can be demonstrated)
		Please provide the list of coils/coil-combinations that use this
		configuration.
		(iii) Specify the RF receiver bandwidth for each channel.
		(iv) The system should have necessary hardware to support
		quadrature phased array and flex coils.
	c) RF Transmit	(i) Latest RF transmit system (like Multi-transmit/ Multi Drive
	Technology	transmit system/ Trueform) with at least two independent output
	reciniology	channels should be offered to improve B1 uniformity and signal
		homogeneity and to reduce patient induced in-homogeneities
	d) SAR limits	(i) SAR limits should be as per FDA guidelines. for all protocols,
	u) SAK IIIIIIIS	
	a) Caila	including neuro/ abdominal imaging.(i) The number of channels and number of elements for each coil
	e) Coils	should be the maximum that the vendor has in their Product list.
		All coils (other than coils for exclusive spectroscopy, like surface
		coils) should be compatible for parallel acquisition. In case the
		vendor does not have or manufacture a particular coil, third party
		coil(s) can be provided. However, it is the responsibility of the
		vendor to provide necessary interface (both hardware and
	x 'O'	software) to make the coil work with appropriate RF sequences,
		etc.
		(ii) Head coil (48-channel or more)/ 64 Channel Head Neck in single
7		scannable FoVfor high resolution brain, brachial plexus, nerve imaging
		EPI/ DTI applications, Compatible with fMRI projection device quoted
		with the system. The coil should have built in shim arrangement for
		high resolution. (iii) Separate coil for Head neck at least 20 channels or more for routing
		brain/ Neurovascular exams should also be quoted as standard.
		(iv) Spine array coil (32 Channel or more) with built in sensor or
		equivalent for motion detection
		(v) Body array coil I Phased Array coil with at least 44 Channe
		imaging for maximum Z-axis FOV of 50cms in combination with spine
		and single or combination of anterior coils.: 2 Nos.
		(vi) Dedicated Shoulder array coil (16 channel); If a dedicated

	T	
		coil is not available with the vendor, then the vendor has to quote
		equivalent coil (for e.g., if Flex coil is offered, then the number
		should be in addition to the previously quoted coil
		(vii) Dedicated Wrist coil (16 channel)
		(viii) Dedicated Knee imaging Transmit/Receive 15 Channel or
		more
		(ix) Eye/ear coil
		(x) Flex coils in available sizes (minimum 2) for extremity
		imaging at least 16 channels
		(xi) Dedicated foot/ankle coil, minimum 16channel or more
	f} Coil	(i) Integrated coil technology, latest as available with the vendor
	Technology	to be quoted: Equivalent of TIM / GEM/ DStream or equivalent
		to be offered.
	g) Table	(ii) Bolus chasing with automatic/continuous moving table
	technology	should be offered and should be available with fluoro triggered
		MR angiography for manual and fast switchover in less than 1
		sec for CE-MRA.
		(ii) Latest table technology available with the vendor (globally)
		should be offered.
5	Computer	(i) The vendor should supply the latest computer system along
	Control System	with the MR system, to handle all the latest applications available
	Control Bystein	on the MR platform.
		(ii) During the warranty period, any software updates that are
		Launched globally should be supplied and installed.
	a) Host	(i) latest state-of-art computer system with sufficient RAM (32
	Computer and	GB or more) and computational speed to match the single shot
	Array	Echo Planar Imaging (EP1), interactive angiogram, multi-planar
	Processors	Three-dimensional (3D) reconstruction, surface rendering and
	1100058018	dynamic imaging, vascular imaging/angiography, and adequate
		storage for images and other Applications.
		(ii) Necessary image processor with sufficiently large RAM
		(iii) (4 GB or more) for ultra-fast image reconstruction, capable
		of performing real time image reconstruction.
		(iv) Total hard disk memory capable of storing a minimum of
		2,00,000 (two lakh) images
	X O	(v) Monitor 19" or more Medical grade monitor (3MP) with
		enhanced graphics accelerator.
	7	(vi) One measurement (Main) console capable of data acquisition
0		and all online calculations (as required for all sequences in the
X ,		tender, section 6), and Post processing (as required for all
7		applications in the tender, section 7).
		(vii) Licenses for acquisition (as required for all sequences in the
		tender, section 6), post processing and for special packages
		should be given explicitly (as required for all applications in the
		tender, section 7), listing all the capabilities of the vendor's
		quoted product basic standard package, premium packages, etc)
	B) Additional	SERVER SYSTEM: (A Client - Server Architecture based
	workstation	solution, Minimum 40,000 concurrent slices, 2 no. floating
		/concurrent user license for all applications including advanced
	<u>l</u>	including advanced

		11
		applications.
		DICOM 3.0 compatibility and interfacing with other modalities
		must be possible.
		CONFIGURATION: 1 no. Server and 5 Clients/Nodes.
		Licenses:
		5 user licenses for basic applications to be provided as standard.
		2 Concurrent licenseswith the capability to process all the loaded software including ALL the advanced post processing applications to be accessible and usable on both the clients/ nodes simultaneously without any processing delay. The software should also include a reputed antivirus software of a perpetual type or renewed by the supplier. Advanced post-processing Offered applications including perfusion quantification, advanced diffusion and DTI, advanced cardiac evaluation (EF, Calculation, Wall motions, analysis) including perfusion analysis, processing of 2D/3D CSI data, with color metabolite mapping, parametric images from the image intensity variations over time, vascular analysis package, two clients concurrently for each application.
		Hardware: Each Client / Node: CPU unit, minimum 16 GB RAM, Two Medical grade monitors of 2MP resolution & size - 21" or more in dual monitor setup, mouse, keyboard.
		Server Hardware: The server (single/dual configuration) should have image storage capacity of at least 2.5 Tera bytes, minimum 20,000 concurrent slice processing power and at least 64GB RAM and 2.5 GhzCPU. 21" or more TFT/LCD monitor. Server should be vendor neutral with Compatibility with data from other MRI systems for post processing. All latest available software for updates of the system for this centre should be available for free of cost for the next eight years.
	c) CD/DVD	(i) DVD RW drive for writing of images, spectra and raw data
	archival	along with the necessary software for reading the images
	arcin var	and spectra on DVD/CD storing capabilities.
7		(ii) Provision for archival of k space data and raw (unprocessed)
	d) Networking	Images. (i) The vendor should provide Level 3 network Switch (with 32 nodes) or latest, to integrate the network,
		(ii) Protocol Ethernet TCP/IP standards-based image transfer with D1COM 3.0 over standard Ethernet IEEE 903 (DICOM send, receive and DICOM query modes).
		(iii) The vendor should provide the connectivity with PACS, with
		the user departments, as mentioned in Item No. 10 of this tender.
		(iv) The network speed and cables should match the latest
		(1.) The notificial speed and energy should mater the latest

		industry standards (e.g. 10 BaseT/100BaseT/ 1 GB)
		(v) System should be configured with different IP series, so as not
		to clash with different equipment already existing in different
		departments.
		(vi) The vendor should provide necessary networking and
(-) D-4-	configuration assistance with existing PACS, HIS, RIS.
6	a) Data	(i) The system should be capable of 2D and 3D acquisitions in
	Acquisition	conventional, fast & ultra-fast spin echo and gradient echo modes
		so that real-lime online images ran lie observed if needed. All the
		sequences that are available with the vendor at the time of quote/
		delivery should be provided as per their manual.
		(ii) 2D multi slice imaging should be possible in all planes (axial,
		sagittal, coronal, oblique and double oblique)
		(iii) Up to 1024 x 1024 matrix acquisitions preferred for all
		applications. Wherever 2048 matrix available, please mention.
		(iv) Half Fourier or other techniques to reduce scan acquisition
		lime while maintaining adequate SNR.
		(v) 3D volume, multiple contiguous slabs, multiple interleaved
		and multiple overlapping slabs
		(vi) Slice thickness in 2D and partition in 3D to be freely
		selectable.
		(vii) Dynamic acquisition (serial imaging) with capability to
		initiate scan sequences either from the magnet panel or from the
		console.
		(viii) Dynamic acquisition; number of repeat scans with delay
		time either identical time interval or selectable
		(ix) Auto slice positioning from the localizer images.
		(x) Maximum off-center positioning both anterior posterior and
		lateral direction and should be selectable.
		(xi) Gating: physiological signals like ECG, pulse, respiratory',
		External signal triggering (interlace for triggering input pulse
		from external source). The provision should be available at the
		console also (for FMRI, EEG etc.).
		(xii) Simultaneous acquisition, processing and display of image
		data in 2D multi-slice mode.
		(xiii) Selection of voxels from oblique slices should be possible
	X	while doing spectroscopy.
		(xiv) Artifact reduction/imaging enhancement/image filtering/
	Y	image subtraction/addition/ multiplication/division techniques:
		(xv) Flow: 1st and 2nd order flow artifact compensation
		(xvi) Presaturation slabs: a number of relocatable saturation
		bands to be placed either inside or outside the region of interest
		(xvii) Fat saturation techniques: frequency selective RF pulses to
		suppress fat signals in the measured image FOV. ROI selective
		(regional) fat suppression should also tie Riven.
		(xviii) Magnetization transfer saturation: Off resonance RF pulses
		to suppress signals from stationary tissue in FOV
		(xix) Phase contrast capability in 2D and 3D mode. (xx) Image intensity correction

		(xxi) Breath hold acquisition
		(xxii) EPI mode
		(xxiii) DTI with MDDW or equivalent with a minimum of 12 and
		selectable up to 128 direction encoding
		(xxiv) Data acquisition in all three standard planes (axial, sagittal, coronal and oblique and double oblique planes or more oblique planes.
		(xxv) Higher matrix acquisition capability in single shot EPI. Acquisition time. TR, TE and slice thickness should be clearly mentioned and supported by data sheet reference.
		(xxvi) The vendor should offer multi coil acquisition in order to Optimize throughput increase and increased effective FOV. Individual acquisition elements of every coil should be Mentioned.
		(xxvii) 4 phase water and fat composed images with phase in and phase out technique (IDEAL DIXON or equivalent) should be included.
	b) Imaging Pulse sequences	(i) All standard and special pulse sequences available at the time of quote/ delivery should be offered and quoted in the bid. If the vendor does not have any particular sequence/s but offers a work in progress (WIP) sequence/s, then it should be provided without any pre-condition like asking the Institute to sign any agreement for this purpose. This also applies to any post - processing software that is offered which is WIP.
		(ii) The system should be capable of selecting TR and TEs as per requirement in majority of the pulse sequences.
		(iii) Spin echo (SE): multi-slice single echo, multi-slice multi- echo (8 echo or more), SE with symmetrical and asymmetrical echo intervals and fast spin echo. MT-SE imaging sequence.
		(iv) Inversion recovery (IR): including short Tl modified IRSE, FLAIR, DIR (Double Inversion Recovery).
	CC	(v) Gradient echo (GE): with transverse gradient/RF spoiling, and transverse gradient re phasing, e.g., GRASE or equivalent etc. 3D gradient echo with shortest TR and TE, free choice of flip angle selection, while maintaining SNR.
a Ó	Fast sequences	(i) Fast spin echo and GE sequences in 2D and 3D mode with T1, T2 and PD contrast capable of acquiring maximum number of slices with a given TR a minimum TE, echo train should be at least 128 or more in fast spin echo mode
		(ii) Half Fourier acquisition capabilities should be available with/without diffusion gradients and in combination with fast spin echo
		(iii) Fast inversion recovery with spin echo
		(iv) Fast gradient spin echo IR multi-slice multi- echo mode with maximum ETL. Sequences should incorporate RF focusing to
		acquire ultra-fast gradient spin echo. (v) Fast gradient echo sequence should incorporate RF spoiling and other technique to acquire images in ultra-fast 2D and 3D
		modes.

		(vi) Fat and water suppressed imaging sequences
		(vi) Fat and water suppressed imaging sequences.
		(vii) EPI optimized sequences (with and without fat suppression)
		(viii) For T1, T2, PD imaging, perfusion, regular diffusion values (at least 5b,3 directions) EPI FLAIR. EP1-IR. EPI FLAIR
		diffusion tensor, EPI MT FLAIR, tensor diffusion at least 16 b
		values, and 128 directions) and diffusion studies. Suitable
		artifact/ fat suppression techniques to be incorporated in the
		sequence to have optimum image quality.
		(ix) There should be capability of calculating ADC map (isotropic
		and anisotropy from the regular diffusion and tensor data).
		(x) Optimized sequences for special applications.
		(xi) Multi-band EPI: Simultaneous Multi Slice Accelerate
		Advance applications for Neuro & Body.
		(xii) System should be offered with SENSE / SMASH / I-PAT
		Plus/ ASSET/GRAPPA or equivalent technique with up to factor
		4 or better in 2D and 3D of real acquisition time reduction in all
		sequences. Please specify compatibility with sequences, Scan
		techniques and gating techniques clearly
	Optimized	Mention all available packages
	sequence	
	Packages	$\mathcal{C}(\mathcal{O})^{y}$
	c) Neuro	(i) All T1 (2D, 3D), T2 (2D, 3D), IR (2D, 3D), Dual IR (2D, 3D)
	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	sequences
		(ii) Sequence for internal ear imaging for visualization of fine
		structures like cranial nerves (appropriate sequences like CISS,
		etc. or equivalent. Mention the sequences provided.
		(iii) 3D sequences for internal auditory canal imaging
		(iv) Dynamic imaging of pituitary using appropriate sequence
		(v) Whole spine T1, T2, IR sequences
		(vi) Whole neuro examination with automatic' planning, scanning
	4	and post processing, with single localizer positioning, without
		changing the coils/ repositioning
		(vii) SMS (Simultaneous Multi Slice Imaging)
		(viii) 2D /3D ASL
		(xi) T1 Permeability with IAUC, kTRANSetc
		(x) T2* Perfusion imaging of brain and other body parts with
	X	automated software for rCBV, rCBF, TTP etc analysis with color
		map generation.
	7	(xi) Susceptibility weighted imaging equivalent to SWAN-
\bigcirc		II/SWI/SWIp
		(xii) Quantitative Brain image analysis software for volumetry of
		brain based on tissue segmentation (Gray mater, white mater, myelin)- Fully automated volumetric software like neuro quant/
		morphometry/ Synthetic MR to be provided including the
		necessary sequences.
		(xiii) T2 Relaxometry and volumetry for Hippocampus- Fully
		automated volumetric software like neuro quant/ morphometry to
		be provided.
		(xiv) Advanced Spine Applications package for nerve root

		analysis. Auto spine labelling software.
		(xv) MR neurography software Nerve view/3D Space
		Neurogram/3D Cube STIR/Cube Flex
		(xvi) Complete FMRI Software and Hardware package including
		paradigm generator and accessories.
	d) Angiography	i) MP angiography: 2D/2D TOE 2D/2D Phase contrast with and
	d) Angiography	i) MR angiography: 2D/3D TOF, 2D/3D Phase contrast with and
		without gating) and magnetization transfer saturation, black
		blood angiography for cerebral, pulmonary, abdominal and
		peripheral vessels.
		(ii) For peripheral moving table angiography should he offered
		covering hip to limbs to be examined in one go with high
		resolution and high SNR.
		(iii) Bolus tracking software package.
		(iv) Sequences for breath hold angiography with contrast
		enhancement.
		(v) Sequences for time resolved angiography with contrast
		Kinetics.
		(vi) ECG triggered non contrast angiography.
		(vii) Contrast bolus tracking (including single shot whole body
		MRA, interactive and automatic tracking, etc.).
		(viii) Perfusion study in organ systems like kidney, brain, etc.
		with T1 perfusion with permeability maps, and quantitation of
		rCBF/ rCBV, MTT, etc., with color maps.
		(ix) Contrast as well as Non contrast enhanced peripheral
		angiography for arterial flow with Native/Trance/inhance
		sequences.
	e) Diffusion	(i) Sequence package for diffusion including DTI (tractography)
	/DTI	study in organs like brain, kidney, muscle, heart, spine, breast,
		etc.
		(ii) There should be capability of calculating ADC map (isotropic
		and anisotropic from the regular diffusion and tensor data).
		(iii) MR diffusion tensor imaging package with tractography.
		(iv) Application for high resolution for small FOV diffusion
		imaging
		(v) Whole body diffusion weighted imaging with background
		suppression (DWIBS)
		(vi) B value of at least 10000 or more in at least 32 directions
	f) Body	(i) Flow quantification in vessels and CSF, hepatobiliary system
O^{\sim}	Imaging	(1) I low quantification in vessels and CSI, hepatoomary system
	IIIIagiiig	(ii) Fly through facility with Flow analysis including display of
*		various velocity values.
		(iii) Optimized breath hold sequences for abdominal studies including angiogram.
		(iv) MR Cholangiography and Pancreatography: Specialized
		sequences and processing to perform MRCP.
		(v) Pulmonary 2D/3D MRA sequence, including single breath
		hold sequence.
		(vi) MR ventriculography, cisternography, myelography.

		(vii) Single sequence to acquire four different contrast (in phase,
		out of phase water only, fat only). The same technique should be
		used in other sequences, for dynamic portography/ T1
		quantitative analyses.
		(viii) Advanced Parallel acquisition techniques including new
		sequences. Specify the technique used and the factor by which
		the acquisition time is reduced for similar acquisition with and
		without parallel imaging technique. Mention the sequences.
		(ix) Flow quantification packages for CSF with dynamic CSF
		flow imaging, aqueduct and spinal canal.
		(x) Radial/Spiral pulse sequences for ultrafast imaging.
		(xi) Suitable artifact/fat suppression techniques to be
		incorporated in all the sequences to have optimum image quality.
		(xii) A sequence for differentiation of fluid and carriage in ortho
		applications (sequence like DESS or equivalent)
		(xiii) Susceptibility artifact correction techniques to be incorporated in all the sequences to have optimum image quality.
	a) CWI	
	g) SWI	(i) Sequences for susceptibility imaging
	h) Prostate	(i) Sequences for imaging of prostate including diffusion,
	Imaging	multiphasic dynamic contrast enhancement, spectroscopy.
	i) Whole Body	DWIBS OR equivalent, whole body imaging using Inversion
	Diffusion and	recovery sequence, Whole body MR angiography
	STIR,	
	Angiography	() B 11 B 0 H 11 H
	j) m-Dixon	(i) Provide sequences like m-Dixon for all applicable sequences,
	1) 77	m Dixon - HD or 3 Point DIXON.
	k) Motion	(i) Sequence for in-line motion correction for uncooperative
	Correction	patients/ children (with software and acquisition sequences like
		BLADE. PROPELLAR, Multivane or equivalent.
		(ii) Sequence with ultra-short TE
		(iii) Sequence for nullifying CSK pulsation artifacts
		(v) Whole body imaging (using body coil and surface coils)
		(vi) Whole body diffusion weighted imaging (using body coil and
		surface coils)
		(vii) Automated fusion and composing for the above two (without
		any artifacts)
		(viii) Volume acquisitions for Neuro applications
	1) MR	(i) System should have capability to perform multi planar proton
\sim	Spectroscopy	spectroscopy.
	1 17	(ii) Proton MRS Sequence for single-voxel acquisition, with
		selectable fat /lipid saturation bands, options of water saturation
		(e.g. VAPOR, CHRSS, etc.) with all post-processing software,
		(iii) Proton Multi-voxel CSI 2-D and 3-D] acquisition and
		metabolite mapping with all necessary RF sequences (and post
		processing algorithms) with all post processing software
		(iv) If separate coils are needed for carrying out MRS, it should
		be provided.
		1
		(v) RF sequences for prostate, liver, musculoskeletal and brain (if
		there are any specialized / optimized sequence available, the

		same should be offered)- with all post processing software
		(vi) Water and lipid suppression in automated sequences.
		(viii) Full post-processing for single voxel MRS, CS1 (multi-voxel MRS), metabolite mapping with color coding (metabolic images) etc., for brain, prostate and for other applications. Post
		processing should include FFT, base line correction, curve optimization, automatic phase correction, metabolite imaging,
		spectral mapping, magnetic- resonance spectroscopic imaging (molecular imaging) with naming and peak integral values for all in vivo metabolites.
	m) Cardiac package	Complete cardiac package including advanced software VCG gating with Arrhythmia rejection techniques,
		Morphology/wall motion, Cine perfusion imaging and Myocardial viability imaging,
ļ		Advanced automatic Cardiac Ventricular Measurement
		Analysis, Cine Cardiac Tagging Techniques, Coronary artery
		techniques, 2D/3D fast field echo/balanced/steady state
		techniques, T1, T2 AND T2* MAPPING
ļ		Complete cardiac evaluation package to be included in the
		workstation.
	n) Breast	Complete breast package including advanced software and Breast
ļ	Package	coil
ļ		Advance package including diffusion, spectroscopy and perfusion
		with time intensity curve and biopsy.
	0)	Hepatobiliary
ļ	Hepatobiliary	Sequences and evaluation software for Fat Quantification in
ļ	package	Liver and Iron Quantification to be provided. 2 point & 3 point
ļ		DIXON ie. MDIXON Quant.
		THRIVE, LAVA XV, VIBE or equivalent for multiphasic liver
		studies to be offered.
ļ		Liver imaging with DISCO/ FREEZE WITH TIST VIBE / D Sense Factor or equivalent should be included.
	X.O	Sense Pactor of equivalent should be included.
	p) MRI	Complete MRI Elastography software and hardware package
	Elastography	including all advanced post processing software.
	0 1 3	morading an advanced post processing software.
7	Post Processing	(i) Licenses of all the post processing and evaluation packages
7		(i) Licenses of all the post processing and evaluation packages should be provided for the main and additional console/Workstation.
7	Post Processing	 (i) Licenses of all the post processing and evaluation packages should be provided for the main and additional console/ Workstation. (ii) Specify clearly number wise the algorithms that need licenses and a statement whether these have been provided in both the main console and the additional workstation (Satellite console/
7	Post Processing and evaluation	 (i) Licenses of all the post processing and evaluation packages should be provided for the main and additional console/ Workstation. (ii) Specify clearly number wise the algorithms that need licenses and a statement whether these have been provided in both the main console and the additional workstation (Satellite console/ extended workspace).
7	Post Processing	 (i) Licenses of all the post processing and evaluation packages should be provided for the main and additional console/ Workstation. (ii) Specify clearly number wise the algorithms that need licenses and a statement whether these have been provided in both the main console and the additional workstation (Satellite console/

		additional workstation.
		a) Neuro (Smart exam/Ready Suite/ Smart Brain/ etc.),
		, , , , , , , , , , , , , , , , , , , ,
		b) Body
		c) Oncology,
		d) Angio (including DSA approach, capturing arterial, capillary
		and venous phases in a single acquisition with a single bolus)
		e) Ortho and MSK, Advanced version of Metal artifact reduction
		software should be provided as standard for imaging of joints
		with prosthesis and implants.
		Cartilage mapping with color coding and parametric maps should
		be provided .
		f) Liver (including 3D T1 Fat sat for dynamic liver imaging)
		g) Pediatric
		h) Breast
		i) Prostate
		j) Necessary composing software for whole body applications.
		Smart Exam/ Smart Brain/ Ready Suite/Brain Dot Engine/
		equivalent technique should be quoted in all available imaging
		packages.
	i) MPR	(i) Multi planar reconstruction (MPR) in any arbitrary plane
	1) 1/11 11	including curved planes with freely selectable slice thickness tend
		slice increments.
		(ii) Surface Reconstruction and evaluation on reconstructed
		images with minimum time.
		(iii) MIP in displaying in cine mode 2D and 3D mode,
		Targeted/segmented MIP in any orthogonal axis with minimum
		processing lime and capable of displaying in cine mode.
	ii) ADC,	(i) Evaluation and display of diffusion images, ADC map, fMRI
	perfusion, etc.	in reference of EPI optimized sequence.
	perrusion, etc.	(ii) Perfusion image evaluation with time intensity graph and
		other statistical parameters.
		(iii) Evaluation package for calculating rCBV, rCBF, MTT,
		perfusion map, corrected CBV calculation; Fusion of perfusion map with Contrast enhanced 3D T1 images etc.
		Mention the package /software offered with brochure.
	X	(iv) Flow quantification and evaluation far vascular (high &. low)
	iii) Amamia1	CSF, bladder outlet and cine display.
	iii) Arterial	2D / 3D ASL processing and quantification package in main
0	Spin	console/additional workstation
	Labeling	
	iv) Liver	Automatic Liver segmentation and volumetric analysis software.
	Segmentation	D
	v) Tractography	Post-processing package for DTI and Tractography, estimation of
		ADC, FA (Lambda parallel, perpendicular separately and
		combined), Fiber tracking, fiber statistics, and display of fiber
		tracts on anatomical images
	vi) Image	(i) Measurement of distance, area, volume, angle, mean, SD,
	statistics	image addition, subtraction, multiplication, division,
		interpolation, segmentation, threshold, histogram.

		(ii) Image	filtering and Image fusion software.
		,	vare for co registering MRI/ fMRI/ MRS/ Metabolite
			mages with images from CT, PET, and SPECT.
			ation features like zoom, rotation, scroll, roaming,
			thesis, multi point Tl and T2 calculation (more than 8)
			tretching, text dialogues graphics, sorting, search,
		<u>U</u> ,	recalling etc.
	vii) Advanced		nced organ specific imaging with automatic planning,
	organ specific imaging		and post-processing application should be quoted.
	viii) Silent MRI		If for neuro protocols including T1W, T2W imaging
		without ar	ny loss of image quality on all sequences (like Neuro
		Silent/ Sll	enz, or equivalent), with noise less than 80 db. The
		quiet scan	ning should be without loss of SNR.
	ix) Advanced		ould have the Advanced Compressed Sensing Imaging
	Compress		peed image acquisition for brain, body, MSK. Also offe
	Sensing		ously multi slab acquisition for diffusion and fmri of th
	imaging	brain.	January and management of the
8	UPS and		n should be provided with an appropriate capacity
O	Voltage		Voltage Stabilizer system with batteries for the Main
	Stabilizer		d chiller with at least 30 minutes back up with another
	Stabilizer		*
			te capacity (at least 40 KVa) UPS and Voltage
			with 30 mins backup for the other local supply
_		items/equi	•
9	RF Cabin	_	m should be supplied with the RF cabin with RF room
		_	RF Door, RF window, and Interiors for the same
			carried our suitably.
10	Safety	(xi) Th	e magnet system should include an Emergency Ramp Down
	features, Quality	_1	unit (ERDU) for fast reduction of the magnetic field with
	assurance and		ramp Down time below 3 minutes
	phantoms	(xii)	The magnet should have quench bands that contain the
			fringe fields to a specified value in the event of a magnet
		7	quench
		(xiii)	Real time SAR calculation should be performed by
			software to ensure that RF power levels comply with
	\circ	/-· \	regulatory guidelines and are displayed on each image
	X O	(xiv)	The system shall have manual override of the motor drive
1		(27)	for quick displayed of the patients for the magnet bore
		(xv)	Temperature sensor (built in) for magnet refrigeration
7)	(vvi)	efficiency must be provided A CCTV system with color I CD/I ED display to observe
V		(xvi)	A CCTV system with color LCD/LED display to observe
7		(27:22)	the patient transfer should be provided in the magnet room. Phontoms for routing quality assurance for all coils.
		(xvii)	Phantoms for routine quality assurance for all coils
		(****:!!!)	(including body coil) Fire Fighting System, Smoke Detectors in all rooms
		(xviii)	
			(except RF cabin) and 6 Fire Extinguishers all MRI
			Compatible
		(xix)	Door / wall mounted Zone 4 Ferromagnetic detectors
	1		before entry into the magnet room: 1 set.
			before entry into the magnet room . I set .
		(xx)	Physical barrier / bollards to prevent direct entry of

11	Standard MRI	(i) Rechargeable Handheld metal detectors (2 Nos.)
	Accessories	
		(ii) Walk through Metal detector with multiple sensor and
		multiple location LED (Zone III type) - 01 no
		(iii) MR compatible Patient monitor and MR compatible Syringe
		Infusion pump. (2 Syringe Infusion Volumes) (Annexure A1)
		(iii) High Standard Ferro Guard should be installed at entrance of
		MR room to detect/alert ferromagnetic articles.
		(iv) MRI Compatible Dual Syringe Pressure Injector:
		Independent dual Syringe Pressure Injector with following
ĺ		Features; Non-ferrous, automatic syringe size detection, performs
		single and dual phase contrast Injections, provides Saline flush
		delivery. (100 Nos of 50 ml Syringes with 100 nos. of tube
		connectors should be provided) Must be able to observe progress
		of Injection and view injection result at the working console.
		(v) MR compatible anesthesia machine (Specifications are
		mentioned separately: Annexure A)
		(vi) Two quantity: Non-magnetic IV stand
		(vii) Two quantity: Digital Patient Weighing Scale (in the range
		between 0 to 200 kg)
		(viii) MR compatible storage carts and wall mounted cabinets.
		(ix) Adequate number of Coil cabinets to be provided.
		(x) Network cable and other required materials for the complete
		installation to be provided by the supplier
		(xi) MR compatible crash cart 1 no.
		(xii) MR compatible instrument-trolley - 1 no.
		(xiii) MR compatible patient trolley (to transfer patient to the
		magnet table) with both vertical and horizontal movement with
		hydraulic operation and should take a minimum load of 150 Kg
		in both vertical and horizontal motion (Model: Adjustable Height
		Trolley: MR5501 of Wardray Premise Ltd. U.K or Adjustable
		Height Trolley, Femo, UK or equivalent) - 2 no.
		(xiv) MR compatible wheelchair (Wardray/equivalent model)
	V'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(with cushion, backrest and anti-rest) - 2 no.
12	Antivirus s/w	(i) All the Servers and Workstations in the network (MRI console,
	and Web	additional workstation, PACS workstation, fMRI workstation,
7	updates	etc.) that is supplied by the vendor should be provided with
		antivirus software (periodically updated) for the entire life of the
7		system.
		(ii) The vendor should provide antivirus updates for entire life of
		the system and make sure of the updated antivirus every week
		using automatic- updates with internet facility by the vendor
		(iii) The vendor should ensure that all the above modalities
		include necessary connection, image & work list send/receive,
		image and data storage, scheduling, patient registration, and
		synchronization functions as per DICOM standards for smooth
		and effective integration to RIS/PACS

13	Other	(i) Ten chairs with arm rest with medium back without casters
	accessories	(Godrej/Geeken make)
		(ii) Table for the MRI console, MRI additional console/
		Workstation. fMRI workstation.
		(iii) Necessary Desk, chair and Rack for the Image Server &
		Workstation to be provided by the supplier
		(iv) All the necessary interconnecting interfaces, cables, module
		and other hardware and software to fully integrate the system for
		full operational status.
		(v) Uninterrupted power supply (UPS) with sufficient capacit
		(appropriate rating as required for MRI and chiller) for 3
		minutes back up of the full load MR system and its accessorie
		during patient MR imaging.
		(vi) Two (quantity) MR compatible oxygen cylinders (for the
		anesthesia system)
		(vii) Good quality air curtain at MRI entrance (for patient entry)
		to filter the dust and prevent the leakage of a/c.
		(viii) Two high quality LED projector for conference room of
		reputed brand like Sony orequivalent.
		(ix) Four Laptops with latest operating system (specifications to
		be discussed with department of Radiology) for viewing the
		images, reporting and making teaching presentations.
		(x) 2 Qty - Osirix Medical Images Viewer (FDA Approved), with App
		iMac 24 inch screen (16GB RAM, 512GB SSD, Radeo
		ProGraphics 5500_4GB GDDR6, Magic keyboard, Mouse) an
		Osirix MD software with two licences.
		(xi) Dry chemistry camera DICOM compatible of DPI 500 or more any reputed make. Three active film trays including one for 14"
		17" films.500 nos of 14 x 17 inches size films to be provided. The
		Dry Chemistry camera should be of a make whose films a
		available on rate contract/ schedule of MCGM.
		(xii) Adequate coverage of the MRI installation by CCT
	× 'O'	cameras(minimum 5 nos)
		(xiii) MRI Compatible ECG electrodes (100 Nos., Disposab
		Electrodes for MRI Image gating)
16		(xiv) MRI compatible Magill forceps: Adult & pediatric size- Two eac
V.		(xv) Stylet for endotracheal tube: Adult, pediatric size- Three each
		(xvi) MRI compatible 1 set of Laryngoscope
		(xvii) MRI compatible Clamps 2 Nos: Either towel clip or arter
		forceps. (vviii) MPI Compatible ECG electrodes (100 Nos Disposab
		(xviii) MRI Compatible ECG electrodes (100 Nos., Disposab Electrodes for MRI Image gating)
		(xix) LED – 4 films view box for 14" X 17" film size – 5 No.s
		(xx) MRI compatible pulse oximeter – 1 No.
		(xxi) Dictation software – Dragon Medical Pro / Augnito with
		licenses for the entire period of use of MRI machine
		incompositor the critic period of use of what machine

		(wii) 1 colors nonce minton
		(xxii) 1 colour paper printer
		(xxiii) 2 black and white paper laser printer cum scanner.
		(xxiv) 4 black and white paper laserjet printers.
		(xxv) MRI Compatible Stethoscope – 2 nos.
		(xxvi) Disposable Ear Pads & Ear Plugs to reduce noise while
		imaging in children & adults –5000 Nos
		(xxvii) Two dehumidifiers for an area of 700 Sq feet
		(xxviii) One number 4k LED smart TV (minimum 65 "size) for
		conduction of academic activities like webinar and seminars.
14	Training	Advanced training to be provided by the vendor at the site for
		Faculty, Residents, students and Radiographers, so as to Benefit
		the latest applications available on the system. The Training
		should be minimum period of 12 weeks, staggered.
15	Special Conditions	Please see Annexure for special conditions, including warranty and CMC.
	1	Original Product Datasheet of main unit and all accessories,
		including third party items to be provided.
		All agreements should be binding on Principal. The principals
		should be responsible for any lacuna or deficit in service or
		supply.
	2	All items in the supply order should be supplied during the time
		of installation. No exceptions will be allowed.
	3	Items under Research Agreement should be finalized well in
		advance after receipt of supply order), so that there is no delay in
		delivery of software or coil or any other accessories.
	4	Software updates [where hardware upgrades are not required) should be
		provided within one month after release worldwide (any country, viz.
		North America / Europe / Germany, etc.). In case, the same is not
		provided in time, the parent company should undertake the
		responsibility to implement the same. This is to make sure that the
		machine stays updated with similar products for entire life of the
		system.
	5	System should be regularly maintained at latest computing platform. If
		hardware required for the same, should be provided at no cost during entire life of system.
	6	Any exclusive items available with the vendor should be quoted
1		as an option. The price of the same will not be considered for L1
		purposes.
	WARRANTY	
	PERIOD	
7	5	The warranty period of the 3T MRI system should be 3 years and
		commences from the date of handing over (from the date of issue
		of Inspection Note) of the fully functional unit. All coils and the
		accessories supplied (such as UPS including batteries
		replacement as when required, AC, Generator etc.) including
		third party items such as MR compatible infusion pump, patient
		monitor with probes, MR compatible anesthesia machine should
		be under warranty against Manufacturing defects of material and
		workmanship. The Helium Supply and cold head repairs

		(including replacement, if needed) should be included in the	
		warranty period.	
	6	Note: any Liquid Helium filling, due to quenching or due to any	
		other causes during the warranty period shall be borne by the	
		firm. (except purchaser fault)	
	POST GUARAN	NTEE ANNUAL COMPREHENSIVE MAINTENANCE	
	CONTRACT (C	CMC):	
	7	The post- warranty (after 3 years) CMC should be comprehensive	
		and should include helium and cold head (repair and / or	
		replacement) + labour + spares for the complete system which	
		includes all the accessories supplied such as UPS, Generator, AC,	
		etc. (including all consumables like batteries for UPS, and	
		maintenance for another 5 years after expiry of the warranty.	
		All third party accessories and supplied items, including	
		hardware, software, antivirus etc are covered under the CMC. If a	
		3 rd party item cannot be serviced or repaired during the CMC	
		period, the same shall be replaced with a new equivalent or	
		better model by the bidder at no additional cost to MCGM.	
	8	Note any Liquid Helium filling due to quenching or due to any	
		other causes during the CMC period shall be borne by the firm.	
		(Please review – will be a costly affair)	
16		BLE ANAESTHESIA MACHINE, MRI COMPATIBLE	
		IP &MRI COMPATIBLE MONITOR – as per Annexure A1.	
17		ATION WORK - 3 T MRI SYSTEM – as per Annexure A2.	
18	SITE MODIFICATION – Drawing – as per Annexure A3 (attached separately)		

ANNEXURE A1

SPECIFICATION FOR MRI COMPATIBLE ANAESTHESIA MACHINE, MRI COMPATIBLE MONITOR AND MRI COMPATIBLE INFUSION PUMP

MRI COMPATIBLE ANAESTHESIA MACHINE SPECIFICATIONS (**Drager/ Damaica** /Penlon/ GE or equivalent)

Should be MRI compatible at 3 T, antistatic, heavy frame & base with good quality castors with front brakes, with following features:

- 25. Three gas model, viz Oxygen, Nitrous oxide and Air
- 26. Should be compact, ergonomic, easy to use and easy to maintain.
- 27. Should have separate fresh gas outlet for use in open circuit.
- 28. Machine should have flow matters for Oxygen, Nitrous oxide and air. Emergency oxygen flush should be available. There should be facility to select oxygen air or oxygen nitrous oxide with the help of a separate switch or knob.
- 29. Dural flow sensing capability at inhalation and exhalation ports.
- 30. Should have paramagnetic /galvanic cell oxygen sensors. In case of galvanic cell

- sensors, the firm should supply free sensors for the entire warranty period of 3 years. In case of paramagnetic sensors, the firm shall ensure that there is no down time during repair of these sensors (if necessary) and provide a standby alternative.
- 31. Shall have back-up O₂ control which provides an independent fresh gas source and flow meter control in case of failure.
- 32. Pressure regulators shall be of modular design.
- 33. Should have oxygen fall-safe device & an auxiliary built in oxygen flow meter.
- 34. Electronic or Mechanical Hypoxic Guard to ensure minimum 25% O₂ across all O₂ N₂ O mixture and Oxygen Failure Warning.

Vaporisers:

- 35. Facility of mounting minimum two Vaporizers, latest technology, key filler, selected type, tool free installation, meaning any vaporizer of our choice can be mounted at will with interlocking facility. It should be preferably of the same make as that of machine.
- 36. Temperature, pressure and flow compensated with high accuracy of delivered concentration of volatile anesthetic agent, should be maintenance free.
- 37. Two vaporizers should be supplied (Isoflurane, Sevoflurane)

Ventilator:

- 38. The machines should have an integrated Anesthesia Ventilator system, facility to vary respiratory parameters and should be able to ventilate adult and pediatric patients including infants.
- 39. Ventilator should have Controlled, manual, spontaneous modes and provision for PEEP
- 40. Tidal volume (inspired and expired), respiratory rate, I: E ratio, minute volume, Airway pressure, & FiO2 should be continuously displayed.
- 41. Should have Tidal volume and fresh gas compensation mechanism
- 42. Audio-visual Alarms for high and low settings of pressure, volume and disconnection should be present.
- 43. Tidal Volume (VT) 20-1500ml. (Volume Control). Rate at least 4-80 BPM.
- 44. Inspiratory /Expiratory ratio (I:E) 2.1 to 1.6, & Peak Flow 100 to 1201/min.
- 45. Ventilator should have at least 30 min rechargeable battery backup for ventilator.
- 46. Machine should have an integrated breathing circuit with circle absorber of good quality, easy to clean, autoclavable, fewer parts to reduce leaks.
- 47. Machine should have mounting capability of one O₂ and one N.O pin-indexed cylinder.
- 48. Adult (2 sets) breathing circuits & one pediatric circuit to be provided.

MRI COMPATIBLE MONITOR

Specifications for MRI compatibility:

- 4. Monitor should be equipped with MRI shielding and set to Remote Communication Mode.
- 5. Should be MRI safe at 5,000 Gauss, 3.0 Tesla and 4 W/Kg SAR
- 6. System should include fiber optic SPo2 finger sensor, MRI compatible ECG Patient Leads and electrodes, NIBF cuffs, hoses and etCO2 sampling kit and temperature probe

General specifications for monitor:

- 7. The monitor should have adult and neonatal applications and should be user friendly.
- 8. It should be capable of monitoring ECG, noninvasive blood pressure, oxygen saturation (SpO₂), ETCO2 and temperature
- 9. It should have an internal battery which should last for 30-40 min.
- 10. It should be operational at wide temperatures (10°C to 40°C) and humidity (20% to 90%)
- 11. It should have a facility of 24 hours data storage of trended parameters and trend graph of 1, 2, 3, 6, 12 or 24 hours display format.
- 12. Should have a facility to deactivate all the alarms if necessary.

ECG monitoring: Essential specifications:

- 9. Available leads: I, II, III, V, AVR, AVL, AVF with facility for recording 12 lead ECG.
- 10. Should display one or all the selected leads at a time
- 11. Accuracy of +5% of the rate.
- 12. Monitor Mode: Digital Signal Processing (DSP)
- 13. T-wave suppression for high field MRI
- 14. Should have arrhythmia monitoring facility:
- 15. Should have user selectable alarms.
- 16. Heart rate measuring range 15-300 beats/min.

Pulse Oximeter (SpO₂)

- 6. Should provide a digital value of the arterial oxygen saturation as well as diagnostic plethysmography pulse waveform.
- 7. Measurement range: 0% to 100%
- 8. User selectable upper and lower alarm limits.
- 9. Probes with finger and ear sensors for adult, pediatric and neonatal use.
- 10. Should be sensitive and function accurately even at low perfusion states of low blood pressure or hypothermic conditions.

ETCO2: monitoring:
11. Should have side stream CO ₂ module and display both graphically and numerically.
12. Single beam, non-dispersive infrared (NDIR) absorption, radiometric measurement, no moving parts
13. Initialization time less than 10 seconds, full specifications within 1-2 minutes
14. CO ₂ range should be 0 to 152 mm Hg barometric pressure supplied by module itself
15. Should be able to detect breath rate in the range of 20-150 BPM
16. Respiratory rate accuracy should be + 1 breath
17. Barometric Pressure auto compensated from 400 mm Hg to 850 mm Hg Operator selectable O2, N2O, HE and Agent compensation.
18. No routine user calibration required. An offset calibration should run automatically when the ambient temperature is not stable.
19. Sampling line should have both nasal sampling line and extension sampling line
20. Warm up time 10 seconds
Temperature monitoring:
5. Measuring range: 5 to 50 ^o C
6. Accuracy + 1 ^o C
7. User selectable upper and lower limit of alarm.
8. Core and skin probes
Noninvasive blood pressure (NIBP) monitoring:
4. Should automatically sense infant/adult cuffs and set appropriate inflation pressure and safety limits.
5. Operating Modes: Automatic, Manual Stat
6. Accessories, NIBP cuff:
d. Adult for thigh and arm e. Pediatric
f. Neonatal

Specifications of MRI Compatible Syringe Infusion pump are as follows:

1	The MR Safe pump should be adaptable both as a syringe pump as well as a volumetric pump.
2	It should be designed for use in MR environment and not adopted for the purpose (should not be a non MR pump in an RF cage).

3	It should have a non magnetic ultrasonic motor to provide accurate fluid delivery from infants to adults with capability of delivering two drugs
	simultaneously.
4	It should come with a 10 digit keypad entry system for ease of programming.
5	It should be 5000 Gauss compliant so that it can be placed anywhere in the MR room.
6	It should have a large LCD display providing high visibility.
7	Expanded delivery range of the pump should be 0.1—1400 ml / hr.
8	It should have a longlife lithium polymer battery pack for more than 10 hours
	back up once fully charged.
9	The syringe set should be self vented type with a very low priming volume.
10	The system should be field upgradable to pulse oximeter monitoring.
11	The downstream occlusion pressure should be adjustable from 1 — 10 psi to suit
	various cannula sizes and viscosity of the drug to be infused.
12	There should be an air inline ultrasonic bubble detector.
13	It should have a 360° visible green / red bright flashing alarm light indication
	sufficiently big to be observed from control room itself in event of any alarm
	situation or for regular drug delivery confirmation.
14	MR Safe free standing IV pole with mounting of pump for easy operation
15	It should be CE marked and FDA approved.

Following accessories /consumables to be supplied with MR compatible Patient Monitor (including the standard supply) -

- 18. Adult Reusable Cuff (27 -35 cm) 2 qty
- 19. Infant Reusable Cuff (9-15 cm) -2qty
- 20. Large Adult Reusable Cuff (34-44 cm) 2 qty
- 21. Pediatric Reusable Cuff(14 21.5 cm)- 2 qty
- 22. Small Adult Reusable Cuff (20.5 -28.5 cm) -2 qty
- 23. NIBP Hose 2 qty
- 24. Reusable Adult SPO2 Probe- 2qty
- 25. Reusable Pediatric SPO2 Probe- 2qty
- 26. Reusable Neonatal SPO2 Probe- 2qty
- 27. Neonatal Disposable SpO2 wraps 100 qty
- 28. Reusable Temperature probe/Sensor- 2 qty
- 29. ECG electrodes 500 qty

- 30. EtCO2 Filtered samaple line extension 50 qty
- 31. Adult Oral/Nasal cannula 50 qty
- 32. Pediatric Oral/Nasal Cannula -50 qty
- 33. Infant Nasal Cannula 50 qty
- 34. Nomoline Agent Sample Line (2.0 m)- 50 nos.

Gene	eral Condition:-
A	All the above equipments shall be new and manufactured from virgin materials. All
	the requirements of this supply shall be necessary sourced from the original
	equipment manufacturer of the model quoted which shall not be necessary
	sourced from the original equipment manufacturer of the model quoted but
	should be compatible with the quoted model. In case the machine is imported one
	no import substitution is permitted neither before the award nor after the award for
	any part or accessory. "Third party inspection certificate should be applied from the
	port of origin of shipping of equipment (from the parent companies country of
	origin).
В	Equipment shall operate on 230 V, single phase, 50 Hz electric supply. The necessary
	protective relaying / circuitry shall be there with the machines. The mains supply
	voltage variation may be max.±10% and frequency variation maximum ±3%.
C	1)The quoted CT Scan equipment shall have CE mark from European Conformity
	(EC) notified bodies issued from European address and valid US FDA approval and
	documentary evidence to that effect shall be uploaded.
	A Y
	2) The following accessories viz. anesthesia workstation with ventilator, patient
	monitor, dual head pressure injector, Dry Chemistry Imager shall be having valid CE
	and US FDA approval. Documentary evidence to that effect shall be submitted in
	packet B.
	3) Rest of the accessories should have valid CE or USFDA approval. Documentary
	evidence to that effect shall be submitted in packet B.
	Bidders are requested to go through the European CE and US FDA policy document
	for submission of CE and US FDA approvals as mentioned elsewhere in tender
	document.
D	The equipments shall be having warranty of three years as described in the tender
	document elsewhere. The warranty and CMC shall cover all the spare parts for total 8
	years (warranty 3 years and CMC 5 years). The manufacturer shall supply of spares,
	consumables for at least two years after the contract period of eight years is over.
7	The successful bidder has to ensure that all the required spares and services are
	available during the period of CMC and 2 years after the contract period of eight
	years.
	All third party accessories and supplied items, including hardware, software, antivirus etc are covered under the CMC. If a 3 rd party item cannot be serviced or repaired
	during the CMC period, the same shall be replaced with a new equivalent or better
	model by the bidder at no additional cost to MCGM.
Е	The equipments should be provided with one hard copy in original of the detailed
	service manual and operation manual. Further, a soft copy is also required.
	sorvice manual and operation manual. I druler, a soft copy is also required.

F	The equipment must be tropicalized as below:
	Operating room temperature: upto 40° C
	Storage room temperature: upto 60° C
	Relative Humidity: upto 90% Non-condensing
G	Among the other things, the responsiveness of the bid will be based on successful
	demonstration of the offered model of the equipments to MCGM officials as
	mentioned elsewhere in the tender specifications.
Н	The bidder has to submit users list with address & contact telephone number/s.
Ι	Prospective tenderers should have a full-fledged and well-established service centre
	in Mumbai with engineers qualified in servicing of 3T MRI System. Please provide
	details of the same in Annexure – 1.

Turn key work (Civil) (BOQ) for MRI Scan at LTMG Hospital

Water	rproof Nitrile Coati	ng for roof of the entire area of BOQ				>			
Sr. No.	Item No.	Description		Details No. L B D				Total Qty	Unit
				(2)					
1	R2-CS-FL-28-d	Providing and fixing polished natural stone tiles as specified below of approved quality, pattern and colour for dado including preparing the surface and levelling in the desired line, backing of 20 thk. cement mortar in porportion 1:3, square cut top edge or chamfered top edge in cement mortar 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement or pigment mixed with cement, polishing, finishing, curing etc complete as directed by Engineer In Charge.25 to 30mm thk. Kota stone							
		MRI Technical room	1	2.50	6.01		15.03		
	O	MRI Electrical room	1	3.10	3.90		12.09		
X	/						27.12	27.12	Sqm
2	R2-CS-DD-70	Removing and refixing existing door or window with frames and shutters, making good the damaged brick work and applying 3 coats of Syn. Ena. Paint							

			11			11.00	11.00	Each
3	R2-CS-DD-64	Removing mosaic, cement marble, granites non-slippery, tandur, kotah, shahabad stone or Indian Pattern stone, glazed tiles in flooring and dado including bedding brick bat coba etc., and delivering materials in Ward office and carting away unserviceable					1	
		Materials		1.10				
		MRI Examination room	2	6.60	2.40	31.68		
		Less door	-1	1.00	2.10	-2.10		
			2	6.01	2.40	28.85		
		MRI Technical room	2	6.01	2.40	28.86		
			2	2.50	2.40	12.00		
		Less door	, -1	0.90	2.10	-1.89		
		MRI Control room	2	6.15	2.40	29.52		
		Less window	-2	1.6	1.2	-3.84		
		(.0)	2	2.5	2.4	12.00		
		MRI Electrical room	2	3.10	2.40	14.88		
		Less door	-1	1.00	2.10	-2.10		
			2	3.90	2.40	18.72		
		Passage	2	3.10	2.40	14.88		
			1	6.60	2.40	15.84		
	X		1	3.90	2.40	9.36		
			1	5.37	2.40	12.89		
0			1	3.10	2.40	7.44		
		Less door	-1	1.00	2.10	-2.10		
			2	12.31	2.40	59.09		
		less door	-3	1.00	2.10	-6.30		
			-1	1.63	2.10	-3.42		
		Work station room	2	7.17	2.40	34.44		

			2	5.37	2.40		25.79		
		Less door	-1	1.00	2.10		-2.10		
		MRI Reporting room	2	14.91	2.40		71.57		
			2	3.59	2.40		17.23		
		Less door	-1	1.63	2.40		-3.91		
		W.C.	4	1.80	2.40		17.28	1	
		less door	-2	0.60	2.10		-2.52		
			2	2.40	2.4		11.52		
		Doctor room	2	6.30	2.40	>.	30.24		
			2	3.10	2.40		14.88		
		less door	-1	1.00	2.10		-2.10		
		WC	2	2.10	2.40		10.08		
		S	2	1.20	2.40		5.76		
		Senior staff and procedure room	2	3.10	2.40		14.88		
		X Y	2	2.86	2.40		13.73		
		Less door	-1	1.00	2.10		-2.10		
		1					528.91	528.91	Sqm
		Providing and fixing 8mm thk.							
		vitrified tiles as specified below							
		conforming to I.S. 15622-2006 with							
		water absorbtion less than 0.08% and							
		of approved quality, pattern and colour							
		for dado in the dry area including							
		preparing the surface and levelling in							
		the desired line, backing of 20 thk.							
		cement mortar in porportion 1:3,							
4	R2-CS-FL-64	square cut top edge or chamfered top							
	R2 05 12 01	edge in cement mortar 1:3, cement							
		float, machine cutting, leveling,							
		jointing, filling the joints with neat							
		cement slurry or approved colour							
		grout, finishing, curing etc complete							
		as directed by Engineer In Charge.							
		Light coloured glazed vitrified tiles/							
		Dark coloured glazed vitrified tiles/							
		Light coloured antiskid /matt vitrified tiles/ Dark coloured antiskid / matt							
		THES/ DALK COLOHIECT AHRISKICE / MAIT	1	1	i			İ	1

		vitrified tiles						
							1	
					>,			
		N Pa GG PD 44						
		same as above item No. R2-CS-DD-64				528.91	528.91	Sqm
	LD 22			>		14.00	14.00	1
5	LB-32	Semi Skilled Labour (Beldar)	14			14.00	14.00	each
		Providing anti termite treatment						
		conforming to IS- 6313 (part-III) tothe sides of flooring of the Existing						
		building by punching/ drilling theholes of 16 mm dia at a distance of 300mm						
6	R2-CS-AT-3	centre to centre andinjecting 150 ml untill refusal or to a maximum of 1	500			500.00	500.00	
6	R2-C3-A1-3	Lit. per hole withchloropyrifos EC 20	300			500.00	300.00	
		Emulsion or equivalent of 1% concentration byweight, sealing the						
		hole by filling the putty etc. complete asdirected by Engineer-In-Charge with						
		2 years guaranty.						Hole
	Oy							

7	R2-CS-FL-8-a	Providing and laying 600 x 600 x 8 mm thk. Vitrified tiles as specified below conforming to I.S.15622-2006 with water absorbtion less than 0.08% for flooring of an approved, quality, make and pattern /design for flooring including cement mortar bedding of 25 mm thick in 1:4 proportion, cutting, leveling, jointing, filling the joints by neat cement slurry or approved colour grout, curing, finishing etc complete as directed by Engineer In charge. Light coloured glazed vitrified tiles					3	
		MRI Examination room	1	6.01	6.60	39.67		
		MRI Control room	1	2.50	6.15	15.38		
		Lumpsum provision wherever req.	1	3.50	3.50	12.25		
			3	2.80	2.80	23.52		
		C	e ê	Y		90.81	90.81	Sqm
		.0	Y					
8	R2-CS-AW-10	Providing and fixing in position alluminum door fully panelled with 6mm thick Novapan BSL and made up of extruded and anodised aluminium sections of approved make and of size 63.5 mm x 38.10 mm x 2.0 mm thk, 47.62 mm x 10.16 mm x 1.74 mm thk (wt.0.881kg./Rm) for outer frame, 47.62 mm x 10.16 mm x 1.74 mm thk (wt. 0.881 kg/Rm) for top rail, 95.25 mm x 25.40 mm x 2.0 mm thk (wt. 1.519 kg/Rm) for bottom rail, 25.0 mm x 44.45 mm x 2.40 mm thk (wt. 0.918 kg/Rm) for lock rail, 47.62 mm x 44.45 mm x 1.88 mm thk (wt. 0.943 kg/Rm) for vertical shutter (hinge side), 47.52 mm x 44.45 mm x 1.95 mm thk (wt. 0.936 kg/Rm) for vertical shutter (latch side), clip weighing 0.097/kg/Rm., including neoprene gasket, fixtures, fastenings and accesories like hinges, locking arrangement, door closer etc. complete as directed by Engineer In Charge. (Note: anodic film must not be less than 15 microns i.e. AC-15 as per IS, the anodizing must be scaleted by						

		keeping the anodized section in boiling de-anodized water for a period of one hour)					
		Provision	(C)		25.00	25.00	Sqm
		21	Y				
9	R2-CS-PL-46	Providing and Fixing Modular False Ceiling of "Armstrong /M/sHunterDouglas India/USG" make by using 600 x 600 x 15 mm thick prima finefissured microlook mineral fibre ceiling tiles on superfine 15 mm Teegrid system suspended with the help of 2 mm prestraitenedG.I.wire,etc.complete. As per Architect's Detailed Drawing & Design asdirected by Engineer In Charge.					
	T.C.	Provision			177.17	177.17	Sqm
	O						

10	R2-CS-PL-45	P&F in position Gypsum board false ceiling with 12.5mm th. Gypsum boards, screwed/ fixed to the under struct of suspended G.I. Grid const & suspended from the main ceiling of ceiling sectn at max c to c distance of 450 mm perimeter channel and intermediate channels at max c to c distance 1200 mm galvanised grid should be fixed to RF CC slab. The gypsum board should be fixed to galvanised iron grid with necessary screws. The boards should be taped and filled from underside to give smooth, seamless ceiling. The rate should include necessary additional ceiling sections and intermediate channels to be provided at openings for light fixtures, asbestos cement ducts, vertical drops, offsets etc. Additional intermediate channels should be fixed to strap hangers for additional support to prevent strapping at every 1200 mm item to be comp in all respect. (G.I. perimeter channel size-27mmx0.5mm thk., flange-20mm & 30mm, intermediate channel. size-45mm & 0.9mm thk., hanger size-25mmx0.5mm thk.) complete				3	
		Provision			77.51	77.51	Sqm
		$^{\vee}O_{\lambda}$					
11	R2-CS-WW-23	Providing and fixing trap door in the Gypsum board / POP ceiling system for elecrical and mechanical utilities with 18mm thk. plywood shutter and 12mm thk. teak wood lipping all around including wooden / G.I. frame with supports, fixtures, fastenings etc. complete as directed. Provision			3.00	3.00	each
3		G.I. frame with supports, fixtures,			3.00	3.00	

12	R2-CS-PN-5	Providing and applying first single coat of approved primer and two coats of acrylic plastic emulsion paint of an approved make and colour as per manufacturers specifications to any surface, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-incharge.						3	
		Qty same as R2-CS-PL-45					77.51	77.51	Sqm
)		
13	R2-CS-DD-1	Demolishing cement concrete manually/ by mechanical meansincluding disposal of material within 50 metres lead as per direction ofEngineer - in - charge.	~	es es	C				
		Provision					0.40	0.40	Cum
		A.C.	Y						
		Provision					5.00	5.00	Cum
		C 0							
14	R2-CS-DD-3	Demolishing brick work in lime or cement mortar including plaster, paint, etc. manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.							
	XO	MRI Examination room	1	6.60	0.23	3.20	4.86		
		MRI Technical room	1	2.50	0.23	3.20	1.84		
							6.70	6.70	Cum

15	R2-CS-PL-15-a	Providing and applying 20 mm thick external sand faced cement plaster upto 10m from ground level and at all locations in cement mortar proportion specified below in two coats for masonry (except stone masonry) and concrete surfaces including providing water proofing compound to the first coat of plaster as per manufacturers specification, racking out joints, hacking of concrete surface, finishing, curing, scaffolding, etc complete as directed By Engineer In Charge.						3	
			1	6.60	3.20	>,	21.12		
			1	2.50	3.20		8.00		
							29.12	29.12	Sqm
	R2-CS-PL-08-b	Providing and applying 20 mm thick internal sand faced cement plaster at all heights and locations in cement mortar specified below in two coats for masonry (except stone masonry) and concrete surfaces including racking out joints, hacking of concrete surface, watering, finishing, curing, scaffolding etc complete as directed By Engineer In Charge.							
		~O ×	1	6.60	3.20		21.12		
			1	2.50	3.20		8.00		
							29.12	29.12	Sqm
16	R2-CS-PN-8	Providing and applying first single coat of approved primer andtwo coats of waterproof cement paint of an approved make andcolour as per manufacturers specifications to any surface, upto10m height from ground level and at all locations as directedincluding preparing surfaces for painting by any approved means,scaffolding, cleaning and curing etc. complete as directed							

		byEngineer-in-charge.							
								1	
			2	6.60	3.20		42.24		
			2	2.50	3.20		16.00		
							58.24	58.24	sqm
		Brick work with common burnt clay F.P.S. (non modular) bricks of							
17	R2-CS-MW-3-a	class designation 3.5 and above in	~	(C)					
		superstructure above plinth level upto floor five level in all shapes and sizes		Y					
		in:							
		MRI Examination room	1	6.60	0.23	3.20	4.86		
		MRI Technical room	1	2.50	0.23	3.20	1.84		
							6.70	6.70	Cum

Turn key work (M & E) (BOQ) for MRI Scan at LTMG Hospital

Sr No.	FME 2018 Item No.	Description	Qty	Unit
A		Cable End Termination For Aluminium Cables : (SPME-TS-6)		
3	OTX	Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of Double compression cable glands, stripping of cable insulation, supply and fixing of aluminium lugs for aluminium cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, G.I nut - bolts and G.I washers, consumables and other hardware materials as required to make the installation complete, are in the scope. All G.I Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core & accessories		
1	R2-ME-2-11-aa	3.5C x 240 Sq.mm	2	Set

2	R2-ME-1-28-a	415V Main Distribution Panel 1 short circuit reating 50kA for 1 Sec. 250A (Thermal magnetic overload, short circuit releaseMCCB with rotary operating mechanism as incomer with digital ammeter, voltmeter with selector switches, phase indicating lamp with required accessories, 1Nos. 32A, 63A, 1Nos. 80A, 2Noss. Of 100A, 1Nos. 160A & 2Noss. 200A (total 8Noss.) MCCB of short circuit rating 25kA for 1 sec. as outgoings.	1	no
В		MCCB incomer and MCB outgoing Distribution Board (SP-ME-TS- 3)	^	4
	R2-ME-1-16	IP 43 & IP 30 Vertical TPN Distribution Board with Modular Incomer with Metal door (Box only) of of various sizes on wall/ Column/ floor mounting, with detachable gland plate, terminal connectors and other required hardware & fasteners. DB shall be designed with provision for MCCB as incomer & SP / TP MCB as outgoing as per requirement. (Cost of the DBs will be without MCB, MCCB). DB shall be as per IS 8623- 1 & 3 / IEC 61439- 1 & 3.	O	
3	R2-ME-1-16-c	IP 43 8 Way MCCB DB (125/160A MCCB + 8Way TP MCB /24 Way SP MCB)	3	nos
		Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required.		
4	R2-ME-1-17-c	16A/20A SP MCB	24	nos
5	R2-ME-1-17-m	32A TP MCB	6	nos
	R2-ME-1-18	Unit rate of 415V, 10kA/16kA, Moulded case circuit breaker with Thermal magnetic overload suitable for DB mounting complete with connection, testing & commissioning etc. as required.		
6	R2-ME-1-18-d	125A 4P MCCB	3	nos
	O. C.	WIRING FOR SUBMAINS/ CIRCUIT WIRING (SP-METS-2)		
3	R2-ME-3-1	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor wire in surface/ recessed medium class PVC conduit as required		
7	R2-ME-3-1-i	3 X 10 sq. mm + 1 X 10 sq. mm earth wire in 32mm Conduit	170	mtr
8	R2-ME-3-1-h	3 X 6 sq. mm + 1 X 6 sq. mm earth wire in 25mm Conduit	170	mtr
9	R2-ME-3-1-g	3 X 4 sq. mm + 1 X 4 sq. mm earth wire in 25mm Conduit	185	mtr

10	R2-ME-3-1-b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire in 20mm Conduit	250	mtr
11	R2-ME-3-1-a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire in 20mm Conduit	250	mtr
12	R2-ME-3-1-n	4 X 16 sq. mm + 2 X 16 sq. mm earth wire in 38mm Conduit	150	mtr
		1.1 KV GRADE COPPER FLEXIBLE WIRE WITH SINGLE PVC INSULATED "METER LEADS" COMPLETE WITH FLEXIBLE PVC CONDUIT, END TERMINATIONS, CLIPPINGS ETC.: (SP-ME-TS- 12)		4
13	R2-ME-1-10-g	3 Nos. single core Cu PVC insulated flexible cable of 95 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for neutral of 50 Sq.mm for UPS System.	90	mtr
		Point wiring by using FRLSZH insulated copper conductors (alongwith same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose): PVC conduit concealed with modular switches & FRLSZH wires.		
14	R2-ME-3-26-a	Light /Fan / Ex. fan Points Concealed Manner with Modular switches & FRLSZH wires	35	pt
15	R2-ME-3-26-b	3/5 Pin Independent Plug (IP) Concealed Manner with Modular switches & FRLSZH wires	35	pt
		Point wiring by using FR insulated copper conductors (alongwith same size of FR insulated copper conductor for earthing & 3 plate ceiling rose) using M.S.CONDUIT		
16	R2-ME-3-29-i	15 / 5 A / 6 A Combined Power Plug Socket Point with Fuse and Indicating Lamp, One 15 Amp SP Switch	17	pt
3	ortal	LED Square Recessed Downlighter:- up to 8 W LED with a minimum system efficacy of 80 lm/W and for above 8W LED Recessed Downlighter with a minimum system efficacy of 100 lm/W The luminaire shall have a rated system lifetime of min 40,000 burning hours at L70. The luminaire should have a color temperature of 6500K and CRI>70. The luminaire shall meet IP20 rating. Up to 24 w -The luminaire housing should made of plastic with a polycarbonate reflector and a high quality diffuser. For 36 W and 45 W-The luminaire housing should made of powder coated metallic CRCA with high efficiency opal diffuser. The driver should be integrated		
17	R2-ME-4-33-g	45W (600x600)	19	nos

		Downlighter/Wall mounted LED:- Recessed Downlighter /Wall mounted up to 8 W with a minimum system efficacy of 80 lm/W and above 8W LED with a minimum system efficacy of 100 lm/W The luminaire shall have a rated system lifetime of min 40,000 burning hours at L70. The luminaire should have a color temperature of 6500K and CRI>70. The luminaire shall meet IP20 rating. The luminaire housing should made of pressure die cast aluminium with a high efficiency diffuser. The driver should be integrated.		
18	R2-ME-4-32-d	13-18 W	30	nos
		FANS (SP-ME-TS-28)		
19	R2-ME-4-12-p	Wall mounting fan of 400mm sweep, 230 Volts,AC 50 Hz, oscillating type complete with all necessary accessories for completing installation	3	nos
20	R2-ME-4-12-i	Exhaust fan of 305mm sweep, 900/1400RPM, with 750 CFM free air delivery, AC 230V/415V, 50 Hz, single phase / three phase complete with all necessary accessories for completing installation as per specification.	3	nos
		EARTHING		
21	R2-ME-7-1-d	600 X 600 X 3.15 mm Copper Plate, 3000mm dip with suitable size cu strip earth pit as per IS 3043. The earth pit shall be provided with watering pipe (Class B) with wire messed funnel, 12 SWG cu wire upto chamber, disconnecting links with 600 x 600 mm (clear) RCC chamber & 3mm thick heavy duty CI chequered plate cover with hinge. Bentonite shall be provided for earth pits. Excavation, backfilling, removal of excess soil is included in the scope	4	nos
22	R2-ME-1-10-f	3 Nos. single core Cu PVC insulated flexible cable of 50 Sq.mm. for Earthing.	50	mtr
	W.O.	Supplying & laying I.S.I. mark 'B' class GI Pipe for surface / under ground cable protection.		
23	R2-ME-2-21-f	50 mm dia.	120	RMT
В		FIRE DETECTION AND ALARM SYSTEM		
24	Fair	Dismantling Existing Fire System alogwith all accessoires & cables etc. Handover to MCGM Authority	1	Job

25	R2-ME-15-32-a	Supply, Installation, testing & commissioning of addressable 2 loop main fire alarm electronic control panel, expendable up to 4 loop & having maximum 250 devices (any combination detectors plus devices) per loop & Audio/ Visual alarm complete as per IS: 2189 specification - modular type front operated with interlocking door arrangement totally enclosed dust and vermin proof for indoor type applications.	1	No
26	R2-ME-15-32-b	Supply, Installation, testing & commissioning of expandable Loop card for main fire alarm electronic control panel, shall support 254 devices both detectors and modules and shall support both class 'A' & class 'B' wiring.	1	No
27	R2-ME-15-32-c	Supply, Installation, testing & commissioning of 2Cx1.5 sq.mm armoured RED colour copper FRLS cable with necessary saddles, screws, junction boxes, sleeves, elbows couplings etc. for Fire alarm System	250	Mtr
28	R2-ME-15-32-d	Supply, Installation, testing & commissioning of Intelligent Photoelectric Smoke Detector along with mounting box & termination glands.	22	Nos
29	R2-ME-15-32-e	Supply, Installation, testing & commissioning of Intelligent Heat Detector along with mounting box & termination glands.	10	Nos
30	R2-ME-15-32-h	Supply, Installation, testing & commissioning of Addressable Manual call point/ station with mounting back box	1	No
31	R2-ME-15-32-i	Supply, Installation, testing & commissioning of Programmable Electronic Sounders (Hooters):	1	No
С		AIR CONDITIONING WORK		
	ortal	SITC of Capacity (R-410A/R-407c or eco-friendly Refrigerant) Air Cooled type OUTDOOR UNITS of VRF system having hermetically sealed scroll inverter compressor, condenser coil fabricated from Seamless Copper tube & Plate type Al. Fins of Multi Row, Axial Flow, upward throw condenser fan, Condenser fan - motor unit, insulated refrigeration piping, power / control wiring, and earthing, external wiring between Indoor & Outdoor units, all system controls-safety. Each Outdoor units with High Pressure switch, Fan driver overload protector, Over current relay, Inverter Overload Protector & Fusible Plug. The unit shall be suitable for 415 ± 10 % volts, 50 Hz, 3 phase AC supply, and IP 55 protection. The out door unit shall be installed on M.S. platform duly painted, as per specifications. (Carrier / Blue Star / Voltas)		
32	R2-ME-9-10-i	22 HP	1	No

33	R2-ME-9-10-j	Supply Installation Testing & commissioning AHU Controller / distribution kit of suitable capacity for connecting multi VRF ODU to DX AHU, with a) built in auto restart function, c) with necessary electrical wiring & remote controller.	1	No
34	R2-ME-9-10-k	SITC of Seamless heavy gauge REFRIGERATION COPPER PIPING for VRF/ VRV system in 18 gauge, duly insulated with 13 mm/19 mm thickness. Nitrile Rubber Insulation. Refrigeration piping will have to be taken in the piping rack / Support individually connecting to Indoor units, including necessary supports, fittings, valves & ref. joints, Cable tray for exposed piping where ever required will be included The pipe sizes from 1/4 " to 1".(13 mm insulation) and 1-1/8 " to 2"(19 mm insulation) shall be used.	150	RMT
35	R2-ME-9-10-1	Supply, Installation, Testing and Commissioning of Refnets as specified of pipe sizes from 1/4 " to 2"	2	Nos
36	R2-ME-9-10-m	Supply, Installation, Testing and Commissioning of Central remote controller must be integrable with the VRV/VRF system Complete operation & monitoring of VRV air conditioning system shall be possible through the control system. Following functions shall be possible i.) Controlling indoor units ii.) Zone control iii.) Malfunction code display iv.) All the functions available with wired remote controller v.) It should be possible to wire the remote to 1000m vi.) Remote start / stop of indoor units vii.) Mal function report. viii.) Colour LCD touch panel icon display ix.) Fault History up to 100 actions. x.) Simple Interlock Function xi.) Fire Alarm System interface Required hardware shall be suitable for operation between -10 Deg C to 50 Dg C & humidity range, of 0% to 98%, without condensation.	1	No
37	R2-ME-9-11-a	Indoor Units :- Ductable for VRF 2 TR Ceiling Mounted duct type	2	Nos
38	R2-ME-9-11-c	Indoor Units :- Ductable for VRF 3 TR Ceiling Mounted duct type	4	Nos
39	R2-ME-9-11-d	Indoor Units :- Ductable for VRF 4 TR Ceiling Mounted duct type	4	Nos
40		GSS Ducting:- Supplying fabrication installation testing and commissioning of GI. Sheet metal ducting. Zinc coated. Complete with all Standard Accessories, G.I Hardware, Self Adhesive elastomeric foam gasket, Support etc as per SMACNA specification.		
41	R2-ME-9-47-b	22 SWG	280	Sq. Mtr
42	R2-ME-9-37	Providing thermal insulation to supply air ducting with 19mm. thickness nitrile rubber	280	Sq. Mtr

43	R2-ME-9-44	Supply & installation of under deck roof insulation with teak wood frame and 50mm thick TF qulaity themocol covered with foam sheet	320	Sq. Mtr
44	Fair	To make opening in the walls for laying of chilled water piping / drain piping, supply air duct, cable etc. & making them good as per original appearance.	1	Job
45	R2-ME-9-2-g	Providing & fixing of M.S. Stand & Bracket for fixing Indoor & Outdoor unit.	1	No
46	R2-ME-9-2-h	Providing & fixing of M.S.Cage / encloser for 1.0 TR/ 1.5 TR, 2 TR window A.C. & 1.0 TR/ 1.5 TR/2.0 TR Split A.C Units	1	No
47	R2-ME-9-2-j	Providing & fixing of Weather shed for Window A.C.& split A.C. units.	1	No
D		SITC OF PUBLIC ADDRESS SYSTEM		
48	R2-ME-12-10-u	Supply and installation of Booster amplifier 500W with all accessories.	1	No
49	R2-ME-12-10-s	Supply and installation of 16 channel zone selector	1	No
50	R2-ME-12-10-m	Supply & installation of PVC conduit for speaker wiring	200	Mtr
51	R2-ME-12-10-f	Speaker wiring using 40/36 cable with PVCc conduit(in mtr.)(polycab/Pyroflex cable)	250	Mtr
52	R2-ME-12-10-d	6W/100V. PA Ceiling Speaker	10	Nos
53	R2-ME-12-10-j	Supply & installation of Microphone	3	Nos
54	R2-ME-12-10-b	Delegate unit Microphone	1	No
Е		LCD PROJECTOR, LAN, CCTV & TELEPHONES		
55	R2-ME-12-11-c	Projector, Full Hd Resolution (1920 x 1080 Pixels), 3200 Lumen, 15000 : 1 Contrast Ratio, 2 HDMI Ports, USB , 3D, Rugged design, etc.	1	No
56	R2-ME-12-11-d	SITC of 84" Portable Indoor Outdoor Projector Screen, 84 Inch Diagonal Projection and Pull Up Foldable Stand Tripod.	1	No
57	R2-ME-12-11-e	Ceiling bracket 1 meter for projector including all fitting accessories.	1	No
58	R2-ME-12-12-b	16 Port Network Switch	1	No

59	R2-ME-12-3-a	SITC OF ARMOURED JELLY FILLED TELEPHONE CABLES Armoured Telephone Cable -10 pair	55	Mtr
60	R2-ME-12-2-a	SITC OF TELEPHONE CABLES PVC Telephone Cable -2 pair	450	Mtr
61	R2-ME-12-4-b	SITC OF COMPUTERS CABLES Cat 6	800	Mtr
62	R2-ME-12-5-c	PVC box & cover plate with RJ-45 for LAN access only	20	Nos
63	R2-ME-12-5-b	Switch BOX point for computers through PVC Conduit Description of Item:- 8Modular SURFACE BOX - 1 No. 8Modular PLATE - 1 No. INDICATOR LAMP - 1 No. 15A SWITCH - 1 No. 6A 5 PIN SOCKET - 3 Nos. 2Modular SURFACE BOX - 1 Nos. 2M PLATE - 1Nos. RJ11 SOCKET - 1 Nos. RJ45 SOCKET - 1 Nos.	20	Nos
		CCTV		
64	ITI-07-009-3010	15 U Rack	1	no
65	R2-ME-12-13-a	Dome type camara	10	no
66	R2-ME-12-13-b	Color infra red camera	5	no
67	R2-ME-12-13-j	SITC 4 TB storage	1	no
68	R2-ME-12-13-h	Digital Video Recorder	1	no
69	R2-ME-12-4-d	S/L of RG 6 cable	600	mtr
70	R2-ME-12-7-a	S/L of 25x12 mm PVC casing caping	600	mtr
71	R2-ME-12-8-a	S/L of 25 mm PVC pipe	600	mtr
72	R2-ME-2-16-a	S/L 50x50 PVC trunking	100	mtr
73	R2-ME-3-27-b	3 pin 5/6 Amp Independent plug point	15	pt
74	R2-ME-3-3-a	S/L 2x1.5 + 1x1.5 mm in PVC casing caping	100	mtr
75	R2-ME-12-4-b	S/L CAT 6 cable	200	mtr
		LCD PROJECTOR, LAN, CCTV & TELEPHONES		

F		MEDICAL GAS WORK		
76	Fair	Providing & Fixing of 12MM OD COPPER PIPE as per technical specification TS-1.	45	Mtr
77	Fair	Providing & Fixing of 15MM OD COPPER PIPE for oxygen as per technical specification TS-1.	100	Mtr
78	Fair	Providing & Fixing of 22MM OD COPPER PIPE for vacuum as per technical specification TS-1.	100	Mtr
79	Fair	Providing & Fixing of 15MM Isolation valve as per technical specification TS-2.	2	No
80	Fair	Providing & Fixing of 22MM Isolation valve as per technical specification TS-2.	2	No
		MEDICAL GAS WORK		
G		DISMANTLE & HANDOVER ERQUIPMENTS		
	Fair	Dismantling of existing Air Conditioning/ Medical Gas / Electricals/ Mechanical system equipments / parts etc. in the MRI Departments & handover to MCGM Authority. Due care shall be taken while dismentling so that dismentle part/ equipment shall remain functional for reinstallation. Damage if any shall have to be composated by the contractor, the decesion of Hospital Authorty shall be binding.	1	Job
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-	MRI BOQ FOR <u>NAIR HOSPITA</u>						
SI.	Item No.	Description	Qty	Unit			
Α		CIVIL AND FURNOTURE WORK	Gty	Unit			
1.1	R2-CS- DD-8-a	Dismantling doors and windows including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead	8	Nos.			
1.2	R2-CS- DD-3	Demolishing brick work in lime or cement mortar including plaster, paint, etc. manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge		sq mtr			
1.3	R2-CS- DD-21	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	60	Sq. Mtr			
1.4	R2-CS- DD-65	Removing cement plaster of any finish from the wall, complete with racking out the joints to a depth of 20 mm.	220	Sq. Mtr			
1.5		Dismantatling / Removing existing light fittings in area	1	Lot			
1.7	R2-CS- DD-53	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means including loading, transporting, unloading to approved municipal dumping ground oras ap proved by Engineer-in-charge, beyond 50 minitial lead, for all leads including all lifts involved. M. K. I.	1	Cu.Mtr			
1.8		Loading & Unloading Platform for 🕰 System	1	Nos.			
		Full brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 and above in foundations and plinth in cement mortar 1:4 (1 cement : 4 coarse sand)	145	sqmt			
2.1	R2-CS- MW-10-B	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 and above in foundations and plinth in cement mortar 1:4 (1 cement : 4 coarse sand)	115	Sq. Mtr			
3.1A		Lead Lined Door & Frame	4	Nos.			
3.1B		Lead lined window frame only	1	Nos.			

Providing and fixing in position aluminium door fully panelled with 6mm thick Novapan BSL and made up of extruded and anodised aluminium sections of approved make and of size 63.5 mm x 38.10 mmx 2.0 mm thk, 47.62 mm x 10.16mm x 1.74 mmthk (wt. 0.881kg./Rm) for outer frame, 47.62 mm x 10.16 mmx 1.74 mm thk (wt. 0.881 kg/Rm) for top rail, 95.25 mm x 25.40 mm x 2.0 mm thk (wt. 1.519 kg/Rm) for bottom rail, 25.0 mm x 44.45 mmx 2.40 mm thk (wt. 0.918 kg/Rm) for lock rail, 47.62 mm x 44.45 mm x 1.88 mm thk (wt. 0.943 kg/Rm) for vertical shutter (hinge side), 47.52 mm x 44.45 mm x 1.95 mmthk (wt. 0.936 kg/Rm) for vertical shutter (latch side), clip weighing 0.097/kg/Rm., including neoprene gasket, fixtures, fastenings and accessories like hinges, locking arrangement, door closer etc. complete as directed by Engineer In Charge. Providing and fixing anodized(anodic film must not	8.6	Sq.Mtr.
be less than 15 micron i.e. AC-15 as per IS, the anodsing must be scaleted by keeping the anodized section in boling deanodized water for a period of one hour)aluminium fixed / sliding/ pivoted / top hung/ louvered type windows, ventilators and partitions conforming to IS:1948, 1961 with hollow bottom section and standardsingle/ two/three / four track frame section all round(top, bottom, and side)with shutter frame made up of standard top & bottom section with infill panle of plain/rosted/tinted slaminated sheetas listed below with nylon guides, gliders glass fixing PVCweather strips, neoprene gasket, PVC weep holes etc complete with approved type of loacking arrangment, handles and other fixtures including fixing, filling the gaps with silicon sealant, cleaning polishing the aluminium section with petrol and / or other agents as specified by the manufacturers etc. complete as directed by Engineer In Charge	0	Sq.Mtr.
Providing and Fixing Console table with 30mm thick top finish with 1mm thick laminet and key board	2	seater
Providing and Fixing Reporting table with 30mm thick top finish with 1mm thick laminet and key board	3	seater

3.3C		Providing and Fixing File storage with 19mm thick ply finish with 1mm thick laminet.	6	sqmt
3.3D		Providing and Fixing 7' ht storage with 19mm thick ply finish with 1mm thick laminet in Gantry.	2	Nos
3.3.E		Providing and Fixing 3' ht Instrument table with 19mm thick ply finish with 1mm thick laminet in Gantry.	1	Nos
3.3F		P/Fixing Camrea table with 19 mm thick ply and finish with 1 mm thick laminet.	1	Nos
3.3G		Providing and Fixing Registration table with 19mm thick ply finish with 1mm thick laminet.	1	Nos
3.3H		Providing and Fixing storage for CT 19mm thick ply finish with 1mm thick laminet.	4	sqmt
3.31		Supplying of Revolving chair.	6	Nos
3.3j		Supplying of S.S. waiting bench set of 3 visitor in waiting area.	12	Nos
4.1		Providing and laying 600 x 600 x 8 mmthk. vitrified tiles as specified below conforming to I.S.15622-2006 with water absorption, less than 0.08% for flooring of an approved, quality, make and pattern /design for flooring including cement mortar bedding of 25 mm thick in 1:4 proportion, cutting, levelling, jointing, filling the joints by neat cement slurry or approved colour grout, curing, finishing etc complete as directed by Engineer In Charge. Light coloured glazed vertified tiles.	155	sq Mtr
4.2	R2-CS-FL-6	Providing and fixing 8mm thk. Vertified tiles as specified below conforming to Is. 15622-2006 with water absorption less than 0.08% of approved quality, pattern and colour for dado in the dry are a including preparing the surface and levelling in the desired line, backing of 20thk. cement mortaring proportion 1:3, square cut top edge or chamfered top edge in cement mortar 1.3, cement float, machine cutting, levelling, jointing, filling the joints with near cement slurry or approved colour grout, finishing curing etc complete as directed by Engineer Ir Charge. Light coloured glazed virtifyed tiles/Dark coloured glazed vertified tiles/Light coloured antiskid	295	Sq.Mtr.
4.3 CS	Lumsum Scanned CamSca	Providing and doing M-10 epoxy pidigrout as pe	0.42	Cu. Mtı

	5.1 R2-Me-	The successful contractor shall provied the sheets of the false ceiling by new sheets of size 600mm 600mm,made us pf medium density fiberboards of 12mm thk, both sides laminated on the existing framework of aluminium tees suspended with M.S. Rods after carying out ducting & insulation work wherever necessary. The opening for the lighting/fan/air diffuser & grill arrangement shall be provided in the false ceiling as directed & if required if required additional supports of 6mm dia ms rods suspended from ceiling to grid work shall be provided as per the drection of site engineer. All the suspended bars shall be painted with two coats of anticorrosive red oxide paint. The complete boxing shall be made airtight by using felt.	6 55 55 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Sq.Mtr.
5.2	2	P & F in position Gypsum board false ceiling with 12.5mmthk.Gypsum boards, screwed/ fixed to the under struct of suspended G.I. Gride const & suspended from the main ceiling of ceiling section at max c to c distance of 450 mm perimeter channel and intermediate channels at max c to c distance 1200mm galvanised grid should be fixed to rf CC slab.	125	Sq.Mtr.
6.1	R2-CS-PN	scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge.		Sq.Mtr.
6.2	R2-CS-AT-	Providing Pre-constructional anti-termite treatment conforming to Is-6313(part II) using chloropyrifos EC 20 Emulsion or equivalent of 1% concentration by weight for creating barrier under and all around foundation pits, wall trenches, basement excavation, backfill in immediate contact with foundation and treating the top surface of plinth filling, junction of wall & floor, along the external perimeterof building, expansion joints, surrounding of pipes, water conduits and at places suggested and as directed by Engineer-in-charge	150	Sq.Mtr.
· c 9	canned	with	-	
	CamScan			

		ELECTRIC WORK			
Sr No.	2018 Item	Description		Unit	
Α		Cable End Termination For Aluminium Cables : (SPME- TS-6)			
1		Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed armoured/ unarmoured cables including supply & fixing of Double compression cable glands, stripping of cable insulation, supply & fixing of aluminium lugs for aluminium cables for all phases & crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, GI nut - bolts and G.I washer, consumable & other hardware materials as require to make the installation complete, are in the scope. All G.I. Nut, bolt & washer shall be HDGI with 80 micron. One Set of termination includes gland, lugs for cable core & accessories			
	70 145 0 446	3.5C x 240 Sq.mm	0	5	et
2		415V Main Distribution Panel 1 short circuit reating 50kA. for 1 Sec. 250 A (Thermal magnetic overload, short circuite release MCCB with rotary operating mechanism as incomer with digital ammeter, voltmeter with selector switches, phase indicating lamp with required accessories, 1 No. 32A, 63A, 1No. 80A, 2 Nos. of 160A & 2 Nos. 200 A (total 8 Nos.) MCCB of short circuit rating 25kA for 1 sec. as outgoings.	1		No.
		Distribution		+	
		MCCB incomer and MCB outgoing Distribution Board (SP-ME-TS-3)			
	R2-ME-1-1	IP 43 & IP 30 Vertical TPN Distribution Board with Modular Incorner with Metal door (Box only) of of various size on wall/ Column/ floor mounting, with detachable plate, terminal connectors and other required gland, hardware & fasteners. DE shall be designed with provision for MCCB as incomer & SP / TP MCB as outgoing as perequirment. (Cost of the DBs will be without MCB MCCB). DB shall be as per IS 8623- 1 & 3 / IEC 61439-1&3	s s r		



3	2-ME-1-1	6-TP MCB /24 Way SP MCB)	y O	No
	3 (8)	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniatur circuit breaker suitable for DB mounting complet with connection, testing & commissioning etc. a required.	е	
4	2-ME-1-17	7-16A/20A SP MCB	0	No
- 5	2-ME-1-17	- 32A TP MCB	0	No
	R2-ME-1-1	commissioning etc. as required	rl	
6	2-ME-1-18-	125A 4P MCCB	0	No
		WIRING FOR SUBMAINS /CIRCUIT WIRING (SP METS-2)		
	R2-ME-3-1	wiring for circuit/submain wiring alongwith earth wire with the following saize of FR PVC insulated copper conductor wire in surface/recessed medium class PVC conduit as required	5	
7		3×10 sq.mm + 1 x 10 sq.mm earth wire in 32mm	125	mti
_		3 x 6 sq.mm + 1 x 6 sq.mm earth wire in 25mm	1 125	mtr
19000		3 x 4 sq.mm + 1 x 4 sq.mm earth wire in 25mm	130	mtr
\dashv		2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire in 20mm	כטו	mtr.
-		x 1.5 sq.mm + 1 x 1.5 sq.mm earth wire in 20mm	190	mtr.
12 R2		x 16 sq.mm + 2 x 16 sq.mm earth wire in 38mm	130	mtr.
	C T 1:	.1 KV GRADE COPPER FLEXIBLE WIRE WITH INGLE PVC INSULATED "METER LEADS" OMPLETE WITH FLEXIBLE PVC CONDUIT, END ERMINATIONS, CLIPPINGS ETC. : (SP-ME-TS- 2)		
13 2	•ME-1-10 in U	Nos. single core Cu PVC insulated flexible cable of 5 Sq.mm. for phase & 1 single core Cu PVC sulated flexible cable for neutral of 50 sq.mm for PS System	110	mtr.
14 2-		ight/Fan/Ex.Fan Points Concealed Manner with	55	pt
-	13	/5 Pin Independent Plug (IP) Concealed Manner ith Modular switches & ERI SZH wire	1	

THE PER	_				
			Point wiring by using FR insulated copper conductors (alongwith same size of FR insulated copper conductor for earthing & 3 plate ceiling rose) using M.S. CONDUIT		(7)
	16	R2-ME∍3-2	15/5A/6A Combined Power Plug Socket Point with Fuse and Indicating Lam, one 15Amp Sp Switch	23	pt .
	17	2-ME-1-19		5	Nos.
(C)			LED Square Recessed Downlighter:- up to 8 W LED with a minimum system effcacy of 80 lm/W and for above 8WLED Recessed Downlighter with a minimum system efficacy of 100lm/W. the luminaire shall have a rated system lifetime of min 40,000 burning hours at L70. the luminaire should have a colour temperature of 6500K and CRI>70. The luminaire shall meet IP20 rating. UP to 24w-the luminaire housing should made of plastic with a polycarbonate reflector and high quality diffuser. For 36 w and 45W the lumiaire housing should made of powder coated metallic CRCA with high efficiency opal diffuser. tThe driver should be integrated.		
İ	18	2-ME-4-33	45 W (600x600)	30	Nos.
			Downlighter /Wall mounted LED:- Recessed Downlighter / Wall mounted up to 8W with a minimum system efficacy of 80 lm/W and abovve 8W LED with minimum system efficacy of 100lm/W. The luminaire shall have a rated luminaire should have a coloe temperature of 6500K and CRI>70. The luminaire shall meet IP20 rating. The luminaire housing should made of pressure die cast aluminium with a high efficiency diffuser. The driver should be integrated.		
1	19	2-ME-4-32-	13-18 W	25	Nos.
			FANS (SP-ME-TS-28)		
	20	2-ME-4-12	Wall mounting fan of 400 mm Swwp, 230 Volts, AC 50 Hz, oscillating tye cpmplete with all necessary accessories for completing installation	6	Nos.
	21	2-ME-4-12	Exhaust fan of 305mm sweep, 900/1400 RPm, with 750 CFM free air delivery, AC 230V/415V, 50 Hz, single phase/three phase compete with all necessary accessories for completing instrallation as per specification.	2	Nos.
	22	Fair Scanned	Supply and istallation of radiation Warning Light	1	No.
	22	CamScan	ner		المالا

	T			
		EARTHING		
23	R2-ME-7-1	600 x 600 x 3.15 mm Copper Plate, 3000mm dip with suitable size cu strip earth pit as per IS 3043. The earth pit shall be provideed with watering pipe (Class B) with wire messed funnel, 12 SWG cu wire upto chamber, disconnecting links with 600 x 600 mm (clear)RCC chamber & 3mm thick heavy duty C chequered plate cover with hing. Bentonite shall be provided for earth pits. Excavation, backfilling removal of excess soil is included in the scope.	6 5 7 1 4	Nos
24	2-ME-1-10	50 Sq.mm for Earthing.	120	mtı
	ì	supplying & laying I.S.I. mark 'B' class GI Pipe fo surface / under ground cable protection.	r	
С	STATE OF	FIRE DETECTION AND ALABAS OVOTES		
•	Merical Europe	FIRE DETECTION AND ALARM SYSTEM Dismantling Existing Fire System alongwith al		
26		accessoires & cables etc. handover to MCGN Authority	1 1	Jol
27	2-ME-15-32	Supply, Installation, testing & commissioning of addressable 2 loop main fire alarm electronic contro panel, expendable up to 4 loop & having maximum 250devices (any combination detectors plus devices) per loop & Audio/ Visual alarm complete as per IS:2189 specification - modular type front operated with interlocking door arrangement totally enclosed dust and vermin proof for indoor type applications.	1	Nos
8 2	-ME-15-32	Supply, Installation, testing & commissioning of expandable Loop card for main fire alarm electronic control panel, shall 254 devices both detectors and modules and shall support both class 'A' .8t class 'B' wiring.	1	Nos.
29	- WL-10-32	Supply, Installation, testing 8c commissioning of 2Cx1.5 sq.mm armoured RED colour copper FRLS cable with necessary saddles, screws, junction boxes, sleeves, elbows couplings etc.	250	Mtr
30	2-ME-15-32	Supply, Installation, testing & commissioning of Intelligent Photoelectric Smoke Detector along with mounting box & termination gloods.	28	Nos.
31	canned	Supply, 'installation, testing 8c commissioning of Intelligent Heat Detector along with mounting box & termination glands.	5	Nos.

	1		Supply Installation tosting to commission d		(9)
	32	2-ME-15-32	Supply, Installation, testing 8c commissioning of Addressable Manual call point/ station with mounting back box	1 1	Nos.
_;	33	2-ME-15-32	Supply, Installation, testing 8c commissioning of Programmable Electronic Sounders (Hooters):	1	Nos.
	D		AIR CONDITIONING WORK		
4	45	Fair	To make opening in the walls for laying of chilled water piping / drain piping, supply air duct, cable etc. & making them good as per original appearance	1	Job
			Split type Air Conditioning fitted with Hermetically sealed Compressors operating on Refrigerant R-407c/ R-410A non CFC / R-22 environment friendly refrigerant, suitable for wall/ceiling mounting Conforming to IS (Except power Consumption Norms) suitable for operation on 230 V ±f- 10% n 50 Hz., single phase AC supply capable of performing I) Cooling 2) Dehumidifying 3)Air circulating 4) Filtering.		
4	16	R2-ME-9-2-	voitas.	8	Nos.
4	18	R2-MĒ-9-2-l	Providing & fixing of M.S.Cage / encloser for 1.0 TR/ 1.5 TR, 2 TR window A.C. & 1.0 TR/ 1.5 TR/2.0 TR Split A.C Units	4	Nos.
4	19	R2-ME-9-2-	Providing & fixing of Weather shed for WINDOW a.C. & Split A.C. Units	4	Nos.
			Voltage Stabilizer	8	NOS
	- 1	g _2 77_3	SITC OF PUBLIC ADDRESS SYSTEM		
A. L.	E	2-ME-12-10	Supply and installation of Booster amplifier 500 W with all accessories		No.
5	51	2-ME-12-10	Supply and installation of 16 channel zone selector	1	No.
	52	P-MF-12-10	Supply & installation of PVC conduit for speaker		Mtr
5	3	2-ME-12-10	Speaker wiring using 40/36 cable with PVCc conduit (in mtr) (Polycab/Pyroflex cable)	325	Mtr
5	54	2∘ME-12-10	6W/100V. PA. Ceiling Speaker	10	No
	55	2-ME-12-10	Supply & installation of Microphone	3	No
_	66	2-ME-12-10	Delegate unit Microphone	1	No
-10	-110		LCD PROJECTOR, LAN, CCTV & TELEPHONES		+-
	5_	tranned v	Anna		

CamScanner

Projector, Full Hd Resolution (1920 a 1080 Pixels),		
57 2-ME-12-11 3200 Lumen, 15000:1 Contrast Ratio, 2 HDMI Ports, USB, 3D, Rugged design, etc	1	No.
SITC of 84" Portable Indoor Outdoor Projector 58 2-ME-12-11 Screen, 84 Inch Diagonal Projection and Pull Up Foldable Stand Tripod.	1	No.
59 2-ME-12-11 Ceiling bracket Imeter for projector including all fitting accessories	1	No.
60 2-ME-12-12 16 Port Network Switch	1	No.
	30	Mtr
	350	Mtr
63 2-ME-12-4-SITC OF CO	650	Mtr
64 2-ME-12-5-PVC box & cover plate with RJ-45 for LAN access only	20	Nos.
Switch BOX point for computers through PVC Conduit Description of Item:- 8 Modular SURFACE SOX - 1 No. 8 Modular PLATE - I No. INDICATOR LAMP - 1 No. 15A SWITCH - 1 Nos. 6A 5 PIN SOCKET - 3 Nos. 2 Modular SURFACE BOX - I Nos. 21M PLATE - 1 Nos. RJ11 SOCKET - 1 Nos. RJ45 SOCKET - 1 Nos.	12	Nos.
G CCTV		
66 -07-009-30 15 U Rack		
67 2-ME-12-13 Dome type camara	1	Nos.
	10	Nos.
69 2-ME-12-13SITC - 4 TB storage	5	Nos.
70 2-ME-12-13 Digital Video Recorder	1	Nos.
71 2-ME-12-4-S/L. of RG 6 cable	1	Nos.
72 2-ME-12-7-S/L. of 25 X 12 mm PVC casing caping	480	Mtr
72 12 ME 12-7-07E. 01 25 X 12 mm PVC casing caping	480	Mtr
10 Z MZ 12 0 0/2 of 25 Hill PVC pipe	480	Mtr
75 2-ME-3-27-3 pin 5/6 Amp Independent plug point	70	Mtr
76 R2-ME-3-3 S/L 2 X 1.5 + 1 X 1.5 mm in PVC casing caping	15	pt
CamScanner & Casing caping	80	Mtr

y grid	1				
	77	2-ME-12-4	S/L CAT 6 cable	220	Mtr
	Н		MEDICAL GAS WORK		
	78	Fair	Providing & Fixing of 12MM OD COPPER PIPE as per technical specification TS-1	70	Mtr
	79	Fair	Providing & Fixing of 15MM OD COPPER PIPE for oxygen as per technical specification TS-1	140	Mtr
	80	Fair	Providing & Fixing of 22MM OD COPPER PIPE for vacuum as per technical specification TS-1	140	Mtr
	81	Fair	Providing & Fixing of 15MM Isolation valve as per technical specification TS-2	2	Nos.
C	S 32 ^{S(} C	tanped v amScan	Providin g& Fixing of 22MM Isolation valve as per technical specification TS-2	2	Nos.
1			11.4.4.		

Waterproof Nitrile coating for roof of the entire area of BOQ

Details of Item data

Tender No. Dy.Ch.E./CPD/42/TDR /AE-6 of 2022-23 Bid No. 7200038362

Item Group No.	<u>Description of the Items</u> (Bidder shall quote the following items as per technical specifications)	Quantity
1.	Import supply for SITC of 3 Tesla MRI System as per technical specifications (excluding the cost of accessories /consumables mentioned under Annexure-7A and 7B)	2 No.
	Make	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
	Model	Y
2	Local supply for SITC of 3 Tesla MRI System as per technical specifications (excluding the cost of accessories /consumables mentioned under Annexure-7A and 7B)	2 No.
	Make	
	Model	
3	Import Supply for 1 Set of standard accessories to be supplied with tender as per annex 7A	2No.
<u>4</u>	Local Supply for Set of standard accessories to be supplied with tender as per annex 7A	2No.
<u>5</u>	Import Supply for Set of standard accessories to be supplied with tender as per annex 7B	2 No.
<u>6</u>	Local Supply for Set of standard accessories to be supplied with tender as per annex 7B	2 No.
7	Turnkey work (Civil BOQ) for NAIR Hospital	1 No.
8	Turnkey work (M &E BOQ) for NAIR Hospital	1 No.
9	Turnkey work (Civil BOQ) for LTMG Hospital	1 No.
10	Turnkey work (M &E BOQ) for LTMG Hospital	1 No.
11	Dismantling of existing (old) MRI scanner at LTMG	1 No.
	Consumables/ accessories (for which rates to be freezed for 8years)	
12	Films	1 No.
13	Sampling Lines	1 No.
14	Contrast	1 No.
15	Gauss Lines	1 No.
16	Syringes	1 No.