

REGIONAL INSTITUTE OF MEDICAL SCIENCES
(An Autonomous Institute under the Ministry of Health and Family
Welfare Govt. of India)
Imphal West-795004, Manipur, India

TENDER DOCUMENT

FOR

**PROVIDING 01 NO. MRI 3 TESLA
(ON OPEX MODEL)
FOR A PERIOD OF 7 YEARS
AT RIMS HOSPITAL, IMPHAL WEST**

JUNE 12, 2023

REGIONAL INSTITUTE OF MEDICAL SCIENCES, IMPHAL, MANIPUR.
(An Autonomous Institute under the Ministry of Health & Family Welfare, Govt. of India)

INVITATION FOR 2 (TWO BIDS SYSTEM) ON OPEX MODEL (IFB)

No.11-RIMS-Hos/MRI-Opex

Date:

RIMS, IMPHAL invites sealed and super scribed tenders on two bid basis from competent and experienced parties who are capable of executing the tendered work successfully meeting our requirements and specifications.

SI No	Brief Description of Item/Work	Qty (Location)	EMD Amountper Location
1	Providing 01 No. MRI 3 TESLA Facilities (ON OPEX MODEL) for a period of 7 Years a	01(RIMS HOSLPITAL, IMPHAL)	Rs.10,00,000/- (Rupees ten lakh only)

2. Eligibility criteria for Bidders

- A. The Bidder shall be a sole provider (Company/Society/Trust) or a group of companies coming together as Consortium to implement the Project. The Lead Member in case of Consortium should be the company of contact and should have a business of MRI services and must also have all legal liabilities. The bidder cannot be an individual or group of individuals. The Service provider should be registered as a legal entity such as company registered under Companies Act, Societies Registration Act, Trust Act or an equivalent law applicable in the region/state/ country. A bidder cannot bid both as a sole provider as well as a partner in a consortium.

The principal bidder shall be legally responsible and shall represent all consortium members, if any, in all legal matters. But in case of any litigation or event of breach of contract the Lead partner and all the members of the Consortium, shall be equally responsible and shall be held liable individually and collectively. Consortium Agreement is enclosed.

OR

The Bidder should be the original equipment manufacturer of MRI Machines.

- B. The Bidder shall have adequate experience in carrying out similar type of assignment / service in private or public sector. In support of this, a statement regarding assignments of similar nature successfully completed during last three years should be submitted as per Performa. Users' certificate regarding satisfactory completion of assignments should also be submitted. The assignment of Govt. Depts. / Semi Govt. Depts. should be specifically brought out. (The decision of the Purchaser as to whether the assignment is similar or not and whether the bidders possess adequate experience or not, shall be final and binding on the bidders.)
- C. The principal bidder / Consortium shall have a minimum average turnover of Rs. 33 Crores per annum in last three financial years (2020 – 2021, 2021 – 2022 and 2022-2023).
3. The Tender Documents can be downloaded from our Website www.rims.edu.in from the date of issue of tender document. Any amendments or updates on this tender will be available only in our website.

Tender forms shall be filled in ink or typed. No tender filled in pencil shall be considered. The tenderer shall sign and seal the form at each page and at the end, in token of acceptance of all the terms and conditions of the tender.

4. The scheduled Date and Venue for Pre-Bid meeting is as given below:

Date:

Venue:

5. The scheduled date for issue, receipt and opening of bids is as follows.

- | | |
|---|---|
| a) Date of issue of tender document | - |
| b) Last date and time for receipt of bids | - |
| c) Date and time of opening of bids | - |

6. The bid documents will be available up to 15.00 Hrs. on the previous working day of the opening of the bids.

7. Address for Communication, Receipt and Place of opening of bids.

Section Officer, Purchase Section, Administrative Block, RIMS Imphal.

8. The completed bid documents and all schedules should be submitted to **DEPUTY DIRECTOR (ADM) RIMS, IMPHAL** in the above address along with sealed bids and the EMD. Bids received after due date and time will be rejected. Any bid not accompanied by EMD will be rejected without further notice.
9. The EMD should be enclosed in a separate envelope and super scribed as "EMD" and should be attached in the main cover. SSI/MSME units interested in availing exemption from payment of EMD should submit a valid copy of their registration certificate issued by the concerned DIC or NSIC.
10. Bidders that have been blacklisted by RIMS IMPHAL or any other State / Central Government organizations / PSU's shall not be entertained.
11. Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of DDA (ADM) RIMS IMPHAL at the address given in Clause "7" above. In the event of the date specified for bid receipt and opening being declared as a closed holiday for RIMS office, the due date for submission of bids and opening of bids will be the following working day at the appointed time.
12. RIMS may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of the RIMS and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
13. RIMS will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. **Bids sent by any of the electronic media such as Telex/Fax/Telegraph/e-mail will not be entertained.**
14. **The eligible bidder can quote for 01 number of MRI 3 TESLA Facilities (to provide on OPEX MODEL) and the work shall be awarded to the qualified bidder, who quotes the lowest amount.**
15. RIMS reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the tender without assigning any reason thereof.

DEPUTY DIRECTOR (ADM) RIMS

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SCHEDULE I

CONDITIONS OF BID

1. DEFINITIONS

In this Contract, the following words and expressions shall have the meanings as stated below:

- a. "INVITATION FOR BID" shall mean and include the present document, and such other complements and agenda, which may subsequently be issued in this connection.
- b. "BIDDER" shall mean the person, firm or Company submitting a bid against this invitation for bid and shall also include his authorized agents and representatives.
- c. "OWNER" or "PURCHASER" shall mean RIMS IMPHAL.
- d. 'TENDERER', shall mean the company/agency who quotes against the tender enquiry for undertaking the work.
- e. 'CONTRACTOR' or 'SUPPLIER', shall mean the successful bidder whose tender has been accepted by the Owner and to whom the order is placed by the Owner and shall include his heirs, legal representatives, successors etc.
- f. 'SITE', shall mean the actual place of the installation specified in Schedule V i.e. RIMS HOSPITAL IMPHAL.
- g. 'CONTRACT', shall mean the articles of Contract Agreement, the Conditions of Contract, Technical Specifications, Drawings attached and duly signed by the Owner and the Supplier.
- h. "THE CONTRACT PRICE" means the price payable to the supplier under the contract for the full and proper performance of its contractual obligations.
- i. 'DATE OF CONTRACT', shall mean the date on which the successful bidder has accepted the notification of award.
- j. "THE GOODS/EQUIPMENTS" means all of the equipments, machinery and/or other materials, which the Supplier is required to supply to the Purchaser under the contract.

- k. 'CONTRACT PERIOD', shall mean the period specified in the tender documents during which the contract shall be executed.
- l. 'COMPLETION CERTIFICATE', shall mean the certificate issued by the Owner to the Contractor after successful completion of the project for making final payment.
- m. Amount (Currency) indicated in USD shall mean US Dollars and INR shall mean Indian Rupees

2. BID INFORMATION AND PERIOD OF VALIDITY

The Technical Bid must include the following: -

- a. Enquiry No,
- b. Earnest Money Deposit
- c. All the details and documents mentioned in the Technical Bid.
- d. Promised Delivery and Completion Time (whichever is applicable) for each item and/or work
- e. Certificate that bid is in total conformity with the specifications and terms and conditions mentioned in the bid document and if not, list of exclusions, and/or exceptions.
- f. All information requested in the specifications, dimensional drawings, technical literature describing the makes of the item offered, material etc., as specified in the bid document.
- g. Warranty Period for the machine
- h. All other documents/certificate/information as specified in the bid document.

Prices quoted by the bidder shall be final during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

Bidder must quote for unit price and total price based on the requirement shown in the bid document.

Bid currencies

The prices shall be quoted either in Indian rupees or USD, which is convertible in Indian Rupees.

Bid Validity

Bids shall remain valid for one year after the date of bid opening prescribed by the Purchaser.

3. FORMAT AND SIGNING OF BID

The Bidder is expected to examine all instructions, forms, terms and specifications in the Bid Documents. Failure to furnish all information required by the Bid Documents or submission of a bid not substantially responsive to the Bid Documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

Bidders shall submit their bids in two parts (**TECHNICAL BID and PRICE BID**) as under:

Both the bids shall be submitted in sealed covers separately. Tender Nos. of the Technical and Price Bids shall be super scribed on the respective covers in order to clearly identify between the 2 Bids. The two separately marked Bids enclosed in a single sealed cover with the respective tender mentioned thereon complete in all respect, addressed to the:

DEPUTY DIRECTOR(ADM)
Address

The tender should reach us on or before the due date and time mentioned in the Tender Notification. The purchaser shall not be responsible for any delay if any, in the delivery of the bidding document or non-receipt of the same.

It may be noted that when the main cover is opened on the date and time scheduled for bid opening, only the **TECHNICAL BIDS** will be opened and read out in public.

Bidders whose technical bids are found substantially responsive will be informed of the date and time of opening of their price bids. Price bids of others will be returned to them unopened.

The person or persons signing the bid shall sign and seal on all pages of the bid, except for un-amended printed literature.

The Bid prepared by the Bidder and all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser shall be

written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case for purposes of interpretation of the bid, the English translation shall govern.

The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the bid.

4. SUBMISSION OF BIDS

Sealing and Marking of Bids

The Bidder shall seal the original and each copy of the bid in an inner and then in an outer envelope, duly marked the envelopes as "original" and "copy".

The inner and outer envelopes shall be: -

(a) Addressed to the Purchaser in the following address and

Deputy DIRECTOR (Admn) RIMS Imphal

(b) Bear the Enquiry No, closing date and General description of item tendered, and the words "DO NOT OPEN BEFORE" 15.30 Hrs (IST) on__(Indicate the Closing Date).

The inner envelopes shall indicate the name and address of the Bidder. If the outer envelope is not sealed and marked as indicated above, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

Bids should be hand delivered or sent by courier/mail to ensure timely arrival. Bids sent by any of the electronic media such as Telex /Fax/Telegraph /e-mail shall not be entertained & will be rejected.

Deadline for submission of Bids

The Hard copies of bids will be received by the Purchaser in the following address not later than the date and time specified in the Invitation for Bids. If the Hard copies did not received timely tender will not be consider.

Deputy Director (Admn) RIMS Imphal.
Address:

The Deputy Director, (Admn) RIMS Imphal, Lamphepat, 795004,

In the event of the specified date for submission of Bids being declared a holiday for the Purchaser, the bids will be received up to the appointed time on the next working day.

The purchaser may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

It is the responsibility of the bidders to see that the completed bid documents whether sent by post or by courier or by person are received in the office of **DEPUTY DIRECTOR(ADM)**, in the above address by the date and time stipulated for receipt as above failing which the bid would be considered late and rejected. Purchaser will not be held responsible for the postal delay, if any, in the delivery of the bid document or the non-receipt of the same. Bids received after due date and time will be rejected. Mere handing over of the bid documents at reception counter or at any other counter or room or person cannot be considered as submission of bid.

5. CLARIFICATION OF BID DOCUMENTS

A prospective Bidder requiring any clarification of the Bid Documents may notify the Purchaser in writing, or by fax at the purchasers mailing address indicated in the Invitation for Bids. The Purchaser will respond in writing to any request for clarification of Bid Documents, which it receives not later than 7 days prior to the deadline for submission of Bids prescribed by the Purchaser. Copies of the Purchaser's response shall be sent to all prospective bidders who have purchased the Bidding Documents.

6. AMENDMENT OF BID DOCUMENTS

At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, modify the Bid Documents by amendment.

The amendment will be notified in writing or fax or telegram or e-mail to all prospective Bidders, which have received the Bid Documents and will be binding on them.

In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the Purchaser may, at its discretion, extend the deadline for the submission of bids.

7. BID OPENING BY PURCHASER

The Purchaser will open the bids, in the presence of the bidders' representatives who choose to attend, at the date and time specified and in the location given in this document. The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of bid opening being declared a holiday for the Purchaser, the bids shall be opened at the appointed time and location on the next working day.

The Bidders' names and such other details as the Purchaser, at its discretion, may consider appropriate will be announced at the opening.

The Purchaser will prepare appropriate bid opening register and the same shall be signed by each of the bidders present during the opening of the bids and the Purchaser.

8. CLARIFICATION OF BIDS

To assist in the examination, evaluation and comparison of bids, the purchaser may, at its discretion, ask the bidder for clarifications of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

9. PRELIMINARY EXAMINATION

The purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, whether the bid validity is as required and whether the bids are generally in order.

Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be calculated. If there is a discrepancy between the words and figures, the amount in words shall prevail.

Prior to the detailed evaluation, the purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these clauses, a substantially responsive bid is one that conforms to specifications and all the terms and conditions of the bid documents without material deviation. The purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

In the event of the specified date for submission of Bids being declared a holiday for the Purchaser, the bids will be received up to the appointed time on the next working day.

The purchaser may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

It is the responsibility of the bidders to see that the completed bid documents whether sent by post or by courier or by person are received in the office of **DEPUTY DIRECTOR(ADM)**, in the above address by the date and time stipulated for receipt as above failing which the bid would be considered late and rejected. Purchaser will not be held responsible for the postal delay, if any, in the delivery of the bid document or the non-receipt of the same. Bids received after due date and time will be rejected. Mere handing over of the bid documents at reception counter or at any other counter or room or person cannot be considered as submission of bid.

5. CLARIFICATION OF BID DOCUMENTS

A prospective Bidder requiring any clarification of the Bid Documents may notify the Purchaser in writing, or by fax at the purchasers mailing address indicated in the Invitation for Bids. The Purchaser will respond in writing to any request for clarification of Bid Documents, which it receives not later than 7 days prior to the deadline for submission of Bids prescribed by the Purchaser. Copies of the Purchaser's response shall be sent to all prospective bidders who have purchased the Bidding Documents.

6. AMENDMENT OF BID DOCUMENTS

At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, modify the Bid Documents by amendment.

The amendment will be notified in writing or fax or telegram or e-mail to all prospective Bidders, which have received the Bid Documents and will be binding on them.

In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the Purchaser may, at its discretion, extend the deadline for the submission of bids.

12. AWARD CRITERIA

The Purchaser will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily for the items offered.

13. NOTIFICATION OF AWARD

Prior to the expiration of the period of bid validity, the purchaser will notify the successful Bidder in writing by e-mail, or cable or telex or fax, to be confirmed in writing by post, that its bid has been accepted. The notification of award may be sent in the form of Letter of Intent and/or Supply order.

The signed acceptance of the notification of award by the Supplier will constitute a concluded contract.

14. SECURITY DEPOSIT

Simultaneously with the execution of the contract successful bidder shall furnish a Security deposit in the form of a Demand Draft from a scheduled bank drawn in favour of **DIRECTOR, RIMS IMPHAL payable at IMPHAL** or a Bank Guarantee (**as per format in Schedule VIII**) from a scheduled bank, for an amount equal to 5% of the total price on the value of the contract (5% of total lease amount for 7 years i.e. lease rate/month x 12 months x 7 years) as Security Deposit for his faithful execution of the contract. The Security deposit should be valid until successful completion and acceptance of the Equipment/works by the Purchaser and will be released after acceptance of the Facility by the Purchaser and signing the lease agreement and after submission of a Performance Guarantee for an amount equal to 10% of the total contract value (10% of total lease amount for 7 years i.e. lease rate/month x 12 months x 7 years) in the form of cash deposit or Bank Guarantee by the Supplier valid for a period of 7 Years.

Within **10 days** of the receipt of notification of award from the Purchaser; the successful Bidder shall furnish the security deposit in the form of a Demand Draft or Bank Guarantee in the security deposit form to be sent along with the Notification of Award.

Failure of the successful Bidder to accept the notification of award or submission of security deposit within the timeframe shall constitute sufficient grounds for the annulment of the award; in which even the Purchaser may make the award to the next lowest evaluated bidder or call for new bids.

15. EARNEST MONEY DEPOSIT

Each bid must be accompanied by E.M.D and should be submitted along with the Technical Bids.

The EMD is required to protect the Owner against risk of Bidder's conduct, which would warrant the security's forfeiture

- a. The OEM who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).
- b. The earnest money shall be denominated in Indian Rupees or US Dollars. The earnest money shall be furnished in one of the following forms:
 - i) Account Payee Demand Draft
 - ii) Banker's Cheque
 - iii) Bank Guarantee
- c. The demand draft or Banker's Cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the "RIMS IMPHAL payable at IMPHAL. In case of Bank Guarantee, the same is to be provided from any commercial bank in India or country of the tenderer as per the format specified in **Schedule VI**. The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender.
- d. E.M.D. of the unsuccessful bidders will be released after tabulating tenders, keeping only the earnest money of the first three lowest bidders. The earnest money deposit of the remaining two unsuccessful bidders will be released after the acceptance of the notification of award by the successful bidder.
- e. In the case of successful bidder, the Earnest Money will be returned after signing the agreement and submission of Security Deposit, which they will have to offer for the faithful execution of the contract.
- f. Earnest Money is required to protect the Purchaser/Customer against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD.
 - 1) Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false,

misleading or forged without prejudice to other rights of the Purchaser/Customer.

- 2) The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser/Customer if it fails to:
 - (i) to sign the agreement.
 - (ii) to furnish security deposit within the specified period.

- g. In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any Nationalised Bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

SCHEDULE II

DETAILED SPECIFICATIONS

Sub: Providing 01 Nos. 3 TESLA MRI Facility (**On OPEX MODEL**) for a period of 7 Years at RIMS HOSPITAL, IMPHAL on rental basis.

A. Scope of Work and Services of the bidder

The scope of services include supply, Installation, Commissioning, Human resources, manage service, Supervision, related Turnkey works, Demonstration, Trial run for 3 Tesla MRI Facility including accessories & utilities at RIMS HOSPITAL IMAPHAL. The scope includes executing the required Civil and electrical works (Turnkey works) and DG backup and related services for MRI supplied. The Bidder will have to equip their centre with lifesaving and monitoring equipment like de- fibrillators, monitors, ventilators etc. in compliance with Medical Imaging Standard No. CEA/ MIS – 028.

The bidder shall comprehensively maintain the MRI Scanner and its associated Equipments for the entire lease period (7 years) mentioned in the tender.

B. TURNKEY - TECHNICAL SPECIFICATIONS

Sr.No.	Technical Specification	
	TECHNICAL SPECIFICATION OF 3 TESLA MRI SYSTEM F	
	The equipment should be "state of the art" new 3 Tesla MRI system with at least 32 independent RF receiver channels as per specifications below. The offered model should be US FDA& CE approved (authentic and legible certificate for the same to be annexed). Also, the vendor will guarantee that the system supplied is not refitribished and the MR system quoted is the latest best available model in the segment (3T MR canner with 70 cm or more bore) quoted, at the time of delivery and should submit an undertaking in this regard. The .offered model should be the latest and launched after 2016. No older models with version improvements are allowed.	
Sr.No.	Features	Essential Specification
1	Magnet	(i) 3 Tesla active shielded superconducting newer designed Magnet with 70 cm or more bore diameter.
		(ii) Magnet should be short (length should be less than 180 cm), non-claustrophobic and well ventilated to ensure highest patient comfort.
		(iii) There must be built in 2-way intercom for communication with patient.
		(iv) Magnet should have touch display for information on coil connectivity, physiological curves, start scan, switching off alarm, automatic transfer from any vertical & horizontal position to home position and isocenter.
		(v) The magnet should have zero helium boil off technology.
		(vi) Magnet Should be manufactured in Europe/USA/Japan
	a) Ext Shielding	(i) Should have active shielding, external interference shielding (sufficient to house the magnet, anesthesia and physiologic monitors) with good field stability.
	b) Homogeneity	(i) Best homogeneity possible should be given. Specify homogeneity in VRMS at 10 cm, 20 cm, 30 cm, 40 cm and 50 cm DSV and at max. FOV achievable with the quoted scanner.
		(ii) Should be very good for Single voxel and CSI spectroscopy. Specify values
	c) Magnet Bore	(i) 70 cm or more patient bore diameter
	d)Active Shielding/ Fringe field	(i) Quote values for 5 Gauss and 1 Gauss line
	e) Magnet Cooling System	(i) The magnet should be having zero boil off technology.
		(ii) Devices for helium level monitoring in the magnet should be supplied.
		(iii) Liquid helium should be supplied during comprehensive warranty period and Comprehensive AMC period without keeping any condition or hider.
		(iv) The vendor should include the Cold Head maintenance and replacement during warranty period and also during Comprehensive AMC.
2	Shim System	(i) High performance and highly stable shim system with global and localized manual and auto-shimming for high homogeneity magnetic field required for imaging, spectroscopy (MRS), CSI and spectroscopic imaging (MRSI). 3D shimming for volume imaging, spectroscopy and CSI. Second order/High order shirnmng should be offered as standard
		(ii) Auto shim should take minimum time to shim the magnet with patient in position (specify the time)

3	Patient Table a) General features	(i) Computer controlled fully motorized subject table, movement in vertical and horizontal direction. (ii) It must be controlled from magnet panel as well as from main console. (iii) Subject table should be able to take at least 200 Kg load. (specify the patient load capacity) (iv) Emergency manual traction of the subject from the magnet.
	b) Patient monitoring	(i) MR compatible pulse oximeter should be offered as standard
	c) Patient Comfort Features	(i) Two-way Patient communication with headphone, microphone and necessary accessories. (ii) Patient audio alarm (iii) Lighting (iv) Music system (complete) (v) Close Circuit TV system and LED (32 inch) display for patient monitoring. (vi) Provide other standard patient comfort devices, with quoted system (please specify)
4	Gradient System a) General	(i) Actively shielded gradient system in X, Y, Z planes. (ii) The gradient should be actively shielded with a slew rate of at least 200 T/m/s at a peak amplitude of at least 44 mT/m to be achieved Simultaneously. The minimum rise time should not be more than 225 micro second. This should be achievable in each axis. (iii) 100% duty cycle for full FOV.
	b) Resolution Parameters	(i) Maximum FOV should be 50 cm (ii) Specify min. slice thickness in 2D and 3D modes at 128x128, 256x256, 512x512 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. (v) The system should have efficient and adequate provision for eddy current compensation.
5	RF system (Transmitter, Receiver, Coils)	The vendor should quote the latest RF transmit technology available with them globally, as per the datasheet. It should support parallel acquisition technique with a factor of 10.
	a) RF Transmitter	(i) A fully digital RF system capable of transmitting enough power of at least 30 kW or more (please quote the value) enabling uniform RF distribution in all body regions for amplitude and phase transmission settings optimized for dedicated body regions (as per FDA guidelines), and the operating frequency should cover 1H. (ii) It should improve RF uniformity and signal homogeneity and reduce patient induced in-homogeneities.
	b) RF Receiver	(i) Optical/ Digital RF receiver system with/ highly efficient RF receiver system / or its equivalent located on the magnet/Coil inside the shielded scan room.

		(ii) Minimum 32 independent RF receiver channels that can be used simultaneously in one single scan and in one single FCV, each generating an independent partial image.
		(iii) Specify the RF receiver bandwidth for each channel.
	c) SAR limits	(i) SAR limits should be as per FDA guidelines for all protocols, including neuro/ abdominal imaging
		(ii) Head neck coil of 16 channels or more
		(iii) Spine any/ matrix coils for thoracic and lumbar spine imaging with 12 or more channels in single FOV.
		(iv) Body imaging with 32 Channel or more for Z axis max FOV (50 cm) in combination with spine along with single or combination of anterior/posterior coils.
		(v) Dedicated Bilateral Breast array coil (16 Channel or more)
		(vi) Dedicated rigid Shoulder array coil (16 Channel or more)
		(vii) Dedicated rigid Knee imaging (Transmit/Receive 16 Channel or more)
		(ix) General Purpose wrap around Flex Coil (with minimum 4 channels) at least 2 sizes (Large and small)
	(b) Coil technology	(i) Integrated coil system should permit coverage of at least 200 cm to scan patient from head to toe without re- positioning or re- connecting of coils.
		(ii) coil system must be latest as available with the vendor to be quoted: Equivalent of TIM / GEM/TDI/ D- Stream or equivalent to be offered.
	(c) Table Technology	(i) Bolus chasing with automatic/continuous moving table 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
7	Computer Control System	(i) The vendor should supply the latest computer systems for console& workstations along with the MR system, to handle all the latest applications available on the MR platform.
		(ii) The MR system should be regularly maintained in the latest version of computing software, including software platform upgrades released for the respective system that can prepare it for future enhancements. If a HW upgrade is required to run the latest software version to its normal performance, the respective HW should be upgraded at no additional costs during the complete life of the system.
		(iii) The MR computing software system should offer built- in security controls to protect the system from vulnerabilities that can result in cyber attacks or inappropriate access to patient data. The built-in security should comply with the latest international standards of data security and encryption, as well as with existing regulations to protect personal and protected health information (e.g., GDPR, HIPAA, any local regulation), during the complete life of the system.
	a) Host Computer and Array Processors	(i) Latest state-of-art computer system with sufficient RAM (16 GB or more) and computational speed to match the single shot Echo Planar Imaging (EPI), 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 (3200mhz)

		<p>(iii) 64 GB or more for ultra-fast image reconstruction, capable of performing real-time image reconstruction.</p> <p>(iv) Total solid state drive memory capable of storing a minimum of 2TB or more.</p> <p>(v) Monitor 23" or more with enhanced graphics accelerator also with [PS panel.</p> <p>(vi) One measurement (Main) console capable of data acquisition and all online calculations (as required for all sequences in the tender), and Post processing (as required for all applications in the tender)</p> <p>(vii) Licenses for acquisition (as required for all sequences in the tender), post-processing and for special packages should be given explicitly (as required for all applications in the tender), listing all the capabilities of the vendors quoted product (basic standard package, premium packages, etc).</p>
	b) Additional Workstations (3 Nos.)	<p>Client server architecture with 3 clients for 1 concurrent user (Dexus, IntelliSpace Portal, Syngo. via, etc. or higher). Workstation hardware should be industry standards and should be the latest with the vendors. Below applications should be offered for the server:</p> <p>(i) Basic post-processing software including MIP, MPR, surface reconstruction and volume rendering technique, Image fusion, 3D evaluation, MR Subtraction, MR Diffusion, MR Addition, ADC and b-value calculation.</p> <p>(ii) One license for each of the applications- Neuro perfusion quantification, cardiac evaluation including cardiac perfusion analysis, processing MID/3D CSI data, with color metabolite mapping, quantification of CSF flow data, advanced diffusion and DTI- diffusion tensor imaging. There must be basic CT softwares along with MR softwares in one additional workstation.</p> <p>(iii) Hardware Client: Client / Node: CPU unit, minimum 32 GB RAM, Medical grade monitor of 2MP resolution & size - 21" or more, mouse, keyboard.</p> <p>(iv) Computer Hardware will be replaced after every five years free of cost & software will also be updated/ upgraded as and when required the of cost.</p>
	c) CD/DVD and BluRay archival	<p>(i) DVD RW drive for writing of images, spectra and raw data along with the necessary software for reading the images on DVD/CD storing capabilities.</p>
	d) Film documentation	<p>(i) DICOM interface to hook DICOM compatible, dockable, latest state-of-art Dry Laser Camera with more than 500 dpi, capable of storing/printing images of 1024 x 1024 (or higher, if available) matrix size in various matrix formats (including 16 format) without loss of digital resolution to be made available on any of the consoles and on the films (Agfa/Fuji/Kodak etc), with three online tray system.</p> <p>(ii) The MR system should also have DICOM compatibility for other dry laser camera already available in the department for getting films in emergency conditions.</p> <p>(iii) 10 packets of film (14x17 size) must be provided with dry laser camera.</p>
	e) Printers	<p>(i) Colour Laser Network Printer (PCL6/PS) for printing of colour CSI/ Perfusion/BOLD maps and images and film documentation on paper (minimum 24 ppm). HP or equivalent.</p> <p>(ii) Black & white laser printer (two nos.) for printing of reports.</p>

Data Acquisition
a) General

(i) The system should be capable of 2D and 3D acquisitions in conventional, fast & ultra-fast spin echo and gradient echo modes so that real-time online images can be 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) Up to 1024 x 1024 matrix acquisitions preferred for all applications. Wherever 2048 matrix available, please mention.
(iii) Half Fourier or other techniques to reduce scan acquisition time while maintaining adequate SNR.
(iv) 3D volume, multiple contiguous slabs, multiple interleaved and multiple overlapping slabs
(v) Slice thickness in 2D and partition in 3D to be freely selectable. Minimum 2D slice thickness should be equal to or less than 0.5 mm. And minimum 3 D slice thickness should be equal to or less than 0.1 mm.
(vi) Dynamic acquisition (serial imaging) with capability to initiate scan sequences either from the magnet panel or from the console.
(vii) Dynamic acquisition: number of repeat scans with delay time either identical time interval or selectable
(viii) Auto-slice positioning from the localizer images.
(ix) Maximum-off center positioning both anterior-posterior and lateral direction and should be selectable.
(x) Gating: physiological signals like ECG, pulse, respiratory, External signal 2D multi-slice imaging should be possible in all planes (axial, sagittal, coronal, oblique and double oblique)
(xi) Simultaneous acquisition, processing and display of image data in 2D multi-slice mode.
(xii) Selection of voxels from oblique slices should be possible while doing spectroscopy.
(xiii) Artefact reduction/imaging enhancement/image filtering image subtraction/addition/multiplication/ division techniques
(xiv) Flow: 1st and 2nd order flow artefact compensation
(xv) Presentation slabs: a number of relocatable saturation bands to be placed either inside or outside the region of mama
(xvi) Graphic prescription.
(xvii) Fat saturation techniques: frequency selective RF pulses to suppress fat signals in the measured image FOV. ROI selective (regional) fat suppression should also be given.
(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. Largest FOV should be at least 50 cm in all three axes. Specify the highest FOV and minimum FOV
	b) Imaging Pulse sequences	(i) All standard and advanced special pulse sequences available at the time of quote/delivery should be offered and quoted in the bid. Fat suppression for high quality images both inversion recovery and Dixon method /IDEAL/3D Dual Echo/m-Dixon. The system should acquire motion artifact free images in 12 studies of the brain in restless patients (Propeller 3.0/Multivane -XD, / Blade etc). Dynamic study for pre and post contrast scans and time intensity studies.
		(ii) Sequences with gradient wave modification for extremely quiet imaging without compromise on slew rate or peak amplitude or acquisition time should be offered as standard. List the sequences which are included in this package and estimated sound levels. The sound level of these sequences should not exceed 85 dB. Display on the magnet along with use of artificial intelligent to accelerate exams by accurate patient positioning.
		(iii) The system should be capable of selecting TR and TEs as per requirement in majority of the pulse sequences.
		(iv) 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.
		(v) Inversion recovery (IR): including short T1 modified IRSE, FLAIR, DIR (Double Inversion Recovery).
		(vi) 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.
		c) Fast sequences
	(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 (255 or more). 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.
		(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 artefact/ 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.
9	Optimized Sequence	Mention all available special application packages
	b) Neuro	(i) All T1(2D, 3D), T2 (2D, 3D), IR (2D, 3D), Dual IR (2D, 3D) 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 and post-processing, with single localizer positioning, without changing the coils/ repositioning
		(vii) MR ventriculography, cistemography, myelography.
		(viii) Perfusion imaging of brain with software for rCBV, CBV, MTT etc analysis.
		(ix) Susceptibility weighted imaging with phase information SWI/SWIp/ eSWAN 2.0 or equivalent.
		(x) 3D T2 weighted Turbo Spin for volumetric acquisition reconstructed in any plane e.g for lumbar spine and for nerve root analysis.
		(xi) Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct, spinal canal vessel flow. Both retrospective and prospective gating should be possible.
		(xii) Sequence with ultra-short TE, Sequence for nullifying CSF pulsation artifacts.
		(xiii) Sequence employing arterial spin labelling (ASL) technique.
		(xiv) Whole body imaging (using body coil and surface coils) with automated fusion and composing for the above two (without any artifacts).
		(xv) Sequences such as double inversion recovery for "Plaque Imaging" in carotid to be provided.
		(xvi) MR ventriculography, cistemography and myelography.
		(xvii) Volume acquisitions for neuro applications.
		(xviii) BOLD sequence should be there.
	c) 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. Facilities for high temporal & high resolution 4D angio imaging for time resolved vascular imaging with imaging frame of 40 frame / sec or more. 4DTRAKS/ TWIST/TRICKS XV etc.

		<p>(ii) For peripheral moving table angiography should be offered covering hip to limbs to be examined in one go with high resolution and high SNR.</p> <p>(iii) Bolus tracking software package.</p> <p>(iv) Sequence for breath hold angiography with contrast enhancement.</p> <p>(v) Sequence for time resolved angiography with contrast kinetics.</p> <p>(vi) ECG triggered non-contrast angiography</p> <p>(vii) Contrast bolus tracking (including single shot whole body MRA, interactive and automatic tracking, etc.).</p> <p>(viii) Perfusion study in organ systems like kidney, brain, heart etc</p> <p>(ix) Quantitation of rCBF/ rCBV, MTT, etc, with colour maps with required licenses.</p>
	d) Cardiac package	<p>(i) Comprehensive cardiac sequences which includes, MR cardiology package for evaluation of heart in long and short axis with black blood cardiac imaging. VCG gating, morphology/wall motion, cine perfusion imaging, myocardial viability imaging.</p> <p>(ii) Operator selective or automatic contour mapping and calculation of cardiac parameters, myocardial wall motion including display of data in table, graph and in cine mode, blood flow quantitation, velocity mapping, pressure gradient quantitation, shunt quantitation, regurgitation calculation, stenosis, blood flow, etc. These should be usable on main as well as on one additional workstation.</p> <p>(iii) Advanced cardiac packages</p> <p>(iv) Package for coronary artery imaging including sequences for motion compensation - prospective and retrospective gating etc.</p> <p>(v) EPI based sequence for stress perfusion MRI including ability to adjust the cardiac phases required with increasing HR.</p> <p>(vi) 2D and 3D Sequences enabled with delayed enhancement</p> <p>(vii) 3D sequence of cine (bright blood & dark blood options)</p> <p>(viii) Rapid acquisition of heart using acceleration techniques</p> <p>(ix) STIR sequence for cardiac use</p> <p>(x) 3D whole heart sequence (with & without contrast for coronary imaging).</p> <p>(xi) Ability to acquire multiple arterial and venous phases on CE MRA.</p> <p>(xii) Quantitative flow analysis software.</p> <p>(xiii) 3D acquisition of whole heart in one breath-hold.</p> <p>(xiv) 4D TRAK/ TRICKS-XVI TWIST/equivalent (with maximum FOV).</p> <p>(xv) Pulmonary 2D/3D MRA sequence, including single breath hold sequence. timing drug infusion</p>
	e) Diffusion /DTI	<p>(i) Sequence package for diffusion including DTI (tractography) study in organs like brain and spine,</p> <p>(ii) There should be capability of calculating ADC map (isotropic and anisotropic from the regular diffusion and tensor data).</p> <p>(iii) Multidirectional diffusion tensor imaging package with DTI quantification & tractography software.</p> <p>(iv) MR neuro functional imaging sequence package (incl. Mosaic etc.- (Optional).</p>
	f) Body imaging	<p>(i) Flow quantification in vessels and hepatobiliary system</p> <p>(ii) Fly-through facility with Flow analysis including display of various velocity values.</p>

		(iii) Optimized breath holds sequences for abdominal studies including angiogram.
		(iv) MR Cholangiography and Pancreatography: Specialized sequences and processing to perform MRCP.
		(v) 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 angiography/ T1 quantitative analyses.
		(vi) 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.
		(vii) Radial/Spiral pulse sequences for ultrafast imaging.
		(viii) Suitable artefact/fat suppression techniques to be incorporated in all the sequences to have optimum image quality.
		(ix) A sequence for differentiation of fluid and cartilage in ortho applications (sequence like DESS or equivalent).
		(x) Susceptibility artefact correction techniques to be incorporated in all the sequences to have optimum image quality.
	g) SWI	(i) Sequences for susceptibility imaging
	h) Prostate imaging	(i) Sequences for imaging of prostate including prostate spectroscopy along with required coils
	i) Breast imaging	(i) Sequences for imaging of breast (including sagittal bilateral breast imaging in a single acquisition)
		(ii) Advanced package including diffusion, spectroscopy and perfusion with time intensity curve.
		(iii) MR breast imaging with simultaneous View of both breast fat suppression SPAIR & visualization of rapid contrast uptake 4D bliss/Views/ Vibrant XV.
	j) Whole Body Diffusion	DWIBS OR equivalent
	k) m- Dixon	(i) Provide sequences like m- Dixon for all applicable sequences, m Dixon- HD or equivalent.
	l) Relaxometry	T1 mapping and T2 mapping with necessary post-processing s/w.
	m) Motion correction	(i) Sequence for in-line motion correction for uncooperative patients/ children (with software and acquisition - sequences like BLADE, PROPELLAR, Multivane or equivalent)
	n) MR Spectroscopy	(ii) Proton MRS Sequence for single-voxel acquisition, with selectable fat/lipid saturation bands, options of water saturation (eg. VAPOR, CHESS, 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 cardiac, prostate, breast, 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.
	O) MR elastography	Suitable & adequate software, hardware and sequences for MR elastography (Optional)
10	Post Processing and evaluation	(i) Licenses of all the post processing and evaluation packages should be provided for the main console and one additional workstation.
	a) Special Application Packages	(i) The vendor must provide their specialized and optimized imaging sequences in the Main Acquisition Console; Post- processing packages in the Main Acquisition Console and one additional workstation.
		a) Neuro (Smart exam/Ready Suite/ Smart Brain/ etc.), b) Necessary composing s/w for whole spine and whole- body applications.
	b) MPR	(i) Multi-planar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and 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 time and capable of displaying in cine mode
	c) ADC perfusion etc.	(i) Evaluation and display of diffusion images, ADC map, 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 for vascular (high & low) CSF, bladder outlet and cine display.
	d) Arterial Spin Labelling Liver Segmentation	(i) 2D or 3D ASL processing and quantification package in main console and one additional workstation.
	e) Tractography	Post-processing package for DTI and Tractography, estimation of ADC, FA (Lamba — parallel, perpendicular separately and combined), Fiber tracking, fiber statistics and display of fiber tracks on anatomical image(s).
	f) Image Statistics	(i) Measurement of distance, area, volume, angle, mean, SD, image addition, subtraction, multiplication, division, interpolation, segmentation, threshold, histogram.
		(ii) Image filtering and Image fusion software.
		(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 T1 and T2 calculation (more than 8) window stretching, text dialogues graphics, sorting, searching, archiving, recalling etc.
		(v) Latest generation AI tools for scan management, automation for most common exams like Brain, spine, knee, shoulder and hip should be offered as standard. Capability of these to be specified.
		(vi) whole body screening imaging studies for metastasis. (PET type of imaging on MRI.

	g) Advanced organ specific imaging	Any advanced organ specific imaging with automatic planning, seaming and post-processing application should be quoted. Like liver iron load quantification.
	h) Noise reduction Sequence	Noise reduced MRI for body, brain and other available protocols without any loss of image quality, with noise less than 85dB. The scanning should be without loss of SNR and increase in time.
11	Quality assurance and Phantoms	<p>(i) Phantoms for routine quality assurance for all coils (including body coil).</p> <p>(ii) Quality assurance as per AAMP standard for SNR for different coils and nuclei, spatial resolution, magnetic field inhomogeneity, eddy current compensation, RF power and inhomogeneity measurement. Specify the details of the QA package. It should be possible to provide the QA report quarterly to the Faculty-in-charge, MRI for records.</p>
12	Standard MRI Accessories	<p>(i) Rechargeable Hand-held metal detectors (3 Nos.)</p> <p>(ii) MR Compatible Dual head Pressure injector with 200 syringes and tubings need to be supplied.</p> <p>(iii) MR compatible anesthesia machine (for Paediatric and adults use) with dual vaporisers (for isoflurane, halothane), and other accessories (minimum 1000 Gauss line) (Penlon/ Leon/equivalent models)</p> <p>(iv) Non-magnetic IV stand (2 nos)</p> <p>(v) Digital Patient Weighing Scale (in the range between 0 to 200 kg): 2 in nos</p> <p>(vi) MR compatible storage carts and wall mounted cabinets.</p> <p>(vii) Coil cabinets to be provided.</p> <p>(viii) Cabling of Network (LAN) connectivity for camera system, console system, workstation, servers and computers etc.</p> <p>(ix) Cabling for Broadband connection: for REMOTE SERVICE of MRI system. Network cable and other required materials for the complete installation to be provided by the supplier</p> <p>(x) MR compatible crash-cart - 1 no.</p> <p>(xi) 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, Ferno, UK or equivalent) - 1 no.</p> <p>(xii) MR compatible wheel chair (with cushion, back-rest and arm-rest) - 1 no.</p> <p>(xiii) RF cabin: the system should be supplied with the standard RF cabin with RF room shielding, RF door screen, and decorative interior for the same be carried out suitably.</p> <p>(xiv) One set of all original catalogue related to function of unit, its breakdown and do & don'ts should be provided with adequate holding carts suitable to project.</p>
13	Antivirus s/wand Web updates	(i) All the Servers and Workstations in the network, MRI console, additional workstations, that are supplied by the vendor should be provided with antivirus software (periodically updated) for complete warranty & CAMC period.

		<p>(ii) The vendor should provide antivirus updates for complete warranty & CAMC period and make sure of the updated antivirus every week (using automatic updates with internet facility by the vendor)</p> <p>(iii) The vendor should ensure that all the above modalities include necessary connection, image & work list send/receive, image& data storage, scheduling, patient registration, and synchronization functions as per DICOM standards for smooth and effective integration to RIS/PACS</p>
14	Essential accessories	<p>(i) Two Tables for the MRI console, and one table for each additional console/workstation.</p> <p>(ii) All the necessary interconnecting interfaces, cables, modules and other hardware and software to fully integrate the system for full operational status.</p> <p>(iii) Uninterrupted power supply (UPS) with sufficient capacity (appropriate rating as required with a minimum of 160 kVA or more UPS) for 30 minutes back up of the full load MR system and its accessories during patient MR imaging.</p> <p>(iv) Two MR compatible oxygen cylinders (for the anaesthesia system).</p> <p>(vii) Two computer system for generation of reports should have following specification & configurations: - Monitor- high resolution LED 27-inch Full HD (of at least 1920x1080 matrix size) monitor, 144Hz; OS- windows 10 pros; Processor- i9-9900k, 3.6GHz; Memory- 32 GB DDR4; Graphics- NVIDIA GeForce RTX 2080ti 11GD6; SSD- 1TB nvme; HDD- 2TB or more, 7200rpm; Wifi/Bluetooth- 802.11ac 2x2 + BT5.0; Lan- 10 gbps; Power- 700W. A good quality suitable independent UPS with each computer system should be supplied by vendor</p>
15	Turnkey work (SITE MODIFICATION WORK)	<p>i) The vendor should inspect the site, before quoting and ensure that the unit can be installed in the available space without any functional compromise.</p> <p>(ii) Complete equipment layout site plan and details of work (BOQ) should be part of technical bid.</p> <p>(iii) Provisions should be made for placing the various accessories in console room, work-station and printer locations.</p> <p>(iv) It should also include Door with glass peeping window, warning indicators and signage, false ceiling, GVT floor tiles and wall tiles/ Paneling/painting.</p> <p>(v) All site modification works should comply with specified standards of the hospital.</p> <p>(vii) Care should be taken to provide easy negotiation of the patient stretchers/ trolleys through corridors and doors.</p> <p>(viii) RF shielding for doors, walls, glass viewer etc.</p> <p>Scope of work for Site Modification MRI unit works:</p> <ol style="list-style-type: none"> 1. MRI Room- (Gantry room) 2. Console room 3. Electrical room

	4. UPS room/ equipment room
	5. Patient preparation and changing room
	6. Waiting lobby.
	7. Reception area
	8. Radiologist Room with wash basin
	9. Corridors
	10. Washroom area
	Civil Work:
	(i) The total turnkey area is approximately 2000 Sq fit Or more Civil construction work including construction / demolition / alteration of brick wall, plastering, flooring as per the approved plan and equipment layout plan.
	(ii) Concrete reinforcement required for MRI equipment areas & other defined areas, if required. (Existing ceiling require repairing or re-strengthening to solve the water seepage)
	(iii) Platform for unloading and shifting the MRI should be provided if necessary.
	(iv) Platform for Chiller unit if needed. Fencing and weather protection facility should be provided for the Chiller unit.
	(v) Cable tray, trench & channel — necessary trenches, cable tray and channels at required location would be provided.
	(vi) All the construction work to be done as per the final plan approved by the purchaser.
	(vii) Active and passive room shielding for magnetic, fringe field should be provided as per the requirement of the equipment.
	(viii) False Ceiling-to-floor ceramic wall tiling in: Console room, doctors' room, washroom area & reception area including all MRI premises.
	(ix) Flooring:
	1.5mm Hospital grade Vinyl Flooring of reputed brands (eg. Armstrong, Gerflor, Tarkett or equivalent) for MRI Examination-Gantry room.
	2. 600 x 600 mm vitrified tiles with 100mm tile skirting to match in other rooms.
	3. 50 mm thick cement concrete flooring with 5mm-Vinyl flooring in MRI equipment / UPS room.
	(x) Wooden Gates with see through glass window at console room, patient entry door, and doctor room. Main entry door at MRI premises must be aluminum glass door.
	(xi) False Ceiling:
	Lightweight Aluminum ceiling panels, acoustical-treated, supported on grid or finished seamless with support above ceiling. Powder coated finish (colour to be approved by institute). The False ceiling inside RF cage as per equipment and RF cage requirement and design (must be attractive & patients friendly especially for paediatric patients to allay anxiety of claustrophobia). Ceiling height to suit the equipment mount and clearances.
	(xii)Electrical Work:

		<p>1. The supplier shall be required to specify the total load requirements for the MRI scan center including the load of air conditioning, room lighting and for the accessories if any.</p> <p>2. The mains supply line will be provided by the supplier from nearby transformer up to one point within the MRI Scan center area. The distribution panel shall be provided by the vendor. Few lights in each room shall be connected to the UPS to provide emergency lighting.</p> <p>3. The electrical work shall include the following:</p> <p>a. Wiring — All interior electrical wiring as well as wiring for chiller and outdoor a/c units - with main distribution panel board, necessary MCBs, DB, joint box, switch box etc. The wires shall be of copper of different size as per the requirement of load and should be renowned make as listed below.</p> <p>b. Electrical Earthing for all equipment & accessories supplied shall be provided by the vendor. The earth resistance value should match with the company's standard. The earth-pits should be located as per the approved by the Institute.</p> <p>c. Vendor shall provide Complete cabling & automatic switch panel for alternate electric supply from nearby Generator in hospital premise.</p> <p>d. Switches of lights and power points should be of modular type and of standard make as listed below.</p> <p>e. The number of LED light fittings should be such that a minimum 500 Lux Illumination is achieved.</p> <p>f. MRI compatible lights for MRI examination room. The lamps/bulbs used within the RF cage should be easily replaceable and locally available.</p> <p>g. Adequate UV lights for sterility.</p> <p>(xiv) Rodent/Paste/Termite control — At the time of installation and after every two years during warranty & CAMC period.</p>
16	<p>AIRCONDITIONING: minimum 18 TR (12TR workmg + 6 TR standby)</p>	<p>(i) Duct-able/split air conditioners, AC units may be used according to room requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface. The Air conditioning should be designed with standby provision to function 24 hours a day.</p> <p>(ii) The outdoor units of AC should be located as approved by the Institute and should have grill coverings to prevent theft and damage.</p> <p>(iii) Copper pipes and valve panel to be used for the Chiller to the MRI.</p> <p>(iv) Environment specifications: Humidity range: Relative humidity 40% and 60% in all areas except equipment room which shall be as per requirement of the equipment.</p> <p>Temperature ranges: 22 :h 2° C in all areas except equipment room which shall be as per requirement of the equipment. Air conditioning load: The heat load calculations and maintaining the desired temperature and humidity shall be the responsibility of the bidder.</p>

17	Firefighting system including alarm & Detector	i) Fire alarm (along with new/existing panel) should be provided in all rooms, wherever site modification is being carried out, and in the rooms (in the MRI section), where there is no fire alarm.) Fire alarm shall comprise of fire panel, smoke / heat detectors. The vendor should discuss with the engineering section and the department before quoting for Site-Modification.
18	Furniture & Miscellaneous (All furniture items should be of standard make)	<p>(i) Revolving chairs height adjustable, high back with hand- rest in the Control room, Radiologist room and viewing area. - 15 NOS.</p> <p>(ii) Office chairs of reputed brand — 15 Nos</p> <p>(iii) Chairs for patient waiting area —Three-seater airport chair of reputed brand like Godrej (chrome plated). - 15 NOS. and 6 Nos 2-seater chair.</p> <p>(iv) Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement. — 4 NOS.</p> <p>(v) Drug trolleys for patient preparation area. - 1 NO.</p> <p>(vi) Laminated Name boards and signage for all rooms as well as two big glow signages for main entrance (8x2.5 fit)</p> <p>(vii) Office tables with at least 6 drawers in each for Workstation and Radiologist in reporting room. - 6 NOS.</p> <p>(viii) Four office almirah of reputed brand like Godrej etc</p> <p>(ix) LED X-ray Film viewer with adjustable brightness; capable of holding 4 films of 14"x17" size. - 2 NOS.</p> <p>(x) Proper Cabling of Network (LAN) connectivity for camera system, console system, reporting room, workstations, PACS (optional), sewers and computers etc.</p> <p>(xi) Cabling for Broadband connection: for REMOTE SERVICE of MRI system.</p> <p>(xii) Sink/ wash basin in reception area</p> <p>(xvii) Door mats - Big size (6 Nos)</p> <p>LIST OF ITEMS AND SUGGESTED MANUFACTURERS</p> <p>i. FLOORING VITRIFIED TILES -Somany, Kajaria , H&R Johnson,</p> <p>ii. PAINT - Dulux, Asian Paints, Nerolac</p> <p>iii. ELECTRICAL</p> <p>* CABLES - Finolex, Havells, V-Guard, polycab</p> <p>* SWITCHES - Legrand, L&T, Crabtree , Roma</p> <p>* DISTRIBUTION BOX , MCB - Legmnd, L&T, Siemens</p> <p>* LIGHT FITTINGS - Philips / Crompton / Kesselec- Schreder/ Wipro.</p> <p>iv. AIR CONDINTIONING - Daikin, Hitachi, Blue Star</p> <p>v. FURNITURE — HermenMiller,Godrej, Featherlite, Wipro.</p>

SCHEDULE III

CONDITIONS OF CONTRACT

1. OPEX LEASE RENT

The Opex Rent for the MRI Scan facility as per specification mentioned in **Schedule –II** and **Schedule IV** shall be quoted in the Format given and the quoted rate should be inclusive of all applicable taxes & duties and should be firm without any escalation, till the Contract is completely executed.

2. LEASE PERIOD

The Bidder should offer the MRI Scan facility (ready to use) on lease for a minimum period of 7 years (or as extended for another 3 years) from the date of signing of lease agreement with RIMS.

3. SCOPE OF BIDDER

- 1) The Scope of the successful Bidder is to provide 3 Tesla MRI facility complete in all aspects as per Specifications of Schedule II within the Completion Schedule mentioned in this tender, ready to use on lease to RIMS, Imphal for a minimum period of 7 years,
- 2) The facility offered should be complete with all accessories, supporting equipments such as DG sets, necessary facilities as per Schedule II for continuous round the clock production operations (24 hrs in 3-shifts/day) in a Year to meet the capacity as per RIMS requirement.
- 3) The Successful bidder should comprehensively maintain the equipment including the replacement of all parts and facility for the lease contract period of 7 Years.
- 4) Provide all necessary support for obtaining CT Machine related statutory compliance like AERB registration.
- 5) RIMS will issue Letter of Award to the lowest responsive bidder, to set up the MRI Facility at RIMS Imphal.
- 6) RIMS Imphal authorities will provide requisite built up space for MRI center within the Hospital/Standalone premises and a dedicated adjacent space for setting up a DG Set/Generator as power back up.

- 7) RIMS will enter into a lease agreement with the party, based on the tender terms & conditions and lease rates, on successful completion and qualification of the facility as required by this tender.
- 8) Bidder will operate the ready to use MRI facility (set up as per specifications in Schedule II).
- 9) All manpower and consumables etc required for day to day operation of the facility will be in the scope of Bidder.
- 10) Bidder shall pay the utility cost like electricity cost, water cost, fuel cost etc. at actuals for operating as per RIMS requirement during the lease period. For this, the Bidder may install separate meters for measuring the power, water etc used for the daily operations.

4. COMPLETION PERIOD

Time being the essence of the Contract, the delivery and completion period stipulated should be strictly adhered to. The Supplier should complete the installation and hand over the said MRI facility (as per Schedule II) ready to use as given below:

SI No.	No. of Locations	Completion Period
1	RIMS, Imphal	Facility shall be setup & handover to RIMS within 180 Days from the date of notification of award.

Note: Exact Locations will be informed in the Letter of Award

5. FAILURE TO PROVIDE FACILITY

If the Successful Bidder fails to provide the facility on lease or comply with all the terms & conditions of the tender within the time period(s) specified in the contract, RIMS shall, without prejudice to its other remedies under the contract, at the risk and cost of the Successful Bidder terminate the Contract and engage the next lowest bidder.

6. INSPECTION AND TESTS

- a) RIMS shall have the right to inspect and/or to conduct the quality assurance and calibration test of the MRI facility to confirm their conformity to the contract.

- b) The inspections and tests may be conducted on the premises of the Bidder at site. Where conducted on the premises of the Bidder, the Bidder should make available all reasonable facilities including tools, instruments, apparatus, equipment, facilities, services and materials and assistance, including access to drawings and production data.

7. PAYMENT TERMS

Payment terms suggested is as follows:

- i) RIMS will pay Operational Expenditure as monthly lease rent, as mutually agreed by the successful bidder and RIMS based on the tender.
- ii) Monthly lease rent shall be paid at the end of each month during the lease period, from the 6th month onwards.

8. FABRICATION SCHEDULE

The Supplier shall furnish to Purchaser, a PERT/BAR CHART, within 15 days of receipt of the Intimation of Contract. The PERT/BAR Chart, should give all important milestones such as ordering of material, completion of procurement, release of drawings, phased fabrication/manufacture, inspection/tests at Supplier's works, despatch, start and completion of erection at site (wherever applicable) etc. Purchaser has the right to depute their representative to the Supplier's works to check his adherence to such chart.

9. POWER TO MAKE ALTERATIONS

The Owner shall have the power to make in writing any alterations, omissions, additions or substitutions for original specifications, drawings, designs, patterns and instructions that may appear to him necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with the instructions which may be given to him by the Owner or his representative. On submission of electrical scheme to the Electrical Inspectorate it is bound to have some changes in the panels, cables rating etc.

10. LIQUIDATED DAMAGES FOR DELAYS

The Liquidated Damages for non-commencement of services for each phase will be applicable at the rate of **Rs. 10,000/- per day**. This will be recoverable from the Performance Security, and up to a maximum of 5% of the signed contract value (Maximum Value). Upon reaching the Maximum Value, this contract will be terminated as per Termination Clause (Clause 12) given below.

Down Time- The Service Provider will have to maintain an uptime of 335 days in a year with maximum 12 days of downtime at a stretch and a total of 30 days in a year.

Downtime Penalty: The provider shall pay a sum equivalent to contracted cost per MRI Scans multiplied by the total number of CT Scans done per day during the previous month multiplied by number of downtime days as penalty in the following cases:

- If the machine is down for more than 30 days in a year, for each additional day of MRI not in operation.
- In case the machine is out of order for 72 hours and Service Provider has not made any alternative arrangements, then for each additional days beyond 72 hours of MRI not in operation.
- If shutdown extends beyond 12 days due to technical and/or administrative reasons on the part of Service Provider, the contract may be cancelled.

11. TERMINATION CLAUSE:

Any of the following events shall constitute an event of default by the bidder entitling RIMS to terminate this agreement:

- a. If the successful bidder withdraws its bid after its acceptance or fails to submit the required Performance Securities for the initial contract and or fails to fulfill any other contractual obligations. In that event, the RIMS will have the right to purchase the services from next eligible bidder and the extra expenditure on this account shall be recoverable from the defaulter. The Earnest Money Deposit or Performance Security deposited by the defaulter shall also be recovered to pay the balance amount of extra expenditure incurred by the RIMS.
- b. Failure to commence services in the Hospital within time frame mentioned in the tender and contract
- c. Failure to comply with the statutory requirements
- d. Either party can terminate the contract by giving 90 days written notice to the other party if any breach in the contractual terms.

However RIMS shall terminate the agreement by giving 30 days' notice to the other party, if the party is not meeting the machine up time requirement, not maintaining the equipment on time. In such events, RIMS will stop the payment of the Operational expenditure/ lease amount to the other party from the date of notice. The party shall remove the equipment from the site at their own cost within a period of 30 days from the date of issue of notice, failing which RIMS will remove the machine and the security amount will be forfeited. RIMS will not be responsible for any damage or loss of equipment according to this act.

The other party can terminate the agreement by giving 90 days' notice if RIMS is not promptly making the payment of Operational expenditure / lease amount within the specified time even after giving notice to RIMS.

12. PERFORMANCE GUARANTEE

The Supplier shall fully guarantee all of the equipment supplied to perform in accordance with the specifications and to be free of all defects in design, material and workmanship. Should any equipment not performing as intended or should the design, material or workmanship prove defective within a period of 7 years from the date of handing over, the equipment shall, upon notification of deficiency or defect, be promptly corrected by the Supplier to the satisfaction of Purchaser without delay and at no extra cost. If the Supplier fails to take proper corrective action to replace or repair the deficiency within a reasonable time of Purchaser's notification to this effect, the Purchaser shall be free to take such corrective action at the Supplier's risk and cost.

Simultaneously with the successful completion of the facility, supplier shall furnish a Performance Bond in the form of a Demand Draft or a Bank Guarantee from a nationalized/scheduled bank or from balance payment to be paid to the supplier as per contract, acceptable to the purchaser, for an amount equal to 10% of the total price on the value of the contract (total lease amount calculated up to 7 years) as Deposit for his faithful execution of Performance Guarantee. The Performance Bond should be valid for the lease period of 7 Years. Form for Performance Bank Guarantee is enclosed as **SCHEDULE VIII**.

13. FORCE MAJEURE

- a. Neither the Supplier nor the Purchaser shall be considered in default in the performance of their obligations as per the Contract so long as such performance is prevented or delayed because of strikes, war, hostilities, revolution, civil commotion, epidemics, accidents, fire, cyclone, flood or because of any law and order proclamation, regulation or ordinance of Government or subdivision thereof or because of any act of God. The proof of existence of force majeure shall be provided by the party claiming it to the satisfaction of the other.
- b. The Supplier shall advise Purchaser initially by a Mail, followed by post, the beginning and end of any of the above causes of delay, failing which Purchaser shall not be liable to consider delays due to the above reasons. Notice as stated above should be given even in case where only the Supplier's bids are under the consideration of the Purchaser and no acceptance of the same has been given and Contract issued.
- c. In the event of definite delay even if arising out of reasons due to force majeure, Purchaser shall have the right at their discretion to cancel the Contract or part of the Contract without any liability on their part to make any

payment to the Supplier while reserving the right to claim refund of and any payment if advanced or paid to Supplier.

14. ASSIGNMENTS AND SUBLETTING

No assignment and subletting of whole or part of the Contract shall be permitted except with prior approval of purchase obtained in writing.

15. CORRESPONDENCE

All correspondence relating to this enquiry shall be in English, to:

Deputy Director(Adm)

Address

16. INDEMNIFICATION CLAUSE

The Supplier shall indemnify and hold harmless the Purchaser from and against all claims, liability, loss damage or expense, including counsel fees arising from or by reason of any actual or claimed trade mark, patent or copy right infringement or any litigation based thereon with respect to any part of the items covered by the Contract and such obligations shall survive acceptance of payment for the items.

17. STANDARDS

The goods supplied under this contract shall conform to the standards mentioned in **SCHEDULE II** and when no applicable standard is mentioned; to the authoritative standard appropriate to the goods' country of origin and such standards shall be the latest issued by the concerned institution.

18. TECHNICAL DOCUMENTS

Supplier shall furnish the following documents to the Purchaser, free of cost, in such number of copies as specified in the Contract.

- a. Instruction/Testing/Operation/Service manual, lubrication charts, load-bearing details etc.
- b. Reproducible of all final drawings – electrical, mechanical and civil, P&I Diagram.
- c. Relevant Test Certificates, Guarantee/Warranty Certificate for each item of equipment.
- d. Catalogue and literature on bought outs
- e. Any other related documents

19. ENTIRETY OF THE AGREEMENT

All of the terms agreed to between the Supplier and Purchaser will be included in the Purchase/work Order/Contract/ Lease of Operational Expenditure agreement and their communication, proposal or understanding, written, oral or implied, will be considered to be included in the Purchase/work Order/Contract or form part of the Contract between the Supplier and Purchaser unless specifically agreed to in that behalf in writing between Purchaser and Supplier.

24. APPLICABLE LAW

The Contract shall be interpreted in accordance with Indian laws.

25. SETTLEMENT OF DISPUTES

The contract shall be deemed to have been concluded at Imphal, Manipur and suits and proceedings, if any, shall be only in the courts of competent jurisdiction in Imphal.

In the case of dispute between the purchaser and a foreign supplier, then dispute shall be settled by arbitration in accordance with the provisions of the above. But if this be not acceptable to the supplier, then the disputes shall be settled in accordance with the provisions of the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules.

The venue of arbitration shall be the place from where the contract is issued.

SIGNATURE OF BIDDER WITH SEAL

SCHEDULE IV

SPECIAL INSTRUCTIONS

1. The bidder shall visit the site before quoting for the work and also take their own assessments before quoting of bids.
2. All pages of the bid, except for un-amended printed literature shall be signed by the person or persons signing the bid. The seal of the company shall be stamped in all pages.
3. Bids shall be made in English. The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the bid.
4. The eligible bidder can quote for MRI Facility as per the Schedule VI. The work shall be awarded to the qualified bidder, who quotes the lowest.
5. To assist in the examination, evaluation and comparison of bids, the Owner may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the rate or substance of the bid shall be sought, offered or permitted.
6. Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of bid to the bidding documents. For purposes of these clauses, a substantially responsive bid is one, which conforms to specifications and all the terms and conditions of the bidding documents without material deviation. The Owner's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
7. The Owner's determination as to the substantial responsiveness or otherwise of bid or consideration of a minor informality or non-conformity or irregularity is final and conclusive.
8. The Owner reserves the right to negotiate with the lowest evaluated responsive bidder.
9. The Owner will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily for the items offered.
10. Prior to the expiration of the period of bid validity, the Owner will notify the successful Bidder in writing by Mail or cable or telex or fax, to be confirmed in writing by post, that its bid has been accepted. The notification of award may be sent in the form of Letter of Intent and/or Work order.

11. The signed acceptance of the notification of award by the Contractor will constitute a concluded contract.
12. The work should be carried out without causing any inconvenience to the public and shall ensure that no damages are caused to the existing site premises.
13. During the execution of work, the contractor or authorized representative should be present at site.
14. All Materials, Equipment's/ Tools required for the work should be arranged by the contractor and brought to site for the timely completion of the work.
15. The materials used shall be as per specification and of good quality.
16. The Contractor has to arrange necessary insurance coverage for the machine, workmen etc. deployed by him. He shall arrange all safety measures to protect his workmen and also the properties of RIMS Hospital. The work site safety of all employees, their ESI, PF etc will have to be borne by the contractor.
17. The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the Purchaser/Owner before completely executing the work.
18. The Purchaser/Owner should be immediately informed for any discrepancy in drawings, specifications and instructions in the execution of job before actual execution of particular item having discrepancy.
19. Any item found to be having been executed with poor workmanship then the Contractor shall have to rectify /reconstruct the work as specified by Purchaser/Owner. No extra charge will be admissible in such case. If CONTRACTORS fails to do so, the Purchaser/Owner reserved the right to rectify/reconstruct the work through some other agency at the expenses of Contractor.
20. The schedule of activities as submitted by the Contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the Contractor giving all details for monitoring of the schedule.
21. **The Supplier/Contractor shall make initial drawings/layouts for each of the awarded sites (as per site conditions) and get it approved by RIMS before execution.**
22. Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
23. The Contractor shall have to co-operate with the agencies executing other works in the same area.
24. While executing the work, the Contractor shall ensure safety and security of the property of the Purchaser/Owner so as to avoid theft etc.

- 25. Water and Electricity:** The contractor shall make his own arrangement for water and electricity required for the works. RIMS will not be responsible for the supply of either electricity or water.
- 26.** During the execution of work, the contractor or authorized representative/s at least one person having technical qualification should be present at site.
- 27. Electrical**
The work shall be carried out by a contractor holding valid licence issued by the State Government/Competent Authority for carrying out installation work of all voltage classes involved, under direct supervision of the persons holding valid certificates issued or recognized by the state government/competent authority. The Supplier/Contractor shall take all statutory licenses/clearances including Electrical authority approvals for the work/installations on behalf of the Owner and statutory fees, paid if any will be reimbursed by RIMS on producing original challans/receipt.
- 28.** The Supplier/contractor shall comply with by-laws and regulation of local and statutory authorities having jurisdiction over the work and shall be responsible for payment of all statutory fees and other charges and the giving and receiving of all necessary notices and the Owner shall be kept informed of the said compliances with by-laws, payment made, notices issued and received. All statutory payments shall be made by the Contractor and the same will be reimbursed by RIMS on producing original challans/receipts.

SCHEDULE V

FORMAT FOR QUOTING (should be quoted at Price bid envelope only)
The price bid should be seal at separate enveloped and details of firms should be mentioned at envelope)

Sub: Providing 01 Nos 3 Tesla MRI (On Operational Expenditure) for a period of 7 Years at RIMS Hospital.

SI No	Particulars	Rate per imaging (to be quoted by the firm) at INR
1	Brain	
2	Brain with Angiography	
3	Brain Angiography	
4	CE Brain	
5	Brain MR spectroscopy	
6	CSF cisternography	
7	Orbits	
8	Face	
9	Neck	
10	Neck Angiography	
11	Aortogram	
12	Shoulder – Right	
13	Shoulder – Left	
14	Brachial plexus	
15	Cervical Spine	
16	Lumbar Spine	
17	Dorsal spine	

20	Thorax	
21	Para nasal sinuses	
22	TM Joint – Dynamic	
23	Upper extremity -Right	
24	Upper extremity – Left	
25	Lower extremity – Right	
26	Lower extremity – Left	
27	Abdomen	
28	Pelvis	
29	MRCP	
30	Triphasic Abdomen	
31	Multiparametric Prostate	
32	Multiparametric Breast	
33	Elbow – Right	
34	Elbow – Left	
35	Hand – Right	
36	Hand – left	
37	Wrist – Right	
38	Wrist – Left	
39	Hip – Right	
40	Hip – Left	
41	Bilateral Hip	
42	Knee- Right	
43	Knee – Left	
44	Bilateral Knee	
45	Ankle – Right	
46	Ankle – Left	
47	Foot – Right	
48	Foot – Left	

49	Fetal MRI	
50	Cardiac MRI	

I agree to perform the work as per the schedule at the rate quoted by me as above. The rate quoted is inclusive of all applicable taxes.

SIGNATURE OF BIDDER WITH SEAL

SCHEDULE VI

BANK GUARANTEE FORM FOR EMD

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for providing services _____ (hereinafter called the "tender") against the Purchaser/Customer's tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser/Customer) in the sum of _____ for which payment will and truly to be made to the said Purchaser/Customer, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 20__.

The conditions of this obligation are:

1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser/Customer during the period of its validity:-

fails or refuses to furnish the security deposit for the due performance of the contract or fails or refuses to accept/execute the contract or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

We undertake to pay the Purchaser/Customer up to the above amount upon receipt of its first written demand, without the Purchaser/Customer having to substantiate its demand, provided that in its demand the Purchaser/Customer will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature with date of the authorised officer of the Bank)

.....
Name and designation of the officer

.....
.....

Seal, name & address of the Bank and address of the Branch

SCHEDULE - VII

BANK GUARANTEE FORM FOR SECURITY DEPOSIT

RIMS, Imphal

WHEREAS _____ (Name and address of the supplier)
(Hereinafter called "the supplier") has undertaken, in pursuance of contract
no _____ dated _____ to provide 3 Tesla MRI Facility as per
tender conditions (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish
you with a bank guarantee by a scheduled commercial bank recognised by you for the sum
specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf
of the supplier, up to a total of _____ (Amount of the guarantee in words
and figures), and we undertake to pay you, upon your first written demand declaring the supplier
to be in default under the contract and without cavil or argument, any sum or sums within the
limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds
or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before
presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract
to be performed there under or of any of the contract documents which may be made between
you and the supplier shall in any way release us from any liability under this guarantee and we
hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until successful completion and acceptance of the facility by RIMS
and will be released against submission of a Performance Guarantee for an amount equal to
10% of the total contract value in the form of cash deposit or Bank Guarantee by the Supplier
valid for the lease period of 7 Years i.e. up to ----- (indicate date).

.....
(Signature with date of the authorized officer of the Bank)

.....
Name and designation of the officer

.....
Seal, name & address of the Bank and address of the Branch

SCHEDULE – VIII

FORMAT FOR PERFORMANCE BANK GUARANTEE

To
RIMS, Imphal

This deed is made the day of....., Two Thousand & Twenty Three only by
(Name of the Bank) (hereinafter called the "Bank" which expression shall include its successors assigns).

WHEREAS RIMS,Imphal, (hereinafter called the Purchaser) which expression shall unless the contract require otherwise include their successors and assigns), have placed order for as per the order No...
..... dated with(Name of the Supplier) having its Office at (hereinafter called "the supplier") which expression shall unless the contract requires otherwise, includes their successors and assigns and accepted by the supplier).

And whereas the order is accepted as per the following terms of the payment:

(TERMS OF PAYMENT)

And whereas as per the above payment terms the supplier is to furnish a Bank Guarantee for (Rs.....only) towards performance guarantee.

And whereas the supplier has approached us, we (Name of the Bank) (hereinafter referred to as "The Bank") with a request to furnish our guarantee for Rs..... (Rupeesonly) valid tillbeing the 10% of the order value on their behalf in favour of RIMS, Imphal for the aforesaid purpose.

Now, we the Bank, in consideration to the promises and release of 10% as aforementioned by the Purchaser to the supplier hereby agree and undertake to pay to the purchaser a sum not exceeding Rs (Rupees.....only) against receipt of any written claim of the Purchaser within arising out of the non-fulfillment of contractual obligation by the "supplier" in respect of the subject contract

This guarantee shall not be affected by any change in the constitution of the Bank or Purchaser nor shall this guarantee be affected by any change in the constitution of the purchaser by absorption with another body or corporation and this guarantee will be available to or enforceable by such body or corporation.

We the Bank, lastly undertake to revoke this guarantee during its currency i.e. within.....with the consent of the purchaser in writing.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to Rs.....only) and the same is valid up to.....(for the lease period of 7 Years).

NOTWITHSTANDING ANYTHING HEREIN ABOVE STATED OUR LIABILITY UNDER THIS GUARANTEE IS LIMITED TO RS.....AND A CLAIM ARISING OUT OF THE GUARANTEE MUST BE RECEIVED BY THE BANK IN WRITING ON OR BEFORE.....AT.....AFTER WHICH THE LIABILITY OF THE BANK WOULD BE EXTINGUISHED.

PLACE:

DATE: