

Sl. No	Tender Page & Para	TENDER SPECIFICATION	NAME OF THE FIRM	REPRESENTATION RECEIVED FROM THE FIRMS	COMMITTEE RECOMMENDATION
1	Page 45 Para 2.a.ii	2 a) Patient Table (ii) The vendor should supply Dockable Table/ Table Top/ Table Top with dockable trolley for the main MRI patient table.	WIPRO GE HEALTHCARE	Please remove/delete this clause.	
2	Page 45 Para 2.a.ii	b) Patient monitoring (i) Patient monitoring devices for ECG, respiratory, pulse rate, oxygen saturation, at the console etc. A comprehensive solution at patient side and at main console capable of gating the sequence protocols with respect to patient's heart (ECG) and respiratory rates. Remote display of gating signals on magnet and at console.	Siemens Healthcare Private Limited	Request you to amend as "Suitable patient table to be quoted which should be fully motorized with computer controlled table movements in vertical and horizontal directions."	(ii) The vendor should supply fully motorized computer controlled table, with movements in vertical and horizontal directions for the main MRI patient table.
3	Page 45 Para 2.b.i		Philips India Ltd	Patient monitoring devices for ECG, respiratory, pulse rate, oxygen saturation, at the console etc. A comprehensive solution at patient side and at main console capable of gating the sequence protocols with respect to patient's heart (ECG) and respiratory rates. Remote display of gating signals on console.	Patient monitoring devices for ECG, respiratory, pulse rate, oxygen saturation, at the console etc. A comprehensive solution at patient side and at main console capable of gating the sequence protocols with respect to patient's heart (ECG) and respiratory rates.
4	Page 45 Para 3.a.ii	3. Gradient System a) General (ii) Minimum Gradient Strength should be 45 mT/m or more along each axis and a slew rate of 200 T/m/s in each axis.	WIPRO GE HEALTHCARE	The System should have latest generation actively shielded gradient. The Gradient strength should be 36 mT or more & slew rate 150 T/m/s or more	This is a major requirement by the user. Vendor's request cannot be accepted
5	Page 46 Para 4.a.i	4. RF Transmitter, Receiver, Coils a) RF Transmitter (i) A fully digital RF system capable of transmitting enough power (please quote the value) (as per FDA guidelines), and the operating frequency should cover 1H, and 31P nuclei (for multinuclear spectroscopy of 1H/31P)	Philips India Ltd	A fully digital RF system capable of transmitting enough power (please quote the value) (as per FDA guidelines), and the operating frequency should cover 1H.	This is a requirement of the user. Vendor's request cannot be accepted
6	Page 46 Para 4.b.ii	4. RF Transmitter, Receiver, Coils The vendor should quote the latest RF transmit technology available with them globally, as per the datasheet. b) RF Receiver (ii) Minimum 32 independent RF receiver channels or channel independent. Please provide the list of coils / coil combinations that use this configuration	WIPRO GE HEALTHCARE	Minimum 64 independent RF receiver channels or channel independent	Since there are no 64 channel coils available, and also to make sure that the tender is satisfied by a minimum of three bidders, the request by vendor not accepted.
7	Page 46 Para 4.c.i	4. RF Transmitter, Receiver, Coils The vendor should quote the latest RF transmit technology available with them globally, as per the datasheet. c) RF Transmit technology (i) Latest RF transmit system (like Multi-transmit/ Multi Drive transmit system or its equivalent/Trueshape multi-transmit, etc) with at least two independent output channels should be offered to improve RF uniformity and signal homogeneity and to reduce patient induced in-homogeneities	WIPRO GE HEALTHCARE	Latest RF transmit system(like Multi-transmit/ Multi Drive /Trueshape multi-transmit with at least two independent output channels should be offered to improve RF uniformity and signal homogeneity and to reduce patient induced in-homogeneities	No change
8	Page 46 Para 4.e	e) Coils (in addition to the in-built body coil) Price to be separately for each coil, biopsy needle	Philips India Ltd	Biopsy Needle will be supplied with Bilateral Breast Biopsy Coil.	e) Coil: Breast coil for breast biopsy. Price to be separately quoted for all consumables including biopsy needle; Two sets of biopsy needle and full kit to be quoted in the tender.
9	Page 46 Para 4.e		Siemens Healthcare	Request you to amend as "Coils (in addition to the in-built body coil)"	e) coil: Neurovascular coil covering head and neck (20 channel or more);
10	Page 46 Para 4.e.ii	e) Coils (in addition to the in-built body coil) Price to be separately for each coil, biopsy needle (ii) Standard Head coil (15-channel or more)	Siemens Healthcare	Request you to delete this point as head coil is part of Neurovascular coil which is asked under Point (iv) Neurovascular coil(20 channel or more)	e) (ii) coil: Head coil is deleted

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11	Page 46 Para 4.e.v	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (v) Spine array coil (12 Channel or more)	WIPRO GE HEALTHCARE	Spine array coil (32 Channel or more)	(v) Spine array coil (32 Channel or more)
12	Page 46 Para 4.e.vi	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (vi) Body array coil / Phased Array coil (32 Channel) If a single coil is not available with the vendor, then a combination of coils should be quoted (capable of single station Cardiac/ abdominal imaging), so that the resolution over 40 FOV is not compromised.	WIPRO GE HEALTHCARE	Body array coil / Phased Array coil (28 Channel)	(vi) Body array coil / Phased Array coil (28 Channel); If a single coil is not available with the vendor, then a combination of coils should be quoted (capable of single station Cardiac/ abdominal imaging), so that the resolution over 40 FOV is not compromised.
13	Page 47 Para 4.e.vii	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (vii) Bilateral Breast array coil (16 Channel or more)	WIPRO GE HEALTHCARE	Bilateral Breast array coil (8 Channel or more)	(vii) Bilateral Breast array coil (8 Channel or more)
14	Page 47 Para 4.e.viii	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (viii) Shoulder array coil (8 Channel or more)	WIPRO GE HEALTHCARE	Suitable Shoulder array coil (8 Channel or more)	(viii) Dedicated Shoulder array coil (8 Channel or more); If a dedicated coil is not available with the vendor, then the vendor has to quote equivalent coil (for eg, if Flex coil is offered, then the number should be in addition to the previously quoted coil)
15	Page 47 Para 4.e.ix	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (ix) Dedicated wrist coil (8 Channel or more)	WIPRO GE HEALTHCARE	Suitable wrist coil (8 Channel or more)	(viii) Suitable Wrist coil (8 Channel or more); If a dedicated coil is not available with the vendor, then the vendor has to quote equivalent coil (for eg, if Flex coil is offered, then the number should be in addition to the previously quoted coil)
16	Page 47 Para 4.e.x	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (x) Extremity coil (8 Channel or more)	Siemens Healthcare Private Limited	Request you to delete this coil as knee coil has already been asked.	This coil can be deleted
17	Page 47 Para 4.e.xi	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (xi) Knee imaging (Transmit/Receive 8 Channel or more)	WIPRO GE HEALTHCARE	Knee imaging (Transmit/Receive 16 Channel or more)	(xi) Knee imaging (Transmit/Receive 15 Channel or more)
18	Page 47 Para 4.e.xii	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (xii) Peripheral angiography coil (32 Channel or more) for carrying out with high SNR and high spatial resolution.	Siemens Healthcare Private Limited	Request you to amend as "(xii) Knee imaging (15 Channel or more) . "	(xii) Dedicated Peripheral coil or whole body coil with a coverage of atleast 80 cm with a maximum combination of 2 coils)
19	Page 47 Para 4.e.xiii	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (xiii) Dedicated Peripheral coil or whole body coil with a coverage of atleast 80 cm with single coil should be possible.	Siemens Healthcare Private Limited	Request you to amend as "(xiii) Dedicated Peripheral coil or whole body coil with coverage of atleast 80 cm with single coil should be possible."	(xiii) Dedicated Peripheral coil or whole body coil with a coverage of atleast 80 cm with a maximum combination of 2 coils)
20	Page 47 Para 4.e.xiv	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (xiv) 31P surface coil for Heart/ Liver/ calf muscle.	WIPRO GE HEALTHCARE	We humbly request to delete this point	(xiv) 31P surface coil for Heart/ Liver/ calf muscle. This is a requirement by the user. Hence cannot be deleted
21	Page 47 Para 4.e.xv	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (xv) 31P surface coil for Heart/ Liver/ calf muscle.	WIPRO GE HEALTHCARE	Kindly delete	
22	Page 47 Para 4.e.xvi	e) Coils (in addition to the in-built body coil) Price to be separately for each coil , biopsy needle (xvi) 31P surface coil for Heart/ Liver/ calf muscle.	WIPRO GE HEALTHCARE	Kindly delete	

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23	Page 47 Para 4.e.xvii	e) Coils (in addition to the in-built body coil) Price to be separately for each coil, biopsy needle (xvii) Bilateral Breast Biopsy Coil (with Grid biopsy – Core and Vacuum assisted Biopsy facility with all necessary software and hardware).	WIPRO GE HEALTHCARE	Please remove as Bilateral Breast Coil at Point No 4 (e) (vii) will suffice the Biopsy facility	(xvii) Bilateral Breast Biopsy Coil (with Grid biopsy – Core) should be compatible with the Vacuum assisted Biopsy facility (that is being procured separately), with all necessary software and hardware for integration.
24		b) Additional workstation (i) Two workstation with colour TFT display (19" or more) with evaluation capabilities (as required for all applications in the tender, section 7). (ii) Separate licenses for all the post-processing (including special packages) should be provided for this workstation also (as required for all applications in the tender, section 7). (iii) Specify clearly the algorithms that require extra license and list them whether these have been included or not. (iv) Filming also should be possible from this workstation. (v) The vendor should mention which are the post-processing capabilities that have been quoted with additional workstation. (vi) The vendor should mention which are the post-processing capabilities that are not quoted or not available with additional workstation.	Siemens Healthcare Private Limited	Request you to amend as " (xvii) Bilateral Breast Biopsy Coil (with Grid biopsy – Core assisted Biopsy facility with all necessary software and hardware). Latest Client Server Architecture based solution (Intellispace Portal 3.0/Advantage Workstation/ Syngo Via/ or equivalent)- to be added	
25	Page 48 Para 5.b (i-vi)		Philips India Ltd		No change
26	Page 48 Para 5.e	e) Film documentation DICOM interface to hook DICOM compatible, dockable, latest state-of-art Dry Laser Camera with more than 600 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), with three online tray system.	Fujifilm India Pvt Ltd	Change request: 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), with three online tray system. Justification: 600 Dpi is available with only one company (Kodak). Rest all vendors have 508 dpi resolution. We Request you to kindly amend as requested for wider participation. Also as (Agfa/Fuji/Kodak) Name is mention as a preferred vendor, but Agfa and Fujifilm both have 508 dpi Dry Imager.	e) Film documentation 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, with three online tray system.
27	Page 51 Para 6.c.vii	c) Neuro (vii) Synthetic MR imaging	WIPRO GE HEALTHCARE	Synthetic MR Imaging with offline TR/TE changing Capability	(vii) Synthetic MR imaging with offline provision to reconstruct with variable TR/TE
28	Page 51 Para 6.c.ix	c) Neuro (ix) 2D & 3D ASL	Siemens Healthcare Private Limited	Request you to amend as " 2D/3D ASL." Justification: 3D ASL provides Higher SNR, optimized contrast uniformity and reduced motion sensitivity	(ix) 2D or 3D ASL, with quantitative mapping
29	Page 53 Para 6.o.i	o) MR Spectroscopy (i) System should have capability to perform multi-planar proton and phosphorous spectroscopy (31p)	WIPRO GE HEALTHCARE	We humbly request to delete this point	This is a requirement of the user. Cannot be modified

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30	Page 53 Para 6.o.v	o) MR Spectroscopy (v) Sequences for phosphorous single voxel and multi-voxel spectroscopy should be provided, with all post-processing software	WIPRO GE HEALTHCARE	We humbly request to delete this point	This is a requirement of the user. Cannot be modified
31	Page 53 Para 6.o.viii	o) MR Spectroscopy (viii) The pulse sequences for 31P MRS and 1H MRS for liver, cardiac spectroscopy, etc., should have external gating provision with triggering bases on ECG/ Respiratory, with all post-processing software	WIPRO GE HEALTHCARE	We humbly request to delete this point	
32	Page 53 Para 7.i	Post Processing and evaluation Special Application Packages. (i) The vendor must provide their specialized and optimized imaging sequences with post-processing packages for	Siemens Healthcare Private Limited	Request you to add special application packages along with main acquisition console.	This is a requirement of the user. Cannot be modified
33	Page 53 Para 7.i	Special Application Packages. (i) Necessary composing s/w for whole body applications. Smart Exam/ Smart Brain/ Ready Suite/ equivalent technique should be quoted in all available imaging packages.	Philips India Ltd	Necessary composing s/w for whole body applications. Smart Exam/ DOT Engine/ Ready Suite / equivalent technique should be quoted in all available imaging packages.	(k) Necessary composing s/w for whole body applications. Smart Exam/ Smart Brain/ Ready Suite/ Brain Dot Engine/ equivalent technique should be quoted in all available imaging packages.
34	Page 54 Para 7.k	Arterial Spin Labelling 2D and 3D ASL processing and quantification package	Siemens Healthcare Private Limited	Request you to delete this from workstation post processing and evaluation as ASL is a inline tool and can only be used on main acquisition console.	2D or 3D ASL processing and quantification package in main console/additional workstation
35	Page 54 Para 7.o	o) Coregistration Superimposition on Neurotractography geometry and tensor diffusion field on both functional BOLD mapping and neurometabolite (CSI) mapping.	Philips India Ltd	Kindly delete	Deleted
36	Page 55 Para 7.q.i	q) Spectroscopy (i) Full post-processing for single-voxel MRS, CSI (multi-voxel MRS), metabolite mapping with colour coding (metabolic images), 31P MRS post-processing, etc., for brain, breast, prostate and for other applications.	WIPRO GE HEALTHCARE	We humbly request to delete this point	This is a major requirement. Vendor's request cannot be accepted
37	Page 55 Para 11.iii	11 Standard MRI Accessories (iii) MR compatible (minimum 2000 Gauss line) cardiac and physiological monitor (ECG, NIBP, SPO2,) for neonates/ infants and adults (with all accessories for five years) (Medhad/In-vivo/equivalent models)	Anaecon India Healthcare	This should be 5000 gauss compliant or higher for safety in the MRI suite as lower gauss compliance items have tendency of mall function if get pushed in to higher gauss compliance area than 2000 and also may cause accident.	(iii) MR compatible (minimum 5000 Gauss line) cardiac and physiological monitor (ECG, NIBP, SPO2,) for neonates/ infants and adults (with all accessories for five years) (In-vivo/tradimed/ equivalent models)
38	Page 55 Para 11.iv	11 Standard MRI Accessories (iv) MR compatible (minimum 2000 Gauss line) syringe/infusion pump. (MRIdium/equivalent models) to be supplied with 50 lines.	Anaecon India Healthcare	This should also be 5000 gauss compliant or higher for better safety in the MRI suite. The so called 2000 gauss compliant devices literally start flying towards the bore from the foot end of the patient itself and need to be kept quite away. If required we can even show a video demonstrating this fact to the committee.	No change
39	Page 55 Para 11.iv				

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40	Page 55 Para 11.vi	11 Standard MRI Accessories (vi) MR Compatible Dual Pressure injector (minimum 2000 Gauss line) (MedRad/equivalent models) to be supplied with 100 syringes with 500 tubings.	Anaecon India Healthcare	MR Compatible Dual Pressure injector with 100 syringes and 500 patient tubes is asked for. This indicates that you are allowing reuse of the syringes for 5 patients where as the syringes are for single use and disposable accordingly the syringes should be as many as the patient tubes. Further new technology injectors which are syringeless are also available now and for center of excellence like NCI under AIIMS these should be considered. AIIMS Delhi has already taken syringeless injectors which are working very efficiently for them saving lot of costs and contrast. These result in better workflow and no exposure of the contrast while loading in syringes thereby reducing contrast related allergy cases. Accordingly as an alternative a Dual head syringeless injector with 100 Pump hose and 500 patient tubes should also be asked for as an alternative.	a. MR Compatible Dual Pressure injector or Triple head (minimum 2000 Gauss line) (Ulrich/ MedRad/ better models); b. Please quote the price of the consumables for the quoted MR Compatible pressure injector (for 100 syringes/pump hoses and 500 patient tubings), valid for a period of five years. This has to be supplied in a staggered manner, after consultations with the user. This is to be quoted separately.
41	Page 55 Para 11	11 Standard MRI Accessories: Added para:		Added para:	11 Standard MRI Accessories: Added para: xiv. : MR compatible crash-cart - 1 no. xv. : MR compatible instrument-trolley - 1 no. xvi. : 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: MRS501 of Wardray Premise Ltd. U.K or Adjustable Height Trolley, Ferro, UK or equivalent) - 1 no. xvii. : MR compatible wheel chair (with cushion, back-rest and arm-rest) - 1 no. xviii. : MR Compatible Cart for biopsy handling, etc. - 1 no.
41	Page 56 Para 13.i	13 Other accessories (i) Ten Revolving chairs (Godrej Make) with ergonomic support (ii) Table for the MRI console, MRI additional console/ workstation, fMRI workstation. (iii) Necessary Desk, chair and Rack for the PACS Server & Workstation to be provided by the supplier	Siemens Healthcare Private Limited	Request you to amend as "Following furniture to be provided a) Revolving chairs height adjustable, medium-back with hand-rest - 11 NO.S c) Cupboard with laminate door shutters for storage of spare parts and accessories and records (300 x 50x40 cm) requirement - 3 NO.S d) Rack for the PACS Server & Workstation- 1 No e) Name boards for all rooms f) Tables for Workstation - 2 NO.S g) Dustbins: 6 NO.S"	ADDED PARA: SITE MODIFICATION - 3T MRI SYSTEM, Details of scope of work to be added to the technical specifications

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42	Page 57 Para 15	Civil works (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. The vendor should discuss with the engineering section and the department before quoting for Site-Modification	Siemens Healthcare Private Limited	Request you to amend as "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. The vendor should discuss with the engineering section and the department before quoting for Site-Modification The supplier shall be required to specify the total load requirements for the MR area including the load of air conditioning, room lighting and for the accessories if any. The supply line will be provided by the institute up to one point within the MRI area. The distribution panel for MRI area shall be provided by the vendor. Few lights in each room shall be connected to the UPS to provide emergency lighting. The electrical work shall include the following: a. Wiring – All interior electrical wiring- with main distribution panel board, necessary MCBs, DB, joint box, switch box etc. the wires shall be of copper of different capacity as per the load and should be renowned make as listed below. b. Switches light and power points should be of modular type and of standard make as listed below. c. General lights –LED light fittings with to be provided. Flooring: 5mm-Vinyl flooring in MRI Exam, equipment / UPS room. Walls: 600 x 600 mm glazed vitrified (GVF) tiles with 100mm tile skirting in Console room. False Ceiling: Mineral fibre panel false ceiling with AL suspension. Ceiling height to suit the equipment mount and clearances. Pre-laminated particle board paneling on the walls of MRI Exam room. Cement plaster, POP, plastic emulsion paint above 100 mm skirting in UPS/Equipment and console room."	ADDED PARA:SITE MODIFICATION - 3T MRI SYSTEM, Details of scope of work to be added to the technical specifications
43	Page 57 Para 15	Airconditioning works (ii) Air-conditioning that is required for the MRI equipment, examination room, and Console areas have to be carried out by the vendor with a new unit. Proper ducting and other necessary work has to be carried out without	Siemens Healthcare Private Limited	Request you to amend as "Total 15 TR (10 TR Working+5 TR Standby) Ductable Split Units / Split Air-conditioning that is required for the MRI equipment, examination room, and Console areas have to be installed by the vendor. Proper ducting and other necessary work has to be carried out without damaging The Following Point is requested to be added The vendor should offer Hi-Res Zoomed Diffusion sequence such as Zoomit/FOCUS for selective excitation within a user specified FOV	ADDED PARA:SITE MODIFICATION - 3T MRI SYSTEM, Details of scope of work to be added to the technical specifications
44		Suggested by Bidder	WIPRO GE HEALTHCARE		No change

16.5 : Original Product Datasheet of main unit and all accessories, including third party items to be provided.

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SITE MODIFICATION WORK – 3 T MRI SYSTEM

1	The Site Modification Scope of Work -3 T MRI
	The vendor should inspect the site at NCI, Jhajjar, before quoting and ensure that the unit can be installed in the available space without any functional compromise. The Site drawing of the Institute can be obtained from the Project office of NCI - AIIMS, room no. 161, 1st floor, DBRAIRCH, AIIMS campus, New Delhi.
i.	Complete equipment layout site plan and details of work (BOQ) should be part of technical bid. Provisions should be made for placing the various accessories in console room, work-station and printer locations. It should also include Door with glass peeping window, warning indicators and signage, false ceiling, GVT floor tiles and wall tiles/ Panelling/painting. All site modification works should comply with specified standards of the hospital.
ii.	While preparing the plan, the following aspects have to be addressed.
iii.	Care should be taken to provide easy negotiation of the patient stretchers/ trolleys through corridors and doors.
iv.	RF shielding for doors, walls, glass viewer etc.
v.	Furniture like desk, chairs, shelves etc.
vi.	Patient stretcher and other furniture/ accessory to make the scan centre functional.
vii.	The cost of Site Modification will be considered for Ranking / Evaluation purpose.
viii.	Moreover Bidders will have to quote the Unit Rates of the following components of Site Modification work.
1.	Civil works
2.	Electrical work
3.	Air Conditioning (HVAC)
4.	Fire Alarm & Detector
5.	Interior Furnishing & Furniture
2	Scope of work for Site Modification MRI unit works:-
	The supplier should inspect the proposed site and submit all the detailed equipment layout drawings and BOQ for the proposed MRI Scan Centre along with technical bid of the tender.
	The plan of the proposed 3T MRI site is attached below as Annexure 1.
	The MRI SCAN CENTRE shall consist of the following rooms:
i.	MRI Room-Gantry
ii.	Console room
iii.	Electrical room
iv.	UPS room/ equipment room
v.	Patient preparation and changing room
3	Civil work
i.	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 area, if required.
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.

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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, Patient preparation room.
4	Flooring
i.	5mm Hospital grade Vinyl Flooring of reputed brands (eg. Armstrong, Gerflor, Tarkett or equivalent) for MRI Examination-Gantry room.
ii.	600 x 600 mm vitrified tiles with 100mm tile skirting to match in other rooms.
iii.	50 mm thick cement concrete flooring with 5mm-Vinyl flooring in MRI equipment / UPS room.
5	Painting
i.	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in MRI equipment / UPS room and electrical room etc.
ii.	Pre laminated particleboard wall panelling in MRI examination – Gantry room.
6	False Ceiling
i.	Lightweight Aluminium 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. Ceiling height to suit the equipment mount and clearances.
7	Electrical work
i.	The supplier shall be required to specify the total load requirements for the MRI scan centre including the load of air conditioning, room lighting and for the accessories if any. The mains supply line will be provided by the Institute up to one point within the MRI Scan centre 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.
ii.	The electrical work shall include the following:
iii.	Wiring – All interior electrical wiring as well as wiring for Diesel generator 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 capacity as per the load and should be renowned make as listed below. Electrical Earthing for all equipment & accessories supplied shall be provided by the vendor. The earth-pits should be located as per the approved by the Institute.
iv.	Switches light and power points should be of modular type and of standard make as listed below.
v.	LED light fittings with minimum 500 Lux Illumination.
vi.	MRI compatible lights for MRI examination room. The lamps/bulbs used within the RF cage should be easy replaceable and locally available.
7	AIR CONDITIONING: minimum 16 TR (10 TR working + 6 TR standby)
i.	Duct-able Package air conditioners and split 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.
ii.	The outdoor units of AC should be located as approved by the Institute and should have grill coverings to prevent theft and damage.
iii.	Copper pipes and valve panel to be used for the Chiller to the MRI.
iv.	Environment specifications:
a	Humidity range: Relative humidity 60% and 80% in all areas except equipment room which shall be as per requirement of the equipment.

