# **BIDDING DOCUMENTS**

# FOR

# STATE OF THE ART 1.5 TESLA CLINICAL MRI SCANNER FOR F.A.A.M.C&H, BARPETA, ASSAM. ON TURNKEY BASIS.

# IFB NO.: DME/MRI/241/2012/15699, Dated: 11/12/2012 Due for opening on 28-01-2013 at 3.00 P.M.

Bidding Document issued to M/S	
on dated against the receipt of Rs5,000/-(Rupees Five thousand) on	ıly
in the form of Bank Draft/Bankers' Cheque No	•
Dated	

Director of Medical Education, Assam.



GOVERNMENT OF ASSAM DIRECTORATE OF MEDICAL EDUCATION, ASSAM, SIXMILE KHANAPARA; GUWAHATI.

# TABLE OF CONTENTS

SECTION	SUBJECT	PAGE
Ι	INVITATION FOR BIDS	2-3
П	INSTRUCTIONS TO BIDDERS	4-18
III	CONDITIONS OF CONTRACT	19-32
IV	SCHEDULE OF REQUIREMENTS	33-35
V	TECHNICAL SPECIFICATIONS	36-44
VI	QUALIFICATION REQUIREMENTS	45-47
VII	BID FORM AND PRICE SCHEDULES	48-50
VIII	BID SECURITY FORM	51
IX	CONTRACT FORM	52
Х	PROFORMANCE SECURITY FORM	53
XI	MANUFACTURER'S AUTHORISATION FORM	54
XII	PROFORMA CERTIFICATE FOR ISSUE BY THE PURCHASER AFTER SUCCESSFUL COMMISSIONING OF EQUIPMENT/PLANT	55-56
XIII	INSPECTING AUTHORITY AND SPECIAL TEST DETAILS	57
XIV	PROFORMA FOR INDICATING PARTICULARS OF CARGOES FOR WHICH SHIPPING SPACE IS REQUIRED TO BE ARRANGED BY THE SHIPPING CO- ORDINATION AND CHARTERING ORGANISATION OF THE MINISTRY OF SURFACE TRANSPORT, GOVERNMENT OF INDIA	58
XV	LIST OF SCHEDULED BANKS	59-61
XVI	PROFORMA FOR PREFORMANCE	62-63

# **SECTION-I: INVITATION FOR BID (IFB)**

#### GOVERNMENT OF ASSAM DIRECTORATE OF MEDICAL EDUCATION, ASSAM. SIXMILE,KHANAPARA;GUWAHATI-22. FAX /PHONE NO:0361-2366236

No. DME/MRI/241/2012/15699

Dated: 11/12/12

# INVITATION FOR BID (IFB) GLOBAL COMPETETIVE BIDDING

Sealed Bids (Two Envelope System) affixing court fee stamp of Rs. 8.25 (Rs. Eight point two five paisa) only are invited from the intending manufacturer for supply and installation of state of the art **1.5 Tesla clinical MRI Scanner** for F.A.A.M.C&H, Barpeta, Assam. on turnkey basis under the Health & F.W. Department, Govt. of Assam.

Postal Charges (Inland)	: Rs. 500/- Postal Charges
(Overseas)	: Rs.1, 000/-
IFB No.DME/MRI/241/2012/15699	: Dated: 11-12-2012.
ISSUE OF BIDDING DOCUMENTS	: 12-12-2012 (During Office hours)
<b>CLOSING DATE &amp; TIME FOR RECEIPT</b>	OF BIDS : 28-01-2013 AT 2.00 PM
BIDS OPENING DATE AND TIME	: 28-01-2013 AT 3.00 PM
PRE BID MEETING DATE AND TIME	: 21-12-2012 AT 11.00 A.M

1. I	Brief	Schedule
------	-------	----------

Sl No	Description	Bid Security (E.M.D.)	Delivery / Installation schedule / Completion period	Tender fees	Eligibility
1	<b>1.5 Tesla clinical MRI</b> <b>Scanner</b> for F.A.A.M.C&H, Barpeta, Assam. on turnkey basis	Rs. 10.00 Lakhs	120 Days	Rs.5,000/-	Manufacturer

2. Bidding documents are available for sale at this office during the office hours on all working days from **12-12-2012** till a day prior to the closing date of receipt of Bid indicating above, against payment of a non-refundable fee of Rs.10, 000/- (Rupees ten thousand) only in the form of a crossed demand draft in favour of the "Director of Medical Education, Assam, Sixmile, Khanapara, Guwahati-781022 Payable at SBI- Dispur (Guwahati) Branch. Bidders desirous of having bidding documents by post shall have to submit a big size self-addressed envelope with above mention postal charges along with the Bank Draft of Rs.5,000/-.(Rupees Five Thousand) only. The bidding documents can also be downloaded from the official web site of DME, Assam,

(www.dmeassam.gov.in), NIC, Assam (www.assamgovt.nic.in) and NRHM, Assam (www.nrhmassam.in). In case of bid documents downloaded from the website mentioned above the required fees as mentioned above has to be deposited at the time of submission of tender. In case of any disparity between the printed version of the tender documents sold through the Directorate and the downloaded version, the printed will be prevail.

- 3. All prospective bidders are requested to attend pre bid meeting schedule to be held on 21-12-2012 at 11.00 A.M. in the conference hall of the Directorate of Medical Education, Sixmile, Khanapara, Guwagati-781022.
- 4. It is the responsibility of the bidders to ensure that their bids are dropped in the tender box in this office i.e. Directorate of Medical Education, Assam, Sixmile, Khanapara, Guwahati-22 by the closing date and time stipulated above for receipt of bid, failing which the bid would be considered late and rejected.
- 5. The bid documents are not transferable.

Director of Medical Education, Assam

CLAUSE	ΤΟΡΙΟ	PAGE NUMBER
Α	INTRODUCTION	
01	Source of funds	4
02	Eligible bidders	4
03	Eligible goods and services	4
04	Cost of bidding	4
В	BIDDING DOCUMENTS	
05	Content of bidding documents	4-5
06	Clarifications of bidding documents	5
07	Amendment of bidding documents	5
С	PREPARATION OF BIDS	
08	Language of bid	5
09	Documents comprising the bid	6
10	Bid form	6
11	Bid prices	6-8
12	Bid currencies	8
13	Documents establishing bidder's eligibility and qualifications	8-9
14	Documents establishing goods eligibility and conformity to bid	9-10
	documents	
15	Bid security	10-11
16	Period of validity of bids	11
17	Format and signing of bid	11
D	SUBMISSION OF BIDS	
18	Sealing and marking of bids	11-12
19	Deadline for submission of bids	12-13
20	Late bids	13
21	Modification and withdrawal of bids	13
Ε	BID OPENING AND EVALUATION	
22	Opening of bids by purchaser	13-14
23	Clarification of bids	14
24	Preliminary examination	14-15
25	Conversion to single currency	15
26	Evaluation and comparison of bids	15-17
27	Domestic preference	17-18
28	Contacting the purchaser	18
F	AWARD OF CONTRACT	
29	Post qualification	18
30	Award criteria	18
31	Purchaser's right to vary quantities at time of award	18
32	Purchaser's right to accept any bid and to reject any or all bids	19
33	Notification of award	19
34	Signing of contract	19
35	Performance security	19

# SECTION II- INSTRUCTION TO BIDDERS

#### **SECTION II – INSTRUCIONS TO BIDDERS (ITB)**

#### A. INTRODUCTION

#### 01 <u>Source of funds</u>.

Fund allocated to F.A.A.M.C&H, Barpeta for which this Invitation for Bid is issued.

02 Eligible bidders

02.01 This Invitation for Bid is open to all the eligible manufacturers.

- 03 Eligible goods and services.
- 03.01 All goods and ancillary services to be supplied under the contract shall have their origin in India or other countries and all expenditure made under the contract will be limited to such goods and services.
- 03.02 For purposes this clause 'origin' means the place where the goods are mined, grown or produced or from which the ancillary services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or in utility from its components.
- 03.03 The origin of goods and services may be distinct from the nationality of the bidder.
- 04 Cost of bidding.
- 04.01 The bidder shall bear all costs associated with the preparation and submission of its bid, and the Governor of Assam hereinafter referred to as "the Purchaser", will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

# **B** THE BIDDING DOCUMENTS

- 05 Content of bidding documents.
- 05.01 The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to the Invitation for Bid, the bidding documents include:
  - a. Instruction to Bidders.
  - c. Schedule of Requirements
  - e. Qualification Requirements
  - g. Contract Form
  - & i. Proforma

- b. Conditions of contract.
- d. Technical Specifications
- f. Bid Form and Price Schedules
- h. Special Warranty provisions
- 05.02 The bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in the rejection of its bid.

#### 06 Clarification of bidding documents.

06.01 A prospective bidder requiring any clarification of the bidding documents may notify the purchaser in writing or by telex or cable at the purchaser's mailing address indicated in the Invitation for Bid. The purchaser will respond in writing to any request for clarification of the bidding documents, which it receives no later than 30(thirty) days prior to the deadline for submission of bids prescribed by the purchaser. Written copies of the purchaser's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective bidders, which have received the bidding documents.

- 06.02 Amendment of bidding documents.
- 07.01 At any time prior to the deadline for submission of bids, the purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.
- 07.02 The amendment will be notified in writing or by telex or cable to all prospective bidders, which have received the bidding documents and will be binding on them.
- 07.03 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.

#### **C. PREPARATION OF BIDS**

- 08. Language of bid.
- 08.01 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 purpose of interpretation of the bid, the English translation shall govern.
- 08.02 The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, may also be written in the Hindi Language, provided that the same is accompanied by an English translation, in which case, for purpose of interpretation of the bid, the English translation shall govern.

#### 09 **Documents comprising the bid**.

- 09.01 The bid prepared by the bidder shall comprise the following components:-
  - A. a bid form and a price schedule completed in accordance with clauses 10,11 and 12,
  - B. Documentary evidence established in accordance with clause 13 that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted,
  - C. Documentary evidence established in accordance with clause 14 that the goods and ancillary services to be supplied by the bidder are eligible goods and services and conform to the bidding documents and
  - D. Bid Security furnished in accordance with clause 15.
- 10. Bid form.
- 10.01 The bidder shall complete the bid form and the appropriate price schedule furnished in the bidding documents, indicating for the goods to be supplied, a brief description of the goods, their country or origin, quantity and prices.

- 10.02 For the purpose of granting a margin of domestic preference pursuant to clause 27, the purchaser will classify the bid, when submitted, in one of the three groups, as follows:a) Group A: Bids offering goods produced and manufactured from Small Scale
  - Industrial units, provided the quality and delivery are suitable.
  - **b) Group B:** Bids offering goods produced and manufactured from Public Sector Undertakings provided that the quality and delivery are suitable.
  - c) Group C: Bids offering goods produced and manufactured from other units/undertakings or imported, provided the quality and delivery are suitable.
- 10.03 To facilitate this classification by the purchaser, the bidder shall complete whichever version of the price schedule furnished in the bidding documents is appropriate, provided however that the completion of an incorrect version of the price schedule by the bidder will not result in rejection of its bid but merely in the purchaser's reclassification of the bid into its appropriate bid group.
- 11 Bid Prices.
- 11.01 The bidder shall indicate on the appropriate price schedule attached to these documents the unit prices and total bid prices of goods it proposes to supply under the contract.
- 11.02 Prices indicated on the price schedule shall be entered separately in the following manner:

# A) FOR GOODS OFFERED FROM WITHIN INDIA:-

- i) the price of the goods, quoted ex- factory, ex-showroom, ex-warehouse or off-the shelf, as applicable, including customs, excise and any other duties and sales and other taxes already paid or payable,
  - a) on the components and raw material used in the manufacture or assembly of the goods quoted ex- factory or
  - b) on the previously imported Goods of foreign origin quoted ex-, showroom, ex-warehouse or off-the-shelf
- ii) Any sales and other taxes/duties which will be payable on the goods in India if the contact is awarded,
- iii) Charges for inland transportation, insurance (if required) and other local costs incidental to delivery of the goods to their final destination and
- iv) The cost of incidental services listed in clause 13 of the conditions of contract.

#### B) FOR GOODS OFFERED FROM ABROAD: -

i) The price of goods FOB/FAS port of shipment (in Foreign Currency),

- ii) The price of goods quoted CIF port of entry in India (in Foreign Currency). In quoting the prices, the bidder shall use ocean transportation through Indian flag vessels of Indian origin or through vessels of shipping conference lines in which India is a member country. Similarly, the bidder may obtain insurance services from any Nationalized insurance company in India,
- iii) charges for inland transportation, insurance (if required) and other local costs incidental to delivery of the goods from the port of entry to their final destination and
- iv) the cost of incidental services listed in clause 13 of the conditions of contract.

Note: Bidders may like to ascertain availability of deemed export benefits. They are solely responsible for obtaining such benefits, which they have considered in their bid and in case of failure to receive such benefits; the purchaser will not compensate the bidder. Bids, which do not conform, to this provision will be treated as non-responsive and rejected.

- 11.03 The bidder's separation of the price components in accordance with clause 11.02 above will be solely for the purpose of facilitating the comparison of bids by the purchaser and will not in any way limit the purchaser's right to contract on any of the terms offered.
- 11.04 Prices quoted by the bidder shall be fixed during the bidder's Performance of the contract and not subject to variation on any account. <u>A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to clause 24.</u>

#### 12 Bid currencies.

- 12.01 The prices shall be quoted either in Indian rupees or in the currency of the country or origin of goods. <u>Bids</u>, where prices are quoted in any other way shall be treated as <u>non-responsive and rejected</u>.
- 12.02 Agents and services facilities in India-
- a) If a foreign bidder has engaged an agent in India, it will be required to give the following details in the bid:

i) the name and address of the Indian agent with their permanent income tax number;ii) what services the agent renders and;

- iii) The amount of remuneration for the agent included in the FOB component of the bid price;
- b) The Agency Commission shall be indicated in the space provided for in the price schedule and will be paid to the bidder's agent in Indian Rupees using the Telegraphic Transfer Buying Rate of exchange ruling on the date of award of Contract and shall not be subject to any further exchange variation.
- 13 Documents establishing bidder's eligibility and qualifications:
- 13.01 Pursuant to clause 09, the bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.

- 13.02 The documentary evidence of the bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the bidder, at the time of submission of its bid, is eligible as defined under clause 02.
- 13.03 The documentary evidence of the bidder's qualifications to perform the contract if its bid is accepted, shall establish to the purchaser's satisfaction:
  - a) that, in the case of a bidder offering to supply goods under the contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorised (as per authorization form in section XI) by the good's manufacturer or producer to supply the goods in India.
    - b) that the bidder has the financial, technical and production capability necessary to perform the contract and meets the criteria outlined in the 'Qualification Requirements' specified in Section VI.
    - c) that in the case of a bidder no doing business within India, the bidder is or will be (if successful) represented by an agent in India equipped and able to carry out the supplier's maintenance, repair and spare parts stocking obligations prescribed by the conditions of contract and/or Technical Specifications and;
    - d) latest and valid Income Tax Clearance Certificate of the bidder or its agent.
- 14. Documents establishing good's eligibility and conformity to bidding documents.
- 14.01 Pursuant to clause 09, the bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services, which the bidder proposes to supply under the contract.
- 14.02 The documentary evidence of the goods and services eligibility shall consists of a statement in the price schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.
- 14.03 The documentary evidence of the goods and services conformity to the bidding documents may be in the form of literature, drawings and data and shall furnish:
  - a) a detailed description of the goods essential technical and Performance characteristics,
  - b) a list giving full particulars, including available sources and current prices, of all spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of years, following commencement of the goods used by the purchaser and
  - c) A clause-by-clause commentary on the purchaser's 'Technical Specification' demonstrating the goods and services substantial responsiveness to those specifications or a statement of deviations and exceptions to the provisions of the 'Technical Specifications'.
- 14.04 For purposes of the commentary to be furnished to clause 14.03 'c' above, the bidder shall note that standards of workmanship, material and equipment and references to brand names or catalogue numbers designated by the purchaser in its 'Technical Specifications' are intended to be descriptive only and not

restrictive. The bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the purchaser's satisfaction that the substitutions are substantially equivalent or superior to those designated in the 'Technical Specifications'.

- 15 Bid Security.
- 15.01 Pursuant to clause 09, the bidder, shall furnish as part of its bid, a bid security of an amount specified in IFB.
- 15.02 The bid security is required to protect the purchaser against risk of bidder's conduct, which would warrant the security's forfeiture, pursuant to clause 15.07.
- 15.03 The bid security shall be demonstrated in the currency of the bid or in Indian Rupees and shall be in one of the following forms:
  - a) Post Office Cash Certificates, National Savings Certificates and K.V.P duly pledged in favour of Director of Medical Education, Assam, Sixmile, Khanapara, Guwahati-22. (Certificates which are not held in the name of the bidder shall not be accepted),
  - b) Post Office Saving Bank Pass Book and
  - c) Deposit Receipts or Bank Guarantees (in the prescribed proforma given in Section VIII issued by any of the scheduled banks as per list given in Section XV).
- 15.04 Any bid from a bidder who fail to furnish Bid Security (furnish a notarized copy of the registration certificate for the item quoted), not secured in accordance with clause 15.01 and 15.03, will be summarily rejected by the purchaser, as non-responsive, pursuant to clause 24.
- 15.05 Unsuccessful bidder's bid security will be discharged/returned as promptly as possible after the expiration of the period of bid validity prescribed by the purchaser, pursuant to clause 16, but not later than 30 days of the award of contract. The bidders are advised in their own interest to send a pre-receipted challan along with their bid so that the return of bid security, after the bids have been rejected, is made within the stipulation period.
- 15.06 The successful bidder's bid security will be discharged /returned upon the bidder executing the contract pursuant to clause 34 and furnishing the Performance security, pursuant to clause 35.

#### 15.07 The bid security may be forfeited:

- a) If a bidder withdraws its bid or impairs or derogates from the bid in any respect during the period of bid validity specified by the bidder on the bid form or;
- b) In the case of a successful bidder, if the bidder fails
  - i) to sign the contract in accordance with clause 34 or
  - ii) to furnish Performance security in accordance with clause 35.

#### 16. **Period of validity of bids**.

- 16.01 Bids shall remain valid for 365(three hundred sixty five) days after the date of bid opening prescribed by the purchaser, pursuant to clause 19. A bid valid for a shorter period shall be rejected by the purchaser as non-responsive.
- 16.02 In exceptional circumstances, the purchaser may solicit the bidder's consent to an extension of the period of bid validity. The request and the responses thereto shall be made in writing (or by cable or by telex). The bid security provided under clause 15 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security. A bidder granting the request will not be required nor permitted to modify its bid.

#### 17. **Format and signing of bid**.

- 17.01 The bidder shall prepare three copies of the bid, clearly making each "original Bid" and "Copy of Bid" as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.02 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorised to bind the bidder to the contract. Written power-of-attorney accompanying the bid shall indicate the latter authorisation. The person or persons signing the bid shall initial all pages of the bid, except for unlamented printed literature.
- 17.03 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder, in which case the person or persons signing the bid shall initial such corrections.

#### **D.** SUBMISSSION OF BIDS

- 18. Sealing and marking of bids.
- 18.01 The bidders shall seal the original and each copy of the bid in an inner and an outer envelope, duly marking the envelopes as 'original' and 'copy'.
- 18.02 The Inner and outer envelopes shall be:
  - a) Addressed to the purchaser at the following address: -

#### "DIRECTOR OF MEDICAL EDUCATION, ASSAM, SIXMILE,KHANAPARA, GUWAHATI-781022, ASSAM, INDIA"

b) Bear the Invitation for Bid (IFB) number and the words "DO NOT OPEN BEFORE......" (Here insert the time and date of Bid opening).

18.03 The inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared 'late'.

- 18.04 If the outer envelop is not sealed and marked as required by clause 18.02, the purchaser will assume no responsibility for the bid's misplacement or premature opening.
- 18.05 Bidders shall submit their bids in two parts as under:
  - a) Technical bids, in triplicate, consisting of technical details bringing out clearly in a separate sheet, the deviations in specifications if any from that of 'Technical

Specifications' and also clause-by-clause compliance of specifications along with the commercial terms and conditions and bid security.

- b) Price bids showing only item wise prices in a separate sealed cover inside the main cover.
- c) 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.
- d) 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 before opening the price bids of others.

#### 19. **Deadline for submission of bids**.

- 19.01 Bids must be received by the purchaser at the address specified under clause 18.02 no later than the time and date specified in the invitation for bids (Section I). In the event of the specified date for the 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.
- 19.02 The purchaser may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in accordance with clause 07, 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.
- 19.03.It is the responsibility of the bidders to ensure that the completed bidding documents are dropped in the tender box in this office i.e. Directorate of Medical Education, Assam, Sixmile,Khanapara,Guwahati-781022 by the closing date and time stipulated above for receipt of bid, failing which the bid would be considered late and rejected.

# 20. Late bids.

20.01 Any bid received by the purchaser after the deadline for submission of bids prescribed by the purchaser, pursuant to clause 19, or a single bid incorporation both technical details and price, pursuant to clause 18.05, will be rejected and/or returned unopened to the bidder.

#### 21 Modification and withdrawal of bids.

- 21.01 The bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the purchaser prior to the deadline prescribed for submission of bids.
- 21.02 The bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of clause18. A withdrawal notice may also be sent by telex or cable but followed by a signed confirmation copy, postmarked not later than the deadline for submission of bids.
- 21.03 No bid may be modified subsequent to the deadline for submission of bids.
- 21.04 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidder in the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security pursuant to clause 15.07.

# **B. BID OPENING AND EVALUATION**

- 22 Opening of bids by purchaser.
- 22.01 The purchaser will open bids in the presence of bidder's representatives, who choose to attend, at the time and date specified in the invitation for bids and in the following location:

# DIRECTORATE OF MEDICAL EDUCATION, ASSAM, SIXMILE, KHANAPARA, GUWAHATI-781022.

The bidder's representatives, who choose to attend the bid opening, shall bring with them a letter of authority from the bidder on the letterhead for having been authorised to be present at the time of opening of the bid. In the absence of such a letter of authority, the representative(s) will not be allowed to enter and/or to attend the bid opening.

The bidder's 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.

22.02 The bidder's name, technical specifications, bid prices (in case of single bid system), modifications, bid withdrawals and the presence or absence of the requisite bid security and such other details as the purchaser, at its discretion, may consider appropriate will be announced at the opening.

# 23. Clarification of bids.

23.01 To assist in the examination, evaluation and comparison of bids, the purchaser 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 price or substance of the bid shall be sought, offered or permitted.

# 24. **Preliminary examination**.

- 24.01 The purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required bid security has been furnished, whether the document have been properly signed, whether the bid validity is as required and whether the bids are generally in order.
- 24.02 <u>Bids from agents without proper authorisation from the manufacturers as per section XI</u> and principal's original proforma invoice with break-up of price shall be treated as non-responsive and shall be rejected.
- 24.03 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 corrected. If the supplier does not accept the correction of the errors, its bid will be rejected. If there is a discrepancy between the words and figures, the amount in words shall prevail.
- 24.04 Prior to the detailed evaluation, pursuant to clause 26, 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, which conforms to all the terms

and conditions of the bidding documents without material deviations. The purchaser's determination of a bid's responsiveness is to base on the contents of the bid itself without recourse to extrinsic evidence.

- 24.05 <u>A bid determined as not substantially responsive will be rejected by the purchaser and</u> <u>may not subsequently be made responsive by the bidder by correction of the nonconformity.</u>
- 24.06 The purchaser may waive any minor informality or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.
- 24.07 The purchaser's determination as to the substantial responsiveness or otherwise of each bid or consideration of a minor informality or non-conformity or irregularity is final and conclusive.

#### 25. **Conversion to single currency**.

25.01 To facilitate evaluation and comparison, the purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid price is payable, to the Indian rupees at the BC selling market rate of exchange established by the State Bank of India, New Delhi or the Bank of Baroda, New Delhi, for similar transactions as on the date of bid opening.

#### 26. **Evaluation and comparison of bids**.

- 26.01 The purchaser will technically evaluate all bids previously determined to be responsive and compare the bids previously determined to be substantially responsive, pursuant to clause 24 and technically acceptable.
- 26.02 The purchaser's evaluation of a bid will include and take into account:
  - a) in the case of goods manufactured indigenously or goods of foreign origin already located in India, excise duty, sales tax and other similar taxes and duties, which will be payable on the goods if a contract is awarded to the bidder and;
  - b) in the case of a goods of foreign origin offered from abroad, customs duties and other similar import duties/taxes, which will be payable on the goods is the contract is awarded to the bidder.

The purchaser's evaluation of a bid will exclude and not take into account the additional features like training in India or abroad offered free or at an additional cost unless specifically asked for in the 'Technical Specifications'.

- 26.03 The comparison shall be of F.O.R. site and delivered and commissioned at consignee's end.
- 26.04 The purchaser's evaluation of bid will take into account, in addition to the bid price and the price of incidental services, the following factors, in the manner and to the extent indicated in clause 26.05 and in the 'Technical Specifications':
  - a) Cost of inland transportation and other costs within India incidental to delivery of the goods to their final destination at consignee's site,
  - b) delivery schedule offered in the bid,
  - c) deviations in payment schedule from that specified in the conditions of contract,
  - d) the cost of components, spare parts and service,
  - e) the cost of installation and commissioning,
  - f) the cost of guarantee/warranty and

g) the Performance and productivity of the equipment offered.

#### h) The cost of CMC will be added for Ranking/ Evaluation purpose

- 26.05 Pursuant to clause 26.04, following evaluation methods will be followed:
  - a) Inland transportation, insurance and incidentals:

Bidder shall quote separately for inland transportation, insurance and other incidentals for delivery of goods to the site. These costs incurred in India shall be quoted in Indian Rupees. Bids offering goods of foreign origin from abroad shall quote for freight and insurance charges separately. This cost will be added to the bid price.

#### b) <u>Delivery schedule:</u>

The purchaser desires to have delivery of the goods covered under the invitation, at the time specified in the 'Schedule of Requirements'. The estimated time of arrival and installation and commissioning at the site should be calculated for each bid after allowing for reasonable ocean and inland transportation time. Treating the bid offering the scheduled time of arrival as the base, a delivery "adjustment" will be calculated for other bids at 2% (two percent) of the F.O.R. site delivered, installed and commissioned price for each month of protracted delivery beyond the base and this will be added to the bid price for evaluation.

c) <u>Deviation in payment schedule</u>:

Bidders shall state their bid price for the payment schedule outlined in the conditions of contract. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The purchaser may consider the alternative payment schedule offered by the selected bidder.

d) Cost of spare parts and maintenance service:

Bidder shall quote for maintenance spares for five years normal running of the equipment. Bidder shall also quote for annual maintenance charges for a period of five years after the expiry of the standard guarantee/warranty period of five years. This cost will be added to the bid price.

e) Cost of installation and commissioning:

Bidder may quote separately for installation and commissioning, if he chooses to do so. These costs incurred in India shall be quoted in Indian rupees. This cost will be added to the bid price.

f) <u>Guarantee/warranty</u>:

Bidder's bid shall include guarantee/warranty for a period of five years from the date of installation, commissioning and taking over of the equipment by the consignee. In case this element is quoted at extra cost, such cost will be added to the bid price.

g) <u>Performance and productivity of the equipment:</u>

Bidders shall state the guaranteed Performance or efficiency of the equipment. For each drop in the Performance or efficiency below the norm of 100, an adjustment of 1% of the bid price will be added to the bid price for each point drop.

#### 27. Domestic preference

- 27.01 In the comparison of evaluated bids, the purchaser will grant a margin of preference to goods in accordance with the following procedures, provided the bidder shall have established to the satisfaction of the purchaser that the goods are eligible for price/purchase preference.
- 27.02 The purchaser will first review the bids to confirm the appropriate of, and to modify as necessary, the bid group classification to which bidders assigned their bids in preparing their bid forms and price schedule, pursuant to Clause 11.
- 27.03 If evaluated bids in each group will then be compared among themselves, to determine the lowest evaluated bid of each group. The lowest evaluated bid of each group will next be compared with the lowest evaluated bids of the other groups. If this comparison results in a bid from Group 'A' being the lowest, it will be selected for the award of the contract.
- 27.04 If, as a result of the preceding comparison, the lowest bid is from Group 'C', all Group 'C' bids will then be further compared with the lowest evaluated bid from group 'A', after adding to the evaluated bid price of the goods offered in each Group 'C 'bid for the purpose of this further comparison only up to 15% of the evaluated bid price of such goods to group 'C' bids. All Group 'B' bids may be considered for a purchase preference of up to 10% over the bids from Group 'A'& Group 'C', if they happen to be competitive and responsive.

If the group 'A 'or group 'B' bid in the further comparison is the lowest, it will be selected for award. If not, the lowest evaluated bid from group 'C', as determined from the comparison under clause 27.03 as above, will be selected.

27.05 However, the quantum of price/purchase preference to be allowed shall be determined by the purchaser on the merits of individual cases based on the prevailing Government policy and his decision shall be final and binding and the purchaser and/or the Government of India shall entertain no representations on this ground.

#### 28. **Contacting the purchaser**.

- 28.01 Subject to clause 23, no bidder shall contact the purchaser on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded.
- 28.02 Any effort by a bidder to influence the purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions shall result in the rejection of the bidder's bid and also banning of business dealings with the bidder for a period of three years from the date of such ban.

# F. AWARD OF CONTRACT

#### 29. **Post-qualification**.

- 29.01 Notwithstanding the 'Qualification Requirements' set out in section VI the purchaser will determine to its satisfaction whether the bidder selected as having submitted the lowest evaluated responsive bid is qualified to satisfactorily perform the contract.
- 29.02 The determination will take into account the bidder's financial, technical and production capabilities. It will be based upon the examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to clause 13, as well as such other information as the purchaser deems necessary and appropriate.
- 29.03 An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bidder's bid, in which event the purchaser will proceed to the next lowest evaluated bid to make a similar determination of that bidder's capabilities to perform satisfactorily.

#### 30. Award criteria.

- 30.01 Subject to clause 32, 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.
- 31. Purchaser's right to very quantities at time of award.
- 31.01 The purchaser reserves the right at the time of award to increase or decrease by up to 25% of the quantity of goods and services specified in the 'Schedule of Requirements' without any change in prices or other terms and conditions.
- **32.** Purchaser's right to accept any bid and to reject any or all bids.
- 32.01 The purchaser reserves the right to accept or reject any bid and to annual the bidding process and reject any or all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligations to inform the affected bidder or bidders of the grounds for the purchaser's action.

# 33. Notification of award.

- 33.01 Prior to the expiration of the period of bid validity, the purchaser will notify the successful bidder in writing, by registered letter or by cable or telex or fax (to be confirmed in writing by registered letter), that its bid has been accepted.
- 33.02 The notification of award will constitute the formation of the contract.
- 33.03 Upon the successful bidder's furnishing of Performance security, pursuant to clause 35, the purchaser will promptly notify each unsuccessful bidder and will discharge its bid security, pursuant to clause 15.

# 34 **Signing of contract**.

- 34.01 At the same time as the purchaser notifies the successful bidder that its bid has been accepted, the purchaser will send the bidder the contract form provided in the bidding documents, incorporating all agreements between the parties.
- 34.02 Within twenty-one (21) days of receipt of the contract form, the successful bidder shall sign and date the contract and return it to the purchaser.

#### 35. **Performance security**.

- 35.01 Within thirty (30) days of the receipt of notification of award from the purchaser, the successful bidder shall furnish the Performance security in accordance with the conditions of contract, in the Performance security form provided in the bidding documents or another form acceptable to the purchaser.
- 35.02 Failure of the successful bidder to comply with the requirement of clause 34 or clause 35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the purchaser may like the award to the next lowest evaluated bidder or call for new bids.

Clause	Topic Number	Page
Number		
01	Definitions	21
02	Application	21
03	Country of origin	21-22
04	Standards	22
05	Use of contract documents and information	22
06	Patent rights	22
07	Performance security	22-23
08	Inspection and tests	23-24
09	Packing	24
10	Delivery and documents	25-26
11	Insurance	26
12	Transportation	26-28
13	Incidental services	28
14	Spare parts	28-29
15	Warranty	29
16	Payment	30-32
17	Prices	32
18	Change orders	32
19	Contract amendments	32
20	Assignment	32
21	Sub-contracts	32-33
22	Delays in suppliers' Performance	33
23	Liquidated damages	33-34
24	Termination for default	34
25	Force Majeure	34
26	Termination for insolvency	35
27	Termination for convenience	35
28	Resolution of disputes	35-36
29	Governing language	36
30	Applicable law	36
31	Notices	36
32	Taxes and duties	36

# SECTION III-CONDITIONS OF CONTRACT (COC)

# SECTION III-CONDITIONS OF CONTRACT (COC)

## 01 **Definitions**

- 01.01 In this contract, the following terms shall be interpreted as indicated:
  - a) "the contract" means the agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
  - b) "the contract price" means the price payable to the supplier under the contract for the full and proper Performance of its contractual obligations;
  - c) "the goods" means all of the equipment, machinery and/or other materials, which the supplier is required to supply to the purchaser under the contract;
  - d) "services" means services ancillary to the supply of the goods, such as transportation and insurance and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other such obligations of the supplier covered under the contract;
  - e) "the purchaser" means the Governor of Assam and includes its successors or assignees;
  - f) "the supplier" means the individual or firm supplying the goods under the contract and includes its successors or assignees and;

#### 02. Application

02.01 These conditions of contract shall apply to the extent they are not superseded by provisions in other parts of the contract:

#### 03. **Country of origin**.

- 03.01 All goods and services supplied under the contract shall have their origin in India or other countries recognized by the Government of Assam.
- 03.02 For purpose of this clause "origin" means the place where the goods are mined, grown or produced or from which the ancillary services are supplied. Goods are produced when, through manufacturing, processing or substantial or major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 03.03 The origin of goods and services may be distinct from the nationality of the supplier.

#### 04 Standards

04.01 The goods supplied under this contract shall conform to the standards mentioned in the 'Technical Specifications' 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.

- 05 Use of contract documents and information.
- 05.01 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the Performance of the contract. Disclosure to any such employed person shall be made confidential and shall extend only so far as may be necessary or purposes of such Performance.
- 05.02 The supplier shall not, without the purchaser's prior written consent, make use of any documentary information enumerated in clause 05.01 except for purposes of performing the contract.
- 05.03 Any document other than the contract itself, enumerated in clause 05.01, shall remain the property of the purchaser and shall be returned (in all copies) to the purchaser on completion of the supplier's Performance under the contract if so required by the purchaser.

#### 6. **Patent rights**

06.01 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof in the purchaser's country.

#### 07 **Performance security**.

- 07.01 Within 30 (thirty) days after the purchaser's issue of notification of award, the supplier shall furnish Performance security to the purchaser for an amount of **10%** (**ten percent**) of the contract value, valid up to 365 (three hundred sixty-five) days after the completion of Performance obligations excluding warranty obligations.
- 07.02 The proceeds of the Performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract.
- 07.03 <u>The Performance security shall be denominated in the currency of the contract or in</u> <u>Indian Rupees and shall be in one of the following forms:</u>
  - a) Post Office Cash Certificates, National Savings Certificates and KVP duly pledged in favour of Director of Medical Education, Assam (Certificates which are not held in the name of the bidder shall not be accepted),
  - b) Post Office Saving Bank Pass Book and
  - c) Deposit Receipts or Bank Guarantees (in the prescribed proforma given in section X issued by any of the scheduled banks as per list given in section XV).
- 07.04 The Performance security will be discharged by the purchaser and returned to the supplier on completion of the supplier's Performance obligations excluding the warranty obligations under the contract.
- 07.05 In the event of any contract amendment, the supplier shall, within 21 (twenty-one) days of such amendment to the Performance security, rendering the same valid for the contract, as amended.

#### 08 **Inspection and tests**

- 08.01 The purchaser or its representatives shall have the right to inspect and/or to test the goods to confirm their conformity to the contract. The 'Technical Specifications' and 'Inspection authority and special test details' indicated in section XIII shall specify what inspections and tests, the purchaser required and where they are to be conducted. The purchaser shall notify the supplier in writing of the identity of any representatives for this purpose.
- 08.02 The inspections and tests may be conducted on the premises of the supplier or its subcontractor(s), at point of delivery and/or at the goods final destination, where conducted on the premises of the supplier or its sub-contractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the purchaser.
- 08.03 Should any inspected or tested goods fail to conform to the specifications, the purchaser may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specification requirements free of cost to the purchaser, within a period of 45(forty five) days of intimating such rejection.
- 08.04 The purchaser's right to inspect, test and, where necessary, reject the goods after the good's arrival at the final destination shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by purchaser or its representatives prior to the goods dispatch from the place of manufacture.
- 08.05 Nothing in clause 08 shall in any way release the supplier from any warranty or other obligations under the contract.

#### 09 Packing.

- 09.01 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and open storage. Packing case size and weights shall take into consideration, where applicable, the remoteness of the goods final destination and the absence of heavy handling facilities at all points in transit. In addition, the supplier shall also take into the limitations of the packing size acceptable for inland transportation in India by rail/road and make necessary arrangement for the goods smooth transportation up to the final destination specified in the contract.
- 09.02 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract and subject to clause 18, in any subsequent instructions ordered by the purchaser.
- 09.03 Packing instructions:

The supplier will be required to make separate packages for each

Consignee. Each package will be marked on three sides with proper point the following:

a)Brief description of goods,
b)Contract no. and date,
c)Country of origin of goods,
d)Supplier's name and address,
f) Packing list reference number and
g) Consignee's name and full address.

#### 10 **Delivery and documents**

- 10.01 Delivery of the goods shall be made by the supplier in accordance with the terms specified by the purchaser in the notification of award.
- 10.02 For purposes of the contract, "F.O.B.", "C.I.F." and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them as specified in the notification of award.

#### 10.03 a) For imported goods:

Within 24 hours of shipment, the supplier shall notify the purchaser, port consignee, ultimate consignee, paying authority, chartering wing of the Ministry of Shipping & Transport, indenter, bankers opening the letter of credit and the insurance company by cable or telex or fax, the full details of the shipment including contract number, description of goods, quantity, the vessel, the Bill of Lading/Air Way Bill number and date, port of loading, date of shipment, port of discharge, expected date of arrival at the port of discharge, etc. The supplier shall mail the following documents to the purchaser and authorities as indicated against each immediately on shipment.

Document	Port consignee	Ultimate consignee	Paying Authority	Purchaser	Min. of Shipping	Indenter	Bank	Insurance Company
Bill of lading/ Air way bill (original)	1						1	
Bill of lading/ Air way bill (copy)	2	2	1	1	1	1	1	1
Freight memo	3	2	1	1	1	1	1	
Signed copies Of invoice	1			1			1	
Invoices	2	2	1		1	1		1
Packing list	3	2	1	1	1	1	1	1
Country of Origin certificate	3	2	1	1	1	1	1	
Drawings/sket ches showing dimensions	3	2		1	1	1		
Literature/catal ogue	3	2		1		1	1	
Manufacture's/ supplier's guarantee certificate	3	2	1	1		1	1	
Insurance certificate	3	2	1	1	1	1	1	1
Inspection Certificate	3	2	1	1		1	1	

The above documents shall be received by the purchaser and other authorities mentioned above at least one week before the arrival of goods at the port of discharge and, if not received, the supplier will be responsible for any consequential charges/expenses.

c) For domestic goods:

Within 24 hours of dispatch, the supplier shall notify the purchaser, consignee, indenter and the paying authority, the full details of dispatch and also shall supply

following documents:

(i) copies of supplier's invoice showing goods description, quantity, unit price and total amount,

(ii) Railway Receipt/Consignment Note/acknowledgement for receipt of goods from the consignee(s),

(iii) manufacturer's /supplier's guarantee certificate,

(iv) inspection certificate issued by the nominated inspection agency, where applicable, and the supplier's factory inspection report,

(v) certificate of origin and

(vi) any other document specified in the notification of award/contract.

#### 11. **INSURANCE**

- 11.01 The goods supplied under the contract, if considered necessary, shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner.
- 11.02 Where delivery of the goods is required by the purchaser on a C.I.F. basis, the supplier shall arrange and pay for marine/air insurance, making the indenter as the beneficiary. Where delivery is on F.O.S. basis, marine/air insurance shall be the responsibility of the indenter.
- 11.03 In the case of C.I.F. contract, the supplier shall obtain the marine/air insurance in an amount equal to 110% of the C.I.F. value of the goods from "warehouse to warehouse" on "all risks" basis including war risks and strike clauses. In the case of domestic contracts for delivery of goods to site, the insurance shall be obtained by the supplier, if considered necessary, in an amount equal to 110% of ex-works value of goods from "warehouse to warehouse" (final destination) on "all risks" basis including war risks and strike clause.

# 12. **Transportation.**

- 12.01 Where the supplier is required under the contract to deliver the goods F.O.B., transport of the goods, up to and including the point of putting the goods on board the vessel at the specified port of loading, shall be arranged and paid for by the supplier and the cost thereof shall be included in the contract price.
- 12.02 Where the supplier is required under the contract to deliver the goods C.I.F. or to a specified destination within India, transport of the goods to the port of discharge or such other point in India as shall be specified in the contract, shall be arranged and paid for by the supplier and the cost thereof shall be included in the contract price.
- 12.03 Where the supplier is required to effect delivery under any other terms, for example, by post or to another address in India, the supplier shall be required to meet all transport and storage expenses until delivery.
- 12.04 In all the above cases, transportation of the goods after delivery shall be the responsibility of the purchaser.
- 12.05 Where the supplier is required under the contract to deliver the goods C.I.F., no further restriction shall be placed on the choice of the ocean carrier except that the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country. Where the supplier is required under the contract (i) to deliver the goods F.O.B. and (ii) to arrange on behalf and at the expense of the purchaser for ocean transportation on Indian flag vessels or vessels of conference lines in which India is a member country, the supplier may arrange for such transportation on alternate carriers if the specified Indian flag vessels or

conference vessels are not available to transport the goods within the time period(s) specified in the contract, with the prior written consent of the purchaser.

- 12.06 In case of F.O.B. contract, the Shipping Co-ordination and Chartering Division/Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, India shall make shipping arrangements. Notice about the readiness of Cargo for shipment shall be given by the supplier from time to time at least 6 (six) weeks in advance for finalizing the Shipping arrangement as per section XIV, through Fax/Telex and courier, to the Chief Controller of Chartering, Shipping Co-ordination Officer, Ministry of Surface Transport, Government of India, New Delhi, India. Within 3 (three) weeks of receipt of the advance notice, as above, the said Chief controller of Chartering, Shipping Co-ordination officer will advise the supplier, through Fax/Telex and courier when and on board what vessels, these goods or such part thereof are to be delivered.
- 12.07 If the advice for shipping arrangement is not furnished to the supplier, within 3 (three) weeks as aforesaid or if the vessel arranged is scheduled to arrive at the specified port of loading later than 15(fifteen) days of the date of readiness of cargo, as aforesaid, the supplier may arrange for such transport on alternative carriers with the prior written consent of the purchaser.
- 12.08 Should the goods or any part thereof be not delivered on the nominated vessel (except in case where prior written consent of the purchaser was obtained), the supplier will be liable for all payments and expenses that the purchaser may incur or be put to, by reason of such non-delivery including dead and extra freight, demurrage of vessels and any other charge incurred by the purchaser whatsoever.
- 12.09 The supplier shall not arrange part-shipments and/or transshipment without the express/prior written consent of the purchaser.

#### 13. Incidental services

- 13.01 As specified in the contract form, the supplier may be required to provide any or all of the following services:
  - a) Performance or supervision of on-site assembly and/or start up of the supplied goods;
  - b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
  - c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
  - d) Performance or supervision of maintenance and/or repair of the supplied goods, for the period of warranty specified in the contract form, provided that this service shall not relieve the supplier of any warranty obligations under the contract and;
  - Conduct of training of the purchaser's personnel, at the supplier's plant and/or onsite (as specified in the bidding documents), in assembly, start-up, operation, maintenance and/or repair of the supplied goods. This cost shall be included in the contract price.
- 13.02 Prices charged by the supplier for the preceding incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services. All bank charges (for opening of LC etc) will have to borne by Manufacturer / Supplier

# 14. Spare parts

- 14.01 As specified in the contract form, the supplier may be required to provide any or all of the following materials and notifications pertaining to spare parts manufactured and/or distributed by the supplier:
  - a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election will not relieve the supplier of any warranty obligations under the contract,
  - b) in the event of termination of production of the spare parts:
    - i) advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements and
    - ii) following such termination, furnishing at no cost to the purchaser, the blue prints, drawings and specifications of the spare parts, if and when requested.
- 14.02 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order and establishment of letter of credit.

#### 15. Warranty.

- 15.01 The supplier warrants that the goods supplied under the contract are new, unused, or the most recent of current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials or workmanship (except insofar as the design or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in India, i.e. the country of final destination.
- 15.02 The warranty shall remain valid for 5 (**five**) **years** after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed, commissioned and taken over by the consignee to the entire satisfaction of the purchaser. 15.03 The purchaser/indenter shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.04 Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the detective goods or parts thereof, free of cost at the ultimate destination. The supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the purchaser for the replaced parts/goods thereafter.
- 15.05 If the supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchase may have against the supplier under the contract.
- 15.06 The warranty for defective parts will begin de novo from the date of replacement. Supplier will pay customs duty and all expenses up to the destination for the replaced part.

#### 16. Payment

 16.01 a) <u>Payment for imported goods</u>: Payment of foreign currency portion shall be made in the currency specified in the contract in the following manner:
 i) On shipment: 90% of the contract price shall be paid through irrevocable Letter of Credit established in favour of the foreign supplier through the State Bank of India on a bank in the supplier's country, on submission to bank of document specified in clause 10.03 and further following documents:

- a) Foreign supplier's certificate that the amounts shown in the invoice are correct in terms of the contract and that all the terms and conditions of the contract have been complied with,
- b) Foreign supplier's certificate confirming that the original shipping documents have been dispatched to the port consignee in accordance with the contract and;
- c) any other document specified in the notification of award or the contract.
- ii) On final acceptance:

10% of the contract price of goods received shall be paid on receipt of goods on submission of claim supported by the acceptance certificate issued by the consignee/purchaser's representative in the proforma given in section XII and a Performance Guarantee for the like amount valid for the period of guarantee/warranty in the proforma given in section XVI from any scheduled bank as per list given in section XV.

#### Payment of agency commission:

Payment shall be made by the paying authority in local currency on presentation of claim supported by a certificate from the purchaser declaring that the goods have been delivered and that all other contractual services/obligations excepting warranty obligations have been performed and proof of 100% payment to the foreign supplier.

#### b) <u>Payment for domestic goods and services</u>:

Payment for domestic goods and services shall be made in Indian rupees in the following manner:

- (i) <u>On dispatch</u>: 90% of the contract price shall be paid through the paying authority specified in the contract form/notification of award on receipt of goods and upon submission of documents specified in clause 10.03 and;
- (ii) On final acceptance: The remaining 10% of the contract price shall be paid to the Contractor on submission of a claim supported by the acceptance certificate issued by the consignee/purchaser's representative in the proforma given in section XII and a Performance Guarantee for the like amount valid for the period of guarantee/warranty in the proforma given in section XVI from any scheduled bank as per list given in section XV.
- c) Payment for incidental services including supervision:

The charges for incidental services including supervision, if provided for separately in the contract, shall be paid in Indian rupees after the said services have been performed to the satisfaction of the purchaser in accordance with the requirements of the contract;

- d) i) where payments are to be effected through letter of credit, the same shall be subject to the regulations of the Reserve Bank of India,
  ii) The letter of credit will be confirmed at supplier's cost if requested officially by the supplier and
  iii) If letter of credit is required to be extended/reinstated for reasons not attributed to the purchaser, the charges thereof shall be to the supplier's account.
- 16.02 The supplier's request for payment shall be made to the Paying authority specified in the notification of award/contract in writing accompanied by an invoice describing, as appropriate the goods delivered and the services performed and by shipping documents, submitted pursuant to clause 10 and upon fulfillment of other obligations stipulated in the contract.
- 16.03 The paying authority on submission of claim by the supplier shall make payments promptly.
- 16.04 The currency or currencies in which payment is made to the supplier under the contract shall be specified in the contract subject to following general principle: "payment will be made in the currency or currencies in which the contract price has been stated in the supplier's bid as well as in other currencies in which the supplier had indicated in its bid that it intends to incur expenditures in the Performance of the contract and wishes to be paid."
- 16.05 No payments will be made without the written authority of the purchaser.

#### 17. **Prices**

17.01 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in its bid.

#### 18. Change orders

- 18.01 The purchaser may at any time, by a written order given to the supplier pursuant to clause 31, make changes within the general scope of the contract in any one or more of the following:
  - a) drawings, designs or specifications, where goods to be supplied under the contract are to be specifically manufactured for the purchaser;
  - b) the method of shipment or packing;
  - c) the place of delivery or
  - e) the services to be provided by the supplier.
- 18.02 If any such change causes an increase or decrease in the time required for, the supplier's Performance of any part of the work under the contract, whether changed or not changed by the order, an equitable adjustment shall be made in the contract delivery schedule and the contract shall accordingly be amended. Any claims by the supplier for adjustment under this clause must be asserted within forty-five (45) days from the date of purchaser's change order.

## 19. **Contract amendments**.

19.01 Subject to clause 18, no variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties.

# 20. Assignment

20.01 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

## 21. Sub-contracts.

- 21.01 The supplier shall notify the purchaser in writing of all sub-contracts awarded under the contract, if not already specified in his bid. Such notifications, in his original bid or later, shall not relieve the supplier from any liability or obligation under the contract.
- 21.02 Sub-contracts must comply with the provisions of clause 03.
- 21.03 Sub-contract shall be only for bought out items and sub-assemblies.

#### 22. **Delays in the supplier's Performance**.

- 22.01 Delivery of the goods and Performance of the services shall be made by the supplier in accordance with the time schedule specified by the purchaser in the "Schedule of Requirements".
- 22.02 Any unexcused delay by the supplier in the Performance of its delivery obligations shall render the supplier liable to any or all of the following sanctions:
  - forfeiture of its Performance security.
  - imposition of liquidated damages and/or
  - termination of the contract for default.
- 22.03 If at any time during the Performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and Performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at its discretion extend the supplier's time for Performance, in which case the extension shall be ratified by the parties by amendment of the contract.

# 23. Liquidated damages

#### 23.01 For delays:

Subject to clause 25, of the condition of contract (COC) of the bidding documents if the supplier fails to deliver any or all of the goods or perform the services within the time period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5 percent of the delivered price of the delayed goods or under formed services for each week of delay or part thereof until actual delivery or performance, up to a maximum deduction of 10 (ten) percent of the delayed goods or services contract price. Once the maximum is reached, the purchaser may consider termination of the contract.

23.02 For shortfall in equipment Performance:

Recovery shall be made from the supplier for not meeting the guaranteed performance/productivity of the equipment during actual testing as detailed in 'Technical Specifications', a sum equivalent to one percent of the cost of the equipment/plant for each unit of shortfall in the guaranteed Performance/productivity, where applicable.

#### 24 **Termination for default**

24.01 The purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the contract in whole or in part:

- a) if the supplier fails to deliver any or all of the goods or perform the services within the time period(s) specified in the contract or any extension thereof granted by the purchaser pursuant to clause 22, of the Condition of Contract of the bidding documents.
- b) if the supplier fails to perform any other obligation(s) under the contract.
- 24.02 In the event the purchaser terminates the contract in whole or in part, pursuant to clause 24.01, of the Condition of Contract (COC) of the bidding documents the purchaser may procure, upon such terms and in such manner, as it deems appropriate. Goods similar to those undelivered and the supplier shall be liable to the purchaser for any excess costs for such similar goods. However, the supplier shall continue performance of the contract to the extent not terminated.

#### 25 Force Majeure.

- 25.01 Notwithstanding the provisions of clause 22, 23 & 24, Condition of the Contract furnish along with the bidding document the supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
- 25.02 For purpose of this clause, "Force Majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the purchaser either in its Sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 25.03 If a force Majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

# 26. **Termination for insolvency**

26.01 The purchaser may at any time terminate the contract by giving written notice to the supplier without compensation to the supplier, if the supplier becomes a bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

#### 27. **Termination for convenience**

- 27.01 The purchaser, may by written notice sent to the supplier, terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the purchaser's convenience, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective.
- 27.02 The goods that are complete and ready for shipment within 30(thirty) days after the supplier's receipt of notice of termination shall be purchased by the purchaser at the contract terms and prices. For the remaining goods, the purchaser may elect:
  - (a) to have any portion completed and delivered at the contract terms and prices and/or

(b) to cancel the remainder and pay to the supplier an agreed amount for partially completed goods and for materials and parts previously procured by the supplier.

#### 28. **Resolution of disputes**

- 28.01 The purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the contract.
- 28.02 If, after thirty (30) days from the commencement of such informal negotiations, the purchaser and the supplier have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolution to the formal mechanism specified in clause 28.03 of the Condition of Contract (COC) of the bidding documents. These mechanisms may include, but are not restricted to, conciliation mediated by a third party, adjudication in an agreed national or international forum and/or international arbitration forum.
- 28.03 The dispute resolution mechanism to be applied pursuant to clause 28.02 Condition of Contract (COC) of the bidding documents shall be as follows:
  - (a) In the case of a dispute or difference arising between the purchaser and a domestic supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the Judicial Department of Govt. of Assam through the Health & F.W. Department, Govt. of Assam. The views/judgment of the Judicial Department shall be final and binding on the parties to the contract.
  - (b) In the case of dispute between the purchaser and a foreign supplier, the dispute shall be settled in accordance with the provisions of sub-clause 'a' above. But if this were not acceptable to the supplier, then the dispute shall be settled in accordance with the provisions of the Arbitration Low of India.
  - (c) The Arbitration & Reconciliation Act, 1996 the rules there under and any statutory modifications or re-enactments thereof, shall apply to the arbitration proceedings.
- 28.04 The venue of arbitration shall be the place from where the contract is issued.

# 29. **Governing Language**.

29.01 The contract shall be written in the language of the bid, as specified by the purchaser in the 'Instructions to Bidders'. Subject to clause 30, that English version of the contract shall govern its interpretation. All correspondence and other documents pertaining to the contract, which are exchanged by the parties, shall be written in that same language.

# 30. Applicable Law

30.01 The contract shall be interpreted in accordance with the Laws of India.

#### 31. Notices

- 31.01 Any notice given by one party to the other pursuant to the contract shall be sent in writing or by telegram or telex/cable or fax and confirmed in writing to the address specified for the purpose of in the notification of award/contract.
- 31.02 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

# 32. Taxes

- 32.01 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees and other such levies imposed outside India.
- 32.02 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc. incurred until delivery of the contracted goods to the purchaser. However, sales tax (not surcharge in lieu of sales tax) in respect of the transaction between the purchaser and the supplier shall be payable extra by the purchaser, if so stipulated in the notification of award/contract.

# SECTION IV: SCHEDULE OF REQUIREMENT

# Part-I

Sl No	Brief Description of Goods	Installation site	Schedule of Requirement	Delivery/Installation /Commissioning Period
1	<b>1.5 tesla clinical MRI scanner</b> for F.A.A.M.C&H, Barpeta, Assam. on turnkey basis	F.A.A.M.C&H, Barpeta, Assam, India on Turnkey basis.	1 (one)	Maximum 180 days however Bidders may quote earliest delivery/Installation /Commissioning period.

Note:

- 1. <u>Bidder should submit a soft copy (in CD/Pen drive) of Technical Bid (only technical specs/details of the goods and services proposed to be supplied under contract) to help in preparation of Comparative Specs. Which should be inserted in the Technical Bid (Original Copy). Any discrepancy between soft and hard copy, the hard copy (printed and signed documents) shall prevail.</u>
- 2. All the materials should be well packed to avoid any breakage during transit.
- 3. The responsibility for providing after sale service would rest on the Principal equipment supplier.
- 4. The Principal shall be solely responsible for warranty period and CMC/AMC period for maintenance of the equipment even if there is any change in the Indian Agent during the above period.
- 5. The warranty shall be as per Clause 15 of the Conditions of Contract. But if period as per Technical Specification is more then that will be applicable. This period shall apply to all relevant clauses of bidding documents.
- 6. <u>Bidders shall submit their bids in two parts as per clause 18.05 of Section-II –</u> <u>Instruction to Bidders (IFB).</u>
- 7. Bidders shall submit their Performance statement as per Section VI Qualification Criteria (Performa- A) along with certificate from the users and copy of the orders for the equipment quoted.
- 8. Bid security (EMD) to be furnished in favour of Director Medical Education, Assam, Sixmile, Khanapara, Guwahati-781022. (in case furnished in the form of Bank Guarantee/NSC/KVP).

# PART-II: SCOPE OF INCIDENTAL SERVICES:

- A. Installation, Commissioning, Demonstration, on-site training, Performance Supervision of on-site assembly, Start-up and Turnkey of the supplied Goods. The payment for Turnkey charges will be made in Indian Rupee only as per terms of payment for incidental services as per clause 16.01(c) of Section III, Conditions of Contract (COC) of Bidding Documents.
- B. Furnishing of a detailed Operations and Maintenance Manual for each appropriate unit of the supplied Goods.

# **PART-III: TERMS OF DELIVERY**

**C.I.F.** (Mumbai / Kolkata / Chennai Airport, India) (For imported goods if supplied directly from foreign): However prices should also be quoted giving breakup of price such as FOB Price and estimated freight & insurance from port of loading to Mumbai/Kolkata/Chennai Airport. The custom clearance, transportation, insurance etc of the equipments from the port of entry in the country to the site of installation shall be the sole responsibility of the supplier and its agent. These are to shown separately in the price bid.

**F.O.R. Destination** (F.A.A. Medical College Hospital, Barpeta, Assam, India.(<u>For</u> <u>Imported goods if supplied from India or the Indigenous goods.)</u>

Consignee

: Principal-Cum-Chief Superintendent, F.A.A. Medical College & Hospital, Bar peta.

# **SECTION V: TECHNICAL SPECIFICATION**

# DETAILED CONFIGURATION FOR A STATE OF THE ART 1.5 TESLA CLINICAL MRI SCANNER FOR F.A.A.M.C&H,BARPETA,ASSAM.

	CLINICAL MINI SCANNER FOR F.A.A.M.C&II,BAR	
	Detailed Technical Specification:	
Α	В	С
Sl.No.	PURCHASER'S REQUIREMENTS	<b>BIDDER'S OFFER</b>
	Manufacturer :	
	Type & Model:	
	Country of Origin :	
1	Magnet	
	Actively shielded super-conducting magnet with operational	
а	field strength of 1.5 Tesla suitable for high resolution	
	imaging.	
b	The length of magnet should be short and it should have	
	atleast 70cm.patient bore with flared opening.	
с	The homogenicity of the magnet should be mentioned in	
	relation to 10, 20, 30, 40 cm DSV	
d	The Magnet should be well ventilated and illuminated with 2 way intercom for communication with patient.	
	Cryogen vessel to be of Helium only with appropriate super	
	thermal shielding & refrigeration facility for minimum	
e	helium boils off. Specify the helium tank capacity & boil-off	
	rate	
	Helium level monitoring equipment in the magnet & facility	
f	for appropriate quick shutdown of the magnet in the event of	
	emergency	
σ	Helium refill time should not be $< 2$ years. Please mention	
g	the helium refill time	
2	Shim System	
	High performance & highly stable shim system with global	
а	& localised manual & auto-shimming for high homogenicity	
	magnetic field for imaging. Specify time for shimming.	
	Quote the number of shim coil used.	
	Specify the minimum time for auto-shim(global and voxel shim) of the magnetic field with patient in	
b	position.Advanced high order (second order) shim must be	
	incorporated as standard.	
3	Gradient System	
a	Actively shielded Gradient system.	
	The gradient should be actively shielded with each axis	
b	having independently a slew rate of atleast 200 T/m/s and a	
	peak amplitude of 44 mT/m.	
C	The Gradient system should have provision for efficient and	
с	adequate eddy current compensation.	
d	Effective cooling system for gradient coil and power supply.	
4	<b>RF SYSTEM</b>	
а	A fully digital solid-state RF system capable of transmitting	
u	power of at least 15 KW.	
	It must have at least minimum of 32 independent RF	
b	receiver channels with each having bandwidth of 1 MHz or	
	more along with necessary hardware to support Quadrature/	

	CD among (Matrix agile The highest reasing about also	
	CP array /Matrix coils.The highest receiver channels	
	available with the vendor should be quoted.	
с	It should support Parallel acquisition techniques with a factor of upto 2 in 2D.	
	It should allow remote selection of coils and/or coil	
d	elements.	
5	COIL SYSTEM	
e	The main body Coil integrated to the magnet must be	
а	quadrature /CP. In addition to this coil following Coils -	
	should be quoted.	
	Multichannel Head coils with atleast 12 channels for high	
1.	resolution Brain imaging.(16 channel coil should be	
b	supplied whenever available to the vendor with no	
	additional cost)	
	Neuro -vascular coil with 16 or more channels of	
с	Head/Neck coil combined, capable of high resolution neuro-	
C	vascular imaging.Maximum achievable FOV should be	
	mentioned.	
d	Spine Array/Matrix coils for thoracic and lumber spine	
	imaging.	
f	Body Array/Matrix coils with atleast 38 cm Z axis coverage	
	for imaging of abdomen, angiograms and heart.	
g	Dedicated Cardiac coil ( <b>Optional-Price to be quoted</b> separately)	
h	Suitable coil for peripheral angiography application.	
i	Bilateral Breast coil with atleast - 4 channels.	
j	Dedicated High resolution knee coil	
k	Dedicated shoulder coil.	
1	General purpose flexible coils and circular coils.	
m	Loop flex coil-large & small.	
n	Coil storage cart.	
	The system should be continuously monitor the RF coils	
	used during scanning to detect failure modes. RF coils	
0	should not require either setup time or coil tuning : Multi	
	coil connection for upto 2 or more mutinous scanning	
	without patient repositions like 4G TIM/GEM/D stream coil combination should be quoted as standard.	
5	1	
5	PATIENT HANDLING SYSTEM	
0	Computer controlled patient table movement in vertical and horizontal direction. Patient table should have facility for	
а	moving table angiography.	
b	The table should be able to take at least 150 kg patient load.	
-	Emergency manual traction of the patient from the magnet.	
c d	The table should have patient auto audio alarm system.	
e	The CCTV system with LCD display to observe the patient. Two way communications should be possible with the	
f	patient from the console room.	
	COMPUTER SYSTEM IMAGE PROCESSOR /	
6	OPERATOR CONSOLE	
а	Computer should be latest in the industry, fast and efficient,	
	One color console for acquisition. all calculations, post	
b	processing etc Console must have full colour screen with	
-	user define protocols with programmable interscan delay	
с	Necessary image processor with large RAM for ultra-fast	

r		
	image reconstruction should be provided. It should be at	
	least 2 GB RAM. Please specify. RAM and reconstruction	
	speed in images per second for full FOV 256 matrix. Higher	
	will be preferred.	
	Computational Speed to match the single shot Echo Planar	
	Imaging (EPI). Interactive angiogram, multi-planar three	
d	dimensional (3D) reconstruction. surface rendering,	
	dynamic Imaging, vascular Imaging/angiography.	
	Functional imaging, DTI.	
9	The main host computer should have at least 19-inch	
e	TFT/LCD type color monitor.	
f	The main console should have facility for music system for	
1	the patient in the magnet room.	
	Filming and adequate storage for images and other	
g	applications	
	Total hard disk memory to be sufficient to store at least	
	200,000 images of 256 x 256 matrix data size Systems	
h	offering higher' storage will be preferred. The system	
	should have CD/DVD archiving facility on the main console	
	and work station.	
	Dual DVD write/CD Read/Rewrite drive for writing of	
	images, spectra and raw data along with the necessary	
i	software for reading the Images and spectra on DVD/CD	
•	storing capabilities. Provision for archival of k-space data	
	and raw (unprocessed) images.	
	DICOM interface to hook DICOM dry/laser camera capable	
j	of storing printing $1024 \times 1024$ matrix size images at least in	
J	16 format without loss of digital resolution.	
	The system should be capable to connect to PACS through	
k	RIS/HIS at no extra cost. Highest version of DICOM	
ĸ	connectivity be provided.	
	Automatic software Upgradation updation should be done as	
1	and when avilable for the particular model during the period	
1	of warranty and CMC	
7	WORKSTATION	
/		
	One work station with 19 TFT/LCD monitor with dual exam	
а	processor with at least 2 GB RAM, separate hard disk with image storage of at least 2.0 lacs images in 256 x256 matrix	
	with C DRW or DVDRW.	
	All necessary software in including post-processing software for all offered applications (point no. 9,10)	
	including FMRI, perfusion, diffusion DTI, cardiac	
	evaluation, and other associated post processing like MIP,	
h	MPR, surface reconstruction should be provided. The	
b	workstation should have availability of Cardiac, perfusion	
	analysis & Processing of Real Time BOLD imaging data,	
	with color metabolite mapping, quantification of the CSF flow date	
c	The workstation should have display of Cardiac cine images	
	in movie mode with rapid arc creation.	
d	Printing of films should be possible from both main console	
	and workstation.	
e	Workstation should also be able to have the similar function	
6	and user interface of the main console	
8	DATA ACQUISITION	

	The system should be capable of 2D and 3D	
а	ACQUISITIONS in conventional, fast & ultra-fast spin echo	
	and gradient echo modes so that real- time online images	
	can be observed if needed	
b	2D multi-slice imaging should be possible in all planes	
0	(axial, sagital, coronal, oblique arid double oblique).	
с	1024 x 1024 matrix acquisition for all applications	
J	Half Fourier or other techniques to reduce scan acquisition	
d	time while maintaining adequate SNR	
	3D volume, multiple contiguous slabs, multiple interleaved	
e	and multiple overlapping slabs	
f	Slice thickness in 2D and partition in 3D to be freely	
1	selectable	
	Dynamic acquisition (serial imaging) with capability to	
g	initiate scan sequences either from the magnet panel or from	
	the console.	
h	Dynamic acquisition' number of repeat scans with delay	
h	time either identical time interval or selectable.	
i	Auto slices positioning from the localizer images.	
:	Maximum -off center positioning both anterior-posterior and	
j	lateral direction and should be selectable.	
	Gating: physiological signals like ECG, pulse,	
9	respiratory, external signal triggering (interface for	
	triggering input pulse from external source).	
0	Simultaneous acquisition, processing and display of image	
a	data in 2D multi-slice mode.	
	The application software for image smoothing and edge	
b	sharpness etc. for improvement in image resolution should	
	be quoted.	
	Artifact reduction/motion correction techniques/imaging	
с	enhancement/image filtering/image subtraction/addition	
	multiplication/division techniques:	
d	Flow 1st and 2nd order flow artifact compensation.	
e	presentation slabs: a number of relocatable saturation bands	
	to be placed either inside or outside the region of interest.	
f	Graphic prescription.	
	Fat saturation techniques: frequency selective RF pulses to	
g	suppress fat signal in the measured image FOV. ROI	
	selective (regional) fat suppression should also be given.	
h	Magnetization transfer saturation; OFF resonance RF pulses	
	to suppress signals from stationary issue in FOV.	
i	Phase contrast capability in 2D and 3D mode.	
j	Image intensity correction.	
k	Breath hold acquisition	
10	EPI MODE	
a	Single and multi shot EPI imaging techniques.	
	Data acquisition in all three standard planes (axial, sagital,	
b	coronal) and oblique and double oblique planes.	
	Higher matrix acquisition capability in single shot EPI,	
с	Acquisition time, TR, TE and slice thickness should be	
	clearly mentioned and supported by data sheet reference.	
11	IMAGING SEQUENCES	
**	The system should be capable of selecting TR and TEs as	
а	per requirement in majority of the pulse sequences.	
	per requirement in importer of the public bequences.	

-		1
	Spin echo (SE); multi-slice single echo, multislice multi-	
b	echo (B echo or more) with minimum TR and TE. SE with	
U	symmetrical and asymmetrical echo intervals: MT-SE	
	imaging sequence.	
с	Inversion recovery (IR) including short TI, modified IRSE,	
	FLAIR, DIR (Double Inversion Recovery) MT and FLAIR.	
	Gradient echo (GE) 3D gradient echo with shortest TR and	
d	TE, free choice of flip angle selection while maintaining	
	SNR	
e	Fast Sequences	
	Fast spin echo in 2D and 3D mode TI, T2 and PD contrast	
Ι	capable of acquiring maximum number of slices with a	
1	given TR a minimum TE. echo train should be at least 128	
	or more in fast spin echo mode.	
	Half Fourier acquisition capabilities should be available	
II	with/ without diffusion gradients and in combination with	
	fast spin echo.	
III	Fast inversion recovery with spin echo.	
	Fast gradient spin echo, IR multi-slice multi-echo mode with	
IV	maximum turbo factor. Sequences should incorporate RF	
	focusing to acquire ultra fast gradient spin echo.	
v	Fast gradient echo sequence should be provided to acquire	
•	images in ultra-fast 2D and 3D mode.	
	Fat and water suppressed imaging sequences including the	
VI	sequence which should give 4 contrast (in phase, opposed	
*1	phase, FAT and Water) images in a single acquisition to be	
	quoted as standard.	
	EPI optimized sequences for T1, T2, PD imaging, perfusion,	
	regular diffusion values (5b, 3 directions), EPI-FLAIR. CPI-	
	IR, IPI-FLAIR diffusion tensor. EPI-MT-FLAIR, tensor	
	diffusion (5b values in minimum in six directions) for	
VII	diffusion studies. Suitable artifact/fat suppression techniques	
	to be incorporated in the sequence to have optimum image	
	quality. There should be capability of generation of ADC	
	map (isotropic and anisotropy from the regular diffusion and tangen data). Excility of generation of ADC man should be	
	tensor data). Facility of generation of ADC map should be	
	there.	
f	Optimized sequence package for special applications.	
	NMR angio: 2D/3D TOF, 2D/3D Phase contrast (with and	
	without gating) magnetization transfer saturation, black	
	board angiography for cerebral, pulmonary, abdominal and	
Ι	peripheral vessel for peripheral angio moving table	
	angiography should be offered so that complete limb can be	
	examined in one go Bolus tracking software package should be offered. Sequences for breath hold angiography with	
	contrast enchainment should also be offered.	
	NON Contrast Angiography like Native, Inhance, Trance for	
II	whole body applications to be quoted as standard.	
	Contrast bolus tracking (including single shot whole body	
III	MRA, interactive and automatic, etc.	
	The system should have the Hydrogen, Single Voxel	
	spectroscopy, Multivoxel, multislice 2D, 3D Spectroscopy	
IV	and also the Chemical shift imaging in 2D/3D. The	
1 1	complete processing / post –processing software including	
	color metabolite maps should be available. System should	
	color metabolite maps should be available. System should	

be capable of spectroscopy for Brain, Prostrate, Breast &           Liver.           Full comprehensive cardiac sequences which includes, (a)           MR cardiology package for evaluation of heart in long and           short axis with black blood cardiac imaging, (b) package for           – prospective and retrospective gating, etc.           (Optional-Price to be quoted separately)           Advanced Cardiac Applications: morphology, wall motion, perfusion imaging myocardial viability imaging. Cardiac utput, wall thickness. (Optional-Price to be quoted separately)           VII         Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc.           VIII         ret. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.           IX         Flow quantification in vessels and CSF, hepatobiliary system.           XI         Sequence package for functional mapping of brain.           Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.           XIII         Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.           XV         MR coholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.           XVIII         Actional deg. Dixo. (Add and the acquisition time is reduced as standard.           XVIII         Actional brain exclusion with ad with out parallel imaging technique.           XVIII         Advaced descence.			
Full comprehensive cardiac sequences which includes, (a)         MR cardiology package for evaluation of heart inlog and         W short axis with black blood cardiac imaging (b) package for         - prospective and retrospective gating, etc.         (Optimal-Price to be quoted separately)         Advanced Cardiac Applications: morphology, wall motion, perfusion imaging myocardial viability imaging. Cardiac functions including EF. ED/ES volume, Cardiac output, wall thickness. (Optional-Price to be quoted separately)         VI       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc         Perfusion study in organ systems like kidney, brain , heart         VII       tc: evaluation package for calculating CBV. CBF, MTT, perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         XI       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV MR ventriculography and cisternography, Myelography.         XVII       FATSAT Techniques : Dixon method to be quoted as standard.         XVII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging tchnique. A scan time reduction factor of 4 for head, body, cardiae, angio and ortho application is required.         XVI		be capable of spectroscopy for Brain, Prostrate, Breast &	
MR cardiology package for evaluation of heart in long and short axis with black blood cardiac imaging,(b) package for prospective and retrospective gating, etc. (Optional-Price to be quoted separately)         Advanced Cardiac Applications: morphology, wall motion, perfusion imaging myocardial viability imaging, Cardiac functions including EF, ED/ES volume, Cardiac output, wall thickness. (Optional-Price to be quoted separately)         VI       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc         Perfusion study in organ systems like kidney, brain , heart       etc.         VII       Sequence package for calculating CBV, CBF, MTT, perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XVV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XVV       MR ventriculography and cisternography. Myelography.         XVII       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         XVVIII       ASET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Artification packages for CSF with dynamic CSF flow imaging, aqueduct, and spinal canal <td></td> <td></td> <td></td>			
V       short axis with black blood cardiac imaging (b) package for         -       prospective and retrospective gating, etc.         (Optional-Price to be quoted separately)         Advanced Cardiac Applications: morphology, wall motion,         v1       perfusion imaging myocardial viability imaging. Cardiac functions including EF, ED/ES volume, Cardiac output, wall thickness. (Optional-Price to be quoted separately)         VII       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc.         Perfusion study in organ systems like kidney, brain , heart etc. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.         XI       Flow quantification in vessels and CSF, hepatobiliary system.         XI       Sequence package for functional mapping of brain.         XII       Internal car imaging, 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XVIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XVI       FATSAT Techniques : Dixon method to be quoted as standard.         XVII       FATSAT Techniques : Dixon method to be quoted as standard.         XVII       Sequercy package for Si With the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. As can time reduction factor of 4 for head, body, cardiae, angio and ortho application is required.			
-         prospective         gating.         etc.           (Optional-Price to be quoted separately)         Advanced Cardiac Applications: morphology, wall motion, perfusion imaging myocardial viability imaging. Cardiac functions including EF, ED/ES volume, Cardiac output, wall thickness.           (Optional-Price to be quoted separately)           VII         Sequence package for diffusion study in organs like brain, kickness.           (Optional-Price to be quoted separately)           VIII         Sequence package for calculating CBV, CBF, MTT, perfusion mapete.           IX         Porfusion mackage for calculating CBV, CBF, MTT, perfusion mapete.           XI         Sequence package for functional mapping of brain.           XII         Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.           XIII         MR Cholanziography and Pancreatogram: Specialized sequences and processing to perform MRCP.           XVV         MR ventriculography and Pancreatogram.         Specify the factor by which the acquisition time is reduced as standard (eg. Dixon, 3D Dual Echo, Idea tech).           XVII         ASSET. IPAT,ARC and other new sequences to be quoted as standard.           XVIII         Asset for by which the acquisition time is reduced for similar acquisition vith and with out parallel imaging techniques (for non-cooperative' patients/pediatric applications frau gravies) for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm (not just faster scanning			
Image: constraint of the second sequence in the second sequence is the	V		
Advanced Cardiac Applications: morphology, wall motion, perfusion imaging myocardial viability imaging, Cardiac functions including EF, ED/ES volume, Cardiac output, wall thickness. (Optional-Price to be quoted separately)           VII         Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc           Perfusion study in organ systems like kidney, brain , heart           VIII         etc. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.           IX         Flow quantification in vessels and CSF, hepatobiliary system.           X         Optimized breath hold sequences for abdominal studies including angiogram.           XII         Sequence package for functional mapping of brain.           XIII         Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.           XIII         MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.           VIV         Pulmonary 2D/3D MRA sequence, including single breath hold sequence.           XVI         FASTAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).           VIII         Faster fast, ARC and other new sequences to be quoted as standard.           SPECify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique, A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.           XIXI         Flow quantification packages for CSF with dynami		– prospective and retrospective gating, etc.	
VI       perfusion imaging myocardial viability imaging, Cardiac functions including EF, ED/ES volume, Cardiac output, wall thickness. (Optional-Price to be quoted separately)         VII       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc.         Perfusion study in organ systems like kidney, brain , heart etc. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         XI       Sequence package for functional mapping of brain.         Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XVII       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         XVIII       FATSAT Techniques : Dixon method to be quoted as standard.         XVIII       FATSAT Techniques sequences to be quoted as standard.         XVIII       FATSAT Techniques sequences to be quoted as standard.         XVIII       FATSAT Techniques and other new sequences to be quoted as standard.         XVIII       FATSAT Techniques and the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required. <t< td=""><td></td><td>(Optional-Price to be quoted separately)</td><td></td></t<>		(Optional-Price to be quoted separately)	
V1       functions including EF, ED/ES volume, Cardiac output, wall thickness. (Optional-Price to be quoted separately)         VII       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc         Perfusion study in organ systems like kidney, brain , heart         VIII       tec. Evaluation package for a diffusion get N, CBF, MTT, perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       R Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XVV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XVV       R ventriculography and cisternography. Myelography.         XVI       standard (cg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       technique, Asc antime reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XVIII       technique, asc antime reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIVIII </td <td></td> <td>Advanced Cardiac Applications: morphology, wall motion,</td> <td></td>		Advanced Cardiac Applications: morphology, wall motion,	
Tunctions including EF, ED/ES Volume, Cardiac output, wall         thickess. (Optional-Price to be quoted separately)         VII       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc         Perfusion study in organ systems like kidney, brain , heart         VIII       etc. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.         Dytimized breath hold sequences for abdominal studies including angiogram.         XI       Sequence package for functional mapping of brain.         XIII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography. Myelography.         FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         YVIII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non- cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION: <td< td=""><td>X/I</td><td>perfusion imaging myocardial viability imaging, Cardiac</td><td></td></td<>	X/I	perfusion imaging myocardial viability imaging, Cardiac	
VII       Sequence package for diffusion study in organs like brain, kidney, muscle, heart, etc         Perfusion study in organ systems like kidney, brain , heart       etc. Evaluation package for calculating CBV, CBF, MTT, perfusion study in organ systems and CSF, hepatobiliary system.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         XI       Optimized breath hold sequences for abdominal studies including angiogram.         XII       Sequence package for functional mapping of brain.         XIII       Internal car imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         YVII       ASET, IPAT,ARC and other new sequences to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         YVIII       Assandard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIXII       Flow quantification packages for CSF with dynamic CSF flow imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIXI       Flow	V I	functions including EF, ED/ES volume, Cardiac output, wall	
VII       kidney, muscle, heart, etc         Perfusion study in organ systems like kidney, brain , heart         VIII       etc. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XII       Sequence package for functional mapping of brain.         II       Internal ear imaging. 3D acquisitions like CUBE.SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XVVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative patients/pediatic applications That Is motions/patient mov		thickness. (Optional-Price to be quoted separately)	
Image: Instant State State       Image:	VII	Sequence package for diffusion study in organs like brain,	
VIII       etc. Evaluation package for calculating CBV, CBF, MTT, perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XII       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING	۷II	kidney, muscle, heart, etc	
perfusion map etc.         IX       Flow quantification in vessels and CSF, hepatobiliary system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XI       Sequence package for functional mapping of brain.         Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         VIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVII       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         XVIII       Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique, a scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIIX       Flow quantification packages for CSF with dynamic CSF flow imaging, queduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:       3		Perfusion study in organ systems like kidney, brain, heart	
IX       Flow quantification in vessels and CSF, hepatobiliary system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XI       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         VIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (g. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D Multiplanar reconstruction (MPR) in any arbitrary plane	VIII	etc. Evaluation package for calculating CBV, CBF, MTT,	
IX       system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XI       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       WR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow unanging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12 <b>POST PROCESSING AND EVALUATION:</b> 3D Multiplanar reconstruction (MPR) in any arbitrary plane a including curved planes with freely selectable sl		perfusion map etc.	
IX       system.         X       Optimized breath hold sequences for abdominal studies including angiogram.         XI       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       WR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow unanging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12 <b>POST PROCESSING AND EVALUATION:</b> 3D Multiplanar reconstruction (MPR) in any arbitrary plane a including curved planes with freely selectable sl	IV	Flow quantification in vessels and CSF, hepatobiliary	
X       including angiogram.         XI       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE, 4D VISTA to be quoted as standard.         XIII       4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, XVII         ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct, and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved			
XI       Sequence package for functional mapping of brain.         XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE,         4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         VIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm (not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with	v	Optimized breath hold sequences for abdominal studies	
XII       Internal ear imaging. 3D acquisitions like CUBE,SPACE.         4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         Pulmonary 2D/3D MRA sequence, including single breath hold sequence.       Pulmonary 2D/3D MRA sequence, including single breath standard (eg. Dixon, 3D Dual Echo, Ideal etc).         YV       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct, and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         d       MIP in 2D and 3D mode, t	Λ	including angiogram.	
XII       4D VISTA to be quoted as standard.         XIII       MR Cholangiography and Pancreatogram: Specialized sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH,         XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         d       MIP in 2D and 3D mode, targeted/segmented MIP in any o	XI	Sequence package for functional mapping of brain.	
4D VISTA to be quoted as standard.         XIII       Sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum mode.         c       MIP in 2D and 3D mode, targeted/se	VII		
XIII       sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT, ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         d       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.	ЛП	4D VISTA to be quoted as standard.	
Sequences and processing to perform MRCP.         XIV       Pulmonary 2D/3D MRA sequence, including single breath hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH,         XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques) for non- cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.	VIII	MR Cholangiography and Pancreatogram: Specialized	
XIV       hold sequence.         XV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	ЛШ	sequences and processing to perform MRCP.	
NV       MR ventriculography and cisternography, Myelography.         XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH,         XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	VIV	Pulmonary 2D/3D MRA sequence, including single breath	
XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion         xXX       for similar operative applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	ΛΙΥ	hold sequence.	
XVI       FATSAT Techniques : Dixon method to be quoted as standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH, ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion         xXX       for similar operative applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	XV	MR ventriculography and cisternography, Myelography.	
XVI       standard (eg. Dixon, 3D Dual Echo, Ideal etc).         Parallel acquisition technique such as SENSE, SMASH,         XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion         movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	VUI	FATSAT Techniques : Dixon method to be quoted as	
XVII       ASSET, IPAT,ARC and other new sequences to be quoted as standard.         XVIII       Specify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion         patients/pediatric applications That Is motions/patient         movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	ΛνΙ		
as standard.XVIIISpecify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.XIXFlow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canalXXflow imaging, aqueduct. and spinal canalXXIn-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non- cooperative/sick patients/children should be provided.12POST PROCESSING AND EVALUATION: a including curved planes with freely selectable slice thickness and slice Increments.b3D Surface reconstruction and evaluation on reconstructed images with minimum time.MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.dFull cardiac evaluation Operator selective or automatic			
XVIIISpecify the factor by which the acquisition time is reduced for similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.XIXFlow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canalXIXFlow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canalXXFlow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canalXXIn-line motion correction for uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non- cooperative/sick patients/children should be provided.12POST PROCESSING AND EVALUATION: a aa3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.b3D Surface reconstruction and evaluation on reconstructed images with minimum time.cMIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.	XVII	ASSET, IPAT, ARC and other new sequences to be quoted	
XVIIIfor similar acquisition with and with out parallel imaging technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.XIXFlow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canalXIXIn-lineMathematicationcorrectionfor similar acquisition packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canalXIXIn-lineIn-linemotionpatients/pediatricapplicationsThatIsmovementcorrection sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non- cooperative/sick patients/children should be provided.12POST PROCESSING AND EVALUATION:a3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.b3D Surface reconstruction and evaluation on reconstructed images with minimum time.cMIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.dFull cardiac evaluation Operator selective or automatic			
XVIII       technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion         correction       for uncooperative' patients/pediatric applications         The motion       correction         faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
technique. A scan time reduction factor of 4 for head, body, cardiac, angio and ortho application is required.         XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion       correction       for       uncooperative' patients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	XVIII		
XIX       Flow quantification packages for CSF with dynamic CSF flow imaging, aqueduct. and spinal canal         In-line       motion       correction       for       uncooperative' patients/pediatric applications         XX       movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic		-	
XIX       flow imaging, aqueduct. and spinal canal         In-line       motion       correction       for       uncooperative'         patients/pediatric       applications       That       Is       motions/patient         XX       movement       correction       sequence       and algorithm (not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D       Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D       Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
Inow imaging, aqueduct. and spinal canal         In-line       motion         correction       for         uncooperative'         patients/pediatric       applications         That       Is         movement       correction         faster       scanning         gate       faster         faster       scanning         operative/sick       patients/children         state       scanning         faster       scanning         operative/sick       patients/children         state       scanning         faster       scanstruction         faster       scanst	XIX		
XXpatients/pediatric applications That Is motions/patient movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non- cooperative/sick patients/children should be provided.12POST PROCESSING AND EVALUATION:a3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.b3D Surface reconstruction and evaluation on reconstructed images with minimum time.cMIP in 2D and 3D mode, targeted/segmented MIP in any 	111/1		
XX       movement correction sequence and algorithm ( not just faster scanning or parallel imaging techniques ) for non-cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D       Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D         3D       Surface reconstruction and evaluation on reconstructed images with minimum time.         MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
faster scanning or parallel imaging techniques ) for non- cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
cooperative/sick patients/children should be provided.         12       POST PROCESSING AND EVALUATION:         3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	XX		
12       POST PROCESSING AND EVALUATION:         a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
a       3D Multiplanar reconstruction (MPR) in any arbitrary plane including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
a       including curved planes with freely selectable slice thickness and slice Increments.         b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         c       MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	12		
thickness and slice Increments.         3D Surface reconstruction and evaluation on reconstructed images with minimum time.         MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
b       3D Surface reconstruction and evaluation on reconstructed images with minimum time.         MIP in 2D and 3D mode, targeted/segmented MIP in any orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic	а	6 1 5	
b       images with minimum time.         MIP in 2D and 3D mode, targeted/segmented MIP in any         c       orthogonal axis with minimum processing time and capable         of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
Images with minimum time.         MIP in 2D and 3D mode, targeted/segmented MIP in any         orthogonal axis with minimum processing time and capable         of displaying in cine mode.         d         Full cardiac evaluation Operator selective or automatic	b		
c       orthogonal axis with minimum processing time and capable of displaying in cine mode.         d       Full cardiac evaluation Operator selective or automatic			
of displaying in cine mode.         J         Full cardiac evaluation Operator selective or automatic			
Full cardiac evaluation Operator selective or automatic	с		
d Full cardiac evaluation Operator selective or automatic contour mapping and calculation of Cardiac parameters like			
contour mapping and calculation of Cardiac parameters like	d	Full cardiac evaluation Operator selective or automatic	
	-	contour mapping and calculation of Cardiac parameters like	

1		
	wall thickness, stroke volume EF, filling rate myocardial	
	wall motion including display of data in label, graph and in	
	cine mode, blood flow quantitation, velocity mapping,	
	pressure gradient quantification, shunt quantification,	
	regurgitation calculation, stenosis blood flow, etc. These	
	should be usable on main or on the work station. (Optional-	
	Price to be quoted separately)	
	Evaluation and display of diffusion images, fMRI reference	
e	of EPI optimized sequence	
	Full Perfusion imaging with necessary post processing with	
f	time intensity graph and other statistical parameters.	
g	Flow quantification and evaluation for vascular (high and	
	low). CSF bladder outlet and cine display	
	Full Fledged Advanced Functional MRI: Whole brain	
	coverage using high temporal resolution T2* weighted	
	BOLD) imaging Single-shot EPl for multi-slice imaging.	
h	Complete fMRI processing software, Automatic real-time	
	processing of functional BOLD like Realtime Brain Wave	
	Pre & Post Acquisition, Inline BOLD, BOLD 3D Evaluation	
	to be quoted as standard.	
	Image statistics: measurement of distance, area, volume (2D	
	and 3D), angle ,sd, mean, image addition subtraction,	
i	multiplication, division, interpolation, segmental, threshold,	
	histogram (ROC)	
	Evaluation features like zoom, rotation, scroll, image	
	synthesis, multi point T1 and T2 calculation (more than 8)	
j		
-	window searching, text dialogues graphics. Sorting, searching, archiving, recalling, etc.	
	searching archiving recalling etc	
10		
13	UPS	
13	<b>UPS</b> The system should be provided with the suitable UPS	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied)	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units	
13	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise	
	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b>	
	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry	
	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A	
14	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on	
14	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm.	
14	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach	
<b>14</b> a	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement)	
<b>14</b> a	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour	
14 a b	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size.	
14 a b c	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size.	
14 a b	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request.	
14 a b c d	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size.	
14 a b c	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request.	
14 a b c d	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request. The system must have contrast resolution of 500 Dpi or	
14 a b c d	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request. The system must have contrast resolution of 500 Dpi or more	
14 a b c d e	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request. The system must have contrast resolution of 500 Dpi or more The system must have at least three online film sizes, and should be capable to print on any of the 8 x 10, 10x 12, 11x	
14 a b c d e	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request. The system must have contrast resolution of 500 Dpi or more The system must have at least three online film sizes, and should be capable to print on any of the 8 x 10, 10x 12, 11x 14, 14x17 sizes.	
14 a b c d e f	UPS The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. GENERATOR : An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. DOCUMENTATION The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request. The system must have contrast resolution of 500 Dpi or more The system must have at least three online film sizes, and should be capable to print on any of the 8 x 10, 10x 12, 11x 14, 14x17 sizes. The system must not involve any wet process and must give	
14 a b c d e	<b>UPS</b> The system should be provided with the suitable UPS system for the complete system (MR + accessories supplied) with at least 30 minutes back up. Suitable Chiller to be provided. <b>GENERATOR :</b> An automatic generator with adequate capacity to run the MR scanner, UPS, AC units etc. must be provided. The generator must be from noise free from reputed firms. <b>DOCUMENTATION</b> The dry imager system should have digital DICOM 3.0 dry chemistry camera with resolution of 500 dpi or more . A color laser printer for printing color images and protocols on plane in 1200 dpi resolution and more than 20 ppm. The camera must be DICOM compatible (attach conformance statement) The system must be able to process up to 100 films / hour (Min) depending on the size. The system must deliver its first film within 80 seconds from request. The system must have contrast resolution of 500 Dpi or more The system must have at least three online film sizes, and should be capable to print on any of the 8 x 10, 10x 12, 11x 14, 14x17 sizes.	

h	Start up time should be less than 10 minute	
i	Easy day light loading.	
	The system should be freely configurable by the user, to use	
j	any of the above mentioned size.	
15	A) ACCESSORIES	
	Must have independent dual Syringe Pressure injector with	
	following features; Non- ferrous, automatic syringe size	
	detection, performs single/dual phase contrast injections,	
а	provides Saline flush delivery and allows timed contrast	
	delivery. 100 nos compatible syringes with connectors	
	should be provided. Must be able to observe progress of	
	injection and view injection result	
b	Two non magnetic patient transfer trolleys should be	
U	provided	
с	Metal detectors three in number, two of which are hand	
	held.	
d	Phantoms to be provided for regular QA studies.	
е	Complete manuals and older necessary documentation	
-	should be provided.	ļ
	<b>B) PATIENT COMFORT ACCESSORIES :</b>	
а	Soft mattress with head rest	
b	Support, positioning wedges	
с	Set of soft velcro immobilization straps.	
d	MR compatible sandbags.	
e	Knee Hand held nurse call device.	
16	Warranty	
	5 years warranty of complete MRI system along with all	
	accessories supplied i.e. Camera, AC, Chiller, UPS etc The	
	warranty should start from the day of complete satisfactory	
	installation of equipment. Please attach a complete list of	
	spares which would be provided with the equipment	
17	СМС	
	After warranty CMC for next 5 years for complete MR	
	system and all that is supplied with the system including	
	AC, camera, chiller, UPS etc ,site modification works etc.	
	the warranty and CMC of machine would be extended by period of downtime of machine	
10	period of downtime of machine	
18	SPECIAL CONDITIONS	
	In case the company can offer any other technical features which are better than these specifications of would be	
	available at the time of machine is installed. Point wise	
	technical compliance report supported along with original	
	product data sheet must be submitted in all truthfulness and	
	shall be the essence of the technical bid. In the absence of	
	this the offer may liable to be rejected. The offered unit must	
	be FDA approved. All operating and technical manuals of	
	main and sub system must be supplied in duplicate.	
19	Site Development / Turnkey Project	
0	The site will be provided along with requisite power supply	
а	& water connection by the purchaser	
b	The vendor should visit the installation site before bidding	
U	to assess the turnkey costs	
с	The selected vendor is requested to install the equipment	
v	after developing the site as per their requirement	

d	It is the responsibility of the bidder to alter the site & to provide & finish the interiors of the rooms in all respects for successful installation & commissioning of the equipment to the satisfaction of the purchaser. The layout should be made in consultation with the purchaser The turnkey includes complete civil & electrical works like	
e	site modifications, wall tiles, RF flooring, glass, air conditions, power DB box, false ceiling, lights, painting, plumbing, furniture etc	
f	RF cabin with best quality appropriate acoustic shielding	
20	TRAINING	
	Minimum 6 weeks of onsite training at the Hospital should be provided.	
21	NOTE	
1	Bidder's may propose any product / system which is equivalent or better than the requirements specified above. Bidder should provide sufficient documents evidence to support such offer.	
2	All equipment needing consumables must allow the possibility to use generic and/or locally made consumables and/or disposables. Compliance to this condition must be declared here by the bidders.	
3	Bidder shall give his response to the Purchaser's requirements in the left column by furnishing a <b>clause-by-clause commentary</b> on each parameter lines above. Bidder who comments with texts such as "Yes", "Complied", "Better", "Refer to catalogue", copying directly the purchaser's description leaving any parameter line blank and/or submit any text or content of this nature would be considered as <b>NON-RESPONSIVE.</b>	

# SECTION VI - QUALIFICATON CRITERIA

(Referred to in Clause 13.03 of ITB)

- 01. The bidder must be a manufacturer specifically against this bid for the subject goods) and had successfully executed contracts for similar and/or identical goods in the past three years prior to the date of Bid opening. In support of this, the bidder shall furnish Performance statement in the enclosed Proforma 'A'.
- 02. Bidders, meeting the above requirements except for successful execution of contracts for last three years, may also participate in the bidding process, provided they have valid on-going collaboration agreement with a manufacturer, who in turn, fully meets the criteria specified in clause 01 above and provided also, the bidder furnished an undertaking jointly executed by it and the collaborator for satisfactory designs, manufacture, erection, commissioning and performance of the goods and services offered including all warranty obligations.
- i. The bidder shall furnish a brief write-up, packed with adequate date explaining and establishing his available capacity/capability (both technical and financial) to perform the contract (if awarded) within the stipulated time period, after meeting all its current/present commitments. The bidder shall also furnish details of Equipment and Quality Control in the enclosed Proforma 'B'.
- 04. <u>For the assessment of past record of after sales services, bidders are to submit</u> <u>Special Reports duly signed by the Principal-cum-Chief Superintendent of the</u> <u>concerned Medical College Hospital where these machines are to be installed</u> <u>about the performance/quality of services rendered to the other machines and</u> <u>equipments already supplied to the Medical College Hospitals of Assam.</u>
- 05. Notwithstanding anything stated above, the purchaser reserves the right to assess the bidder's capability and capacity to perform the contract satisfactorily before deciding on award of contract, should circumstances warrant such an assessment in the overall interest of the purchaser.
- 06. All bidders must submit an undertaking mentioning that they have not supplied similar equipments in price less than the quoted price here to any other Institution/ Organization in India in last 2 years.

# PROFORMA -A PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last three years)

IFB No.:

Date of opening:

Time:

Name and address of the bidder:

Name and address of the manufacturer:

Order placed by (full address of Purchaser with phone number)	Order number and date	Description and quantity of ordered goods and services with the warranty period	Value of Order* (Rs.)	Date of com Contr As per contract	-	Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach documentary proof)

Note:\* Value including all taxes.

Signature and seal of the bidder

#### **PROFORMA 'B'**

# PROFORMA FOR EQUIPMENT AND QUALITY CONTROL EMPLOYED BY THE MANUFACTURER(S)

IFB No. : Date of opening : Time :

Name and address of the bidder :

Note: All the following details shall relate to the manufacturer(s) for the goods quoted for.

- 01 Name of the manufacturer
  - (a) full postal address
  - (b) full address of the premises
  - (c) telegraphic address
  - (d) telex number
  - (e) telephone number
  - f) fax number
  - (g) e-mail address
- 01 Plant and machinery details
- 03 Manufacturing process details
- 04 Monthly (single shift) production Capacity of goods quoted for(a) normal(b) maximum
- 05 Total annual turn-over (value in Rupees)
- 06 Quality control arrangement details
  - (a) for incoming materials and bought-out components
  - (b) for process control
  - (c) for final product evaluation
- 07 Test certificates held (a)Type test (b) BIS/ISO certification
  - (c) Any other
- 08 Details of staff (a) technical (b) skilled (c) unskilled

Signature and seal of the bidder

#### SECTION VII-BID FORM AND PRICE SCHEDULES

IFB No. Date

То

The Governor of Assam Through the Director of Medical Education, Assam, Sixmile, Khanapara, Guwahati-781022.

#### Gentlemen,

Having examined the bidding documents the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver (description of goods and services) in conformity with the said bidding documents for the sum of (total bid amount in words and figures) or such other sums as may be ascertained in accordance with the schedule of prices attached herewith and made part of this bid.

We undertake, if our bid is accepted, to commence delivery within (number) days and to complete delivery of all the items specified in the contract and to perform all the incidental services within (number) days calculated from the date of your notification of award.

If our bid is accepted, we will obtain the guarantee of a bank in a sum not exceeding 10% (Ten) percent of the contract price for the due Performance of the contract.

We agree to abide by this bid for a period of 365 days (specify the date) and it shall remain bidding up on us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this.....day of .....2011.

Signature (in the capacity of) Duly authorised to sign bid for and on behalf of .....

# PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA

S1.	Item	Country	Quantity		Price per unit						Total	Sales
No.	Description	of	-	Ex-	Excise	Packing	Inland	Insu-	Inci	Price	Price	and
		Origin		factory/	Duty	and	Trans-	rance	den-	Inclu-	Inclu-	other
				Ex-ware-	(if	For-	potation	and	tal	ding	ing	Taxes
				house/	any)	war-	(d)	Incidental	Services	Ex-cise	Excise	Payable,
				Ex-show-	(b)	ding		costs	(including	Duty	Duty	if
				room/		©		(e)	supervi-	[a+b+c	4x6	Contract
				Off-the					sion)	+		is
				shelf					(f)	d+e+f]		awar
				(a)								ded
1	2	3	4				5			6	7	8
-		5					5			0	,	0

Total bid price in Rupees: In words:

Signature of bidder

Place: Date:

#### NOTE:

(i) In case of discrepancy between unit price and total price, the unit price shall prevail.

(ii) The bidder shall give list of spares for three years operation separately indicating description, quantity, unit price and total price in the above format for those items whose scope of supply includes spare parts as per 'Technical Specifications' given in section V.

(iii) For column 9, break-up of the domestic value added, namely, value of materials, labour and overheads should also be indicated separately as specified in clause 27 of instructions to bidders and also furnish necessary documentation in support of the bidder's claim of being a SSI or a PSU.

# PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

S1.	Item	Country	Quantity	Price per un	it					Indian	Shipme	Inland
No.	Description	of		Unit Price	Unit	Inci				Agent's	nt	Transport
		Origin		FOB Port	Price	den-				Commissi	weight	ation
				of	CIF at	tal			Indian	on as a %	and	charge
				Loading	Port of	Services		Total	Agent	of FOB	volume	
				(a)	entry	(including	Unit Price	Price	Name	Price		
					(b)	supervi-		1.6		Including		
						sion) ©		4x6		in the quoted		
						U				price		
										price		
1	2	3	4		5		6	7	8	9	10	11

Total bid price in foreign currency: In words :

Place: Date: Signature of bidder Name Business address

NOTE:

(i) In case of discrepancy between unit price and total price, the unit price shall prevail.

(ii) The bidder shall give list of spares for three years operation separately indicating description, quantity, unit price and total price in the above format for those items whose scope of supply includes spare parts as per 'Technical Specifications' given in section VI.

(iii) Indian Agent's Commission shall be paid in Indian Rupees only. No change due to exchange variation shall be allowed. Market exchange rate ruling on the date of award in accordance with clause 12.02 of instructions to bidders will be applicable for this purpose.

(iv) Manufacturer's Authorisation Form in the prescribed proforma given in section XI and also the foreign supplier's original proforma invoice should be enclosed failing which the bid will be treated as non-responsive and rejected.

#### SECTION-VIII BID SECURITY (EMD) FORM (BANK GUARANTEE)

Whereas......[name of bidder] (hereinafter called "the bidder") has submitted his bid dated .....(date)for the supply of......(hereinafter called "the bid").

The conditions of this obligation are:

- 1. If the bidder withdraws its bid during the period of bid validity specified by the bidder on the bid form or
- 2. If the bidder, having been notified of the acceptance of its bid by the purchaser during the period of bid validity.
  - (a) fails or refuses to execute the contract form, if required or;

(b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to bidders.

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

This guarantee will remain in force up to and including 90 (Ninety) days after the period of bid validity or as it may be extended by the purchaser, notice of which extension(s) to the bank is hereby waived and any demand in respect thereof should reach the bank not later than the above date.

Signature of the bank

eal
Date
'lace
Vitness
signature, name and address)

#### SECTION IX-CONTRACT FORM

#### (To be stamped as an agreement in the court stamp paper valued Rs. 20/-)

Whereas the purchaser is desirous that certain goods and ancillary services, viz. (brief description of goods and services) and has accepted a bid by the supplier for supply of those goods and services in the sum of (contract price in words and figures) (hereinafter "the contract price").

Now this Agreement witnesses as follows:

01. The following documents shall be deemed to form and be read and construed as part of this agreement, viz.:

#### (a) the Technical Specifications,

- (b) the Terms and Conditions of the Bidding Document and
- (c) the purchaser's Notification of Award
- 02. In consideration of the payments to be made by the purchaser to the supplier as hereinafter mentioned, the supplier hereby covenants with the purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the contract.
- 03. The purchaser hereby covenants to pay the supplier in consideration of the provision of the goods and services and the remedying of defects therein, the contract price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract. Brief particulars of the goods and services which shall be supplied/provided by the supplier are as under:

SL. No.	Brief description Of goods/services	Quantity to be supplied	Unit price	Delivery terms (FOB/CIF/FOR etc)	

Total value:

Delivery schedule:

In witness whereof the parties hereto have caused this agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed and delivered by the said.....(for the purchaser) in the presence of .....

Signed, sealed and delivered by the said .....(for the supplier) in the presence of.....

To The Governor of Assam

And whereas it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a recognised bank 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.

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 the date of issue of the 'Acceptance Certificate' issued by the purchaser's representative.

Place and Date

Signature and seal of the guarantor

#### SECTION XI – MANUFACTURERS' AUTHORISATION FORM

(Referred to in clause 13.03 of ITB)

То

The Director of Medical Education, Assam, Sixmile, Khanapara, Guwahati-781022.

Dear Sir,

IFB No.

We ....., who are established and reputable manufacturers of ....., having factories at ...., and ...., hereby authorize Messrs. .....(Name and address of agents) to bid, negotiate and conclude the contract with you against IFB No.....for the above goods manufactured by us. No company or firm or individual other than Messrs.....are authorised to bid, negotiate and conclude the contract in regard to this business against this specific IFB as also for all business in the entire territory of India.

An agency commission of. .....% included in the gross ex-works price is payable to Messrs. ....

We hereby extend our full guarantee and warranty as per clause 15 of the conditions of contract for the goods offered for supply against this Invitation for Bid by the above firm.

Our other responsibilities include:

(i)	
(ii)	
(here specify in detail manufacturer 's responsibilities)	
The services to be rendered by Messrs.	are as under:
(i)	
(ii)	
(here specify the services to be rendered by the agent).	

Yours faithfully, (name)

NOTE: This letter of authorisation should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer. A copy of notarised power of attorney should also be furnished.

# SECTION XII - PROFORMA OF CERTIFICATE FOR ISSUE BY THE PURCHASER AFTER SUCCESSFUL COMMISSIONING OF EQUIPMENT

(Referred to in clause 16 of COC)

No.....

Date.....

То

Messrs.

.....

Subject: Certificate of commissioning of equipment/plant.

01 This is to certify that the equipment(s)/plant(s) as detailed below has/have been received in good conditions along with all the standard and special accessories and a set of spares (subject to remarks in para no.02) in accordance with the contract/technical specifications. The same has been installed and commissioned. (a) Contract No Date (b) Description of the equipment(s)/plants (c) Equipment(s)/ plant(s) nos. (d) Quantity (e) Bill Of Loading/Air Way Bill/Railway Receipt/ Goods Consignment Note no...... dated..... (f) Name of the vessel/Transporter (g) Name of the Consignee

(h) Date of commissioning and proving test.

02 Details of accessories/spares not yet supplied and recoveries to be made on that account.

Sl. No.	Description of Item	Quantity	Amount to be recovered No

- 04 The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).
- 05 The supplier has fulfilled its contractual obligations satisfactorily ## or The supplier has failed to fulfill its contractual obligations with regard to the following:
  - He has not adhered to the time schedule specified in the contract in (a) dispatching the documents/drawings pursuant to 'Technical Specifications'.
  - He has not supervised the commissioning of the equipment(s)/plant(s)in time, (b) i.e. within the period specified in the contract from date of intimation by the purchaser in respect of the installation of the equipment(s)/plant(s).
  - The supplier as specified in the contract has not done training of personnel. (c)
  - The extent of delay for each of the activities to be performed by the supplier in (d) terms of the contract is

- 05 The amount of recovery on account of non-supply of accessories and spares is given under para no.02.
- 06 The amount of recovery on account of failure of the supplier to meet his contractual obligations is......(here indicate the amount).

Signature

Name

Designation with stamp

## Explanatory notes for filling up the certificate:

(a) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.

(b) He has supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the time specified in the contract from date of intimation by the purchaser in respect of the installation of the equipment(s)/plant(s).

(b) Training of personnel has been done by the supplier as specified in the contract.

(d) In the event of documents/drawings having not been supplied or installation and commissioning of the equipment(s)/plant(s) having been delayed on account of the supplier, the extent of delay should always be mentioned in clear terms.

## SECTION XIII- INSPECTION AUTHORITY & SPECIAL TEST DETAILS (Referred to in clause 08.01 of COC)

Inspection Authority	: Director of Medical Education, Assam.
----------------------	---

Inspection Officers	: Principal-cum-Chief Superintendent of F.A.A. Medical College &
	Hospital,

- Place of Inspection :At the place of consignee after receipt and installation of Goods.
- Test Details :The Goods shall be test for its conformity to the accepted specification and services specified in the contract and to prove it's guaranteed performance.

#### SECTION XIV

## PROFORMA FOR INDICATING PARTICULARS OF CARGOES FOR WHICH SHIPPING SPACE IS REQUIRED TO BE ARRANGED BY THE SHIPPING COORDINATION AND CHARTERING ORGANISATION OF THE MINISTRY OF SURFACE TRANSPORT (GOVERNMENT OF INDIA)

(Referred to in clause	12.06 of COC)
------------------------	---------------

SI. No	Name of the Supplier with Postal/ Telegra -phic address	Name Of the Consig- nee With Postal/ Telegra -phic add- ress	Descrip -tion of Goods	Quan- tity	Cargo- Availa- bility whet her Ship- load or Parcel, if parcel, size of parcels	Period over which Shipment to be completed	Loading Port	Discharge port	Nature of Contra ct, FOB or CFR or CIF or FOR	Any Special Condi- tion in the Contract relating Ship
	2	3	4	5	6	7	8	9	10	

# Signature and seal of the supplier

NOTE: This form should be filled in and sent in and sent (in duplicate) to the Chief Controller of Chartering (in respect of bulk cargoes) and the Shipping Coordination Office (in respect of general liner cargoes), Ministry of Surface Transport, New Delhi, with a copy to the purchaser as soon as possible after the relevant contract is finalised and also 6 (six) weeks before readiness of each cargo for shipment.

## SECTION XV – LIST OF SCHEDULED BANKS

(Referred to in clause 15 of ITB and 07 &16 of COC)

- 1. State Bank of India
- 2. State Bank of Bikaner & Jaipur
- 3. State Bank of Hyderabad
- 4. State Bank of Indore
- 5. State Bank of Mysore
- 6. State Bank of Patiala
- 7. State of Saurashtra
- 7. State Bank of Travancore

#### NATIONALISED BANKS

- 1. Allahabad Bank
- 2. Andhra Bank
- 3. Bank of Baroda
- 4. Bank of India
- 5. Bank of Maharashtra
- 6. Canara Bank
- 7. Central Bank of India
- 8. Corporation Bank
- 9. Dena Bank
- 10. Indian Bank
- 11. Indian Overseas Bank
- 12. Punjab & Sind Bank
- 13. Oriental Bank of Commerce
- 14. Punjab National Bank
- 15. Punjab & Sind Bank
- 16. Syndicate Bank
- 17. UCO Bank
- 18. Union Bank of India
- 19. United Bank of India
- 20. Vijaya bank

# SCHEDULED PRIVATE SECTOR BANKS

- 1. Bank of Punjab Ltd.
- 2. The Bank of Rajasthan Ltd.
- 3. Banaras State Bank
- 4. Bharat Overseas Bank
- 5. Catholic Syrian Bank
- 6. Centurion Bank
- 7. City Union Bank
- 8. Development Credit Bank
- 8. Dhanalakshmi Bank
- 9. Federal Bank
- 11. Ganesh Bank of Kurundwad
- 12. HDFC Bank
- 13 ICICI Bank

- 14. IDBI Bank
- 15. Indus Ind Bank
- 16. Jammu & Kashmir Bank
- 17. Karnataka Bank
- 18. Karur Vvsya Bank
- 29. Lakshmi Vilas Bank
- 20. Lord Krishna Bank
- 21. Nainital Bank
- 22. Ratnakar Bank
- 23. Sangli Bank
- 24. SBI Commercial & International Bank
- 25. South Indian Bank
- 26. Tamilnad Mercantile Bank
- 27. United Western Bank
- 28. UTI Bank

## SCHEDULED FOREIGN BANK

- 1. ABN Amro Bank
- 2. Abu Dhabi Commercial Bank
- 3. American Express Bank
- 4. Antwarp Diamond Bank NV
- 5. Arab Bangladesh Bank
- 6. Bank International Indonesia
- 7. Bank of America N.A
- 8. Bank of Bahrain & Kuwait
- 9. Bank of Ceylon
- 10. Bank of Nova Scotia
- 11. Bank of Tokyo-Mitsubishi Ltd.
- 12. Barclays Bank
- 13. BNP Paribas
- 14. China Trust commercial Bank
- 15. Cho Hung Bank
- 16. CITI Bank
- 17. Credit Agricole Indosuaz
- 18. Credit Lyonnais
- 19. Deutsche Bank A.G.
- 20. Mizuho Corporate Bank Ltd.
- 21. Hongkong Bank
- 22. ING Bank
- 23. Krung Thai Bank Public Company Ltd.

- 24. Mashreq Bank
- 25. Oman International Bank S.A.O.G.
- 26. Oversea Chinese Banking Corp.
- 27. UFJ Bank
- 28. Societe Generale
- 29. Sonali Bank

## b. Standard Chartered Bank

- 31 State Bank of Mauritius
- 32. Sumitomo Mitsui Banking Corporation

## NOTE:

- 1. The bank guarantee and extension letter, if any, shall be furnished on a non-judicial stamp paper from any of the above banks mentioned above, failing which the bid will be treated as non-responsive and rejected.
- 2. The list of banks is subject to change as and when Reserve Bank of India notifies any change in the list.

#### SECTION -XVI PROFORMANCE BOND (BANK GUARANTEE) (Referred to in clause 16 of COC)

We..... (hereinafter called 'the bank') at the request of the supplier do, as a primary obligor and not merely as surety, hereby irrevocably, unconditionally and absolutely undertake against any loss or damage caused or suffered by the purchaser by reason of any failure of the supplier to perform or omission or negligence to perform any part of its obligations to the satisfaction of the purchaser in terms of the contract.

We, the bank, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the purchaser stating that the amount claim is due by way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of any breach by the said supplier of any of the terms and conditions contained in the said contract or by reason of the supplier's failure or omission or negligence to perform the said contract or any part thereof. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee, which shall not be considered as satisfied by any intermediate payment or satisfaction of any part of or obligation hereunder. However, our liability under this guarantee shall be restricted to an amount not exceeding.....

We, the bank, undertake to pay to the purchaser any amount so demanded by the purchaser, notwithstanding;

(a) any dispute or difference between the purchaser and the supplier or any other person or between the supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating thereto or;

(b) the invalidity, irregularity or enforceability of the contract or;

(c) any other circumstances which might otherwise constitute discharge of this guarantee, including any act or omission or commission on the part of the purchaser to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the bank, further agree that the guarantee herein contained shall be continued one and remain in full force and effect during the period that would be taken for the Performance of the said contract and that it shall continue to be enforceable till all the

dues of the purchaser under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the office of the **Director of Medical Education**, **Assam/ Health & F.W. Department, Govt. of Assam** certifies that the terms and conditions of the said contract have been fully and promptly carried out by the said supplier and accordingly discharges this guarantee.

We, the bank, hereby agree and undertake that any claim which the bank may have against the supplier shall be subject to and subordinate to the prior payment and Performance in full of all the obligations of the bank hereunder and the bank will not, without prior written consent of the purchaser, exercise any legal rights or remedies of any kind in respect of any such payment or Performance so long as the obligations of the bank hereunder remain owning and outstanding, regardless of the insolvency, liquidation,

or bankruptcy of the supplier or otherwise howsoever. We, the bank, will not counter claim or set off against its liabilities to the purchaser hereunder any sum outstanding to the credit of the purchaser with it.

We, the bank further agree with the purchaser that the purchaser shall have fullest liberty without our consent, without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of Performance by the said supplier from time to time or to postpone for any time or from time to time and of the powers exercisable by the purchaser against the said supplier and forbear or

enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the bank or the supplier.

We, the bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the purchaser in writing.

The disputes relating to this bank guarantee shall be resolved as per the terms and conditions of the contract.

Signature and seal of the Bank

Place: Date :