NATIONAL TENDER ENQUIRY DOCUMENT

FOR PURCHASE OF MEDICAL EQUIPMENT

FOR & ON BEHALF OF

Chittarranjan National Cancer Institute, Kolkata (Campus -II)

On E-Tender Basis

Tender Enquiry No.: HSCC/PUR/CNCI/Kolkata/Medical Equipment/03 dt. 15.11.2017

HSCC (INDIA) LTD

(A GOVERNMENT OF INDIA ENTERPRISE)
Plot No. 6-A, Block-E, Sector-1,
NOIDA (U.P.) – 201 301
PHONE: 0120-2540153
FAX: 0120-2542447
URL: www.hsccltd.com

Important to Bidder:

A. Off- line documents submission:- Sealed part –I document is to be submit in tender box in as per the schedule mentioned in section –I.

- **Bid Security (EMD) – in original**
- **Affidavit- in original.**
- **Bid Summary Sheet**

Note:

1. **Bidders are advice to submit above mentioned documents in tender box only in hard copy.**
2. **EMD favour of "HSCC (India) Ltd" payable at New Delhi/ Noida**

B. On line documents submission:-

- **(i) Part –II : Following scan documents upload as per chronological order as mentioned below:**

- **01 Bid summary sheet**: - Bid summary sheet should be as per Section XXII
- **02 EMD**: Demand draft / BG
- **03 Power of Attorney**- Power of attorney should be as per Section XXIII
- **04 Tender Form** Tender form should be as per section X.
- **05 Manufacturers Authorization Form-** Manufacturers Authorization Form should be as per SECTION – XIV
- **06 Affidavit/Undertaking** Affidavit/Undertaking should be as per Section XIX.
- **07 Proforma A** The performa "A" should as per TE document and supported **with purchaser order in accordance to section –IX in order to qualify the qualification criteria. The latest purchaser order along with End user certificate /installation certificate is to be scan from original copy**.
- **08 PAN and Certificate of Incorporation/Declaration":** PAN Card and Certificate of Incorporation/Declaration of bidder firm.
- **09 Audited Annual report":** Audited Balance sheet (2013 - 14, 2014 – 15 & 2015 – 16) of last 3 completed financial years certified by Chartered Accountant is to be Colour scan from original along with the certificate issued by Chartered Accountant certify
- **10 Certificate of Regn**.":- The certificate of registration Issued by Directorate of Industries/NSIC, if SSI unit is to be Colour scan from original copy.
- **11 Quality Control Requirements":-** This format should be as per Section VIII.
- **12 Bidder Information:-** Bidder Information should be as per Section XXIV
- **13 Technical Compliance":-** Technical compliance for the quoted goods vis-à-vis the Technical specifications with all related brochures/catalogues in the tender enquiry, technical bid.

Note: Before uploading, bidder should ensure that all above documents is to be sign & stamped.

C. Price Bid

Part-III:- Price Bid is to be filled up on line as per the format mentioned in the TE document

- The bidders are required to be registered at HSCC e-tender portal www.tenderwizard.com/HSCC and downloading the bid document from HSCC website. For submission of the bids, the bidders are required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities.

Tender/Bid Validity: The tender/bid shall remain valid 360 days from the date of Techno – Commercial Tender opening, date prescribed in the TE document. The EMD shall be valid for 415 days from Techno – Commercial Tender opening d

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Section **Topic**

Chittarranjan National Cancer Institute, (Campus –II), Kolkata
Ministry of Health & Family Welfare, Govt. of India,

NATIONAL COMPETITIVE BIDDING (NCB), INVITATION FOR BIDS (IFB)

FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING MEDICAL EQUIPMENT
E-Tendering

Director, Chittarranjan National Cancer Institute, (CNCI –Campus –II) Kolkata under Ministry of Health & Family Welfare, Govt. of India through their Consultants HSCC (India) Ltd. invites **On-line bids** from eligible bidders, in single stage two bid system for supply, installation, testing, commissioning & handing-over of various Medical Equipment **for Chittarranjan National Cancer Institute, (Campus –II), Kolkata**

The bidders are required to be registered at HSCC e-tender portal www.tenderwizard.com/HSCC. Please log on to www.tenderwizard.com/HSCC only for downloading bid document and for participation through **E-Tendering basis**. For submission and other details, please refer HSCC e-tender portal www.tenderwizard.com/HSCC. For submission of the bids, the bidders are required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities. The bidders are required to submit Original Bid Security as per Bid Document and submit in the office of **CGM, HSCC (India) Ltd., E-6A, Sector-1, Noida** – 201301 **before the date and time fixed for opening of the bid either by registered post or by hand failing which the bid will be declared nonresponsive**

Complete set of Bid Documents has been made available at E-Tender portal www.tenderwizard.com/HSCC, www.hsccltd.com Prospective bidders are advised to regularly scan through HSCC E-Tender portal www.tenderwizard.com/HSCC, www.hsccltd.com as corrigendum/ amendments etc., if any, will be notified on this portal only and no separate advertisement will be made for this.

Chief General Manager, HSCC (I) Ltd
For & on behalf of Director CMCI, Kolkata

SECTION - I

NOTICE INVITING TENDERS (NIT)

Open E- Tender

FOR

Chittarranjan National Cancer Institute, (Campus –II), Kolkata
Ministry of Health & Family Welfare, Govt. of India,

Tender Enquiry No.: HSCC/PUR/CNCI/Kolkata/Medical Equipment/03 dated 15.11.2017

Director, Chittarranjan National Cancer Institute, Kolkata under Ministry of Health & Family Welfare, Govt. of India through their Consultants HSCC (India) Ltd. invites **On-line bids** from eligible bidders, in single stage two bid system for supply, installation, testing, commissioning & handing-over of various Medical Equipment **for Chittarranjan National Cancer Institute, (Campus –II), Kolkata**

SL .NO	NAME OF THE EQUIPMENT/ INSTRUMENT	Section	Qty.	EMD (Rs.)
1.	MRI 3 Tesla	Radiology	1	30,00,000
2.	CT Scan 256 Slice	Radiology	1	26,00,000
3.	Digital Mammography	Radiology	1	3,00,000
4.	Digital Fluro Radiography	Radiology	1	3,00,000
5.	Digital Mobile X – Ray	Radiology	1	3,00,000
6.	High End Ultrasound Machine	Radiology	1	80,000
7.	Mid End Ultrasound Machine	Radiology	1	80,000

Sl. No.	Description	Schedule
i.	Dates of sale of tender enquiry documents	**15.11.2017 to 19.12.2017, 10:00 hrs to 13:00 hrs IST**
ii.	Place of sale of Tender Enquiry Documents	HSCC (India) Ltd, Plot No. 6-A, Block-E, Sector-1, Noida (U.P)-201301
iii.	Cost of the Tender Enquiry Document	Free of cost
iv.	Pre Tender Meeting Date & Time	**24.11.2017**, 11:00 hrs IST
v.	Pre Tender Meeting Venue	**HSCC (India) Ltd, Sector-1, Noida (U.P)-201301**
vi.	Closing date & time for receipt of Tender	**19.12.2017, 14:00 hrs IST**
vii.	Time and date of opening of Techno – Commercial tenders	**19.12.2017, 14:30 hrs IST**
viii	Venue of Opening of Techno Commercial Tender	Same as 2 (ii)

1. Please long on to www.tenderwizard.com/HSCC only for downloading bid document and for participation through **e-tendering basis**. All corrigendum/modifications/amendments, if any, will be published on the website www.tenderwizard.com/HSCC only. All bidders are requested to visit this website on regular basis.
2. Tenderer may also downloaded the tender enquiry documents from the web site http://eprocure.gov.in/cppp, www.hsccltd.com and submit its tender by utilizing the downloaded document, along with the required non-refundable fee as mentioned in Para 3 above. The tender shall be submitted, all the necessary documents and in physical form (with respect to few documents as mentioned in the SIT) in parts/covers as mentioned below:

A. <u>In Original Offline & Copy Online (In separate Envelope : Part-I)</u>

(i) EMD (in original)
(ii) Affidavit as per Section XIX (in original)
(iii) Bid summary sheet as per Section XXII

B. <u>Online (Part-II)</u>
(i) Bid summary sheet as per Section XXI
(ii) EMD.
(iii) Power of Attorney as per Section XXIII
(iv) Tender Form as per section X.
(v) Manufacturers Authorization Form as SECTION – XIV
(vi) Affidavit as per Section XIX.
(vii) Proforma "A" **with purchaser order in accordance to section –IX in order to qualify the bidder qualification criteria. The copy of latest purchaser order along with installation certificate /service report performance certificate is to be scan and upload accordingly.**
(viii) Copy of PAN and Certificate of Incorporation/Declaration being a proprietary firm of the bidder.
(ix) Audited Annual report of last 3 completed financial years (Balance sheet and Profit & Loss Account).
(x) Certificate of Regn. Issued by Directorate of Industries/NSIC, if SSI unit.
(xi) Quality Control Requirements as per Section VIII
(xii) Bidder Information as per Section XXIV

3. All prospective tenderers may attend the **Pre Tender meeting**. The venue, date and time indicated in the Para 2 above.
4. **Bids to be submitted on-line only in single stage two bid system, i.e. Techno-commercial Bid (unpriced bid) and the Price Bid, for the above, including Bid Security on or before the closing date and time indicated above, failing which the tenders will be treated as late and rejected.**
5. In the event of any of the above tender opening/closing dates being declared as holiday/closed day for the purchase organization, the bids will be sold/received/opened on the next working day at the stipulated time.
6. The Tender Enquiry Documents are not transferable.
7. Bids shall be evaluated separately for each **item.**
8. HSCC reserves the right to accept or reject any or all of the tenders in full or in part including the lowest bid without assigning any reason thereof or incurring any liability thereby.

Chief General Manager, HSCC (I) Ltd
For & on behalf of Director CNCI, Kolkata

SECTION - II

GENERAL INSTRUCTIONS TO TENDERERS (GIT)
CONTENTS

GENERAL INSTRUCTIONS TO TENDERERS (GIT)

A. PREAMBLE

1. Definitions and Abbreviations

1.1 The following definitions and abbreviations, which have been used in these documents shall have the meanings as indicated below:

1.2. Definitions:

(i) "Purchaser" means Director, Chittarranjan National Cancer Institute, (CNCI) Kolkata under Ministry of Health & Family Welfare, Govt. of India
(ii) "Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
(iii) "Tenderer" means Bidder/ the Individual or Firm submitting Bids / Quotation / Tender
(iv) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.
(v) "Goods" means the articles, material, commodities, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, medical equipment, industrial plant etc. which the supplier is required to supply to the purchaser under the contract.
(vi) "Services" means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
(vii) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
(viii) "Contract" means the written agreement entered into between the purchaser and/or consignee and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
(ix) "Performance Security" means monetary or financial guarantee to be furnished by the successful tenderer for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
(x) "Consignee" means the **Director, Chittarranjan National Cancer Institute, (CNCI Campus -II) Kolkata** person to whom the goods are required to be delivered as specified in the Contract. If the goods are required to be delivered to a person as an interim consignee for the purpose of despatch to another person as provided in the Contract then that "another" person is the consignee, also known as ultimate consignee.
(xi) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.
(xii) "Inspection" means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement to determine conformity.
(xiii) "Day" means calendar day.

1.3 Abbreviations:

(i) "TE Document" means Tender Enquiry Document
(ii) "NIT" means Notice Inviting Tenders.
(iii) "GIT" means General Instructions to Tenderers
(iv) "SIT" means Special Instructions to Tenderers
(v) "GCC" means General Conditions of Contract
(vi) "SCC" means Special Conditions of Contract
(vii) "DGS&D" means Directorate General of Supplies and Disposals
(viii) "NSIC" means National Small Industries Corporation
(ix) "PSU" means Public Sector Undertaking
(x) "CPSU" means Central Public Sector Undertaking
(xi) "LSI" means Large Scale Industry

(xii) "SSI" means Small Scale Industry
(xiii) "LC" means Letter of Credit
(xiv) "DP" means Delivery Period
(xv) "BG" means Bank Guarantee
(xvi) "ED" means Excise Duty
(xvii) "CD" means Custom Duty
(xviii) "VAT" means Value Added Tax –Deleted
(xix) "CENVAT" means Central Value Added Tax
(xx) "CST" means Central Sales Tax –Deleted
(xxi) "RR" means Railway Receipt
(xxii) "BL" means Bill of Lading
(xxiii) "FOB" means Free on Board
(xxiv) "FCA" means Free Carrier
(xxv) "FOR" means Free On Rail
(xxvi) "CIF" means Cost, Insurance and Freight
(xxvii) "CIP (Destinations)" means Carriage and Insurance Paid up to Consignee Site. Additionally the Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.
(xxviii) "DDP" means Delivery Duty Paid named place of destination (consignee site)
(xxix) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
(xxx) Detected
(xxxi) "Dte. GHS" means Directorate General and Health Services, MOH&FW.
(xxxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
(xxxiii) "RT" means Re-Tender.
(xxxiv) GST – Goods and Services tax

2. Introduction

2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section – VI – "List of Requirements", which also indicates, *interalia,* the required delivery schedule, terms and place of delivery.

2.2 This section (Section II - "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders. It also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.

2.3 The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.

2.4 Before formulating the tender and submitting the same to the purchaser, the tenderer should read and examine all the terms, conditions, instructions, checklist etc. contained in the TE documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

3. Availability of Funds

3.1 Expenditure to be incurred for the proposed purchase will be met from the funds available with the purchaser/consignee.

4. Language of Tender

4.1 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in the English language, unless otherwise specified in the Tender Enquiry. However, the language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail**.**

4.2 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for purpose of interpretation of the tender etc, the English translations shall prevail.

5. Eligible Tenderers

5.1 This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents.

6. Eligible Goods and Services

6.1 All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term "origin" used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

7. Tendering Expense

7.1 The tenderer shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. The purchaser will, in no case be responsible or liable for any such cost, expenditure etc regardless of the conduct or outcome of the tendering process.

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice inviting Tender" (NIT), the TE documents include:

- Section II – General Instructions to Tenderers (GIT)
- Section III – Special Instructions to Tenderers (SIT)
- Section IV – General Conditions of Contract (GCC)
- Section V – Special Conditions of Contract (SCC)
- Section VI – List of Requirements
- Section VII – Technical Specifications
- Section VIII – Quality Control Requirements
- Section IX – Qualification Criteria
- Section X – Tender Form
- Section XI – Price Schedules
- Section XII – Questionnaire
- Section XIII – Bank Guarantee Form for EMD
- Section XIV – Manufacturer's Authorisation Form
- Section XV – Bank Guarantee Form for Performance Security/CMC Security
- Section XVI – Contract Forms A & B
- Section XVII – Proforma of Consignee Receipt Certificate
- Section XVIII – Proforma of Final Acceptance Certificate by the consignee
- Section XIX – Instructions from Ministry of Shipping/ Surface Transport (Annexure 1 & 2)
- Section XX – Check List for the Tenderers
- Section XXI – Consignee List

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested tenderers are expected to examine all such details etc to proceed further.

9. Amendments to TE documents

9.1 At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it.

9.2 Such an amendment will be published on website.

9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser.

C. PREPARATION OF TENDERS

11. Documents Comprising the Tender

Please refer Clause no. 3 under Section -I

Note: The bidder shall not submit hard copy of financial bid otherwise his tender shall be straightway rejected. Also, uploading the price bid in prequalification bid or technical bid will result in rejection of the tender

It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.

11.1 The **Two Tender System**, i.e. "Techno – Commercial Tender" and "Price Tender" prepared by the tenderer shall comprise the following:

A) <u>Techno – Commercial Tender (Un priced Tender)</u>

i) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.
ii) Tender Form as per Section X (without indicating any prices).
iii) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
iv) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form.
v) Power of Attorney in favour of signatory of TE documents.
vi) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.
vii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
viii) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).

B) <u>Price Tender:</u>

The information given at clause no. 11.1 A) ii) & viii) above should be reproduced with the prices indicated. **In case of tenderer quoting for more than 1 (one) item, the prices for the quoted items should be submitted in separate sealed covers.**

NOTE:

1. All pages of the Tender should be page numbered
2. It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.

11.2 The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender. Individuals signing the tender or other documents connected with a contract must specify whether he signs as:

i. A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.
ii. A partner of the firm, if it be a partnership, in which case he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney;
iii. Constituted attorney of the firm if it is a company.

NOTE:

1. In case of (ii) above, a copy of the partnership agreement or general power of attorney, in either, case, attested by a Notary Public should be furnished, or affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
2. In case of the Partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.
3. A person signing the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.

11.3 A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.

11.4 Tender sent by fax/telex/cable/electronically shall be ignored.

12. Tender currencies

12.1 Deleted

12.2 For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only if such services are to be performed /undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the price schedule and will be payable in Indian Rupees only.

12.3 **Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.**

13 Tender Prices

13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified as "NA" by the tenderer.

13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.

13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Section XI.

13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:

13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) the price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like GST/Sales tax, Custom Duty, etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;
b) any sales or other taxes which will be payable on the goods in India if the contract is awarded;
c) charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;
d) the price of Incidental Services, as mentioned in List of Requirements and Price Schedule;
e) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
f) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.4.2 For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) The price of goods quoted FOB/FCA port of shipment, as indicated in the List of Requirements and Price Schedule;
b) The amount of freight and insurance.
c) the price of goods quoted CIP (at Consignee Site) Basis as indicated in the List of Requirements & Price Schedule;
d) the charges for Incidental Services including Customs Duty on (CDEC) basis/ DSIR certificate, Custom Clearance, inland transport upto Consignee's site, installation & commissioning, supervision, Demonstration & training, as in the List of Requirements and Price Schedule.
e) the charges for Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery. Other local costs and Incidental costs, as specified in the List of Requirements and Price Schedule;
f) the charges for Incidental Services, as in the List of Requirements and Price Schedule;
g) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
h) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Duties and Taxes:

13.5.1 If the Tenderer desires to ask for GST/Sales tax to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such GST and no claim for the same will be entertained later.

13.5.2 Excise Duty: Detected

13.5.3 GST:

If a tenderer asks for GST/ Sales tax to be paid extra, the rate and nature of GST/Sales tax applicable should be shown separately. The GST/Sales tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to GST /Sales tax and is payable as per the terms of the contract. If any refund of Tax is received at a later date, the Supplier must return the amount forth-with to the purchaser.

13.5.4 Octroi Duty and Local Duties & Taxes: Detected

13.5.5 Customs Duty:

The Purchaser will pay the Customs duty wherever applicable.

13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.

13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.

13.8 Unless otherwise specifically indicated in this TE document, the terms FCA, FOB, FAS, CIF, CIP, DDP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris

13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

14. Indian Agent

14.1 If a foreign tenderer has engaged an agent in India in connection with its tender, the foreign tenderer, in addition to indicating Indian agent's commission, if any, in a manner described under GIT sub clause 12.2 above, shall also furnish the following information:

a) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
b) The details of the services to be rendered by the agent for the subject requirement.
c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.
d) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business.
e) Principal / manufacturer's original proforma invoice with the price bid.

15. Firm Price

15.1 Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account.

15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIT clause 13 will apply.

16. Alternative Tenders

16.1 Alternative Tenders are not permitted.

16.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.

16.3 a). If a tenderer, either the Indian Agent on behalf of the Principal / OEM or Principal / OEM itself can bid but both cannot bid simultaneously for the same item/ product in the same tender

b). If an agent submits bid on belhalf of the Principal / OEM, the same agent shall not submit a bid on behalf of another Principal / OEM in the same tender for the same item / product.

17 Documents Establishing Tenderer's Eligibility and Qualifications

17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.

17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:

a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
c) in case the tenderer is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

18. Documents establishing Good's Conformity to TE document.

18.1 The tenderer shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by the purchaser in the TE documents. For this purpose the tenderer shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the TE documents to establish technical responsiveness of the goods and services offered in its tender.

18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the tenderer, the tenderer shall list out the same in a chart form without ambiguity and provide the same along with its tender.

18.3 If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Earnest Money Deposit (EMD)

19.1 Pursuant to GIT clauses 8.1 and 11.1(d) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.

19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification" etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).

19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:

i) Account Payee Demand Draft
ii) Banker's cheque and
iii) Bank Guarantee

19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the **"HSCC (India) Ltd"** payable at New Delhi/Noida. In case of bank guarantee, the same is to be provided from any commercial bank in India or country of the tenderer as per the format specified under Section XIII in these documents

19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is **360 days**, the EMD shall be valid for **415 days** from Techno – Commercial Tender opening date. **In case of extension of submission of bid/ tender, the validity of bid security (EMD) may be considered from the original date of submission of bid.**

19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender **or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser**. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

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

20. Tender Validity

20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of **360 days** after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

20.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, however, may not agree to extend its tender validity without forfeiting its EMD.

20.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

21. Signing and Sealing of Tender

21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.

21.2 Deleted

21.3 The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

Bidders are requested not to submit the hard copy of Price Bid along with the physical form of tender. Uploading of the price bid in prequalification bid or technical bid will result in rejection of the tender.

22.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for

submission of tender falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be received up to the appointed time on the next working day.

23. Late Tender

23.1 A tender, which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

24. Alteration and Withdrawal of Tender

24.1 The tenderer, after submitting its tender, is permitted to alter / modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations / modifications to tenders received after the prescribed deadline will not be considered.

24.2 No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender.

E. TENDER OPENING

25. Opening of Tenders

25.1 The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT.

In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.

25.2 **Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.**

The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.

25.3 Two - Tender system as mentioned in Para 21.6 above will be as follows. The **Techno - Commercial Tenders** are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno – Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF TENDERS

26. Basic Principle

26.1 Tenders will be evaluated on the basis of the terms & conditions already incorporated in the TE document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

27. Scrutiny of Tenders

27.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed stamped and whether the Tenders are generally in order.

27.2 The Purchaser's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.

27.3 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. As prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non – responsive and will be rejected.

27.4 The following are some of the important aspects, for which a tender shall be **declared non – responsive and will be summarily ignored;**

(i) Tender form as per Section X (Signed and stamped) not enclosed.
(ii) Tender is unsigned.
(iii) Tender validity is shorter than the required period.
(iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
(v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
(vi) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
(vii) Poor/ unsatisfactory past performance.
(viii) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
(ix) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
(x) Tenderer has not agreed for the delivery terms & delivery schedule.

28. Minor Infirmity/Irregularity/Non-Conformity

28.1 If during the evaluation, the purchaser find any any minor informality and/or irregularity and/or non-conformity in a tender, the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

29 Discrepancies in Prices

29.1 If, in the price structure quoted by a tenderer, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the purchaser feels that the tenderer has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.

29.2 If there is an error in a total price, which has been worked out through addition and/or subtraction of subtotals, the subtotals shall prevail and the total corrected; and

29.3 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 29.1 and 29.2 above.

29.4 If, as per the judgement of the purchaser, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered / speed post. If the tenderer does not agree to the observation of the purchaser, the tender is liable to be ignored.

30. Discrepancy between original and copies of Tender

30.1 In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, the purchaser will convey its observation suitably to the tenderer by register / speed post and, if the tenderer does not accept the purchaser's observation, that tender will be liable to be ignored.

31. Qualification Criteria

31.1 **Tenders of the tenderers, who do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further**.

32. Conversion of tender currencies to Indian Rupees

32.1 In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Tender' opening.

33. Schedule-wise Evaluation

33.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 13.2, the tenderers have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts wherever applicable will be taken into account to determine the lowest evaluated cost for the purchaser in deciding the successful tenderer for each schedule, subject to tenderer(s) being responsive.

34. Comparison of Tenders

34.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on ware house to consignee site basis. The quoted turnkey prices and CMC prices will also be added for comparison/ranking purpose for evaluation.

35. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders

35.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:

i) In the case of goods manufactured in India or goods of foreign origin already located in India, GST/Sales tax & other similar taxes & other similar duties, Customs Duties, etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and

ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.

35.2 The purchaser's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.

35.3 i. In exercise of powers conferred in section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small enterprises effective from 1st April 2012. The policy mandates that 20% of procurement of annual requirement of goods and services by all Central Ministries/Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST entrepreneurs out of above said 20% quantity.

ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down their price to the L1 price, in a situation where L1 price is from someone other than on MSE. Such MSEs would be allowed to supply up to 20% of the total tendered value. In case there are more than one such eligible MSE, the 20%

supply will be shared equally. Out of 20% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir board or national Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being on MSE, failing which their tender will be liable to be ignored.

36. Tenderer's capability to perform the contract

36.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

36.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

37. Contacting the Purchaser

37.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.

37.2 In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

38. Purchaser's Right to accept any tender and to reject any or all tenders

38.1 The purchaser reserves the right to accept in part or in full any tender or reject any or more tender(s) without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

39. Award Criteria

39.1 Subject to GIT clause 38 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by the purchaser in terms of GIT Clause 36.

40. Variation of Quantities at the Time of Award/ Currency of Contract

40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded of to next whole number) without any change in the unit price and other terms & conditions quoted by the tenderer.

40.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded of to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract after one year from the Date of Notification of Award.

41. Notification of Award

41.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing, by registered / speed post or by fax/ telex/cable (to be confirmed by registered / speed post) that its tender for goods & services, which have been selected by the purchaser, has been accepted, also briefly indicating therein the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. **The successful tenderer must furnish to the purchaser the required performance security within thirty days from the date of dispatch of this notification, failing which the EMD will forfeited and the award will be cancelled**. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.

41.2 The Notification of Award shall constitute the conclusion of the Contract. The Notification of Award/ Supply order shall constitute the conclusion of the Contract agreement from date of issue. The Notification of Award/ Supply order will be placed on successful bidder (i.e. manufacture and /or manufacture authorised agent). **The manufacturer and /or manufacture authorised agent shall be jointly and severally liable to perform the all contractually obligations under the agreement**

42. Issue of Contract

42.1 Promptly after notification of award, the Purchaser/Consignee will mail the contract form (as per Section XVI) duly completed and signed, in duplicate, to the successful tenderer by registered / speed post.

42.2 **Within thirty days** from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post.

42.3 The Purchaser/Consignee reserves the right to issue the Notification of Award consignee wise.

43. Non-receipt of Performance Security and Contract by the Purchaser/Consignee

43.1 Failure of the successful tenderer in providing performance security and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC – Termination of default.

44. Return of E M D

44.1 The earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 19.6.

45. Publication of Tender Result

45.1 The name and address of the successful tenderer(s) receiving the contract(s) will be mentioned in the notice board/bulletin/web site of the purchaser.

46. Corrupt or Fraudulent Practices

46.1 It is required by all concerned namely the Consignee/Tenderers/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition

(b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SPECIAL INSTRUCTIONS TO TENDERERS
(SIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

A Preamble

No Change

B TE documents

10. Clarification of TE documents

10.1 During pre bid meeting clarification asked by the bidder will be respond by the purchaser. The Bidder request shall be in writing and submit to HSCC office during pre bid meeting or not later than **three days** from date of pre bid meeting, thereafter the bidder request will be ignore or rejected. The purchaser response (including explanation of the query but without identifying the source of inquiry) will be displayed on the website only www.hsccltd.com.

19. Earnest Money Deposit (EMD)

19.5 The earnest money deposit (EMD)/ bid security shall be valid for a period 415 days from the Techno – Commercial Tender opening date. In case of extension of submission of bid/ tender, the validity of bid security (EMD) may be considered from the original date of submission of bid.

20. Tender Validity

20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of **360 days** from the date of Techno – Commercial Tender opening, date prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

E Tender Opening

Tender opening commitee first open envelop, if no bid Security/EMD bid will be rejected.

G Award of Contract

42. Issue of Contract

42.1 Deleted

47. If a firm quoted NIL charges /consideration, the bid shall be treated as unresponsive and will not be considered.

SECTION - IV
GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.

2. Use of contract documents and information

2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this TE document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.

2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

3.1 The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trade marks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

4. Country of Origin

4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

4.3 The country of origin may be specified in the Price Schedule

5. Performance Security

5.1 **Within thirty (30) days from date of the issue of notification of award by the Purchaser/Consignee,** the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of **minimum 68 months** for Radiotherapy, Nuclear Medicine, MRI & CT and **66 months** for other equipment **from the date of Notification of Award.**.

5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

a) It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to **sixty (60) days beyond Warranty Period.**

5.3 In the event of any failure /default of the supplier with or with out any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.

5.4 In the event of any amendment issued to the contract, the supplier shall, within twenty-one (21) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.

5.5 The supplier shall enter into Annual Comprehensive Maintenance Contract as per the 'Contract Form – B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CMC will commence from the date of expiry of the Warranty Period.

5.6 Subject to GCC sub – clause 5.3 above, the Purchaser/Consignee will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CMC security in favour of Head of the Hospital/ Institute/ Medical College of the consignee as per the format in Section XV.

6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII of this document.

7. Packing and Marking

7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transhipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements under Sections VII and VIII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

a. contract number and date

b. brief description of goods including quantity
c. packing list reference number
d. country of origin of goods
e. consignee's name and full address and
f. supplier's name and address

8. Inspection, Testing and Quality Control

8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, & if same is accepted by purchaser / consignee / PSA/ PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro. Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period.

8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.

8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.

8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.

8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.

8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.

"On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser / consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser / consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for.".

8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.

8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

9. Terms of Delivery

9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery and as per the delivery period specified in the schedule of requirement. Please note that the time shall be the essence of the contract.

10. Transportation of Goods

10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments and/or transhipment without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (at Consignee site) basis terms; the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country through India's forwarding agents/coordinators. In case the forwarding agent/coordinators are unable to provide timely adequate space in Indian flag vessel or by vessels belonging to the conference lines, the supplier shall arrange shipment through any available vessel to adhere to the delivery schedule given in the contract.
In case of airlifting of imported goods offered from abroad, the same will be done only through the National Carrier i.e. Air India wherever applicable. In case the National Carrier is not available, any other airlines available for early delivery may be arranged.

10.2 Instructions for transportation of domestic goods including goods already imported by the supplier under its own arrangement:

In case no instruction is provided in this regard in the SCC, the supplier will arrange transportation of the ordered goods as per its own procedure.

11. Insurance:

11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

i) **in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.**

ii) **in case of supply of the imported goods on CIP Named port of Destination Basis, the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee**.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will be got extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actual will be reimbursed.

12. Spare parts

12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and

b) In case the production of the spare parts is discontinued:

i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and

ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are used during warranty and CMC period.

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13. Incidental services

13.1 Subject to the stipulation, if any, in the SCC (Section – V), List of Requirements (Section – VI) and the Technical Specification (Section – VII), the supplier shall be required to perform the following services.

i) Installation & commissioning, Supervision and Demonstration of the goods
ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
iii) Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
iv) Supplying required number of operation & maintenance manual for the goods

14. Distribution of Dispatch Documents for Clearance/Receipt of Goods

The supplier shall send all the relevant despatch documents well in time to the Purchaser/Consignee to enable the Purchaser/Consignee clear or receive (as the case may be) the goods in terms of the contract.
Unless otherwise specified in the SCC, the usual documents involved and the drill to be followed in general for this purpose are as follows.

A) For Domestic Goods, including goods already imported by the supplier under its own arrangement

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract):

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
(iii) Two copies of packing list identifying contents of each package;
(iv) Inspection certificate issued by the nominated Inspection agency, if any.
(v) Certificate of origin;
(vi) Insurance Certificate as per GCC Clause 11.
(vii) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

B) For goods imported from abroad

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract). **Any delay or demurrage occurred during the customs clearance on account of the non-availability of technical support/ clarifications /documents from the supplier shall be borne by the supplier:**

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
(iii) Four Copies of packing list identifying contents of each package;
(iv) Insurance Certificate as per GCC Clause 11.
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch
(vii) Manufacturer's own factory inspection report;
(viii) Certificate of origin
(ix) Port of Loading;
(x) Port of Discharge and
(xi) Expected date of arrival.
(xii) Any other documents require in order to avoid the demurrage on the goods.

15. Warranty

15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (*except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications*) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The **warranty** shall remain valid for **5 (Five) Years** from the date of installation & commissioning followed by a **CMC for a period of 5 (Five) Years** for all the equipments after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed and commissioned at the final destination and accepted by the purchaser/CONSIGNEE in terms of the contract, unless specified otherwise in the SCC

a. No conditional warranty like mishandling, manufacturing defects etc. will be acceptable.
b. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work
c. Replacement and repair will be under taken for the defective goods.
d. Proper marking has to be made for all spares for identification like printing of installation and repair dates.

15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.

15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non rectification will be applicable as per tender conditions

15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.

15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.

15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods

15.8 **The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.**

15.9 The supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and equipments supplied by them to the purchaser for 10 years from the date of installation and handing over.

15.10 The Supplier along with its Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments supplied to the Purchaser/Consignee.

16. Assignment

16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

17. Sub Contracts

17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

17.2 Sub contract shall be only for bought out items and sub-assemblies.

17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

18. Modification of contract

18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
b) Mode of packing,
c) Incidental services to be provided by the supplier
d) Mode of despatch,
e) Place of delivery, and
f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser/Consignee, the supplier shall convey its views to the Purchaser/Consignee within twenty-one days from the date of the supplier's receipt of the Purchaser's/Consignee's amendment / modification of the contract.

19. Prices

19.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its tender and incorporated in the contract except for any price adjustment authorised in the SCC.

20. Taxes and Duties

20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to the purchaser.
20.2 Further instruction, if any, shall be as provided in the SCC.

21. Terms and Mode of Payment

21.1 Payment Terms

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

A) Payment for Domestic Goods Or Foreign Origin Located Within India.

Payment shall be made in Indian Rupees as specified in the contract in the following manner:

a) On delivery:

80 % payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:

1. Copy of Purchase order, copy of performance security
2. Consignee receipt in original issued by CNCI -Kolkata/Client.
3. Invoice in favour of consignee through HSCC
4. Packing list showing NOA duly vetted by third party inspection agency.
5. Insurance certificate as per tender terms
6. Despatch note issued by HSCC
7. Manufacture's / supplier's warranty certificate
8. Third party inspection agency report viz SGS, Lloyd, Bureau Veritas, TUV prior to despatch.

b) On Acceptance:

Balance 20 % payment would be made on submission of following document:

1. Copy of Purchase order, copy of performance security valid upto tender terms.
2. Copy of consignee receipt
3. Final Acceptance Certificate (Installation & commissioning certificate) in original issued by CNCI -Kolkata on completion of installation & commissioning
4. Insurance certificate as per tender terms.
5. Invoice in favour of consignee through HSCC

B) Payment for Imported Goods:

Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:

a) On Shipment:

Seventy Five (75) % of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Original and four copies of the negotiable clean, on-board Bill of Lading/ Airway bill , marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
(iii) Four Copies of packing list identifying contents of each package showing contract number duly signed & stamped by thirty party inspection agency.
(iv) Insurance Certificate as per tender
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Manufacturer's own factory inspection report and

(vii) Certificate of origin by the chamber of commerce of the concerned country;
(viii) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, TUV & Beauru Varitus, prior to despatch.
(ix) Despatch note issued by HSCC.

b) On Acceptance:

Balance payment of 25 % of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees to the supplier. The supplier shall submit the original final acceptance certificate to the Purchaser (HSCC India Ltd) who shall issue no objection certificate to the banker for payment through irrevocable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any.

In case where the installation and commissioning or final inspection and test at site is delayed for any reason for which consignee is responsible, 25% of the contract price shall become payable, after the expiry of six months from the date of arrival of the last consignment at site subject to submission of a bank guarantee by the supplier for the said amount valid initially for the period of six months. The supplier shall get the validity of the bank Guarantee extended for the further period as and when asked for by the purchaser.

c) Payment of Incidental Costs till consignee site & Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) will be paid in Indian Rupees to the Indian Agent on proof of final installation, commission and acceptance of equipment by the consignee.

d) Payment of Indian Agency Commission:

Indian Agency commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

C) Payment of Turnkey, if any:
Turnkey payment will be made as indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

D) Payment for Annual Comprehensive Maintenance Contract Charges:
The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on **six monthly basis after satisfactory completion of said** period, duly certified by the consignee on receipt of bank guarantee for an amount equivalent to 2.5 % of the cost of the equipment as per contract in the prescribed format given in Section XV valid till 2 months after expiry of entire CMC period.

21.2 The supplier shall not claim any interest on payments under the contract.

21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.

21.4 Irrevocable & non – transferable LC shall be opened by the respective consignees. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.

21.5 The payment shall be made in the currency / currencies authorised in the contract.

21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.

21.7 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.

21.8 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.

21.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:

(a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
(b) Delay in supplies, if any, has been regularized.
(c) The contract price where it is subject to variation has been finalized.
(d) The supplier furnishes the following undertakings:

"I/We, _____ certify that I/We have not received back the Inspection Note duly receipted by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We _____ agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment.

22. Delivery

22.1 The supplier shall deliver of the goods and perform the services under the contract within the time schedule specified by the Purchaser/Consignee in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contarct.

22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:

(i) imposition of liquidated damages,
(ii) forfeiture of its performance security and
(iii) termination of the contract for default.

22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser/Consignee in writing about the same and its likely duration and make a request to the Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:

(a) The Purchaser/Consignee shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.
(b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty, GST/ Sales tax or on account of any other tax or duty which may be levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.
(c) But nevertheless, the Purchaser/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, GST/ Sales

tax or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.

22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser/Consignee for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

22.6 Passing of Property

22.6.1 The Property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.

22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.

22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

23.1 Subject to GCC clause 26, if the supplier fails to deliver any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.

During the above-mentioned delayed period of supply and / or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

24. Termination for default

24.1 The Purchaser/Consignee , without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.

24.3 Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated.

25. Termination for insolvency

25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser/Consignee.

26. Force Majeure

26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.

26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of , the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, acts of the Purchaser/Consignee either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, and freight embargoes.

26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee 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.

26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.

26.5 In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

27. Termination for convenience

27.1 The Purchaser/Consignee reserves the right to terminate the contract, in whole or in part for its (Purchaser's/Consignee 's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser/Consignee. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.

27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser/Consignee following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser/Consignee may decide:

a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or

b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

28. Governing language

28.1 The contract shall be written in English language following the provision as contained in GIT clause 4. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

29. Notices

29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.

29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

30. Resolution of disputes

30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.

30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India. In the case of a dispute or difference arising between the Purchaser/Consignee 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 sole arbitration of an officer in the Ministry of Law and Justice, appointed to be the arbitrator by the Director General (Health Services). The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-)

30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.

30.4 Jurisdiction of the court will be form the place where the tender enquiry document has been issued, i.e., New Delhi, India.

31. Applicable Law

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

32. Withholding and Lien in respect of sums claimed

Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contact made by the supplier with the purchaser, pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above, by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be, and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

32. General/ Miscellaneous Clauses

32.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier/its Indian Agent/CMC Provider on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.

32.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.

32.3 The Supplier shall notify the Purchaser/Consignee /the Government of India of any material change would impact on performance of its obligations under this Contract.

32.4 Each member/constituent of the Supplier/its Indian Agent/CMC Provider, in case of consortium shall be **jointly and severally liable** to and responsible for all obligations towards the Purchaser/Consignee/Government for performance of contract/services including that of its Associates/Sub Contractors under the Contract.

32.5 The Supplier/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Purchaser/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.

32.6 The Supplier/its Agent/CMC Provider shall, at all times, indemnify and keep indemnified the Purchaser/Consignee/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.

32.7 All claims regarding indemnity shall survive the termination or expiry of the contract

SECTION – V

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below.

These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.
Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

1. Bidder must take into consideration in its bid, costs to be incurred for any additional work pertaining to civil, Electrical, Plumbing, sanitary, **Radiation protection as per Govt. regulation/or equivalent as per local statutory conditions ,** servo stabilisers, U.P.S. etc. if required for successful installation testing and commissioning of the system/ equipment in the "All inclusive lump sum price"/ turnkey work.
2. **The contract will be turnkey work**, bidder must take into consideration in its bid, costs to be incurred for supply of equipment from **ware house to consignee CNCI -Kolkata,** installation, commissioning testing, training, third party inspection cost, packing & forwarding cost, all taxes, all duties, custom clearance charges, loading & unloading charges, site visit charges, two year compressive warranty cost including all spare , Indian agent charges, any other required for successful installation & commissioning of system/ equipment.
3. The pre delivery inspection carried out by **third party Inspection agency viz LLOYDS/SGS /Bureau Veritas/ TUV** or any other with same high status inspection agency. The suppler shall arrange III party Inspection agency approved by HSCC. All charges for III party inspection shall be borne by the supplier. Therefore same charges shall take into consideration in its bid.
4. Purchaser's / consignee's contractual right to inspect before issue despatch note.

A. For goods imported from abroad: The stores **(Import origin goods)** should be dispatched only after ensuring inspection carried out by third party Inspection agencies viz. **LLOYDS/SGS /Bureau Veritas/ TUV** and proof of such documents submitted to HSCC for the goods inspected. Inspection. HSCC on receipt of such documents shall issue **Dispatch note**.

To enable HSCC to issue Despatch note, supplier/manufacture is to furnish the following documents in **two sets:**

1. Packing list showing NOA duly vetted by third party inspection agency
2. Manufacture's internal test report.
3. Quality Certificate by manufacture
4. Certificate of origin by the chamber of commerce of the concerned country
5. Warranty certificate by manufacture/supplier
6. Third party inspection agency report viz SGS, Lloyd, Bureau Veritas, TUV prior to despatch
7. Copy of Insurance as per tender document.

No goods (both Indian & Import origin goods) shall be despatched before issue of despatch note issued by HSCC, failing which responsibility (i.e. demurrage charges etc. by the custom department) shall be rest on manufacture/supplier/ its authorised agency in india.

All above documents showing contract number, goods description & LC. The Invoice should in favour of Director, Chittarranjan National Cancer Institute, Kolkata through HSCC. After scrutiny, if the documents found in order, **Despatch note** will be issued to the supplier.

B. For Domestic Goods, including goods already imported by the supplier under its own arrangement

To enable HSCC to issue Despatch note, supplier/manufacture is to furnish the following documents in **two sets:**

1. Packing list showing NOA

2. Manufacture's internal test report.
3. Quality Certificate by manufacture
4. Warranty certificate by manufacture/supplier
5. Third party inspection agency report viz SGS, Lloyd, Bereau Veritas, TUV prior to despatch
6. Copy of Insurance as per tender document

No goods (both Indian & Import origin goods) shall be despatched before issue of despatch note issued by HSCC, failing which responsibility shall be rest on the manufacture/supplier.

All above documents showing contract number, goods description. The Invoice should in favour of Director, Chittarranjan National Cancer Institute, Kolkata through HSCC through HSCC. After scrutiny, if the documents found in order, **Despatch note** will be issued to the supplier.

5. The performance security shall be valid for a **period six (6) months beyond expire of two years warranty period.**

6. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, faling which bid may not be consider.

7. **Insurance:** For delivery of goods at site, the insurance including transit and installation & commissioning insurance shall be obtained by the supplier in an amount equal to **110%** of the value of the goods from "warehouse to warehouse" (final destination – designated consignee place) on "all risks" basis including war, risks, strikes, erection, storage etc. In any event the Goods are at the Supplier's risk until delivery and installation & commissioning at site.

8. Delected

9. **Reimbursement of Custom Duty: CNCI deserves for customs duty exemption through DSIR certificate.** The custom duty amount as mentioned in the price schedule section –XI (B) (convert in INR at the rate of exchange mentioned in bill of entry) will compared with the actual total custom duty amount levied by custom department and reimbursed to the supplier as per below:

   a. If the custom duty amount as mentioned in the price schedule section –XI (B) is equal to the actual total custom duty amount levied by custom department, the actual total custom duty amount levied by custom department shall be prevailed and reimbursed to the supplier in INR accordingly.
   b. If the custom duty amount as mentioned in the price schedule section –XI (B) is more than actual total custom duty amount levied by custom department, the actual total custom duty amount levied by custom department shall be prevailed and reimbursed to the supplier in INR accordingly.
   c. If the custom duty amount as mentioned in the price schedule section –XI (B) is less than the actual total custom duty amount levied by custom department, the custom duty amount as mentioned in the price schedule section –XI (B) shall be prevail and reimbursed to the supplier at rate of exchange rate mentioned on the bill of entry in INR accordingly.

10. The Tenderer shall furnish copy of all Purchase Orders (complete with specifications and prices) in their Technical Bid for the same model supplied to Govt. Hospitals/PSU Hospital/UN Agencies/Govt. Labs/Corporate Hospitals in the last one year from the date of Technical Bid opening.

11. Manufacture/supplier/ its authorised agency in India shall entirely responsible to safely delivery/handing over the goods from ware house to consignee.

12. Manufacture/supplier/ its authorised agency in India shall entirely responsible for custom clearance/ any statuary compliance etc. however necessary support/document will be provided by HSCC/ **CNCI -Kolkata** if required.

SECTION - VI

Required Delivery Schedule:

a) For Indigenous goods or for imported goods if supplied from India:

(i) Delivery period for Radiology, Radio therapy Equipments: **90 days** from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.
(ii) Installation and commissioning period Radiology, Radio therapy Equipments:- **90 days** for receipt of the stores/ goods delivery at site or **90 days** from handing over the site or instruction for installation, whichever is later.
(iii) Delivery period for other Equipments: **60 days** from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.
(iv) Installation and commissioning period other Equipments:- **60 days** for receipt of the stores/ goods delivery at site or **60 days** from handing over the site or instruction for installation, whichever is later.

b) For Imported goods directly from foreign through LC:

(i) Delivery period for Radiology, Radio therapy Equipments: **90 days** from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.
(ii) Installation and commissioning period Radiology, Radio therapy Equipments:- **90 days** for receipt of the stores/ goods delivery at site or **90 days** from handing over the site or instruction for installation, whichever is later.
(iii) Delivery period for other Equipments: **60 days** from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.
(iv) Installation and commissioning period other Equipments:- **60 days** for receipt of the stores/ goods delivery at site or **60 days** from handing over the site or instruction for installation, whichever is later.

The Time lapse on the part of HSCC approval/ CNCI -Kolkata approval / local statutory approval / issue of CDEC /DSIR Certificate/ Despatch Clearance/note will not be count for delivery period and site not ready/ site not handed over will not be count for installation period.

Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.

NOTE:

1. The bidders are advised to ship / deliver the equipments / items, only after obtaining "Permission to Ship" from HSCC in writing. If the bidder ship the equipments / items without obtaining permission, then the cost towards demurrage, warehouse charges etc has to be borne by the bidder only.
2. **For Imported goods directly from abroad:** The foreign tenderers are required to quote their rates on CIP Named Port of Destination Basis giving break up of the price as per the Proforma prescribed in the Price Schedule. Purchaser will place the order on Consignee basis. The shipping arrangements shall be made by the supplier accordingly.

Section – VII
Technical Specifications

	Technical Specification of 3 MRI System at CNCI 2nd CAMPUS, KOLKATA
	Quoted Model :
	'State of the art' Whole Body 3.0 Tesla Magnetic Resonance Imaging System optimized for all body applications, including musculoskeletal, vascular, pediatric, hepatobiliary, abdominal, cardiac and neurological applications with super conducting magnet, high performance gradients and digital Radio Frequency System. The manufacturer/ bidder must quote the latest 'state of the art' 3 Tesla MR system as per the specifications below or better. Latest model to be quoted; If any new model in the same series with better specifications is launched in RSNA, then the same should be quoted. Model should be US-FDA approved
	Please mention the year of launch of the quoted model offered should be latest RSNA November 2015 launch –or later the manufacturer will guarantee the latest available model at the time of delivery. The detailed specification that follows shall be understood to be minimum requirement.
	The offered model should be US FDA approved. Authentic and legible certificate for the same should be annexed.
	The scanner supplied should not have any refurbished/recycled parts/accessories.
1	**Magnet**
A	3.0 T active shielded super conductive magnet should be short and non-claustrophobic.
B	It should have at least 70 cm patient bore with flared opening.
C	Magnet length should be less than 200cm.
D	Homogeneity of the magnet should be better than 1.5 ppm at 40 cms (guaranteed homogeneity)
E	The magnet should be well ventilated and with in-bore illumination with built in 2 way intercom for communication with patient.
F	It should have a built in cryo-cooler such that helium consumption is minimized and does not exceed 0.05 litre/hour.
G	Specify hardware and software for acoustic noise reduction.
H	Active shielding/ Fringe field - quote values for 5 Gauss and 1 Gauss line.

I	External shielding - external interference shield (sufficient to house the magnet, anaesthesia and physiologic monitors) should be provided.
2	
A	High performance, highly stable shim system with global and localized manual and automated shimming including 3D shimming for high homogeneity magnetic field for complete imaging, volume imaging & CSI and spectroscopy.
B	Auto shim should be available to shim the magnet with patient in position
3	**Gradient System**
A	Actively shielded Gradient system in X, Y, Z planes
B	Amended : The gradient should be actively shielded with each axis having independently a slew rate of at least 200 T/m/s and a peak amplitude of 44mT/m
C	The system should have efficient and adequate Eddy current compensation.
D	Effective cooling system for gradient coil and power supply
E	Silent MRI" sequence package. Please specify the decibel levels for silent MRI and list the sequences where silent MRI not available to be included in standard package.
4	**RF System**
1.A	Amended a (1) A fully digital RF system capable of Multi Transmission with 2 amplifiers of at least 15kW each or one amplifier of 30 kW, to reduce magnetic susceptibility artifacts. B1 in homogeneity correction should be possible. Vendor has to elaborate on technology used to improve organ specific the B1 homogeneity
2.A	If the vendor has additionally technology like Zoom it/FOCUS or equivalent for selective excitation within a user specified FoV, the same should be quoted. True shape and true form or equivalent technology such as multi drive/multi transit 4D to be quoted.
B	It should also have at least 32 independent RF receiver channels "acquisition" with each having bandwidth of 1 MHz or more along with necessary hardware to support quadrature array / Matrix coils.
C	It should support Parallel acquisition techniques with a factor of 12 or more. Highest available PAT factor to be quoted.

D	Should allow remote selection of coils and or coil elements.
E	The operating frequency should cover 1H and 31P nucleus (for multinuclear spectroscopy 1H and 31P)
5	**Patient Table**
A	Patient table should be fully motorized with computer controlled table movements in vertical and horizontal directions. (Specify the patient load capacity).
B	A CCTV system with LCD display to observe the patient should be provided
C	Emergency manual traction of the subject from the magnet.
D	Table technology - (1) Bolus chasing with automatic/ continuous moving table should be offered and should be available with fluoro triggered MR angiography for manual and fast switchover in less than 1 second for CE-MRA
2.	Latest table technology available with the vendor (globally) should be quoted (eg. TIM-CT, etc.) as optional. (Price for point 2 will not be considered for calculation of L1)
6	**Computer System /Image Processor Operator Console**
A	The main Host computer should have a 19 inches or more high resolution LCD TFT color monitor with 1024 x 1024 matrix display. The system should have image storage capacity of 100 GB for at least 2,00,000 images in 256 x 256 matrix.
B	The Image reconstruction speed should be at least 1300 images/second or more for full FOV 256 matrix.
C	The main console should have facility for music system for patient in the magnet room. The system should have DVD / CD/ Flash drive archiving facility. Supply 1000 DVD along with the system. The system should be provided with auto DVD writer. MRI system should be enabled and networked to RIS/HIS

D	Patient monitoring devices for ECG, respiratory rate, pulse rate, O2 saturation at console.
7	**Measurement System**
A	Largest Field of View should be at least 45 cm in all three axis. Specify the maximum and minimum FOV.
B	The measurement matrix should be from 128x128 to 1024x1024. Highest matrix available to be quoted.
C	Minimum 2D slice thickness mm should be equal to or less than 0.5
D	Minimum 3D slice thickness mm should be equal to or less than 0.1
8	**Coil System**
	The main body coil integrated to the magnet must be Quadrature/CP of the latest technology.In addition to the in-built body coil, following coils should be quoted. All coils (other than coils for exclusive spectroscopy, like surface coils) should be compatible for parallel acquisitions. The vendor should supply latest coil (with maximum channels and elements) with the best technology available with them at the time of tender submission.
i	Multichannel Head coil with 32 channels or more for EPI/DTI application.
iii	Neuro-vascular Coil with 20 or more channels or Head / Neck Coil combined, capable of high resolution neuro-vascular imaging or combination of head & neck coil for similar coverage.
iii	Spine Array/Matrix Coil for thoracic and lumbar spine imaging with at least 32 channels acquisition per exam
iv	Body Array/Matrix coil with at least 40 cm z axis coverage for imaging of abdomen, with at least 32 channels Acquisition for body part angiograms and heart. In case one coil cannot provide this coverage then multiple coils should be offered. (The best available body coil with the vendor must be supplied)

v	Suitable surface coil for peripheral angiography application of at least 32 channelsSuitable surface / phased array coil for peripheral angiography application of at least 32 channels with coverage of minimum 80 cm, with single or combination of coils. For Angio application if the coils offered are in combination it will be counted as 1 coil for the purpose of peripheral angiography.
vi	Bilateral Breast Coil with at least 16 channels with fully functional spectroscopy.
Vii	Dedicated Shoulder Coil- at least 16 Channel or more.
viii	Dedicated Knee Coil - at least 15 channels or more. If transmit receive coil is available the same should be quoted.
ix	Dedicated Wrist Coil - 8 channels
	xi Flex Coil
	Large (2 quantity) - 4 channel
x	Small (2 quantity)- 4 channel
xi	Small flex coil for pediatric and neonatal head and neck applications- 8 channels or more
xii	Dedicated Ankle Coil with 16 channels or more.
	TOTAL COILS - 15 Nos.
xiii	For Storage of all coils a caddy to be provided.
xiv	The coil system should permit coverage of 200cm
	The system should continuously monitor the RF coils used during scanning to detect failure modes. (RF coils should not require either set up time or coil tuning; Multi coil connection for up to 2 or more coils simultaneous scanning without patient) repositioning. i.e. like 4GTIM/GEM/D stream coil combination should be quoted as standard.
9	**Application Package**
	Data acquisition:
i	The system should be capable of 2D and 3D acquisitions in conventional, fast and ultrafast spin echo and gradient echo modes so that real-time online images can be observed if needed. All the sequences that are available with the vendor at the time of quote/delivery should be provided as per their manual.
ii	2D multi-slice imaging should be possible in all planes (axial, sagittal, coronal, oblique and double oblique)
iii	Up to 1024 x 1024 matrix acquisitions preferred for all applications
iv	Half Fourier or other techniques to reduce scan acquisition time while maintaining adequate SNR

v	3D volume, multiple contiguous slabs, multiple interleaved and multiple overlapping slabs
vi	Slice thickness in 2D and partition in 3D to be freely selectable
Vii	Dynamic acquisition (serial imaging) with capability to initiate scan sequences either from the magnet panel or from the console
viii	Dynamic acquisition: number of repeat scans with delay time either identical time interval or selectable
ix	Auto slice positioning from the localizer images
x	Maximum-off center positioning both anterior-posterior and lateral direction and should be selectable
xi	Gating: physiological signals like ECG, pulse, respiratory
xii	External signal triggering (interface for triggering input pulse from external source). The provision should be available at the console also (for fMRI, EEG, etc.)
Xiii	Simultaneous acquisition, processing and display of image data in 2D multi-slice mode.
xiv	Selection of voxels from oblique slices should be possible while doing spectroscopy.
xv	Artifact reduction/ imaging enhancement/ image filtering/ image subtraction/addition/multiplication/ division techniques:
xvi	Flow: 1st and 2nd order flow artifact compensation
xvii	Presentation slabs: a number of relocatable saturation bands to be placed either inside or outside the region of interest
xviii	Graphic prescription
xix	Fat saturation techniques: frequency selective RF pulses to suppress fat signals in the measured image FOV. ROI selective (regional) fat suppression should also be given.
xx	Magnetization transfer saturation: Off resonance RF pulses to suppress signals from stationary tissue in FOV.
xxi	Phase contrast capability in 2D and 3D mode: Image intensity correction.
Xxii	Breath hold acquisition

xxiii	EPI mode
xxiv	DTI with MDDW or equivalent with a minimum of 12 and selectable up to 64/256 direction encoding
xxv	Data acquisition in all three standard planes (axial, sagittal and coronal) and oblique and double oblique planes or more oblique planes
xxvi	Higher matrix acquisition capability in single shot EPI. Acquisition time, TR, TE and slice thickness should be clearly mentioned and supported by data sheet reference.
Xxvii	The vendor should offer multi coil acquisition in order to optimize throughput increase and increased effective FOV. Individual acquisition elements of every coil should be mentioned.
	Imaging pulse sequences:
i	All standard and special pulse sequences available at the time of quote/delivery should be offered and quoted in the bid. Fat suppression for high quality images both inversion recovery and Dixon method/ IDEAL/ 3D Dual Echo/ m-Dixon. The system should acquire motion artifact free images in T2 studies of the brain in restless patients (Propeller, Multivane, Blade, etc.). Dynamic study for pre and post contrast scans and time intensity studies.
ii	The system should be capable of selecting TR and TEs as per requirement in majority of the pulse sequences.
iii	Spin echo (SE): multi-slice single echo, multi-slice multi-echo (8 echo or more), SE with symmetrical and asymmetrical echo intervals and fast spin echo. MT-SE imaging sequence.

iv	Inversion recovery (IR): including short T1 modified IRSE, FLAIR, DIR (Double inversion recovery).
v	Gradient echo (GE): with transverse gradient/ RF spoiling and transverse gradient rephrasing, e.g., GRASE or equivalent etc. 3D gradient echo with shortest TR and TE, free choice of angle selection, while maintaining SNR
vi	Fast sequence
vii	Fast spin echo and GE sequences in 2D and 3D mode with T1,T2 and PD contrast capable of acquiring maximum number of slices with a given TR at minimum TE, echo train should be at least 256 or more in fast spin echo mode
viii	Half Fourier acquisition capabilities should be available with/without diffusion gradients and in combination with fast spin echo
ix	Fast inversion recovery with spin echo
x	Fast gradient spin echo IR multi-slice multi-echo mode with maximum ETL. Sequences should incorporate RF focusing to acquire ultra-fast gradient spin echo
xi	Fast gradient echo sequences should incorporate RF spoiling and other technique to acquire images in ultra-fast 2D and 3D modes, gradient echo with ETL of 255 or more.
xii	Fat and water suppressed imaging sequences
xiii	EPI optimized sequences (with and without fat suppression) with ETL of 255 or more.
xiv	For T1, T2, PD imaging, perfusion, regular diffusion values (at least 5b, 3 directions) EPI-FLAIR, EPI-IR, EPI-FLAIR diffusion tensor, EPI-MT-FLAIR, tensor diffusion (at least 16 b values in minimum 32 directions) and diffusion studies. Suitable artifact/ fat suppression techniques to be incorporated in the sequence to have optimum image quality.
xv	There should be capability of calculating ADC map(isotropic and anisotropy from the regular diffusion and tensor data)
Xvi	Optimized sequence package for special applications.
	Special application packages:
I	
	Please give details of licensees for acquisition post-processing and for special packages quoted for the following applications
A.	**Neuro Applications**
1	Functional MRI accessories and post-processing:

i	i Functional Imaging with package for BOLD Imaging and spectroscopic imaging and processing package capable of real-time processing and display of color overlay (in real time) using 32-channel head coil being supplied with the system.
ii	ii Complete MRI solution including audio-visual projection system
iii	iii The audio-video projection system should have the capability to project movies to the subject, and should be compatible with the 32 channel head coil, and should include all attachments that may be required for complete integration
Iv	The system should be integrated with stimulus presentation/ paradigm generator along with licensed software (like super lab, eprime, presentation, etc.) which is capable of presenting audio-visual, audio, video (multiple formats), etc.
V	The paradigm presentation should be synchronized with the scanner (for starting and ending along with measurements)
Vi	Integration and provision near the console for external trigger (of the sequence) for synchronizing MRI acquisition with paradigm
Vii	Post-processing work station / server with post-processing software and hardware associated, with licences for processing the BOLD data (with required licensed operating platform required like MATLAB, IDL, etc.)
Viii	The entire MRI hardware package should be from a single vendor for complete integrated solution. Please specify the vendor.
2	2D/3D Arterial Spin labeling
3	Perfusion imaging of brain with software for rBV, CBV etc analysis.
4	Susceptibility weighted imaging with phase information (i.e. SW1/SWIp/eSWAN 2.0)/Venous BOLD Imaging
	Multi Direction DTI with minimum of 32 directions. (Complete package including DTI quantification and tractography software). Prospective motion correction enabled software preferred. Spinal tractography should also be possible.
5	T2 Relaxometry and volumetric analysis for Hippocampus

6	3D-T2 weighted Turbo Spin for volumetric acquisition reconstructed in any plane e.g. for lumbar spine and for nerve root analysis
7	High resolution imaging for inner ear. Please specify sequences eg. CISS or equivalent
8	The system should have facility for flow quantification of CSF aqueduct, spinal canal, vessel flow. Both retrospective and prospective gating should be possible.
9	Whole spine imaging with fusion software.
10	Real time Brain Wave, Pre Acquisition / post processing or Inline BOLD or BOLD Specialist.
11	Sequences such as Double Inversion recovery for "Plaque Imaging' in Carotids to be provided.
12	MR ventriculography, cisternography, myelography
B.	**Cardiac applications: (optional)**
1	Advanced Cardiac Applications: ECG gating, Morphology/wall motion; Cine perfusion imaging; Myocardial viability imaging; Arrhythmia rejection techniques, Advanced Cardiac Ventricular Measurement Analysis; Cine Cardiac Tagging Techniques; Coronary artery techniques; real time interactive imaging, 2D/3D fast field echo/balanced/steady state techniques. Myocardial tagging, STIR for cardiac use, stress perfusion, 3D acquisition of whole heart in one breath hold. Complete cardiac evaluation package to be included on the workstation, besides the main console. 2 T1, T2, T2 quantification. Tools for evaluation in real time with automated guidance
C.	**Musculoskeletal:**
1	High resolution imaging for cartilage and musculoskeletal imaging. Parametric MAP be available. dGEMERIC or equivalent, radial imaging for menisci and labrum
2	The system should have software package for evaluation of bone marrow.
3	Whole body screening imaging studies for metastasis.
D.	**Hepatobiliary and abdominal system.**
1	High resolution Abdominal and Liver imaging in breath hold and free breathing modes with respiratory triggered volume acquisitions with navigation, liver iron quantification and liver fat quantification software, and spectroscopy

2	The system should have basic and advanced MRCP packages including free breathing and 3D techniques.
E.	**Vascular Imaging**
1	MR angio Imaging Should have 2D/3D TOF, 2D/3D Phase contrast (with and without gating and magnetization transfer saturation), black blood angiography for cerebral, pulmonary, abdominal and peripheral vessels and TONE, ceMRA, Facilities for high temporal and high resolution 4D angio imaging for time resolved vascular imaging with imaging frame of 40 frames/sec or more.
2	Bolus chasing with automatic and manual triggering from fluoroscopy mode to 3D acquisition mode with moving table facility for whole body application. Specify table movement. Inline subtraction should be available.
3	Non contrast enhanced peripheral angiography for arterial flow with Native/ Trance/inhance sequences.
4	Time resolved angiography with contrast kinetics like 4D TRACKS/ 4D BLISS/KTblast / TRICKS /TWIST or equivalent
5	Perfusion study in organ systems like kidney, brain, heart etc. with T1 perfusion with permeability maps, and quantification of rCBF/ rCBV, MTT, etc, with color maps.
F	Breast Imaging:Advance package including diffusion, spectroscopy and perfusion with time intensity curve.
G	**Diffusion Weighted Imaging** with at least b value of 7000 or more. Whole body diffusion weighted imaging with background suppression
	Whole body screening imaging studies for metastasis. The system should have facility for flow quantifications of CSF, vessel flow and hepatobiliary system
H	**Spectroscopy:**

	The system should have the Hydrogen, Single Voxel spectroscopy, Multivoxel, Multislice & Multi-angle 2D, 3D Spectroscopy and Chemical Shift imaging in 2D / 3D.The complete processing / Post processing software including color metabolite maps should be available on main console and the workstation and each of the five clients. Complete prostate, breast, liver spectroscopy hardware and applications should be provided. Spectroscopy phantom for important short echo time neurometabolites, breast and prostate Water and lipid suppression in automated sequences.
I.	Prostrate Imaging with Parametric cards (Ktrans, Kep, Ve, Vp)- quote this as optional and price will not be included in calculation for L1.
J	(1) Workflow improvement Techniques with availability of "Previous Scans" such as Smart Exam/ Auto Align /Ready for Brain applications to be provided.
	(2) Integrated exam planning should be possible. All filming, viewing and export options should be possible. Optional price for breast, joints including shoulder, hip, knee and for other applications to be provided.
	(Price for point (2) will not be considered for L1 calculation).
10	**Additional software and hardware & Accessories (price to be mentioned separately not to be included in price for calculation of L1**).
I	Multi Nuclear Spectroscopy: Facility of P31 Imaging & Spectroscopy. Double tuned surface coil for P31 Imaging and spectroscopy for brain &breast.
Ii	Double tuned head coil for 31P and 1H spectroscopy. The operating frequency should cover 1H and 31P nucleus (for multinuclear spectroscopy 1H and 31P) to be quoted as Optional
iii	MR elastography.
Iv	MRI- HIFU complete system with application for fibroid, prostate, bone etc.
V	"Silent MRI" sequence package. Please specify the decibel levels for silent MRI and list all the sequences with their acquisition time where silent MRI is not available.
Vi	TIM whole body suite. Any other hardware, software application packages with the tender to be quoted.

Vii	Breast coil, biopsy attachment – 4 channels.
Viii	Carotid coil/ Suitable coil for carotid plaque imaging.
ix	Coil for Cardiac application
11	**Additional workstation**:
	Client server architecture-server with 5 concurrent clients (Dexus, Intelligence Portal, Syngo.via, etc. or higher) capable of rendering 40000 images at peak performance.Workstation hardware should be industry standards, and should be the latest with the vendors, as per their globally launched product catalogue.
A	A Server workstation with preferably the same user interface as of main console is required with the availability of all necessary software including.
I	Basic post-processing software including MIP, MPR, surface reconstruction and volume rendering technique, Image fusion , 3D evaluation on all five concurrent clients.
Ii	Advanced post-processing offered applications including FMRI, perfusion quantification, advanced diffusion and DTI, advanced cardiac evaluation(EF, Calculation, Wall motions, analysis) including perfusion analysis, processing of 2D/3D CSI data, with color metabolite mapping, quantification of CSF flow data, vascular analysis package on at least two clients concurrently.
iii	The system should support the DICOM print service class as a service class user (SCU)
Iv	Workstations support the DICOM query and Retrieve SCU
V	Workstation should retrieve MR spectroscopy images.
B	desktops with i7 , 6th generation , Intel Processor , 8 GB DDR3 RAM, 500 GB SSD (Solid state Drives) 1 TB HDD 24" LED Medical Grade Monitor - Total five Clients Each of the client should enable printing in laser film camera and color printers. Total 5 client hardware and software to be provided.
C	The offered System is to be networked with the then existing "Department Network" including PACS. Appropriate anti-virus protection to be provided by the Vendor. The vendor should provide picture storage and archival system, to store and retrieve MR images
D	The system should have DICOM 3.0 compliant interface and enabled for networking connectivity to Linux/ Windows based servers/ clients with patient ID labelling and integration to generic hospital information system/ PACS
	Module for scheduling and imaging

	Modality, exam date and time will be fixed during scheduling of the exam Appointment letter with patient instructions will be printed from RIS and given to patient for OPD patients, ward patients, critical patients and VVIPsDWL licences to plan, perform and document examinations Statistics of exams, etc.
G	The workstation should be enable printing in laser print camera and colour printer
12	**Safety Features**
	The System should have following safety features
A	The magnet system should include an Emergency Ramp Down unit (ERDU) for fast reduction of the magnetic field with Ramp Down time below 3 minutes.
B	The magnet should have quench bands that contain the fringe fields to a specified value in the event of a magnet quench
C	Real time SAR calculation should be performed by software to ensure that RF power levels comply with regulatory guidelines and are displayed on each image
D	The system shall have manual override of the motor drive for quick removal of the patients from the magnet bore
E	Temperature sensor (built in) for magnet refrigeration efficiency must be provided
13	**Accessories**
A	DICOM compatible Dry Chemistry laser camera (1 No.s) with integrated processor for filming from main console & workstation. The camera should be capable of printing on films of 14" x 17", 11" x 14" and 10" x 8" sizes in a resolution of 600 or more dpi. It should be possible to connect other imaging modalities to the printer. 2000 compatible films to be provided. Films to be provided after installation as and when required by the user. Main equipment (MRI) in the emergency block to be networked with cameras of CT and DRF camera in the emergency block
B	A color laser printer for printing high-resolution color-coded 3D images and protocols on plain paper in 1200 dpi resolution or more than 20 ppm or alternatively a dedicated color printer for medical images

C	The UPS system should be provided for complete MRI unit with Chiller and emergency lights with at least 30 minute back up, preferably 150 kVA or more (specify kVA). An emergency door or hatch should be provided in RF cabin.
D	RF Cabin: The system should be supplied with the imported RF cabin with RF room shielding, RF Door screen, and interiors for the same should be carried out suitably.
E	Dual Head MRI-Compatible Pressure Injector (minimum 2000 Gauss line) with 500 sets of syringes (Two syringes & connecting tubing per set). It should be compatible with 50 ml syringes for both saline and contrast
F	Non-magnetic I/V stand
G	G Water Chiller for Cold Head and Gradients
H	Two Non-ferromagnetic MR compatible patient transfer trolleys should be globally repudiated make
I	Fire Fighting System, Detectors and 6 Fire Extinguishers (MR Compatible)
J	Hand held metal detectors - 2 Nos
K	Closed circuit CCD camera for patient observation.
I	Phantoms for image quality audits
M	Defibrillator Biphasic with ECG recording with Adult and Paediatric paddles
N	MR Compatible Infusion Pump (2000 Gauss Line)
O	Patient positioning accessories with hand held alarrn & look-out mirror.
P	MR Compatible Transport Ventilator. (1000 Gauss Line)
Q	Two desktops with i7 , 6th generation , Intel Processor , 8 GB DDR3 RAM, 500 GB SSD (Solid state Drives) 1 TB HDD 24" LED Medical Grade Monitor with two laser Printers of 600 dpi, UPS & Dictaphone
R	SPECIFICATION FOR MRI COMPATIBLE ANAESTHESIA MACHINE (1000 Gauss Line) & MRI COMPATIBLE MONITOR or (1000 Gauss Line)

12	**MRI COMPATIBLE ANAESTHESIA MACHINE SPECIFICATIONS: (Minimum 1000 Gauss Line)**
A	Should be MRI compatible at 3T, antistatic,heavy frame & base with good quality castors with front brakes, with following features
I	Three gas model viz Oxygen, Nitrous oxide and Air.
Ii	Should be compact, ergonomic, easy to use and easy to maintain.
iii	. Should have separate fresh gas outlet for use in open circuit.
Iv	.Machine should have flow meters for Oxygen, Nitrous oxide and air. Emergency Oxygen flush should be available. There should be facility to select oxygen-air or oxygen-nitrous oxide with the help of a separate switch or knob.
V	Dual flow sensing capability at inhalation and exhalation ports.
Vi	Should have paramagnetic/ galvanic cell oxygen sensors. In case of galvanic cell sensors, the firm should supply free sensors for the entire warranty period of 5 years. In case of Paramagnetic sensors, the firm shall ensure that there is no down time during repair of these sensors (if necessary) and provide a standby alternative.
Vii	. Shall have back-up Oxygen Control which provides an independent fresh gas source and flow meter control in case of failure.
Viii	Pressure regulators shall be of modular design.
ix	Should have oxygen fail safe device & an auxiliary built in oxygen flow meter.
X	Electronic or Mechanical Hypoxic Guard to ensure minimum 25% Oxygen across all O2–N2O mixtures and Oxygen Failure Warning.
	Vaporizers:
Xi	Facility of mounting minimum two Vaporizers, latest technology , key filler, selectatec type, tool free installation ,meaning any vaporizer of our choice can be mounted at will with interlocking facility.It should be preferably of the same make as that of machine.

Xii	Temperature ,pressure and flow compensated with high accuracy of delivered concentration of volatile anesthetic agent. Should be maintenance free.
Xiii	Two Vaporizers should be supplied (Isoflurane ,Sevoflurane).
	Ventilators:
Xiv	The Machine should have an Integrated Anesthesia Ventilator System, facility to vary respiratory parameters and should be able to ventilate adult and Pediatric patients including infants.
Xv	Ventilator should have Controlled ,Manual, Spontaneous modes and provision for PEEP.
Xvi	Tidal volume (inspired and expired) respiratory rate ,1 :E ratio, minute volume Airway pressure & FiO2 should be continuously displayed.
Xvii	Should have Tidal volume and fresh gas compensation mechanism.
Xviii	Audio-visual alarms for high and low settings of Pressure, volume and disconnection should be present.
Xix	Tidal Volume (VT) 20-1500ml (Volume Control) ,Rate atleast 4-80 BPM.
Xx	Inspiratory / Expiratory ratio (I :E) 2:1 to 1:6 &Peak Flow -100 to 120
Xxi	Ventilator should have at least 30min rechargeable battery backup for ventilator.
Xxii	Machine should have an integrated breathing circuit with circle absorber of good quality, easy to clean, autoclavable , fewer parts to reduce leaks.
xxiii	Machine should have mounting capability of One O2 and one N2O pin-indexed cylinder
Xxiv	Adult autoclavable (2 sets) breathing circuits & one paediatric circuit to be provided.
Xxv	The Machine should be equipped with AGSS.
B)	**MRI COMPATIBLE MONITOR (Minimum 2000 Gauss Line)**
	Specifications for MRI compatibility:
I	Monitor should be quipped with MRI shielding and set to Remote Communication Mode.
Ii	Should be MRI compatible (Safe will not be acceptable) at 1000 Gauss, 3.0 Tesla and 4W/Kg SAR.

iii	System should include fiber–optic SPO2 finger sensor, MRI compatible ECG Patient Leads and Electrodes, NIBP cuffs, hoses and etCO2 sampling kit and temperature probe.
	General Specifications for Monitor:
I	The Monitor should have adult and neonatal application and should be user friendly.
Ii	It should be capable of monitoring ECG, non-invasive blood pressure ,oxygen saturation (SpO2) ,ETCO2 and temperature.
iii	. It should have an internal battery which should last for 30-40 min.
Iv	It should be operational at wide temperature (10 degree Celsius – 40 degree Celsius) and humidity (20% to 90%).
V	It should have a facility of 24hours data storage of trended parameters and trend graph of 1,2,3,6,12 or 24 hours display format.
Vi	Should have a facility to deactivate all the alarms if necessary.
	ECG Monitoring: Essential Specification:
I	Available leads : I,II,III,V,AVR,AVL,AVF with facility for recording 12 lead ECG.
Ii	Should display one or all the selected leads at a time.
Iii	Accuracy of +- 5% of the rate.
Iv	Monitor Mode : Digital Signal Processing (DSP).
V	T-Wave suppression for high field MRI.
Vi	Should have arrhythmia monitoring facility.
Vii	Should have user selectable alarms.
	Heart rate measuring ranges 15-300 beats/min.
Viii	**Pulse Oximeter (SPO2):**
I	Should provide a digital value of the arterial oxygen saturation as well as diagnostic plethysmographic pulse waveform.
Ii	Measurement range : 0% to100%.
Iii	User Selectable upper and lower alarm limits.
Iv	Probes with finger and ear sensors for adult, paediatric and neonatal use.
V	Should be sensitive and function accurately even at low perfusion states of low blood pressure or hypothermic conditions.
	ETCO2 Monitoring:
I	Should have side stream Carbon di-oxide module and display both graphically and numerically.

Ii	Single beam ,non-dispersive infrared (NDIR) absorption, radiometric measurement, no moving parts.
Iii	. Initialization time less than 10 seconds, full specifications within 1-2minutes.
Iv	Carbon di-oxide range should be 0 to152 mm Hg barometric pressure supplied by module itself.
V	Should be able to detect breath rate in the range of 2-150 BPM.
Vi	Respiratory rate accuracy should be + 1 breath.
Vii	Barometric Pressure auto compensated from 400mm Hg to 850mm Hg.Operator selectable O2, N2O,HE and Agent Compensation.
Viii	. No routine user calibration required. An offset calibration should run automatically when the ambient temperature is not stable.
ix	Sampling line should have both nasal sampling line and extension sampling line.
X	x Warm up time 10seconds.
	Temperature Monitoring:
I	Measuring range: 5 to 50 degree Celsius.
Ii	Accuracy + 0.1 degree Celsius.
Iii	User Selectable upper and lower limit of alarm.
Iv	Core and skin probes.
	Non-Invasive Blood Pressure (NIBP) monitoring:
I	Should automatically sense infant / adult cuffs and set appropriate inflation pressure and safety limits.
Ii	Operating Modes : Automatic ,Manual ,Stat.
Iii	Accessories ,NIBP cuff :
	1 Adult for thigh and arm.
	2 Paediatric
	3 Neonatal
14	**Guarantee**
I	Principals and Indian counterpart. The Principals should be responsible for any lacuna or deficit in service or supply.
I	All items in the supply order should be supplied during the time of installation, No exceptions will be allowed .Items under Research .Agreement should be finalized well in advance (after receipt of supply order). So that there is no delay in delivery of software or coil or any other accessories.

Ii	Software updates (where hardware upgrades are not required)like new pulse sequence, new application package etc. should be provided within one month after release worldwide (any country,viz. north America/ Europe/Germany etc).In case, the same is not provided in time, the parent company should undertake the responsibility to implement the same. This is to make sure that the machine stays updated with similar products for at least 5years.
	WARRANTY PERIOD
I	The equipment should have 5 years warranty from the date of handing over the fully functional unit of all coils and the accessories supplied (such as UPS,AC,, etc)\ to the hospital against manufacturing defects of material and workmanship. The Helium Supply and cold head repairs (including replacement. If needed) should be included in the warranty period.
Ii	Even during the warranty period, the desired uptime of 95% of 365 days (24 hrs basis) will be ensured. In case the down time exceed the 5% limit, Penalty will imposed as per bid document.
Iii	Note any Liquid Helium due to quenching or due to any other causes during the warranty period shall be borne by the firm.
Iv	If any particular coil is not working resulting in non functioning of a particular clinical application for more than 3 days it will be considered as downtime .
	POST GAURANTEE ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT (CMC)
v	The post –warranty (after 5 years) CMC should be comprehensive and should include helium and cold head (repair and/ or replacement) + labour + spares for the complete system which includes all the accessories supplied such as UPS, AC, etc. (including all consumables like batteries for UPS,.) and maintenance for another 5 years. This CMC should be quoted in Indian Rupees.
vi	**The price of post warranty 5 years CMC shall be taken for price comparison. Price of all optional items must be quoted separately and will be taken into consideration of final price bid evaluation for L1**

vii	**Penalty clause:** Penalty at the rate of RS.15,000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year. **Uptime guarantee:** During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.15,000 / per day. **Calculation of uptime** The machine shall remain in working condition/fully functional for minimum 347days (being 95% of 365 days) during the year. For leap year, the machine shall remain in working condition/fully functional for minimum 348 days (being 95% of 366 days) during the year. Sunday and other holidays as per the institute policy would be counted calculation of uptime, if the machine was in working condition/fully functional on both days i.e the day preceding Sunday/holiday and the day succeeding Sunday/holiday. Further, routine maintenance as per scheduled agreed by user would be counted towards calculation of uptime. In case downtime is more than 5 hours on any particular day during normal working hours of the institute the same day would not count towards uptime calculation. **Calculation of down time** Down time calculation would start from the reporting of the down time by the representative of the institute by agreed mode of communication i.e. telephonic communication or email or as per the data of the remote access of the machine(s) by supplier, if any, whichever is earlier. The down time would be calculated by deducing total uptime period as defined above from total days of the respective year. Year for the calculation of Uptime/downtime as the case may be would be considered from 01st January to 31st December of the respective year. For purpose of the downtime calculation breakdown of the machine shall be calculated as under. If no imaging is possible then its complete breakdown. If only some functions of the machine are not working in that case it shall be considered as partial breakdown equivalent to 50% of the complete breakdown for calculation purposes.

Viii	The rate of post-warranty comprehensive CMC should be offered for at least five years by the bidder and be offered in Indian Rupees only.
ix	Note any liquid helium due to quenching or due to any other causes during the CMC period shall be borne by the firm.
x	If a particular coil is not working resulting in non working of a particular clinical application for more than 3 days will be considered as downtime
xi	All local items should be quoted in Indian Rupees. Other items should be quoted in US Dollars only, to have uniformity. The technical and financial bids should be separate. The model with 'the best and latest technical features' available with the vendor should be quoted in tender response with original printed vendor data sheets. The system should incorporate all the features as per the November 2015 RSNA standards/declaration.
xii	All product catalogues in original.
xiii	When the vendor data sheet disagrees with the bid response, clarification should accompany in the form of letter/certificates from the principals in original.
xiv	System should be DICOM - 3MPPS & should be ready to integrate with any existing PACS/HIS System
xv	List of all installations of the system in the country
xvi	The compliance statement must be filled strictly under headings given in the tender.
Xvii	Each specification corroborated in the compliance statement must give the page number where it is listed in the original technical data sheet along with soft copy. The technical bid should clearly mention model number and make, detailed technical specifications, quantity of each component offered. the technical bid should be duly supported by original brochure/catalogue of the manufacturer and relevant parts proposed to be supplied highlighted. In compliance statement units of measurement used should be same as in the required technical specifications.

Xviii	There should be no discrepancy between specifications given in technical bid, brochure and compliance statement. In case of any such discrepancy, the technical bid will be disqualified.
Xix	The quotation should clearly mention the accessories (including quantity) which are part of the main equipment and the price of which is included in the main equipment.
Xx	The equipment should be fully functional with the standard accessories
15	**Training :**
1	Off site training of all departmental faculty members for two weeks in a reputed institute. Departmental books as asked by HOD.
2	On-site training for radiographers and other staff by an application expert for a period of at least 3 months
3	One on site service engineer and one on site application specialist to be available for a uninterrupted continuously break period of two months with the team of both engineers will maintain log book of training provided to technical staff & doctors
	Amendment regarding the Turnkey Works:
	Turnkey Works For 3 Tesla MRI Unit
	The layout plans (with dimensions) allocated uploaded. Air-conditioning of appropriate strength/capacity (tonnage) in the area as required shall be done. Additional standby split air conditioner(s) of appropriate strength/capacity (tonnage) to be fixed in the main equipment rooms.
	Civil work: In the civil works Modifications/Renovations in the existing rooms by the supplier/vendor as shown in the layout plan after approval by Purchaser/HSCC shall be executed as per approved makes specified.

	The walls of MRI Complex should be finished acrylic/plastic emulsion (approved makes) and should be finished with vitrified tiles (approved makes) up to five feet height from the floor. Colour as approved by Purchaser/HSCC shall be provided.
	The flooring in the MRI complex should be as per regulations. Flooring in all rooms shall be of vitrified tiles of 80 x 80cm size or other close appropriate size of reputed makes (approved makes). Colour as approved by Purchaser/HSCC shall be provided.
	Whole area of MRI Complex as in the layout plan shall be finished with fire resistant false ceiling material (approved makes). MRI Room PVC roll flooring with mineral fiber panel false ceiling and Aluminium suspension.
	All the doors should be provided with necessary fittings with hydraulic type door closures (approved makes) and with Mortised locks (approved makes).
	Electrical work: The firm is required to specify load requirement i.e. required for the unit, the air conditioning, room lighting and accessories, if any. The electrical works should be as per approved makes mentioned. The electrical works should have minimum two separate Earthing with copper plate is to be provided for the each equipment and air-conditioning equipment as per equipment requirements. The use of earth leakage circuit breaker will be as required.
	A distribution panel of appropriate capacity is to be provided by hospital. The load shall also be provided by the hospital. From the substation of the hospital to the distribution panel, cable of appropriate size shall be provided & fixed by the hospital. Vendor shall do cabling from distribution panel up to the equipment.
	The switch gears (MCBs / ACBs/ MCCBs), L.T. distribution board for MCBs etc. (approved makes).
	Electrical wires should be of copper of different capacity as per the load (approved makes).
	For Telephone wiring cables (approved makes). Telephones to be provided in all rooms with EPABX system having control in office.
	Modular range Switches / Sockets of approved makes should be provided and fixed as per requirement.
	LED lights of suitable illumination should be provided of Phillips/GE/ Crompton/Syska make.

	Light dimmers (down lighters) should also be fixed in the equipment room.
	Air conditioning:
	Split Air conditioners of reputed make (approved makes) to be provided by the vendor in whole complex as per requirements (to maintain appropriate temperature in the main equipment room & other rooms) and as per regulations of AERB.
	Standby additional split air conditioners of appropriate strength/capacity (tonnage) to be fixed in the main equipment room
	Hygrometer Nos.1 to be provided.
	In-built or External De Humidifier in Equipment, Console and Examination rooms to be provided as per room layout.
	Fire Protection
	Non water based fire protection is to be integrated as per requirement. Fire extinguishers of appropriate types (approved makes) should be fixed in different rooms as per requirement. Heat detectors/hooters/photoelectric/smoke detectors (approved makes) shall be provided in all the rooms and corridors as per requirements. In case the expiry date of fire extinguishers is before the completion of 5 years comprehensive warranty period, extra set(s) of fire extinguishers will be supplied by the vendor till the completion of the 5 years comprehensive warranty period. Besides, any works required as per statutory/Delhi Fire Services norms shall be executed by the vendor.
	The vendor to also install the following:
	Audio visual Music systems for patient waiting areas.
	Adequate Pest, insect and rodent control system to be provided and installed to ensure that area remains insect, pest and rodent free.
	Music and Public Address system for calling/ informing the patients in the waiting areas.
	Furniture:-
	Following furniture (Godrej/Debono/Delite) will be provided:

	Chairs with castors and armrests 2 nos.
	Coil Rack for MRI 1 No.
	Medicine Trolley 1 No.
	Ultrasonic pest repellent equipment 1 no.
	Insect killer equipment 1no.
	Steel Storage Almirah 2 nos.
	Overhead Storage(1.2x0.4x.6m) for CD storage 1 no.

In case any item missed out inadvertently, vendor shall provide the same. The price quoted by the bidders shall include all costs required for supply, installation, testing and commissioning of the equipment on turnkey basis and as per bid document.

ITEM No. 2.

Technical Specification for CT SCAN Machine :

Specification as per tender: The system quoted should be latest state of art top of the line with the features of latest RSNA (2014 or later) release. The system to be of 128 or more physical rows of detectors with dual energy application. The scanner should be capable of comprehensive whole body imaging including cardiac, abdomen, neuro and vascular imaging applications, true isotropic volume acquisition. It should also be capable of 3-D reconstructions at fast speeds, quantitative calcium scoring in the vessels using all documented quantification algorithms, 3-D image display during acquisition on-line as well as real time, 3-D vessel imaging with feasibility for volume rendering.

Please note that if new technological developments occur and an upgraded system becomes available between the notification of this tender and the time of finalization of the bid, then the newer upgraded version shall be supplied at the rates quoted. The AERB compliance for the equipment and its installation would be the responsibility of the supplier.

1) Gantry:
   - i) The CT Scanner should have low Voltage Slip Rings incorporated in the Gantry
   - ii) The Minimum scan time for a 360 Degree rotation should be less than or equal to 0.35 seconds.
   - iii) The gantry should be provided with User control panels on either side for easy positioning.
   - iv) The sub millimetre Slice @ 0.63 mm or less in 128 rows or more of detector with 256 or more acquisitions should be available. The system should be in position to perform256 acquisition Slices/ Rotation for general, cardiac/vascular applications. (Specify the submillimetre slice thickness in millimetres)
   - v) The Gantry should have 3D Positioning Laser lights.
   - vi) The Scan field of view (FOV) in acquisition mode should be at least from 200 mm to 500 mm with intermediate Steps for scanning different anatomies.
   - vii) Aperture should be at least 70 cm diameter.

2) X ray Section:
   - i) The X ray Generator should be compact and inbuilt in the Gantry.
   - ii) The System X ray power should be 100 kW (actual power) and above
   - iii) The mA range available should be between 20 to 800 mA or more with increments in steps of not more than 10mA.
   - iv) The X ray Tube should be essentially Dual Focus. The heat storage capacity should be 7 MHU or equivalent. Specify the method and technique of cooling. Any special feature of the X ray tube to be highlighted with literature.
   - v) Specify the focal Spots of the X ray tube.
   - vi) The X ray tube should have a cooling rate of not less than 1000 KHU per MIN
   - vii) The X ray tube Cooler Unit should be in built in the Gantry.

3) Detectors:
   - i) The Detector Offered should be Solid State.
   - ii) The 256 acquisition slice or more per Rotation should be possible. The Systems should have at least 128 Physical Rows of the detector or more.

iii) Specify the Fan Angle of the X rays and the geometry. The detectors should not require frequent calibration.

4) Patient Couch:
   i) The patient table offered should have a minimum load bearing capacity of at least 200 KG.
   ii) The Minimum table top height should not be more than 65cms from the floor level for easy transport of trauma patients.
   iii) The Floating table top width should be at least 40 cm for better comfort.
   iv) The range of metal free scan should be at least 165 cms.
   v) The vertical range should be at least 55 cms (max height — min height)
   vi) Specify the reproducing accuracy of the table.
   vii) Remote UP/DOWN, FWD/BWD of the Patient Couch should be standard
5) Topogram:
   i) Length and width: specify range.
   ii) Scan times: specify range, specify whether real-time image option available.
   iii) Views: should be feasible in frontal and lateral views
   iv) Should be possible to interrupt acquisition manually if necessary.
6) Spiral/Helical Section:
   i) The system offered should have Spiral Capability of at least 80 seconds & above. Real Time Spiral @ 10 f/s should be standard.
   ii) The range of Spiral facility in Axial Direction should be more than 100 cms.
   iii) The Reconstruction Time in Spiral scan should not be more than 100 Milli seconds.
   iv) The system should have the Smart Prep or equivalent facility & ability to track Contrast medium to trigger scan should be included in the scope of Supply.
   v) High Resolution scan package should be offered as standard and Specify the minimum slice thickness for which High Resolution scan package is possible.
   vi) Multi Slice CT Fluoroscopy to be quoted as standard. Price should be quoted separately.
7) Computer Section:
   i) The Computer offered should be the Latest Multi-tasking Processors and a menu driven platform with a RAM size of at least 4GB.
   ii) The medical grade monitor should be the latest Color of at least 18 inches and flat screen. Two Monitors Independent Console preferred. The Twin Monitor system should work on either shared or Common data base.
   iii) The display matrix should be at least 1024 x 1024.
   iv) The reconstruction time for an Axial scan should not be more than 100 milli seconds.
   v) The Hard disk Capacity for both Image and Raw data should be more than500GB.
   vi) It should have facility to store at least 250,000 Images.
   vii) The system should be supported with archiving facility of DVD & CD Main Console.
   viii) DICOM facility to send , store , print , receive, Query / Retrieve , MWM , MPPS etc should be standard.

ix) PC Based connectivity should be standard for easy transfer of Images & Report. The image transfer from main console to workstation should be automatic and immediate.

x) CT should be with dual monitor console with two concurrent workstations (thin client server architecture based solution) comprising of medical grade monitors (2 mega pixel resolution) with at least 8GB RAM. The server should have image storage capacity of 3 Tera bytes, minimum 20000 concurrent slice processing power and at least 32 GB RAM. It can be single/dual server configuration. The two concurrent workstations should have processing capabilities for basic 2D /3D and following advanced applications.

a) MPR
b) Minimum and maximum intensity projection.
c) 3D volume rendering.
d) 3D SSD (Shaded Surface Display).
e) Advanced vessel analysis.
f) Auto bone removal.
g) Lung nodule assessment.
h) Liver lesion analysis.
i) Virtual endoscopy.
j) Dedicated Colonography and colonoscopy.
k) Time point comparison.
l) Whole organ (Brain & Body) perfusion CT.
m) Coronary tree analysis: automated 3D processing of coronary arteries, calcium scoring, stent analysis, LV analysis.
n) Neuro DSA with Automated Bone Removal.
o) Fusion CT: Fusion of morphological data of CT & MRI.

8) Image Processing section:

Cardiology and Oncology post processing tools to be quoted as standard. The post processing tools of the perfusion and others as quoted below to be available in the workstation.

i) The system should have standard software like 3D Volume rendering , MIP,CT angio, color angio Display, CT Perfusion , Dental scan , Bone Mineral Study should be available as standard on the Workstation .
Computer Aided Detection (CAD) to be provided

ii) The following software should be offered as standard (MPR , ROI, VOLUME CALCULATION , CT NUMBER DISPLAY , WINDOW WIDTH , WINDOW LEVEL , TOPOGRAM DISPLAY , CINE DISPLAY , HRCT LUNG, DYNAMIC SCAN)

iii) Cardiac Scan Attachment with ECG Gated Segmented Recon , Calcium score , Vessel Flythrough of the Coronaries should be available with software package at workstation and thin client server stations

iv) Automatic display of MPR Images after scan will be preferred.

v) Bolus triggered Brain Perfusion CT study (at least 3-level) with automatic CBF, CBV, MTT, TTP maps, ROI placing, comparing ROI, saving maps.

vi) Neuro DSA with automatic bone removal software.

vii) Dental CT: high-resolution evaluation of teeth and jaws with automatic panoramic and paraxial reconstruction, evaluation of mandibular canal and life size filming.
viii) Fusion CT: fusion of morphological data obtained on CT, MR or DSA.
ix) Lung CT: low dose lung CT protocols for advanced lung nodule detection, assessment and follow-up. Lung segmentation software for nodule detection.
Provide LUNG CAD for virtual bronchoscopy .
x) provide Bone / Osteo / Dental CT software.
xi) Post processing should also have liver segmentation analysis, whole body perfusion, tumor tracking, myocardial assessment.

9) Resolution:
i) The System Spatial Resolution should be mentioned with parameters.
ii) The high contrast resolution should be more then 14.5 lp/mm in all routine scan, including spiral and axial mode.
iii) The low contrast resolution should not be more than 3 mm at 0.5 %. Shoulder, Pelvis Streak Artefact suppression Software should be standard.
iv) Noise Suppression protocols to maintain LCR at low dose should be standard.
v) Special softwares(like mA modulationin routine & cardiac mode) to ensure dose efficiency should be standard.
vi) Specify the CT Dose Index.
vii) Should have iterative reconstruction technique for X Ray dose reduction.
viii) Low dose Paediatric CT mode should be available
ix) Patient radiation dose should be displayed on the monitor & films.

10) Accessories:(Make and Model of all the quoted accessories should be specified)
i) Dry chemistry camera of DPI 500 or more of any reputed make.
ii) Lead Glass of 200 x 100 cm.
iii) UPS with half an hour back up to run the entire CT, Computers, Dry chemistry camera, Work Stations etc.
iv) Dual Head Pressure Injector of reputed make with 300 sets of Syringes & 1000 sets of tubings. Specify the make of Injector.
v) Multi Para monitor with pulse oximeter of a reputed make for monitoring vitals.
vi) Patient radiation dose should be displayed on the monitor as well as on the films
vii) ULTRA LIGHT WEIGHT lead free aprons - 4 Nos.
viii) Apron stand — 1 No.
ix) Apron Hanger suitable for the supplied aprons, shields.
x) LEAD Free Thyroid Shields – 4 nos.
xi) CT Phantom with various density for CT no. check.
xii) Necessary QA tools essential for running CT machine.
xiii) Indexed Flat table top compatible to Offered model should be European CE and US FDA approved. Copy of certifications should be submitted with bid.supplied linear accelerator for Radiotherapy Planning .
xiv) Lead Free Gonadal Shields – 4 nos.
xv) Tumour ablation system with treatment planning solution & RF generator .
xvi) Specifications as below.

a) Computerized needle positioning guiding tool along with radio frequency ablation system for CT guidance in tumor ablation.
b) System should support different ablation system.
c) Registration of the data, post processing segmentation before and after ablation should be possible
d) Overlay of non-contrast images with contrast images to be possible.
e) Should include radio frequency ablation generator with:
    1) Frequency at least 450KHz.
    2) To support multiprong electrode and capable of 7cm ablation in one sitting.
    3) Temperature range should be 15-125 deg C with steps of 1 deg C.
    4) RFA accessories- Intelliflow pump, RFA probes, multiprong electrodes and coaxial biopsy gun of 9cm and 15cm with 20cm throw.

11)Warranty:

i) Warranty of the equipment including crystal & CT tube and all accessories as well as batteries of the UPS and Air-conditioning units should be for FIVE years after the satisfactory commissioning and handing over of the system. Warranty will include all the accessories as well as electronic / electrical consumables /cables / leads etc and third party items.

ii) Rates for **FIVE** years comprehensive maintenance contract (CMC) after the expiry of warranty with uptime as per the tender terms. CMC will include the crystal, CT tube, batteries of the UPS, Air-conditioning units. All the accessories supplied with the main equipment as well as electronic / electrical consumables /cables / leads etc. will also be part of the CMC

iii) **Penalty clause:** Penalty at the rate of RS.10,000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.

iv) **Uptime guarantee:** During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.10,000 / per day.

v) Calculation of uptime

The machine shall remain in working condition/fully functional for minimum 347days (being 95% of 365 days) during the year. For leap year, the machine shall remain in working condition/fully functional for minimum 348 days (being 95% of 366 days) during the year. Sunday and other holidays as per the institute policy would be counted calculation of uptime, if the machine was in working condition/fully functional on both days i.e the day preceding Sunday/holiday and the day succeeding Sunday/holiday. Further,

routine maintenance as per scheduled agreed by user would be counted towards calculation of uptime. In case downtime is more than 5 hours on any particular day during normal working hours of the institute the same day would not count towards uptime calculation.

vi) Calculation of down time

Down time calculation would start from the reporting of the down time by the representative of the institute by agreed mode of communication i.e. telephonic communication or email or as per the data of the remote access of the machine(s) by supplier, if any, whichever is earlier.

The down time would be calculated by deducing total uptime period as defined above from total days of the respective year. Year for the calculation of Uptime/downtime as the case may be would be considered from 01st January to 31st December of the respective year. For purpose of the downtime calculation breakdown of the machine shall be calculated as under. If no imaging is possible then its complete breakdown. If only some functions of the machine are not working in that case it shall be considered as partial breakdown equivalent to 50% of the complete breakdown for calculation purposes.

12)Training

i) Qualified personnel nominated by the deptt, should be given application training by the vendor at their cost at site for three months and as and when required.

13)Certifications:

i) Offered model should be European CE and US FDA approved. Copy of certifications should be submitted with bid.

ii) The quoted model should be AERB approved. Copy of AERB type approval should be submitted with bid.

iii) DUAL ENERGY APPLICATIONS to be provided as standard: Renal Calculi Characterization & Gout.Contrast and non contrast application to be quoted as standard.

iv) All other Dual Energy applications available with vendor should be listed as optional with price of each quoted separately.

v) Proof of availability of dual energy application must be supported with original datasheet.

vi) Dual energy application must be possible on all workstation and all fields of view with minimum FOV 33cm.

vii) Also Specify if DUAL ENERGY APPLICATIONS like Metal Artifact Correction / Beam

viii) Hardening artifact Correction, Brain Haemorrhage and virtual non contrast and direct Angio are available in the system. Any other application for dual energy if present in future upgrades should be part of the system.

14) Accessories:

a) X-RAY FILM ILLUMINATOR WITH COLLIMATION – SINGLE PANEL (2 NOS.)

Specification:

i) X-Ray Film Illuminators with collimation and luminous density control.
ii) Suitable for viewing one 14"X17" film.
iii) It should have high luminous density and uniform light as per DIN 6856
iv) It should have daylight fluorescent lamps of latest design, colour temperatures of 6.200 and 6.500 Kelvin.
v) It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.
vi) High frequency flicker free light.
vii) Maximum Luminous density of more than 4.500 cd/sq.m.
viii) It should have four extremely easy to move shutters for glare-free reading of any film format. Four shutters should be fitted between an external scratch-proof clear-glass pane and an internal acrylic milk glass pane.
ix) It should have movable nylon film retaining cords with plastic slides.

b) X-RAY FILM ILLUMINATOR WITH COLLIMATION – DOUBLE PANEL (2 NOS.)

Specification:

i) X-Ray Film Illuminators with collimation and luminous density control.
ii) Suitable for viewing two 14"X17" film.
iii) It should have high luminous density and uniform light as per DIN 6856
iv) It should have daylight fluorescent lamps of latest design, colour temperatures of 6.200 and 6.500 Kelvin.
v) It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.
vi) High frequency flicker free light.
vii) Maximum Luminous density of more than 4.500 cd/sq.m.
viii) It should have four extremely easy to move shutters for glare-free reading of any film format. Four shutters should be fitted between an external scratch-proof clear-glass pane and an internal acrylic milk glass pane.
ix) It should have movable nylon film retaining cords with plastic slides.

c) X-RAY FILM ILLUMINATOR WITH COLLIMATION – TRIPLE PANEL (2NOS.)

Specification:

i) X-Ray Film Illuminators with collimation and luminous density control.
ii) Suitable for viewing three 14"X17" film.
iii) It should have high luminous density and uniform light as per DIN 6856
iv) It should have daylight fluorescent lamps of latest design, colour temperatures of 6.200 and 6.500 Kelvin.
v) It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.

vi) High frequency flicker free light.
vii) Maximum Luminous density of more than 4.500 cd/sq.m.
viii) It should have four extremely easy to move shutters for glare-free reading of any film format. Four shutters should be fitted between an external scratch-proof clear-glass pane and an internal acrylic milk glass pane.
ix) It should have movable nylon film retaining cords with plastic slides.

d) X-RAY FILM ILLUMINATOR WITH COLLIMATION – FOUR PANEL (2 NOS.)

Specification:
i) X-Ray Film Illuminators with collimation and luminous density control.
ii) Suitable for viewing three 14"X17" film.
iii) It should have high luminous density and uniform light as per DIN 6856
iv) It should have daylight fluorescent lamps of latest design, colour temperatures of 6.200 and 6.500 Kelvin.
v) It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.
vi) High frequency flicker free light.
vii) Maximum Luminous density of more than 4.500 cd/sq.m.
viii) It should have four extremely easy to move shutters for glare-free reading of any film format. Four shutters should be fitted between an external scratch-proof clear-glass pane and an internal acrylic milk glass pane.
ix) It should have movable nylon film retaining cords with plastic slides.

e) LED X-RAY FILM ILLUMINATOR WITH COLLIMATION – SINGLE PANEL (1 NOS.)

Specification:
i) LED X-Ray Film Illuminators with collimation and luminous density control.
ii) Suitable for viewing one 14"X17" film.
iii) It should have high luminous density and uniform light as per DIN 6856-1.
iv) It should have LED lamps of latest design.
v) It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.
vi) It should have flicker free light.
vii) Maximum Luminous density of more than 4.500 cd/sq.m2.
viii) It should have four extremely easy to move shutters for glare-free reading of any film format.
ix) It should have thickness of not more than 70 mm.

f) LED X-RAY FILM ILLUMINATOR WITH COLLIMATION – DOUBLE PANEL (2 NOS.)

Specification:
i) LED X-Ray Film Illuminators with collimation and luminous density control.
ii) Suitable for viewing one 14"X17" film.
iii) It should have high luminous density and uniform light as per DIN 6856-1.

iv) It should have LED lamps of latest design.
v) It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.
vi) It should have flicker free light.
vii) Maximum Luminous density of more than 4.500 cd/sq.m2.
viii) It should have four extremely easy to move shutters for glare-free reading of any film format.
ix) It should have thickness of not more than 70 mm.

ITEM 3.
Technical Specifications of Mammography for CNCI, 2nd CAMPUS

I. Digital Mammography

1. Should be an advanced high-end digital mammography machine upgradable to 3D mammography / Tomosynthesis. Tomosynthesis upgrade should not be a separate add on and should be integral to the system. Tomosynthesis should be possible in all positions i.e. inclusive of CC and MLO
2. Should have facility to do stereotactic biopsy.
3. Facility to place the Patient for stereotactic biopsy on a couch for patient Comfort.-(supine or lateral). Couch should be supplied.
4. System should be upgradable with latest technology available in future.

II. X-Ray Generator:

1. Should have high frequency generator.
2. Power output should be 5 KW or more. Please mention the mA range, mAs range, kV range, exposure time range and advantages.
3. Exposure parameters should be displayed

III. X-ray tube unit:

1. Dual track X-ray tube with dual focus for each track
2. Focal spot size 0.1 and 0.3 mm for both tracks
3. Anode heat storage capacity should be at least 150 KHU
4. Please mention the material of anode and advantages
5. Should have at least two filters. Please mention the material used in the filter.

IV. Gantry assembly:

1. It should be an isocentric system
2. The C-arm rotation and the up / down movement should be motorized.
3. The angle of C-arm movement shall be displayed.
4. The patient compression device should be motorised automatic and should have multispeed variable system. It should be state of the art.
5. At least a pair of two foot switches should be provided for compression.
6. Should have facility for magnification 1.5 and 1.8
7. Grid ratio should be mentioned
8. Mention about grid/breast support assembly system
9. Motorised compression force and manual compression force should be mentioned
10. The compression should be extremely smooth and there should be automatic

decompression at the end of each exposure.

11. There should be a safety mechanism for compression with respect to power failure.
12. The following paddle should be supplied
    a. Large paddle for 18x24 and 24x30 cms
    b. Regular sliding paddle
    c. Round spot and square spot compression paddles or equivalent
    d. Special paddles if available should be quoted- optional.

V. Exposure control

1. Should have manual, semi automatic and automatic mode.
2. The anode track and filters shall be selected automatically and manually.
3. Should have the display of all parameters after exposure.
4. Should display the dose delivered after each exposure.

VI. Flat panel detector

1. Should have a large flat panel detector of size at least 24x29cms and the pixel size should be 100 micro meter or less
2. Detector technology should be mentioned.
3. Image matrix in pixel should be mentioned.
4. Please mention the expected life time of the detector.
5. Detector material should be mentioned.
6. No Ghosting or lag effect should be present, specify image depth .

VII. Digital acquisition system

1. Storage capacity should be 5000 image or more
2. Pre-exposure time and Exposure time should be as short as possible it should be mentioned.
3. Should provide large medical grade LCD image monitor with high luminance
4. State of art associated software technology should be available with the data acquisition system. Kindly mention the features advantages and upgradability.
5. It should be possible to receive the demographic patient data directly from Hospital Information System. The demographic patient data should also be able to be entered manually. Retrieval of images from CD, DVD or PACS should be possible.
6. It should be DICOM ready and mention the facilities related to connectivity. MPPS should be included in the DICOM facilities.
7. Tele radiology should be possible
8. Film prints and CD, DVD copying should be possible.
9. Dry Laser camera with at least 2 online film tray compatible for film sizes of 11x14 and 14x17 inches, 500 dpi or more for printing the digital images should be supplied.
10. Acquisition workstation should be height adjustable for operator convenience.
11. Ability to add comments to an image, ability to edit views and to perform repeat/reject analysis.
12. Special processing for implants.

VIII. Reporting Work station

1. Kindly mention whether Work station can do an immediate image display for general survey for patient positioning. The networking should be on TCP/IP protocol.
2. Monitor should be approved for Mammography reporting. Where Web QA is available, vendor to provide license for web QA.
3. The following imaging processing should be possible on the work station:
    a. Measurements

b. Zoom, roam, magnification
c. Brightness and contrast
d. Image inversion
e. Contrast enhancement processing
f. Flip rotate inward
g. Annotations, measurements
h. Image evaluation like contrast enhancement histogram display, length measurements before and after comparison etc.,

4. There should be a DVD ROM drive, Quadrant zooming or selected zooming function should be available. The RAM should be minimum 4GB. The online storage capacity should be more than 5000 images. Hard disk capacity should be expandable. There should be multi modality viewer should display ultra sound x-ray digital mammography, MRI, PET, CT etc. At least 2 high contrast resolution 5mp LCD medical grade monitors should be provided.

IX. Stereo tactic biopsy system

1. This should be fully compatible with Full Field Digital detector.
2. Should have facility to do stereotactic biopsy automated on all the three axis.
3. Facility for needle core biopsy, Fine needle aspiration and wire localization should be available.
4. Should be compatible to use with vacuum assisted biopsy.

X. SYSTEM CONFIGURATION

1. X-RAY Tube unit and tube 01
2. Flat panel detector 01
3. Image acquisition Workstation with console & lead glass 01
4. Reporting Workstation 01
5. Biopsy system 01
6. Height adjustable & Trendlenberg chair for patient 01
7. UPS with batteries for entire system 01

XI. Power Supply:

1. Suitable power input to be 220-240VAC, 50 Hz or 440V 3 PHASE, fitted with Indian Plug.
2. Resettable over current breaker to be fitted for protection
3. Spike protector of appropriate rating to be provided
4. UPS/CVT of suitable rating conforming to IS-302 to be supplied

XII. Accessories

1. Should be supplied with transparent lead radiation shield, face shield, remote service modem, quality control tool kit, user manual, technical documentation, etc

2. Dedicated online UPS for the entire machine and accessories supplied including the work station shall be provided for a minimum backup of at least 30 minutes.

3. Should be supplied with ACR phantom, phantom for calibration of AEC, phantom for calibration of image detector.

4. The digital mammography unit with all features as per specification and thestereotactic system shall be CE &FDA approved and if other international standard certificates are available should be mentioned. Tomosynthesis should be CE Certified.

5. The offered unit should have a minimum of 5 installations in the country, of the same model, and this should be supported by end user certificates, purchase order copies and installation reports.

XIII. **STANDARD and SAFETY**

1. Vendor to get yearly AERB certification for the equipments.
2. Electrical safety conforms to standard for electrical safety IEC-60601/ IS-13450
3. Safety aspects of Radiation dosage leakage should be spelt out.
4. Should comply with AERB Guidelines for radiation leakage
5. The quoted Equipment should have Type Approval/NOC of the Manufacturer for Radiological Equipments. Vendors shall assist the Consignee in getting AERB Site Plan approval prior to installation, wherever applicable QA Test to be performed by vendor on regular interval as per AERB norms during Warranty & CMC Period. Cost to be borne by the vendor.
6. Five years comprehensive on site warranty of entire system (Spares and labour), without any exclusion, including detector, X-ray tube, computers and all other accessories peripherals like UPS etc.. This will be followed by 5 years CMC to be quoted separately, year wise.
7. CMC should cover all updates.
8. **Penalty clause:** Penalty at the rate of RS.2000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.
9. **Uptime guarantee:** During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.2000 / per day.
10. **Calculation of uptime**

    The machine shall remain in working condition/fully functional for minimum 347days (being 95% of 365 days) during the year. For leap year, the machine shall remain in working condition/fully functional for minimum 348 days (being 95% of 366 days) during the year. Sunday and other holidays as per the institute policy would be counted calculation of uptime, if the machine was in working condition/fully functional on both days i.e the day preceding Sunday/holiday and the day succeeding Sunday/holiday. Further, routine maintenance as per scheduled agreed by user would be counted towards calculation of uptime. In case downtime is more than 5 hours on any particular day during normal working hours of the institute the same day would not count towards uptime calculation.
11. **Calculation of down time**

    Down time calculation would start from the reporting of the down time by the representative of the institute by agreed mode of communication i.e. telephonic communication or email or as per the data of the remote access of the machine(s) by supplier, if any, whichever is earlier.

    The down time would be calculated by deducing total uptime period as defined above from total days of the respective year. Year for the calculation of Uptime/downtime as the case may be would be considered from 01st January to 31st December of the respective year. For purpose of the downtime calculation breakdown of the machine shall be calculated as under. If no imaging is possible then its complete breakdown. If only some functions of the machine are not working in that

case it shall be considered as partial breakdown equivalent to 50% of the complete breakdown for calculation purposes.

ITEM NO. 4

TECHNICAL SPECIFICATIONS FOR X RAY WITH FLUOROSCOPY (UPGRADED DIGITAL MODEL) SYSTEM

General :

High powered X-ray unit with Digital flat panel for various fluroscopy and radiography examinations for the department of radio diagnosis. The Unit should be equipped with integrated high-frequency generator,digital detector and Digital Image processing system. It should be capable of performing all plain and contrast enhanced radiology and fluoroscopy along-with angiography facility for interventional procedures. Among three major components tube/generator /detector at least two component must be manufactured by quoting vendor themselves. It should be US FDA approved. Type approval from AERB is mandatory. The vendor should have prior experience of supplying same/similar equipment in India in the reputed government or private institutions as per DGHS /MOHFW guidelines. The order copies and performance certificates from these reputed (Govt./Private institutions)should be available. The system should have the following essential features. The bidder should quote their latest model. Please mention year of launch. Supplier should have a trained service engineer in the state of supply for better uptime.

SPECIFICATIONS :-

1) **Generator:**
   - i) 1000mA unit with microprocessor controlled high frequency (100 KHz) X-ray generator.
   - ii) Power output of 80 kW or more.
   - iii) Exposure kV range should be 40-125 or more.
   - iv) System should have facility for pulsed fluoroscopy
   - v) Generator should have minimum exposure time of at least 1ms.
   - vi) System should have multiple user defined programmes (vendor defined programmes)
   - vii) There should be provision for automatic exposure control (AEC). It should be possible to override AEC if required.
   - viii) Fluoro KV 40-110 KV.
   - ix) Fluoro mA 0.2-6 mA.
   - x) Density corrections: should be provided for optimum image quality.

2) **TABLE:**
   - i) Floor mounted table with carbon fiber/composite material radiolucent table top with scratch resistant surface.
   - ii) Table should have minimum lowest height of 90 cm or lesser to facilitate easy patient transfer.
   - iii) System should have motor driven longitudinal and horizontal table top movements. Please specify the range of movements.
   - iv) Table should have angulations from vertical to head down positions. (Vertical +90 Degrees to Trendelenburg - 20 degrees).
   - v) Table should support patient weight upto 250 kgs.
   - vi) System should have well designed foot switch for releasing fluroscopy and acquisition.
   - vii) System should have provision for collision protection.
   - viii) Specify the dimensions of the table.

ix) Table should have integrated bucky unit for direct flat panel general radiography and fluoroscopy.
x) Communication system to communicate with patients.

3) X-Ray TUBE

i) One X Ray tube should be over couch.
ii) The X Ray tube should have dual focal spots. Large focal spot of 1 mm or lower. Small focal spot of 0.7 mm or lower.
iii) X-Ray tube rating should be compatible with X-ray generator output.
iv) Small focal spot power rating should be in the range 30-50 kW
v) Large focal spot power rating should be in the range 70-90 kW.
vi) Size of focal spots should be specified.
vii) Rotating Anode with heat storage capacity of 600 KHU or more. Tubes with higher storage capacity will be preferred.
viii) Mention the heat dissipation of anode.
ix) Motorised copper filter for prefiltration with minimum 3 selections should be possible.
x) Should have provision of electromagnetic locks with collision protection sensors. The Copper filters should be positionable by organ programs.
xi) DAP meter output should be visible on software console.
xii) Collimator must be mounted on x-ray tube and must have integrated Dose area product.

4) Digital Imaging system for Fluroscopy:

i) Field of view of at least 40cms or more.
ii) Collimator may be rectangular or iris type.
iii) System should have real time optimization techniques to maintain constant brightness at the lowest allowances dose to the patient.
iv) Cine loop facility and last image hold facility.
v) Acquisition matrix should of at least 1024x1024 at 10 bit rate.
vi) Digital fluoro system in standard continuous fluroscopic operating mode from single image display to serial exposures with verifying frames rates up to 15 fps. In pulsed fluroscopy mode it should be at least 6 frames per second.

5) Tube Column Assembly

i) Tube Column – detector assembly movement should be motorized and not less than 160cm.
ii) Tube rotation should be preferably motorized -90/+180 degrees
iii) Tube should have an SID of 150cm on table for chest x-rays.

6) DETECTOR SYSTEM :-

i) Single digital flat panel detector with cesium Iodide Scintilator.
ii) Detector must be at least 40x40 cms or more
iii) Image matrix size 2kx2k pixels or more
iv) Pixels size should be 150 microns or lesser.

v) Image resolution should be at least 3.4 lp/mm
vi) Should allow centered /de-centered collimation
vii) Digitization depth of minimum 14 bits should be available.
viii) Specify refresh cycle (time for second exposure).
ix) Frame rate should be at least 1 to 30 image/sec.
x) Dynamic range should be 16 bits or more.
xi) Detector should be from equipment manufacturer or parent company should have joint venture with the detector manufacturer.
xii) 3 zoom levels
xiii) DQE more than 65%.

7) IMAGE PROCESSING SYSTEM

i) Latest imaging acquisition system.
ii) Operating console- for system operation from control room.
iii) Digital Fluoroscopy at minimum of 15 f/s at 1024 matrix or better.
iv) Alphanumeric patient data input.
v) Image processing functions: Black/inversion, windowing, edge enhancement, text input, roaming shuttering and reversal.
vi) Multiple image display of 16 images and 4 images.
vii) Image storage with last image hold.
viii) Storage of fluoroscopic images.
ix) Contrast should be 16 bits or more.
x) Spatial resolution should be not less than 3.4 lpm.
xi) he system should have capability of online digital subtraction angiography facility with image filters road mapping and peak pacification facilities.
xii) In DSA mode frame rate should be at least 8 per second.

8) IMAGE DISPLAY SYSTEM :-

i) Total of 4 monochrome monitors of 19 inches each to be provided - of these two should be ceiling suspended in examination room. Other two in console room.
ii) Monitors should have resolution of 1 Megapixel or more. Image resolution should be at least 3.4 LP/mm.
iii) Post acquisition image processing viewing reprocessing hardcopy documentation and onward transmission should be possible while doing fluroscopy or radiography. System should have the facility to integrate display of sources such as endoscopy / ultrasound on the right-hand monitor of the examination room display unit.

9) CONTROL CONSOLE

i) All systems movements of table shall be controlled by the operator at the table in the examination room and also at the console.
ii) The system should have faculty for edge enhancement,positive/negative image display windowing contrast brightness electronic shuttering image pixel shifting vertical and horizontal image reversal zoom functions.
iii) System should have software processing functions to improve detail and contrast in static images
iv) The system should have fast and direct access to all series, single

images, in both examination (remote controlled) and console room.

v) System should have angle/distance measurement, image labelling and patient positioning facilities.

vi) System should have a dosimeter to display on line, actual radiation dose on the console.

10) IMAGE STORAGE AND TRANSMISSION

i) Image storage capacity of at least 30,000 images in 1024x1024 matrix at 10/12 bits on the main system disk.

ii) The systems should support storage of images on compact discs/DVD/USB device.

11) WARRANTY:

5 Years Warranty on all supplied items including X Ray tube, vacuumated items, accessories, UPS batteries, third party items and all turnkey items.

12) C.M.C :

Comprehensive Maintenance charges of complete system for which order is placed including turnkey works must be quoted year-wise for next 5 years after completion of warranty.

13) **Penalty clause:** Penalty at the rate of RS.2000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.

14) **Uptime guarantee:** During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.2000 / per day.

15) Calculation of uptime

The machine shall remain in working condition/fully functional for minimum 347days (being 95% of 365 days) during the year. For leap year, the machine shall remain in working condition/fully functional for minimum 348 days (being 95% of 366 days) during the year. Sunday and other holidays as per the institute policy would be counted calculation of uptime, if the machine was in working condition/fully functional on both days i.e the day preceding Sunday/holiday and the day succeeding Sunday/holiday. Further, routine maintenance as per scheduled agreed by user would be counted towards calculation of uptime. In case downtime is more than 5 hours on any particular day during normal working hours of the institute the same day would not count towards uptime calculation.

16) Calculation of down time

Down time calculation would start from the reporting of the down time by the representative of the institute by agreed mode of communication i.e. telephonic

communication or email or as per the data of the remote access of the machine(s) by supplier, if any, whichever is earlier.

The down time would be calculated by deducing total uptime period as defined above from total days of the respective year. Year for the calculation of Uptime/downtime as the case may be would be considered from 01st January to 31st December of the respective year. For purpose of the downtime calculation breakdown of the machine shall be calculated as under. If no imaging is possible then its complete breakdown. If only some functions of the machine are not working in that case it shall be considered as partial breakdown equivalent to 50% of the complete breakdown for calculation purposes.

17) SERVICE

i) Details of the service centers, in India along with names of Trained Service Engineers with address and their telephone Nos. to be provided in the technical bid.

18) TRAINING

i) On site application training for 6 weeks and additionally if required to be provided by the company to doctors and technical staff members.

19) Essential Accessories

i) Lead free Apron 6 Nos. (AERB Approved)

ii) Lead Glass viewing window 100 cm x 120 cm or more with lead equivalence of more than 0.5 mm

iii) Dry Chemistry Digital Camera (2 Nos.), capable of printing all film sizes online with spatial resolution of 500 DPI or more. All film sizes should be freely configurable at user level. It should have contrast resolution of 12 bits/pixel or more. It should have all line film sizes. The imager should preferably come with standard films sorter at the output for sorting the films bases on modality connected. It should have a normal through put of 75 films per hour for the largest size. Access time for 1st film 90 seconds or less. The imager should be DICOM compatible for receive send and print facility. The system allow at least 3 sizes from the five sizes to be loaded at any time. Printer status should be displayed for any error status etc.

iv) Dual head pressure injector US FDA approved with 2000 syringes

v) Foot Switch for fluoroscopy and acquisition of images.

vi) Suitable UPS with at least 30 minute back up to be provided for the whole system.

vii) Patient monitoring system: Multi parameter monitor with facility of three lead ECG, SPO2 monitor, NIBP, reusable SpO2 probes for infants and two Invasive Blood Pressure (IBP) monitoring module, Defibrillator and Suction machine.

viii) One Mobile storage racks for aprons and two Wall Mounted Rack for Aprons with 5 hangers.

20) TURNKEY

i) Necessary Turnkey modification of the provided premises is to be done by the vendor.

21) Other (Accessories, Components etc)

i) Handgrip rail
ii) Handgrips, angled
iii) Shoulder support, one pair
iv) Footswitch for fluoroscopy and exposure
v) Full System Stabilizer
vi) UPS for workstation

ITEM No. 5

TECHNICAL Tender SPECIFICATIONS FOR MOBILE RADIOGRAPHY UNIT (UPGRADED DIGITAL MODEL)

The unit should be compact easily transportable digital mobile radiographic unit with articulated or telescopic arm and built in monitors. It should be suitable for bedside x-ray for ward patients, intensive care units and operation theatres. If the DR system is inoperable it should be able to function as conventional system. Out of three major components (Detector, X-Ray Tube & X-Ray Generator) at least two should be from the same manufacturer. It should be FDA approved. Type approval from AERB is mandatory.. The vendor should have prior experience of supplying same/similar equipment in India in the reputed government or private institutions as per DGHS /MOHFW guidelines. The order copies and performance certificates from these reputed (Govt./Private institutions) should be available. The system should have the following essential features. The bidder should quote their latest model. Please mention year of launch. The system must include the following:

A) Power Line Connection: The unit should operate on single-phase power supply with plug in facility to any standard wall outlet with automatic adaptation to line voltage 200 to 240 Volts, 15 Amp plug.

B) The Generator:
   i) Must be microprocessor controlled high frequency, output 30 KW or above.
   ii) It should have a digital display of mAs and kV and an electronic timer.
   iii) KV range: 40kV to 125kV or more in increments of 1kV
   iv) Max. current: 300 mA or more at 100 KV.
   v) mAs range: 0.1 – 350 mAs (to specify mA and seconds separately)
   vi) Exposure time range: 0.004 – 10 s

C) X-Ray Tube:
   i) Output of the tube should match the output of the generator.
   ii) Focal spot should be less than 1 mm
   iii) Rotating anode with 3000 rpm or more
   iv) Heat storage capacity of the anode : 120 KHU or better
   v) Tube overload protection should be available

D) EXPOSURE:
   i) Vendor must provide with exposure technique chart
   ii) exposure status lights on main control and collimator
   iii) exposure indicator or air kerma indicator to be available.

E) Flat panel detector:
   i) Detector should be wireless , cesium iodide scintillator with amorphous silicon technology

ii) The flat detector should be of the size 14 x 17 inch or more.
iii) The detector pixel matrix size should be 2.0K x 2.0K or more.
iv) Pixel size 200 microns or less
v) The machine should have a detector storage compartment.
vi) The image viewing time after exposure should not be more than 10 sec.

F) Battery:
i) The machine should be able to run on mains as well on battery supply
ii) Specify Battery charging time and battery operation time
iii) Number of exposures which can be done on fully charged battery should be greater than 150.
iv) The battery should also provide power for the motor to move the machine.
v) The battery should be able to be charged from a normal 15A 230 V single phase socket in less than 6 hours.

G) Workstation:
i) The machine should have an integrated workstation with a TFT touch screen.
ii) The workstation should enable to view the image, and provide post processing features, using touch screen.
iii) The post processing features should include, zoom, contrast and brightness adjustment, storage of image with a memory of at least 2000 images.
iv) The touch screen size should be at least 15 inches.

H) Connectivity:

The machine should be fully network ready and it should be possible to transfer images and patient data from and to hospital network using LAN connectivity and wireless LAN. System should be DICOM 3 compatibility and DICOM functions including DICOM Print, Image Export, WLM, and MPPS. It should provide the possibility to write all Patient images, Studies and single images onto CDs/pen drive directly on work station Interface. The system should have DICOM 3.0 Ethernet 10/100 Base T . DICOM worklist interface, storage service class (SCU) and others. Antivirus software to be inbuilt/updated continuously.

I) Others:
i) The unit must have an effective braking system for parking, transport and emergency braking. The tube stand must be fully counterbalanced with rotation in all directions.
ii) It must have an articulated or telescopic arm for maximum positioning flexibility in any patient position. The angles in various planes to be specified by the manufacturer.
iii) The exposure release switch should be detachable with a cord of at least 5 meters. Exposures with remote control should be possible. Remote control should be offered with system.
iv) The Dose Area Product meter should measure the X-ray dose output at the collimator and reports the measured Dose Area Product (mGy*m2) to the DICOM header of the image should be provided.
v) Four light weight 'zero lead' aprons should be provided.
vi) 2 Grids of at least 8:1 or better ratio and frequency should be provided.
vii) Dry Chemistry Printer:-
The System should be supplied with dry imager (dry chemistry) with a spatial resolution of 500 ppi/dpi or more. It should have contrast resolution of 12

bits/pixel or more. It should have all possible film sizes. The imager should preferably come with standard films sorter at the output for sorting the films based on modality connected. It should have a normal through put of 75 films per hour for the largest size. Access time for 1st film 90 seconds or less. The imager should be DICOM compatible for receive send and print facility. The system allow alteast 3 sizes from the five sizes to be loaded at any time. Printer status should be displayed for any error status etc.

viii) Five years comprehensive on site warranty of entire system (Spares and labour), without any exclusion, including detector, X-ray tube, computers and all other accessories. This will be followed by 5 years CMC to be quoted separately, year wise.

ix) **Penalty clause:** Penalty at the rate of RS.2000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.

x) **Uptime guarantee:** During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.2000 / per day.

xi) Calculation of uptime

The machine shall remain in working condition/fully functional for minimum 347days (being 95% of 365 days) during the year. For leap year, the machine shall remain in working condition/fully functional for minimum 348 days (being 95% of 366 days) during the year. Sunday and other holidays as per the institute policy would be counted calculation of uptime, if the machine was in working condition/fully functional on both days i.e the day preceding Sunday/holiday and the day succeeding Sunday/holiday. Further, routine maintenance as per scheduled agreed by user would be counted towards calculation of uptime. In case downtime is more than 5 hours on any particular day during normal working hours of the institute the same day would not count towards uptime calculation.

xii) Calculation of down time

Down time calculation would start from the reporting of the down time by the representative of the institute by agreed mode of communication i.e. telephonic communication or email or as per the data of the remote access of the machine(s) by supplier, if any, whichever is earlier.

The down time would be calculated by deducing total uptime period as defined above from total days of the respective year. Year for the calculation of Uptime/downtime as the case may be would be considered from 01st January to 31st December of the respective year. For purpose of the downtime calculation breakdown of the machine shall be calculated as under. If no imaging is possible then its complete breakdown. If only some functions of the machine are not working in that case it shall be considered as partial breakdown equivalent to 50% of the complete breakdown for calculation purposes.

xiii) The supplier must ensure the availability of expertise for service and maintenance at Kolkata. Uninterrupted availability of spare parts and repair for the next ten years must be assured by the principal in the form of an undertaking. Undertaking by the principal also to be given for providing maintenance services for 10 years in case there is change of local agent. The tender should be quoted in 2 bids-technical and price bids should be quoted in two separate, sealed envelopes. Quotations should be filled strictly under the headings given in the tender document. Incompletely filled quotations or information provided haphazardly will not be considered. All technical information provided in the quotation must be substantiated with attached original product data sheets. The compliance statement must include the page number and paragraph/line no. from the technical datasheet (in original) where the particular specification is being complied.

ITEM NO. 6.

TECHNICAL SPECIFICATIONS FOR USG (HIGH END COLOR DOPPLER)

Technical Specifications – Premium End, Top of the Line, Color Doppler Ultrasound System with Shear Wave Elastography and Fusion Imaging

1. **System should be State of art, top of the Line Premium End Fully Digital with Broadband Digital Beam Former.**
2. The system design should be compliant with Green Emission Product specification.
3. The system should comply with standards of Environmentally Conscious Products (ECP). Certificate to be attached.
4. US FDA &CE compliant .Also mention year of launch.
5. The system should have high density Beam Former technology and should be able to handle independent processing channel for each receiving information from transducer.
6. The system should have minimum 192 hardware channels and 80000 or more digitally processing channels. Original manufacturing letter to be attached for confirming above channel numbers.
7. The system should perform up to 1000 frames/sec. or more. Also system should support transducers of frequency range from 1-18Mhz.
8. The system should have region specific presets like Adult Abdomen, Pediatric Abdomen, TV/TR, Gyn, Small Parts, Musculoskeletal and vascular presets. All presets should be customized according to the user.
9. The system should have Quick View mode for 2D & CDI Preset selection during exam and minimum 8 sub presets for 2D &CDI Modes.
10. The system panel height should be adjustable according to the user comfort.
11. The Panel should have Swivel and In/Out Control for Maximum User Comfort.
12. The system should have latest generation /pulse subtraction / Pulse Inversion Tissue Harmonic Imaging for better contrast and reduced side lobe artifact.
13. System Should have Receiving End Frequency and Spatial Compound Imaging Technology for reducing Clinical Artifacts and
    i. Compound Imaging Should work in all the Probes
    ii. Compound Imaging should be possible on Color and Doppler Modes .
    iii. Transducers operate in Trapezoid format with and without compound imaging.
14. Multiparametric Image Optimization: The system shall automatically and intelligently optimize key imaging parameters in real-time, maintaining image uniformity across tissue types with minimal adjustments as soon as the transducer is placed on the patient.
15. The system should have 256 gray scales.
16. The System should have 2D and spectral Doppler image optimization with a push of a button and auto-refresh function. Should be compatible with other advanced imaging options.
17. Up to 10X digital zoom should be available, on live, frozen, cine, dual screen images-Preserves full image resolution within the zoom ROI.HD zoom should be available.
18. The System should have THREE active transducer ports or more.
19. The system should display Thumbnails on a Clipboard while scanning to facilitate exams.
    i. The User can select either Bigger Screen only Ultrasound Image or With Thumbnail with Live Ultrasound Images.
20. The system should be Upgradable to User Configurable Protocol for Applications such as OBGYN/

Vascular etc. for system operation. The following automation should include the protocol:

i. Automatic set up of Imaging Controls & Modes.
ii. Manual/Automatic steering in B Mode/ CDI/PW Doppler.
iii. Initiation and auto completion of required measurements etc.

21. The System Should High Dynamic range of 200db or more. Higher Dynamic range will be preferred please specify range.
22. The system should have Power Doppler Imaging mode with directions.
23. The system should have PW Doppler & HPRF mode for all transducers 0.3 to 34 KHz.
24. Specify Color Velocity Scale Selection.
25. Pw Sample Gate selection should be 1mm to 20mm or more.
26. The Minimum Imaging Depth should be 30 cm or more and should be selectable by user.
27. The system should have US FDA approved Real Time Elastography (strain and shear wave) for Liver, thyroid Breast, Prostate Applications. Also the Following feature's Available in the Elastography:

    i. During Elasto mode, Reference 2D Mode should display side by side. After Freeze best cycle selected from cine mode reference of Compression Wave.
    ii. Elastography should be Velocity based, The System should able to measure by ON LINE the Stiffness of Tissue and Compare with Normal Tissue, and Ratio should be calculated between Reference Tissue vs Target Tissue.
    iii. Convex and linear probe and Endocavity Probes Should Support strain elastography for all applications including Prostate Elastography. Necessary Software should be Built In
    iv. Convex and linear probes should offer shear wave elastography for abdominal ,breast,and thyroid etc applications.
    v. System should be able to generate a color coded elastogram with a reference adjustable elasticity scale for each application.
    vi. System should be able to display simultaneously both color coded elastogram and corresponding B-Mode image in real time for performing elastography guided biopsies/FNAC.
    vii. There should be user adjustable elasticity box size with a Display Depth: 0-8cm.
    viii. Elastography quantification should be available with pixel accurate absolute or discreet Elasticity values on all transducers.
    ix. Elastography quantification tool should be able to provide Mean, Max, Median & Min elasticity values of the tissues in both m/s or kPA on all transducers.
    x. System should have integrated report worksheet for Liver elasticity assessment.

28. The system shall provide Color coded stiffness map with 4 color display modes
    Color, size, strain ratio, shear velocity.
    i. Maximum Shear wave velocity 10m/s; Minimum Depth shear-wave imaging should be 16cm; Minimum depth shear-wave quantification should be 8cm.
    ii. System should offer custom tissue imaging to improve lateral and contrast resolution in breast imaging by modifying the speed of sound for fatty breast and adipose tissue.

29. The System should provide a **Volume Navigation Tool** which allows Fusing Real Time Ultrasound Images with Images acquired from other Modalities such as CT & MRI of any make. The Following features should be available for Real Time Fusion Imaging
    i. The Transmitter should be fixed with System with movable arm for Easy Navigation.
    ii. The Receiving Sensor should be attached with Convex Probe while performing Fusion Imaging mode.
    iii. DICOM Datasets from other modalities can either be retrieved via DICOM Q/R function or (USB / DVD) DICOM media.
    iv. Tracking of the Ultrasound transducers movement in space is done via Magnetic sensor system. The strength of the Magnet should be indicated on the system monitor
    v. Total Registration of those datasets and real time ultrasound images should be 2 Steps maximum. 1st Step for Angle Synchronization for Magnetic Strength and 2nd Step for Position Synchronization is achieved by using anatomical landmarks.
    vi. The Window level of Data set should be adjustable in Ultrasound system.
    vii. The system should capable of operating in Biopsy mode while performing Fusion study. The Biopsy line should display on both Fusion and Ultrasound Images.
    viii. Fusion Imaging should be possible with at least Convex Probe. Mention additional probe on which fusion is available and price should be quoted separately.(will not be included in calculation of L1)
    ix. The system should capable of Contrast imaging in Fusion mode.

30. The System should have **Needle Navigation** which Utilizes Fusion mode and following should be possible:
    i. A virtual biopsy line generated using a position sensor (up to 3 lines) is displayed on the screen during ultrasound-guided diagnostic/therapeutic procedures. Deviation of the needle tip from the image plane is displayed in different colors according to the direction of deviation. Smart Fusion can be used in combination.
    ii. Ruler with Tip Distance

31. The System Should have advanced **Contrast Package** available.
    i. During contrast examination the system should be able to Display Wash In, retention and wash out information in the lesion with Time intensity curves.
    ii. The system offer user selectable tint maps to allow enhanced visual conspicuity of contrast agent.
    iii. The System should have Contrast Quantification package so that it able to measure the arrival time of contrast agent at any point of time.
    iv. The system shall provide a toolbox of at least five contrast imaging technologies:
        a. - detection of the fundamental response of the CM
        b. - detection of the harmonic response of the CM
        c. - agent destruction imaging
        d. - contrast capture imaging
        e. - micro-bubble destruction imaging
    v. The system shall offer contrast imaging package with Contrast Harmonic and Quantification.
    vi. CPS & CHI Switching Between Contrast Modes:

32. Should offer low MI contrast agent imaging techniques and provides highly sensitive agent detection

with outstanding enhancement information System should have Biopsy Enhancement mode for better Needle Insertion and Multiple Enhancement Level Adjustment should be possible.

33. The System should have 3D and live 3D/4D acquisition possible with Volume convex probe.

34. The system should have advanced DICOM Modalities work list

35. **Sophisticated Ergonomics:**

A flexible multi joint arm supports the LCD monitor, allowing appropriate positioning for operations in the standing or sitting posture to be achieved easily.

36. **Monitor:**

i. Monitor should be high resolution, 21" (inch) or more Back Lit LED/ LCD Monitor with 1080 x1080 matrix or more. Please specify resolution range with IPS technology.

37. **Console:**

i. The freely programmable, mode-sensitive 10" or more Color Touch Command Screen which enables direct access to all basic and advanced system controls.
ii. Convenient transducer trays on both sides should put. up to Six transducers within easy reach in any scanning position.
iii. Basic and advanced quantification functions should be activated directly on the programmable console.
iv. All Mode keys concisely arranged with multi-gain controller should enable direct access to all imaging modes.
v. A retractable alphanumeric keyboard should be available to manually enter comments or patient data
vi. Control panel can be moved horizontally and vertically according to user comfort
vii. Integrated gel warmer.

38. **Data management:**

i. A large-capacity minimum 1TB HDD should be provided in the standard configuration, facilitating efficient management of acquired images. Images can be viewed in Image Review Mode. Also cine memory of more than 2000 frames should be available.
ii. Filed images can have output via the USB port (USB Memory or USB HDD) or stored on CD/DVD by Image Management.
iii. Should be able to integrate with the then existing PACS in the institute with no extra cost.

39. **Measurements and Calculations:**

i. Auto measurement should be possible on frozen images and Images Recalled from the Image archive.
ii. The System should have Comprehensive set of Measurements in OB/ Gyn/ Carotid/ Lower Limb/ Upper Limb / Thyroid / Testis / Abdominal Applications
iii. Template customization should be possible.
iv. On Board Report for all Packages – Report transfer to Print Page along with Selected Images will be Printed using normal PC Printer.

40. **Following Probes should be supplied along with system:**

i. Convex Probe with Band width of 1MHz to 6MHz OR MORE with Biopsy Guide for Abdominal applications and Support for Strain and Shear wave Elastography and Fusion with Navigation Application.
ii. Convex volume probe 2-7MHz with 4D package.(including multislice ,MPR, curved VOI, fetal stic)
iii. Linear probe of 4 to 9 MHz with Biopsy guide and should support Strain, Shear wave Elastography and Fusion with Navigation Application.
iv. Linear Probe of 6-18 MHz with strain Elastography.
v. Dedicated endocavitary Probe with Band width of 4MHz to 9MHz OR MORE with Biopsy Guide and should Support Strain Elastography. (If shear wave elastography is available on this probe quote as optional. Price will not be included for calculation of L1)
vi. Pediatric probe convex 3-8 MHz .

41. **ACCESSORIES**

a) Suitable Online UPS with 30 min. backup
b) Suitable Furniture
c) Option of connecting to imager/printer in the Department

42. Onsite demonstration of the quoted unit may be asked for

43. **Application Training** engineer should be available for one month continuously and for five month thereafter as and when required after date of installation. Departmental books and suitable furniture to be supplied after discussion with HOD.

44. **Warranty** Five years complete warranty for the entire equipment, probes and accessories which should include service as well as parts with 95% uptime. In case of downtime exceeding 2% it will be extended by double the down time. 95% uptime guarantee should be given. In case down time exceeds 5% penalty will be imposed please refer to bid document.

45. Five years CMC after the expiry of the warranty also to be quoted covering the complete system for which order is placed.

46. **Penalty clause:** Penalty at the rate of RS.2000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.

47. **Uptime guarantee:** During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.2000 /

per day.

48. **Calculation of uptime**

The machine shall remain in working condition/fully functional for minimum 347days (being 95% of 365 days) during the year. For leap year, the machine shall remain in working condition/fully functional for minimum 348 days (being 95% of 366 days) during the year. Sunday and other holidays as per the institute policy would be counted calculation of uptime, if the machine was in working condition/fully functional on both days i.e the day preceding Sunday/holiday and the day succeeding Sunday/holiday. Further, routine maintenance as per scheduled agreed by user would be counted towards calculation of uptime. In case downtime is more than 5 hours on any particular day during normal working hours of the institute the same day would not count towards uptime calculation.

49. **Calculation of down time**

Down time calculation would start from the reporting of the down time by the representative of the institute by agreed mode of communication i.e. telephonic communication or email or as per the data of the remote access of the machine(s) by supplier, if any, whichever is earlier.

The down time would be calculated by deducing total uptime period as defined above from total days of the respective year. Year for the calculation of Uptime/downtime as the case may be would be considered from 01st January to 31st December of the respective year. For purpose of the downtime calculation breakdown of the machine shall be calculated as under. If no imaging is possible then its complete breakdown. If only some functions of the machine are not working in that case it shall be considered as partial breakdown equivalent to 50% of the complete breakdown for calculation purposes.

ITEM No. 7.
TECHNICAL SPECIFICATIONS OF USG (MID END COLOR DOPPLER)

1. The system must be latest and state of the art with fully digital technology equipment to incorporate the facility of 2D, M-Mode, CDI, PW Doppler, CW Doppler, Power Doppler, directional power angio, real time 3-D(4-D) Elastography imaging .The vendor should have at least 5 installations in Government Institution in India in last 5 years.
2. Machine should be USA FDA and CE certified
3. System should have 60,000 digital processing channels or more.

4. System should have dynamic range of 200dB or more.
5. System should be offered with a 2D frame rate of at least 630 or more frames/second.
6. Advanced measurements & calculation package for abdominal, small parts, obst./gynae, urology, vascular and Intracavitory intervention applications should be available.
7. System should have THI & should be able to work in combined mode of harmonic imaging and real time imaging to get excellent image quality. The system should offer Tissue Harmonic Imaging in Power Doppler mode for improved sensitivity.
8. **The system should be upgradable to Contrast Harmonic Imaging** and should have optimization settings to detect the Contrast Agents. Please specify other available advanced Technology to perform better Contrast Harmonic Imaging. **(The contrast package is to be quoted as optional and price will not be included for calculation of L1).**
9. Automatic real time & frozen tracing of instantaneous peak velocity & instantaneous mean velocity (or frequency) should be available. Triplex Imaging should be standard on the system.
10. Should be offered with Speckle reduction Imaging/artifact reduction technology.
11. System should be offered with a 19 inch or more high resolution flat panel medical grade display monitor with facility for position adjustments.
12. System should have at-least four universal active probe ports with electronic switching facility from key board without probe adapter.
13. Operating modes B-mode, M-Mode, B/M Mode, Doppler Mode, Color flow, Power Doppler, DCA/DPA, Contrast Imaging, B/Color flow, PW Doppler, Real time 3D (4-D imaging).
14. Probes should be of broad band type and system should support probes from 1-18 MHz frequency.
15. B mode & color-flow images should be simultaneously available side by side in real time. Digital zoom facility for region of interest in real time and frozen images (8 x).
16. Image storage facility on inbuilt hard disc or MOD/CD/DVD-RW facility should be available. Inbuilt hard disk or external storage with minimum capacity of 1 TB or more. System should have extensive image management capability including thumb nail review & Cineloop editing etc.
17. Cine loop as well as cine scroll facility in B mode with storage of 10,000 or more images should be available.
18. Should have Real Time Compound Imaging Technology with Multiple (Five or more) transmitted lines of sight in convex, linear and endocavitary probes.
19. System should be capable of scanning upto depth of 30cm or more
20. The system should be DICOM 3.0 (or higher version) ready (like send, receive, print, record on CD/DVD, acknowledge etc.) for connectivity to any network, PC/computer etc. in DICOM format. Vendor will connect the machine to existing PACS with no extra cost.
21. The system should be DICOM ready. System should have capability of HIS and RIS connectivity and should also be connected to the dry chemistry printer. Should provide advanced DICOM connectivity to an enterprise data management system or PACS with advanced DICOM features: DICOM Store, Modality Work list, Performed Procedure Step and Structured Reporting. Please specify the advance DICOM features available on the quoted system.
23. The System should have Panoramic imaging / Sie-scape and extended field of view imaging.
24. The System should be quoted along with strain based Elastography Imaging as standard.
25. System should have high resolution 10 inch or more user interface touch panel.
26. On site demonstration is mandatory.

SYSTEM SHOULD BE OFFERED WITH THE FOLLOWING TRANSDUCERS (all probes should come with biopsy attachment)

1. 2–6 MHz or better Broadband Convex Transducer for General Imaging, Abdomen, Renal, OB/GYN imaging with capabilities of CEUS and strain elastography.
2. 3-9 MHz linear probe with strain elastography.
3. 5–17 MHz or better Linear Array Transducer for Vascular, breast, Musculoskeletal, small parts imaging.
4. 4–9 MHz or better Broadband endocavitary transducer with FOV of 135 degrees or more with CEUS and strain elastography capabilities.
5. Pediatric probe 3-8 MHz.

Upgrading requirements

1. **Continuous free, comprehensive software upgrade (compatible with the existing platform) guarantee for 10 years (after installation) of the ultrasound unit must be provided**.
2. **The system should be upgradable to Contrast Harmonic Imaging** and should have optimization settings to detect the Contrast Agents. Please specify other available advanced Technology to perform better Contrast Harmonic Imaging. **(The contrast package is to be quoted as optional and price will not be included for calculation of L1).**

Accessories:

1. On-line UPS with capacity for at least one hour backup to support all functions of the equipment i.e. Performing Ultrasound procedure, exposure on to films or copy on a CD.
2. Servo Digital Voltage stabilizer
3. A Dry chemistry camera of 500 DPI or more with two active trays.
4. Essential furniture

Application Training:

Engineer should be available for one month continuously and for 5 months thereafter as and when required after date of installation.

Guarantee/Warranty

1. Five years comprehensive onsite warranty of entire system (Spares and labour), without exclusion, including all transducers, all other accessories and also UPS including batteries. This will be followed by 5 years CMC to be quoted separately, year wise.
2. 95% uptime guarantee should be given. In case down time exceeds 5% penalty will be imposed please refer to bid document.

3. **General Instructions for the Vendor**

1. Supplier must ensure availability of expertise service and maintenance at site

of installation. Uninterrupted availability of spare parts and repair for next ten years must be assured.

2. Two bid system: vendor is required to make separate bids for technical and price components. These should be quoted in two separate sealed envelopes
3. Please note that all technical features, facilities and accessories mentioned in the tender document are standard requirements and hence, these should be offered as the standard feature. None of these should be offered as optional items **except for upgrade to contrast imaging for which price to be quoted separately**.
4. In price bid, cost of locally supplied items must be quoted separately in Indian currency
5. Please respond to each specification in the same format and order as mentioned in the tender document and specify/indicate the verification document form the product data sheet against each column.
6. When required, information other than those in the data sheets should be provided as separate document from the principals only and should refer to the specific sections being addressed. When standard vendor data sheet disagrees with the bid response (offer/compliance statement), clarification should accompany in the form of certificate from the principals only. In absence of this, the vendor data sheet will prevail for the purpose of evaluation and decision of the technical committee shall be final and binding on the supplier.
7. The vendor has to station one application specialist and service engineer at site for a period necessary to familiarize the medical and technical staff to the scanner protocols and enable them to achieve fast and efficient service.
8. *Mention the number (with addresses, phone numbers, e-mails) of installations of the quoted unit in India.*

SECTION-VII

TECHNICAL SPECIFICATIONS
GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

a) **Five year Comprehensive site warranty** from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Hospital/Institution/Medical College.
b) 98% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
c) All software updates should be provided free of cost during Warranty period.

2. After Sales Service:

After sales service centre should be available at the city of Hospital/Institution/Medical College on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by Tenderer/Indian Agent. Undertaking by the Principals that the spares for the equipment shall be available for at least 10 years from the date of supply.

3. Training:

On Site training to Doctors/ Technicians/ staff is to be provided by Principal/ Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the consignee.

4. Annual Comprehensive Maintenance Contract () of subject equipment with Turnkey:

a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted for next **5 years** on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, **but at least once in six months during the CMC period.**
b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
c) Cost of CMC will be added for Ranking/Evaluation purpose.
d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
e) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period. For major equipment the penalty will be as under:
    i) Liner Accelerator -Rs. 25,000/- per day, 8 hours working basis.
    ii) Brachytherapy –Rs. 10,000/- per day, (8 hours working basis).
    iii) CT Simulator –Rs. 10,000/- per day, (8 hours working basis).
    iv) CT Scan, Gamma Camera –Rs. 10,000/- per day, (8 hours working basis).
    v) MRI, PET –Rs. 15,000/- per day, (8 hours working basis).
    vi) X –ray, MMG –Rs 2,000/- per day, (8 hours working basis).

f) During CMC period, the supplier is required to visit at each consignee's site at least once in **6 months** commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
g) All software updates should be provided free of cost during CMC.
h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
i) The payment of CMC will be made as stipulated in GCC Clause 21.

Turnkey:

Turnkey is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with HOD of Hospital/Institution/Medical College concerned. Turnkey details of each Hospital/Institution/Medical College are given at the end of Technical Specification. The Tenderer to quote prices indicating break-up of prices of the Machine and Turnkey Job of each Hospital/Institution/Medical College. **The Turnkey costs may be quoted in Indian Rupee will be added for Ranking Purpose.**

The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

The Turnkey Work should completely comply with AERB requirement, if any.

Note 1: Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1(c). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.

Note 2: General: Bidders are requested to make sure that they should attach the list of equipments for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer / Tester for Medical equipments to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipments. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipments checked for electrical safety compliance with Electronic Regional Test Labs / Electronics Test and Development Centres across the country on every preventive maintenance call.

Note 3: OPTIONAL ITEMS: Deleted.

Section – VIII
Quality Control Requirements

(Proforma for equipment and quality control employed by the manufacturer(s)

Tender Reference No.
Date of opening
Time
Name and address of the Tenderer:
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

02 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 certificate held
- a . type test
- b . BIS/ISO certification
- c . any other

08 Details of staff
- a. technical
- b. b skilled
- c. c unskilled

Signature and seal of the Tenderer

Section – IX
Qualification Criteria

Bidder minimum Qualification:

1. The manufacturer or it's authorized Indian Agent has supplied similar Equipment (i.e. *MRI – MRI, CT Scanner - CT Scanner, Digital Radiography System - Digital Radiography System , Digital mammography - Digital mammography, C ARM – C ARM, Defibrillator - Defibrillator , Multipara Monitor - Multipara Monitor, Anesthesia Workstation - Anesthesia Workstation - , Ventilator - Ventilator, Radiotherapy equipment - Radiotherapy equipment, nuclear medicine - nuclear medicine etc.)* in India during last five years from the date of tender opening. In support of this, copy of latest purchase order & installation report/ service report is to be submitted with performance statement.

2. Tenderer shall submit audited balance sheets for the last three years (2013-14, 2014-15 & 2015-16). Annual Turnover statements should be certified by chartered accountant bearing their membership No.

PROFORMA 'A'

PROFORMA FOR PERFORMANCE STATEMENT

Tender Reference No. : _____

Name and address of the Tenderer : _____

Name and address of the manufacturer : _____

Order placed by (full address of Purchaser/Consignee)	Order number and date	Description and quantity of ordered goods and services	Value of order (Rs.)	Date of completion of Contract		Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach documentary proof)**	**Mobile number , name & Email ID of equipment user person**
				As per contract	Actual			
1	2	3	4	5	6	7	8	

We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money.

Signature and seal of the Tenderer

Note:

1. **The purchase order mentioned in the above format only will be consider for evaluation.**
2. **The purchase order shall be in accordance to section –IX in order to qualify the qualification criteria.**
3. **The original copy of latest purchaser order along with End user performance certificate / installation certificate is to be colour scan and upload accordingly.**
4. **Bidder shall provide Mobile number, email ID & name of person who has issue this End user performance certificate / installation certificate in order verify the authenticity of the same, failing which unable to verify the same from end-user and entire responsibility shall rest on bidder.**

Section – X

TENDER FORM

Date_____

To,

Director, Chittarranjan National Cancer Institute,
Kolkata

Ref. Your TE document No. _____dated _____
Item no. .....

We, the undersigned have examined the above mentioned TE document, including all amendment/corrigendum issued till opening of bid (*if any*), the receipt of which is hereby confirmed with acceptance of all the terms & conditions of TE document including all amendment/ corrigendum issued till opening of bid. We now offer to supply and deliver_____ *(Description of goods and services)* in conformity with your above referred document for the sum as shown in the price schedules attached herewith and made part of this tender. If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery, warranty & CMC. We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract. We agree to keep our tender valid for acceptance as required in the GIT clause 20, read with modification, if any in Section - III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry. We confirm that we do not stand deregistered /banned/blacklisted by any Govt. Authorities. We fully agreed to the all terms and conditions specified in above mentioned TE document, including amendment/ corrigendum issued till opening of bid and withdrawn all conditional terms if anywhere mentioned in the our bid. Whenever there is a conflict, the tender form acceptance shall prevail.

We hereby certify that all information and documents submitted by us in this tender are true to the best of our knowledge and belief and that nothing material has been concealed. We are solely responsible for its accuracy. In case, at any stage, any of the information/ document is found to be false, the Purchaser shall have full right to reject my bid/ cancel the purchase order and / or stop payment / recover the liabilities, if any from our balance payment / performance security etc.

We hereby undertake that the spares for the equipment shall be available for at least 10 years from the date of supply.

Signature:
Name
Designation
Seal :

(On the letter head of the company)

- **TENDER FORM shall be on the letter head of the bidder and should be as per the above format only. The original copy is to be scan & upload.**

SECTION – XI PRICE SCHEDULE

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

	Name of Bidder			IFB no.		
	Name of Manufacturer			Name of Item		
	Model no.			Item no.		
Sr no.		**Qty**	**Unit cost Rs.**	**GST [% age)**	**GST [Amount] Rs.**	**Total cost with GST Rs.**
		A	**B**		**C**	**A x (B+C)**
1	Ex - factory/ Ex -warehouse /Ex-showroom /Off - the shelf	0	0.00	0.00	0.00	0.00
2	Packing and Forwarding charges	0	0.00	0.00	0.00	0.00
3	Inland Transportation, Insurance for a period including 3 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site	0	0.00	0.00	0.00	0.00
4	Incidental Services (including Installation & Commissioning) at the Consignee's site	0	0.00	0.00	0.00	0.00
	Total Bid Price inclusive of all cost warehouse to Consignee site as per scope of work mentioned in the TE document & inclusive of warranty (Rs.)		0.00	0.00	0.00	0.00

Total Bid Price inclusive of all cost in words (Rs.)

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C
3. Bidder shall filled all cost i.e. a.b,c... failing which it will presumed that the same is inclusive in the total price and nothing will be paid on this account extra.

SECTION – XI PRICE SCHEDULE

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

Item no. Equipment Model no.

Name of Item Equipment Make

1	2	3	4	5							6	
Item no.	Name of item	Country of Origin	Quantity (Nos.)	Price per unit (Currency)							Total bid Price inclusive of all cost warehouse to Consignee site as per scope of work mentioned in the TE document & inclusive of warranty	
				FOB/FCA price at port/ airport of Lading	Carriage & Insurance (port of loading to port of destination) and other Incidental costs	CIP (name place /port of destination in india)	#Full Custom duty amount	Custom clearance charges, Loading & unloading at name place/port of entry in India + local transportation and storage to the consignee site + Extended Insurance for a period including 3 months beyond date of delivery**	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site **	Total INR amount		
				(a)	(b)	(c) = a+b	(d)	(e)	(f)	g = (e+f)		
				Name of Foreign Currency for (c & d)				**INR**	**INR**	**INR**	(c + d) x 4	g x 4
			0	0.00	0.00	0.00	0.00	₹ 0.00	₹ 0.00	₹ 0.00	0.00	₹ 0.00

** To be paid in Indian Currency (Rs.)

 # In case Full Custom duty amount not mentioned in the above format by the tenders, it will presumed that the same is inclusive in total price and nothing will be paid extra to the supplier on this account. The custom duty will reimbursed only as per SCC clause no.10

Total Tender price in foreign currency:	0.00	and INR -	₹ 0.00

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C
3. *The Tenderer will be fully responsible for the safe arrival of the goods at destination (consignee site) in good condition as per terms including custom clearance, payment to custom duty to the custom department, insurance etc.*
4. Bidder shall filled all cost i.e. a.b,c... failing which it will presumed that the same is inclusive in the total price and nothing will be paid on this account extra.

Indian Agency Commission - 0 % of FOB/FCA Inclusive in above price

Name of Bidder: M/s

SECTION – XI PRICE SCHEDULE

C) PRICE SCHEDULE FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD

1	2	3	4					5	6
Item no	Name of Item	Qty	Annual Comprehensive Maintenance Contract Cost included GST for each Unit year wise* Rs.					Total Annual Comprehensive Maintenance Contract Cost for each unit for **5 years** (Rs.)	Annual Comprehensive Maintenance Contract Cost for **5 Years** included GST (Rs.)
			1st	**2nd**	**3rd**	**4th**	**5th**		
			a	**b**	**c**	**d**	**e**	(4a+4b+4c +4d+4e)	[3 x 5]
		0	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00
As on date GST included in above price @						%			

*** After completion of Five Warranty period**

NOTE:-

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for **next 5 years** on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
4. Cost of CMC will be added for Ranking/Evaluation purpose.
5. The payment of CMC will be made as per clause GCC clause 21.1 (D).
6. The uptime warranty will be 98 % on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the TE document.
7. All software updates should be provided free of cost during CMC period.
8. The stipulations in Technical Specification will supersede above provisions
9. The supplier shall keep sufficient stock of spares required during Annual Comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.
10. Bidder shall mentioned present rate of GST, failing which it will presumed that the same is inclusive in the total price and nothing will be paid on this account extra.

Name of Bidder: M/s

SECTION – XI PRICE SCHEDULE

D) PRICE SCHEDULE FOR TURNKEY

Name of item	Brief of Turnkey works BRIEF	No of Turnkey works	Turnkey cost per unit Rs.	GST/Sales Tax/service tax		Turnkey price included GST Rs.	Total Turnkey cost included GST Rs.
				%	Amount Rs.		
		a	**b**		**c**	d =b+c	**d X a**
		0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00

Note: -

1. The cost of Turnkey as per Technical Specification (Section VII) may be quoted on lump sum along with taxes applicable on the date of Tender Opening. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.

2. Cost of Turnkey will be added for Ranking/Evaluation purpose.
3. The payment of Turnkey will be made as per clause GCC clause 21.1 (c).
4. The stipulations in Technical Specification will supersede above provisions
5. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.

Name of Bidder: M/s

Section XI - Price Schedule

E -Price Schedule for Optional items /Spare Parts/ Consumables

Sr no.	Name of item	Name of Part	Qty	Unit cost (Rs.)	GST		Unit cost included GST (Rs.)	Total cost included GST (Rs.)
					%	Amount (Rs.)		
			a	**b**		**c**	d= b+c	**d X a**
1			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
2			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
3			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
4			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
5			0	₹ 0.00	10.00%	₹ 0.00	₹ 0.00	₹ 0.00
6			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
7			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
8			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
9			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
10			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
11			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
12			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
13			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
14			0	₹ 0.00	0.00%	₹ 0.00	₹ 0.00	₹ 0.00
	Name of Bidder:		0					

1. Bidder shall mentioned present rate of GST, failing which it will presumed that the same is inclusive in the total price and nothing will be paid on this account extra.

SECTION – XII

Deleted

SECTION – XIII
BANK GUARANTEE FORM FOR EMD

To,

HSCC
For & on Behalf of Director,
Chittarranjan National Cancer Institute,
Kolkata

IFB No.	BG no. with date
Name of Item	Amount Rs.
Item no.	Validity

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for the supply of _____ (hereinafter called the "tender") against the purchaser's tender enquiry No. _____
Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser) in the sum of _____ for which* payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 20____. The conditions of this obligation are:
(1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
(2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

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

We undertake to pay the Purchaser 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 the two conditions, specifying the occurred condition(s).
This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorised officer of the Bank)

Name and designation of the officer

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

SECTION – XIV
MANUFACTURER'S AUTHORISATION FORM

To,

HSCC
For & on Behalf
Director, Chittarranjan National Cancer Institute,
Kolkata

Dear Sirs,
Ref. Your TE document No _____, dated _____

We, _____ who are proven and reputable manufacturers of_____(*name and description of the goods offered in the tender*) having factories at_____, hereby authorise Messrs_____(*name and address of the agent*) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

Yours faithfully,

[*Signature with date, name and designation*]
for and on behalf of Messrs_____

[*Name & address of the manufacturers*]

Note: 1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.
2. Original letter may be sent.

Note:

- **This FORM shall be on the letter head of the manufacturing firm and duly signed and stamped by competent authority and it should be as per the above format only. The original copy is to be colour scan & upload accordingly.**
- **If bidder is self manufacturer than they will filled this form as a self manufacturer.**
- **If bidder is not self manufacturer, they get this FORM from manufacturer and submit accordingly.**
- **Official Email ID of manufacturer form issuing authority shall be provided by the bidder.**

SECTION – XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

To

Director, Chittarranjan National Cancer Institute,
Kolkata

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no_____ dated _____ to supply (description of goods and services) (herein after called "the contract").
AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;
AND WHEREAS we have agreed to give the supplier such a bank guarantee;
NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of. _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.
We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.
We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

.....
(Signature with date of the authorised officer of the Bank)
.....
Name and designation of the officer
.....
.....
Seal, name & address of the Bank and address of the Branch

SECTION – XVI
CONTRACT FORM - A

Deleted

SECTION – XVI
CONTRACT FORM – B
CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Contract No._____ **dated**_____

Between

(Address of Head of Hospital/Institute/Medical College)

And

(Name & Address of the Supplier)

Ref: Contract No_____ **dated**_____ **(Contract No. & date of Contract for supply, installation, commissioning, handing over, Trial run, Training of operators & warranty of goods)**

In continuation to the above referred contract

2. The Contract of Annual Comprehensive Maintenance is hereby concluded as under: -

1	2	3	4					5
Sr no.	Name of Equipment	Qty (Nos	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*. In INR					Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (a+b+c+d+e)
			1st	2nd	3rd	4th	5th	In INR
			a	b	c	d	e	

Total value (in figure) _____ (In words) _____

b) The CMC commence from the date of expiry of all obligations under Warranty i.e. from_____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CMC)

c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for **next 5 years as** contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, _____ & _____) and Turnkey (if any).

d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.

e) During CMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/ technical/ operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.

f) All software updates should be provided free of cost during CMC.

g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5 % of the cost of the equipment as per contract] shall be furnished in the prescribed format given in Section XV of the TE document, along with the signed copy of Annual CMC within a period of 21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.

h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.

i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.

j) **Paying authority:** _____ (name of the consignee i.e. Hospital/ Institute /Medical College's authorised official)

_____

(Signature, name and address of Hospital/Institute/Medical College's authorised official)

For and on behalf of_____

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)
For and on behalf of _____
(Name and address of the supplier)

(Seal of the supplier)
Date: _____
Place: _____

SECTION – XVII

DELIVERY /CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's /HSCC site representative)

The following store (s) has/have been delivered at CNCI- Kolkata –Campus –II:-

1) Contract No. & date :_____

2) Supplier's Name :_____

3) Name of the item supplied :_____

4) Quantity Supplied :_____

5) Date of goods deliver at CNCI –Kolkata :----------

6) Date of goods takeover by Consignee/HSCC :_____

7) Signature of Consignee /HSCC :_____

8) Seal of the Consignee/HSCC :_____

SECTION – XVIII

Final Acceptance Certificate [Installation, commissioning & Handing over]

(To be given by consignee's authorized representative)

The following store (s) has/have been installed & commissioned in good working satisfactory condition:

1. Contract No. & date :
2. Supplier's Name :
3. Consignee's Name & Address :
4. Name of the item supplied :
5. Installed Commissioned completion date :
6. Name CNCI -Kolkata Representative :
7. Signature of CNCI -Kolkata Representative :
8. Seal of the Consignee

Section – XXII

BID SUMMARY SHEET

A. If EMD/bid security in the form of Bank Guarantee:

Item no.	BG no.	Date	Amount Rs.	Name of Bank	BG Validity
15	XXXX	XX.XX.2014	XXXX	State Bank of India	XX.XX.2015

- **Name of Bank Manager who has issued BG : Ram Singh**
- **Mobile number of Bank Manager : 1234567890**
- **Email ID of Bank Manager : ram@sbi.com**

Sr. Item no	Quoted qty.	Name of Bidder	Name with full Address of Manufacture	Model no.
15	5	Rama	Sterling	124D

Signature:
Name:
Designation
Seal:

Note: Bidder Summary sheet shall be filled in all respect.

Section – XXIII

Power of Attorney

IFB No.

I ----------, *Sole Proprietor' of M/s* ----------, *or Board of Director of M/s* ---------- hereby authorised *Sh.* ----------, ---------- to sign all tender documents, participate in negotiations, make correspondence and sign all documents to the client and government statutory bodies for approval take decisions.

He hereby authorized to sign and execute the agreement etc. for the works and all other documents relating to the works awarded or being executed by *M/s* ----------

Signature of *Sh.* ----------, ----------is attested below.

Sh. ----------

Sole Proprietor/ Board of Director
Sealed

Designation

- **Power of attorney is to be signed by competent authority i.e. Sole Proprietor of the firm or Board of Director of the company.**
- **The original document duly signed and stamped is to be scan & upload.**

Section – XXIV

Bidder Information

Bidder correspondence Address :

Bidder correspondence Email ID :

Bidder contact number :

Bidder contact person :

Manufacture correspondence address :

Manufacture correspondence Email ID :
(who issued Manufacture authorisation form)

Manufacture contact number :

Signature:

Name:

Designation

Seal:

Note: All above information are mandatory.

SECTION – XIX
AFFIDAVIT/UNDERTAKING

IFB No.

We have read and understood the all instructions and all terms and conditions contained in the TE document.

We are fully agree all the terms and conditions of TE document including SIT, SCC, amendment/ corrigendum, technical specification issued till opening of bid. In case, anywhere any conditional terms found in our bid, the same shall be treated as deleted/cancelled/ withdrawn from our bid. Whenever there is a conflict, the acceptance of all terms and conditions of TE document in the tender form/ bid form / affidavit shall prevail only.

We (manufacturer and /or manufacturer authorised agent) shall jointly and severally liable to perform all contractual obligations under the agreement.

We (manufacturer and /or manufacturer authorised agent) confirm that we do not stand deregistered/ banned/ blacklisted/ debarred by any Govt. Authorities in India.

We hereby confirm and certify that the prices offered by us in this tender is not higher than the prices we had offered to any other Govt. of India Organisation(s)/PSU(s) during the last one year and shall provide the justification for reasonableness of our offered price whenever asked during evaluation of our submitted bid.

We hereby certify that all information and documents submitted in this tender are true to the best of our knowledge and belief and that nothing material has been concealed/ misrepresented. We are solely responsible for its accuracy.

In case, at any stage, any of the information/ document is found to be false/ misrepresentation, we (manufacturer and /or manufacture authorised agent) shall be fully liable and the purchaser/HSCC shall have full right to reject my bid/ cancel the purchase order and / or stop payment / recover the liabilities/ loss if any, from our balance payment /EMD/ performance security etc. We are liable for any action as deemed fit by the purchaser/HSCC in addition to forfeiture of the earnest money/ performance security.

We are fully agreed all the terms and conditions of TE document including amendment/ corrigendum /technical specification issued till opening of bid. In case, anywhere any conditional terms found in our bid, the same shall be treated as deleted/cancelled/ withdrawn from our bid. Whenever there is a conflict, the acceptance of all terms and conditions of TE document in the tender form/ bid form / affidavit shall prevail only.

Signature:
Name:
Designation

Seal:

Note:

- **Original copy of Affidavit is to be submitted as instructed in the tender. The original document duly signed and stamped is to be scan & upload**
- **To be submitted on non-judicial stamp paper of Rs. 10/- duly certified by Public Notary**

Section – XXI
Consignee List

Consignee Code	Medical Institutions	Contact Address.
	Director, Chittarranjan National Cancer Institute, Kolkata	**Director, Chittarranjan National Cancer Institute(CNCI, Campus –II), 37, S.P. Mukherjee Road Kolkata -700026**

No. P-45021/2/2017-B.E.-II
Government of India
Ministry of Commerce and Industry
Department of Industrial Policy and Promotion
****

Dated 15th June, 2017
Udyog Bhawan, New Delhi

To

All Central Ministries/Departments/CPSUs/All concerned

ORDER

Subject: Public Procurement (Preference to Make in India), Order 2017

Whereas it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued :

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
2. **Definitions**: For the purposes of this Order:

   'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

   'Local supplier' means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries / Departments in pursuance of this order.

   'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

   'margin of purchase preference' means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

   'Nodal Ministry' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services.

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'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

3. **Requirement of Purchase Preference**: Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder:

   a. In procurement of goods in respect of which the Nodal Ministry has communicated that there is sufficient local capacity and local competition, and where the estimated value of procurement is Rs. 50 lakhs or less, only local suppliers shall be eligible. If the estimated value of procurement of such goods is more than Rs. 50 lakhs, the provisions of sub-paragraph b or c, as the case may be, shall apply.

   b. In the procurements of goods which are not covered by paragraph 3a and which are divisible in nature, the following procedure shall be followed:

      i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract for full quantity will be awarded to L1.

      ii. If L1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the local suppliers, will be invited to match the L1 price for the remaining 50% quantity subject to the local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such local supplier subject to matching the L1 price. In case such lowest eligible local supplier fails to match the L1 price or accepts less than the offered quantity, the next higher local supplier within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L1 bidder.

   c. In procurements of goods not covered by sub-paragraph 3a and which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed:

      i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract will be awarded to L1.

      ii. If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.

      iii. In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.

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4. **Exemption of small purchases**: Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.

5. **Minimum local content**: The minimum local content shall ordinarily be 50%. The Nodal Ministry may prescribe a higher or lower percentage in respect of any particular item and may also prescribe the manner of calculation of local content.

6. **Margin of Purchase Preference**: The margin of purchase preference shall be 20% .

7. **Requirement for specification in advance**: The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.

8. **Government E-marketplace**: In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.

9. **Verification of local content**:

   a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.

   b. In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

   c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

   d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.

   e. Nodal Ministries and procuring entities may prescribe fees for such complaints.

   f. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

   g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the

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duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9h below.

h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:

   i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;

   ii. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);

   iii. in respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted.

10. **Specifications in Tenders and other procurement solicitations**:

a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.

b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of local suppliers who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.

c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.

d. If a Nodal Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/ or other items relating to that Nodal Ministry. A copy of every instruction or decision taken in this regard shall be sent to the Chairman of the Standing Committee.

e. For the purpose of sub-paragraph 10 d above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more that 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India."

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11. **Assessment of supply base by Nodal Ministries**: The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.

12. **Increase in minimum local content**: The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.

13. **Manufacture under license/ technology collaboration agreements with phased indigenization**: While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.

14. **Powers to grant exemption and to reduce minimum local content**: Ministries /Departments of Government of India and the Boards of Directors of Government companies or autonomous bodies may, by written order,

    a. reduce the minimum local content below the prescribed level;

    b. reduce the margin of purchase preference below 20% ;

    c. exempt any particular item or procuring or supplying entities or class or classes of items or procuring or supplying entities from the operation of this Order or any part of the Order.

    A copy of every such order shall be marked to the Member-Convenor of the Standing Committee constituted under this Order.

15. **Directions to Government companies**: In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.

16. **Standing Committee**: A standing committee is hereby constituted with the following membership:

    Secretary, Department of Industrial Policy and Promotion—Chairman
    Secretary, Commerce—Member
    Secretary, Ministry of Electronics and Information Technology—Member
    Joint Secretary (Public Procurement), Department of Expenditure—Member
    Joint Secretary (DIPP)—Member-Convenor

    The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

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17. **Functions of the Standing Committee**: The Standing Committee shall meet as often as necessary but not less than once in six months. The Committee

    a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.

    b. shall annually assess and periodically monitor compliance with this Order

    c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content

    d. may require furnishing of details or returns regarding compliance with this Order and related matters

    e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures

    f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization

    g. may consider any other issue relating to this Order which may arise.

18. **Removal of difficulties**: Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.

19. **Ministries having existing policies**: Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

20. **Transitional provision**: This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

(B. S. Nayak)
Under Secretary to Government of India
Ph. 23061257