

TENDER DOCUMENT

M/S _____

Receipt No. _____

Date: - _____

**FOR
SUPPLY OF
DIGITAL FLOURO RADIOGRAPHY X-RAY MACHINE & HIGH END
COLOR DOPPLER ULTRASOUND MACHINE FOR RADIOLOGY
SECTION OF KNH FOR M&C, IGMC, SHIMLA**

DUE ON 09-10-2017

**LAST DATE
FOR RECEIPT OF BID
UPTO 1 PM ON 09-10-2017**

**BID OPENING ON
09-10-2017 AT 3:00 PM**

**PRINCIPAL
INDIRA GANDHI MEDICAL COLLEGE,
SHIMLA**

TEL No. 0177- 2883214, 2807682

COST OF TENDER DOCUMENT

**AT COUNTER RS. 1000/-
BY POST RS. 1050/-**

INDIRA GANDHI MEDICAL COLLEGE, SHIMLA

Phone No.0177-2804251, 2883401, Fax. 0177-2658339, 2808011

No. HFW/ME (MCS)G(3)-(Purchase)-(Radiology)-(DSA)-

Dated:

TENDER NOTICE

Properly sealed tenders are invited for the supply of **Digital Flouro Radiography X-ray Machine and High end Color Doppler Ultrasound Machine** for **Radiology Section of Kamla Nehru State Hospital for Mother & Child Shimla**, so as to reach in this office on or before **09-10-2017** upto 1 PM thereafter no tender shall be entertained. The offers will be opened on same day at 3 PM in the presence of the prospective tenderers who may wish to remain present.

Tender form containing specifications, terms and conditions can be purchased from the office of the undersigned on any working day between 10 AM to 5PM upto **07-10-2017** at the cost of Rs. 1000/- on counter and Rs. 1050/- by Registered post, which is non refundable (only M.O/ TMO will be entertained sufficiently in advance to avoid the risk of late dispatch of the tender forms. Delay in submission of tender form due to late receipt of MO/TMO will be the entire responsibility of the tenderers). The tenders sent by post or courier shall be entertained only if these are actually received by the specific date and time.

The tender document can also be downloaded from the website www.igmcshimla.org, however, such bidder shall be required to pay the cost of the tender document in the form of DD in favour of the Principal IGMC Shimla alongwith their bid.

The tender must be accompanied with an earnest money of **Rs. 3,00,000/- (Rupees Three Lac)** only in the shape of FDR duly pledged in the name of PRINCIPAL, INDIRA GANDHI MEDICAL COLLEGE, SHIMLA. The tenders without earnest money or short or not in form specified above will be rejected straightway.

In case any date mentioned above happens to be a holiday, the next day will be considered as due date.

Note: Any queries in this regard can be addressed to this office before **27-09-2017** positively.

-sd/-

**Principal
IGMC Shimla**

Dated:-11-09-2017

Endst. No. Even/-15494-500

Copy forwarded for information and necessary action to:-

1. The Director, Information & Public Relation Department, Himachal Pradesh, Shimla-2 alongwith six spare copies for wide publicity in the leading News papers in English and Hindi.
2. The Director Medical Education & Research, Himachal Pradesh, Shimla-9.
3. The Controller of Stores, Himachal Pradesh, Shimla-1.
4. All the Members of Technical Committee.
5. Interested tenderers.
6. Notice Board.

-sd/-

**Principal
IGMC Shimla**

ANNEXURE- C

INDIRA GANDHI MEDICAL COLLEGE, SHIMLA, HIMACHAL PRADESH

S.NO. OF TENDER : _____

FILE NO. :

Name of the party in whose :

Favour the Tender form has

been issued _____

(SEAL OF THE OFFICER)

To

The Principal,

Indira Gandhi Medical College

Shimla, HP -171001

Dear Sir,

1. I am /We are hereby submit our tender for the _____
2. I/WE am/are enclosing herewith the FDR. No..... dated..... for Rs.3,00,000/- (Rupees Three Lac Only) in respect of items at Annexure-A of Tender document duly pledged in favour of the "Principal IGMC Shimla" towards EMD. (TENDERS NOT ACCOMPANIED WITH EMD/BID SECURITY ALONGWITH THE TECHNICAL BID SHALL BE SUMMARILY REJECTED).
3. I /We have gone through all terms and conditions of the tender documents before submitting the same.
4. I/We hereby agree to all the terms and conditions, stipulated by the IGMC, in this connection including demonstration, delivery, installation and warranty and penalty etc. Quotations for each group are being submitted under separate covers, and sheets and shall be considered on their face value.
5. I/We have noted that overwritten entries shall be deleted unless duly cut & re-written and initialled.
6. Tenders are duly signed (No thumb impression should be affixed).
7. I/We undertake to sign the contract/agreement, if required, within 15 (Fifteen days) from the date of issue of the letter of acceptance, failing which our/my security money deposited may be forfeited and our/my name may be removed from the list of suppliers at the IGMC Shimla-1.

NOTE: ALL TERMS AND CONDITIONS SUCH AS TAXES ETC, HAS BEEN INDICATED IN THE QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT ALL THE RATES ARE INCLUSIVE OF ALL TAXES AND OTHER TERMS AND CONDITIONS ARE ALSO AS PER YOUR REQUIREMENTS.

Yours faithfully,

Signature of Tenderer(s)
full Address

WITNESS _____

WITNESS _____

WITNESS _____

1. Instructions to Bidders

- 1.1 Bids are invited, for and on behalf of Principal, IGMC Shimla from established, reputed and experienced manufacturers or their authorized dealers/representatives for the purchase of **Digital Flouro Radiography X-ray Machine and High end Color Doppler Ultrasound Machine for Radiology Section of Kamla Nehru State Hospital for Mother & Child Shimla** as per Technical Specifications as at Annexure-A .
- 1.2 Bidders are requested to study the tender document and terms & conditions carefully. Submission of tender shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.
- 1.3 The scope of work shall include Supply, Installation, Commissioning, & Satisfactory Demonstration. This will also include testing, packing, transportation, scheduling of transportation, transit insurance, delivery at sites, unloading, storage, job site storage, insurance, installation and any other services associated with the delivery of the equipment and materials providing warranty of services and operation and maintenance of other related equipment / items required for complete installation. The successful bidder will assume full responsibility of the complete system until final acceptance.
- 1.4 It will be imperative on each bidder to fully acquaint himself with all the local conditions and factors which would have any effect on the performance of the System. No request for the change of price, or time, schedule of delivery of stores shall be entertained after the purchase on account of any local condition or factor.
- 1.5 The bidders may have a survey including a site visit before furnishing the quotations. They have to apply for permission in this regard to the Principal IGMC Shimla. The Principal, IGMC Shimla will give such permission in writing, but the expenses, in connection with the visit and surveys etc., shall be borne by the bidders themselves.
- 1.6 The bidders will not form a part of the cartel and put in supporting quotations for some other company. This will debar the company for participating in other tenders floated or to be floated in by the purchaser. The authorities can compare the prices of other Bidders L2, L3 etc. also with the prices quoted in other tenders for same products and in case of discrepancy suitable action will be initiated
- 1.7 No Gratification Clause: The bidders will give an undertaking that they will not try to gratify any person or use any other unfair means involved in the purchase of the quoted equipment. This will also debar the company for participating in other tenders floated or to be floated in by the purchaser and suitable action will be initiated against such defaulters.
- 1.8 Non Blacklisting Certificate: All the bidders will give an undertaking on non judicial Stamp paper duly attested that neither they nor their principals or the manufacturers have been blacklisted by any State / Central Government Departments/other organisations.
- 1.9 The bidders shall also be required to submit the copies of PAN and income tax returns for the last three year along with the copy of TIN/GST/ copy of registration of their firms with appropriate authority
- 1.10 All the correspondences shall be addressed to the Principal, IGMC Shimla.

1.11 The Bid Documents are not transferable and the cost of the documents is not refundable under any circumstances.

2. Bid Security/Earnest Money

2.1 Bid Security/EMD amount should be enclosed along with the Technical Bid for an amount of Rs.3,00,000/- (Rupees Three Lac) only in respect of items at Annexure-A in the shape of FDR duly pledged in the name of "Principal, IGMC Shimla", failing which the tenders will be out rightly rejected. Bid Security/EMD, if already deposited against other tenders, shall not be adjusted against this tender.

2.2 The "Bid Security/Earnest Money ", in case of unsuccessful Bidders, shall be retained by the Purchaser, up-to a maximum period of one year from the date of opening of the Bids or till the finalization of the tender, whichever is later. The Bid security shall be refunded to the unsuccessful tenderers on their written request. No interest will be payable by the Purchaser on the Bid Security/EMD

2.3 The Bid Security/Earnest Money shall be forfeited ;

a) If a Bidder withdraws his bid during the period of bid validity specified by the Bidder in the Bid; or

b) In the case of finally selected Bidder, if the Bidder fails;

i) to sign the Contract in accordance with Clause 13; or

ii) to furnish Performance Guarantee in accordance with Clause 5.8 or

iii) if, at any stage, any of the information/declaration is found false.

2.4 Bid security/Earnest Money in respect of the finally selected Bidder(s) will be discharged upon the Bidder(s) after executing the Contract and furnishing the Performance Guarantee, pursuant to Clause-5.8.

3. Bidder's Qualification

The "Bidder" as used in the tender document shall mean one who has signed the Bid Form. The Bidder may be either the manufacturer of the equipment/machinery/material for which prices are quoted on the Price Schedule or his duly authorized representative, in which case, he shall submit a certificate of authority as per **Annexure- B.** All necessary certificates and documents shall be furnished by the manufacturer/ representative of the firm. Manufactures/companies should authorize only one distributor for the State/for this particular tender and such specific authorization to this effect should be accompanied with tender document.

Only one bid from a manufacturer firm shall be accepted and in case the manufacturer firm itself apply in the tender process, the bid of the authorized representative shall not be considered.

4. Procurement and Submission of Tender Document

4.1 The non-transferable Tender Document will be sold at counter on payment of tender fee of Rs.1,000/- (Rupees One Thousand only non refundable) through cash or MO/TMO or demand draft or by post Rs.1050/- by MO/TMO or Demand Draft payable at Shimla drawn in favour of the "Principal IGMC Shimla".

IMPORTANT: IN CASE THE TENDER DOCUMENTS ARE DOWNLOADED FROM THE WEBSITE:-THE BIDDERS MAY DOWNLOAD THE TENDER DOCUMENTS DIRECTLY FROM THE WEBSITE AVAILABLE AT WWW.IGMCSHIMLA.ORG IN SUCH CASE, THE

BIDDERS ARE REQUIRED TO SUBMIT THE TENDER COST FEE OF RS.1,000/-(NON-REFUNDABLE) BY WAY OF SEPARATE DEMAND DRAFT MENTIONING FIRMS NAME ON BACK OF BANK DRAFT DRAWN IN FAVOUR OF PRINCIPAL, INDIRA GANDHI MEDICAL COLLEGE, SHIMLA AND THE SAME SHOULD ESSENTIALLY BE ENCLOSED ALONGWITH THE TECHNICAL BID. THE BIDDERS SHOULD SPECIFICALLY SUPERSCRIBE, "DOWNLOADED FROM THE WEBSITE" ON THE TOP LEFT CORNER OF THE OUTER ENVELOPE CONTAINING TECHNICAL BID & PRICE BID SEPARATELY. IN NO CASE, THE TENDER COST FEE SHOULD BE MIXED WITH EMD AMOUNT. THE TENDERS NOT FOLLOWING THE ABOVE PROCEDURE WILL BE SUMMARILY REJECTED.

- 4.2 The non-transferable tender document can be obtained from the Office of Principal IGMC Shimla on or before **07-10-2017** on any working day from 10.00 AM to 05.00 PM.
- 4.3 The sealed bids will be accepted upto **09-10-2017** till 1.00 p.m. in the office of the Principal IGMC Shimla.
- 4.4 The Technical Bids will be opened on **09-10-2017** at 03.00 p.m. in the office of the Principal IGMC Shimla. The bidders or their authorized representatives may like to be present, if they so desire.
- 4.5 After evaluation of the Technical Bids and the technical presentation, the short listed bidders will be intimated accordingly.
- 4.6 The Financial bids of the short listed bidders will be opened in the Office of the Principal IGMC Shimla in the presence of prospective bidders/their authorized representatives, if any. (The date of opening of financial bids will be communicated to the technically successful bidders separately).

Note :- The forwarding letter as at **Annexure C** and other relevant documents as per check list duly signed should invariably be returned alongwith the quotation furnished, failing which the tender shall be rejected.

5. Bid Requirements

- 5.1 The College invites two part Bids from eligible suppliers/bidders. The two part bid shall consist of Part-I Technical Bid and Part-II Financial Bid. Technical and Financial Bids for each Machinery/Equipment as detailed at **Annexure-A** should be submitted in two separate sealed envelopes superscribed "Technical Bid" and "Financial Bid" respectively. The technical bid would be opened first. The Financial bid would be opened only in the case of those bidders who qualify and meet requisite parameters for technical evaluation. Further the
 - a) Technical Bid shall comprise the following and to be submitted alongwith following documents-
 - i) Manufacturers' Authorisation Form (Annexure -B)
 - ii) Forwarding letter (Annexure-C)
 - iii) Bidders particulars (Annexure-E)
 - iv) Undertaking for supply, installation and maintenance of equipment (Annexure -F)
 - v) Earnest Money Deposit
 - vi) Proforma of Guarantee for supply of spares during the post warranty period (Annexure -G)
 - viii) Any other certificates/undertaking as per check list
 - b) Financial Bid in one cover. (Annexure-D). Separate Financial Bid shall be submitted in respect of each equipment in a separate envelope.

5.2 Bidders are required to submit all relevant documents as per check list, brochures, authority letters etc. with the technical offer of the concerned equipment and separate sealed envelope for each equipment should be submitted.

PLEASE NOTE NO PRICE/ COST SHOULD BE INDICATED IN THE TECHNICAL BID. TENDERS SUBMITTED WITHOUT FOLLOWING THE TWO BID SYSTEM PROCEDURE WILL BE SUMMARILY REJECTED.

5.3 Both these covers shall also contain name and address of the firms. Technical Bid cover and Financial Bid cover prepared as above are to be kept in a single sealed cover super-scribed with Tender Number.

5.4 The cover thus prepared should also indicate clearly the name and address of the Bidder.

5.5 Each copy of the tender should be a complete document and should be bound as a volume. Different copies must be bound separately.

5.6 The sealed cover as mentioned at Clause 5.3 above shall be deposited with the Principal IGMC Shimla.

5.7 The Bidder must quote for the equipment with all items and quantities as listed in Annexure-A. **The bidder is required to quote only one model of the equipment.** The bid is liable to be rejected in case more than one model is offered.

5.8 The finally selected Bidder(s) will be required to furnish Security amount for Contract Performance equal to 10% of the Contract Price, on award of Contract as per the prescribed Performa, in the shape of Bank Guarantee from any scheduled Indian Bank or FDR duly pledged in favour of the Principal, IGMC, Shimla which shall be valid till warranty period. Failure to furnish security for the performance of contract, in time, would also entail forfeiture of EMD.

5.9 Bids not accompanied by EMD and Bids from representatives without letter of Authority from the manufacturers will be summarily rejected.

5.10 Telex/Fax bids, bids received through e-mail and incomplete bids will be summarily rejected.

5.11 Bidders should enclose, alongwith the Technical Bid of their offers, the full details including proposed configuration of offers with full documentation, descriptive literature/leaflets supplementing the description and point out any special feature of their system. All documentation is required to be in English.

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

5.13 All pages of the Bid being submitted must be signed and sequentially numbered by the Bidder and a certificate may be provided on the covering letter indicating the number of pages submitted along with the bid.

5.14 All information in the offer must be in English. Information in any other language must be accompanied by its authenticated translation in English. Failure to comply with this may render the offer liable to be rejected. In the event of any discrepancy between the offer in a language other than English and its English translation, the English translation will prevail.

5.15 The bidder must give an undertaking that the offered equipments have not been supplied anywhere at a less rate than offered rate in this tender.

5.16 The bidder must submit the list of installation of similar nature of equipments and also submit the copy of latest supply order alongwith satisfactory performance report.

6. Period of Validity of Bids

Bids shall remain valid for one year from the date of opening of price bid prescribed by the Purchaser or till the completion of job, whichever is later, unless otherwise prescribed contrary in other terms and conditions of this tender document. The Purchaser may reject a bid valid for a shorter period.

7. Purchaser's Right to accept any Bid and to reject any or all bids

The Purchaser reserves the right to accept any bid and to annul the tender process and reject all bids at any time, without assigning any reason, prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

8. Opening of Bids by Purchaser

- 8.1 The bids will be opened in the presence of Bidders/representatives who choose to attend on the scheduled date and time as mentioned. The Bidders/ representatives who are present shall sign a register evidencing their attendance. The Bidder's representatives shall furnish letter of authority from their principal to attend the bid opening. However the tenders of other participating firms shall not be allowed to be handed over to them for their inspection. Financial bids of only those Bidders, whose bids are found technically suitable/qualified (after the presentation, demonstration etc., if any) will be opened. The decision of the sub-committee on technical suitability shall be final and shall not be open for discussion.

The bidders who do not qualify the technical evaluation shall be informed separately and their EMD and unopened financial bid shall be returned on their written request after award of the contract.

9. Scrutiny of Bids

- 9.1 The College will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required EMD has been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

The College may waive any minor infirmity, nonconformity or irregularity in a bid that does not constitute a material deviation and that does not prejudice or affect the relative ranking of any Bidder as a result of the technical and financial evaluation.

- 9.2 Prior to the detailed evaluation, the College will determine whether each Bid is acceptable qualitatively, is generally complete and is substantially responsive to the Bid Documents. For the purposes of this determination, a substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the Bid Documents without material deviations, objections, conditionalities or reservations. A material deviation, objection, conditionality or reservation is one (i) that affects in any substantial way the scope, quality of performance of the Contract; (ii) that limits in any substantial way and /or is inconsistent with the Bid Documents or the college's rights or the successful Bidder's obligations under the Contract; or (iii) whose rectification would unfairly affect the competitive position of other Bidder's who are presenting substantially responsive Bids.

- 9.3 Arithmetical errors, if any, will be rectified on the following basis: If there is a discrepancy between the unit price and the total unit price as declared in the Price Schedule the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and

figures, the amount in words will prevail. If the supplier does not accept the correction of the errors, its bid will be rejected.

10. **Price Bid**

The prices may be quoted in **INR** only. All prices mentioned should be FOR destination at IGMC Shimla. Prices shall be quoted separately for each equipment and in a separate envelope. The bidders are required to quote the following prices:

- i) Cost of core equipment including accessories as detailed in the specification with 3 years warranty .
- ii) Cost of CMC per annum for post warranty period for the number of years as detailed in the technical specification of respective equipment. If nothing has been mentioned, it should be quoted for five (5) years. CMC shall also cover accessories supplied with the main equipment.
- iii) Cost of turn key job, wherever applicable
- iv) Cost of buy-back offer, wherever applicable.
- v) Cost of consumables, wherever applicable.

The price comparison shall be made on the basis of cost of main machinery/equipment along with its accessories plus post warranty CMC period + cost of turn key job & taking into a/c the buy back offer, cost of consumables wherever applicable.

- 10.1 The bidder shall indicate the prices on prescribed PRICE BID PROFORMA at **Annexure-D** of the tender document.. The Proforma should be duly signed & sealed by their authorized signatory/ies. Financial Bids not given in Proforma will be rejected out rightly. Separate proforma shall be used for different equipments of various Departments.
- 10.2 The prices of machinery/equipment quoted by the Bidder and accepted by IGMC Shimla shall hold good till the completion of the works or satisfactory installation of Machinery/equipment and no additional claims will be admissible on account of any price variation or fluctuation in market rates.
- 10.3 Payments made consequent to any notified change in sales tax and other statutory levies (both increase and decrease) shall be to the Purchaser's account. For such claims of variation, the Bidder shall produce the Government notification as documentary evidence. Price variation due to any other cause shall be on Bidder's account.
- 10.4 The finally selected Bidder will have to apply to the proper Government Authority for grant of requisite License for such items as required and the purchaser will only tender such assistance, as considered necessary.
- 10.5 The firm has to provide the break-up of expenditure of different quoted items as well as total expenditure clearly for the whole items.
- 10.6 Excise/Custom Duty, VAT, Entry Tax and any other levy/surcharge in any shape or by whatever nomenclature may be included in the quoted amount unless it is specially mentioned separately.
- 10.7 The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected.

11. Purchaser's Right to Vary Quantities at the time of Award

The Purchaser reserves the right to vary the quantities and/or services.

12. Negotiation/Award of Contract

Prior to the expiry of the period of bid validity, the Purchaser will notify the finally selected Bidder(s) in writing by registered letter or by cable or telex or fax, to be confirmed in writing by registered letter or by Hand in person, that its bid has been accepted. If need for extension of the bid validity period arises, it should be extended by mutual agreement. Before the award of contract, the College may hold negotiations with the bidder, whose bid has been determined to be substantially responsive to the bid documents and whose offers are lowest one. The aim is to reach agreement on all points and sign a contract.

13. Signing of Contract

13.1 At the same time as the Purchaser notifies the finally selected Bidder(s) that its bid has been accepted, the finally selected Bidder(s) shall collect the supply order, agreement/ Contract proforma from the office of the Principal IGMC Shimla.

13.2 Without prejudice to any legal remedy, failure of the finally selected Bidder(s) to comply with the requirement of Clause 2.3 (a) or Clause 2.3 (b) shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Purchaser may make the award to the next lowest evaluated Bidder or call for fresh bids.

14. Payment:

Payment of machinery/equipment will be released in two instalment as under:-

- 90% after the satisfactory installation & functioning of the Machinery/Equipment in the department and receiving of certificate to that effect from the concerned department.
- 10% after 2 month's satisfactory working of the machinery/equipment and receiving of certificate to that effect from the concerned department.

Payment of Turnkey job will be released in two installments as under:-

- 50% on completion of at least half of the jobs under turnkey project
- 50% after satisfactory completion certificate from the PWD(Civil & Electrical wing) and HOD of the concerned department.

15. Other Terms and Conditions of Tendering Firms

15.1 Printed terms and conditions to the Bidder will not be considered as forming part of their Bids. In case terms and conditions of the contract applicable to this invitation of tender are not acceptable to any Bidder, he should clearly specify deviation in his Bid.

16. Inspection and Tests

The Purchaser shall have the right to inspect and/or test the machinery/equipment for its conformity with the given Specifications.

- 16.1 In case any inspected or tested equipment's fail to conform to the specifications, the Purchaser may reject them and the supplier shall either replace the rejected machinery/equipment's or make all alterations necessary to meet specification requirements free of cost to the Purchaser.
- 16.2 The supplier shall provide installation and standard tests for the individual equipment before the delivery of the system at site.
- 16.3 The supplier shall test each individual equipment and the complete system after installation at site and prepare a test report. This shall be compared with the factory test report to ensure that there is no deterioration in the equipment parameters during storage, transportation and installation.
- 16.4 Leaflets and literature should invariably be attached for ready references alongwith complete documentation of all the measurements conducted during installation period which shall be submitted by the supplier for future reference.
- 16.5 The technical problems faced during installation, testing and commissioning period and their solutions shall be submitted by the supplier at the time of handing over the completed works.
- 16.6 For the purpose of taking over the equipment/system supplied pursuant to this contract, an acceptance test shall be carried out at the Purchaser/Consignees destination site. The equipment which meets the acceptance test shall only be accepted by the Purchaser.
- 16.7 (a) Acceptance Test at site shall be conducted of individual equipment and complete system to ensure that individual equipment and complete system meets the technical specifications and other operational and technical requirements of tender.

(b) The Purchaser shall have the right to reject any individual equipment or complete system, if in its opinion the same does not meet technical specifications, operational or technical requirements. The decision of the purchaser in this regard shall be final.

(c) The delivery, installation or commissioning shall not be deemed to have been completed unless all the equipments and systems are accepted by the purchaser.

18. Warranty/CMC (AFTER SALES SERVICES)

- 18.1 The warranty charges shall be quoted alongwith the cost of main equipment on compulsory basis for three years. It shall be noted that the warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. CMC shall be applicable to the post warranty period for five years and shall be quoted on yearly basis.
- 18.2 Incremental Cost (if any) for up-gradation, if required, should form part of the contract for the Warranty and Post Warranty period.
- 18.3 The Supplier (manufacturer) shall set-up a maintenance base to provide maintenance service, of the entire system being offered, at short notice during the warranty and post warranty period. The technical maintenance personnel of the supplier, responsible for supervision and maintenance, shall be available to reach the site(s) within 48 hours' notice.
- 18.4 If the performance of any individual equipment or system is not satisfactory, the same shall be replaced by the supplier free of cost.
- 18.5 If it is found that to meet the performance criteria, any extra equipment is required the same will be provided free of cost by the supplier.
- 18.6 Any lacuna or lacunae noticed in the functioning of the installation as a result of any design feature shall be rectified by the supplier free of cost.
- 18.7 The Supplier shall fully associate the engineers and technicians of the Institute during installation, testing, commissioning, operation and maintenance period.

- 18.8 The bidder shall attach an undertaking on affidavit from the original manufacturer that the AMC/CMC INDICATING THE CMC CHARGES after warranty period shall be provided by the manufacturer OR HIS SOLE All India distributor directly on the rates and terms finalized with the bidder. The manufacturer shall be liable for the aforesaid service in case the dealership is changed/back out.

19. Spare Parts

- 19.1 The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipments and for the complete system for at least twelve years on a continuing basis. An undertaking in this regard should be made available from the original manufacturer.

However, this does not relieve the supplier of any warranty obligations under the Contract.

- 19.2 The Bidder shall include in his tender, the details of essential spares, and their quantity and unit prices as per schedule of requirements.
- 19.3 In addition to the essential spares, Bidder shall indicate additional recommended quantities of spares for efficient maintenance of the equipment and the systems for a period of 9 years, after the completion of warranty period, to ensure that the quality and reliability objective is achieved. The details on which unit price and the total cost or recommended spares is based shall be included in the tender as an option. However, the cost of such recommended spares shall not be considered for tender evaluation.

20. Previous Installations

- 20.1 The names and address of the institutions/hospitals where the supplier has already installed/supplied the equipment indicating the dates of installations may be given (in India and abroad). He should also attach performance certificates to indicate his prompt after sales service.
- 20.2 On site functional assessment of the similar installation and equipment of the short listed Bidders will be undertaken, if necessary, by the Committee duly constituted by the IGMC.

21. Delivery, Installation and Commissioning

- 21.1 Delivery of the goods at the Institute premises shall be completed by the Supplier within 6-8 weeks from the date of Supply Order. This period could be extended on the written request of the supplier and with the mutual consent of both purchaser and supplier. However the delivery period is extendable only in peculiar circumstances.
- 21.2 The installation, testing and commissioning of the proposed system shall be completed within 8-10 weeks from the date of Supply Order, failing which necessary action as deemed fit under rules, will be taken against the defaulter.
- 21.3 In case the goods are not supplied within the prescribed/mutual agreed time period, demurrage @ 0.5% per week on the contract price subject to maximum 10% of contract price shall be charged.

22. Site Preparation

- 22.1 The site for installation of the equipment shall be provided by the purchaser as per the required specification and environmental conditions before the installation of System/equipment/machinery.
- 22.2 Any civil/electrical work or other related works as detailed in the technical specification shall be prepared by the supplier keeping in view the actual condition of site.

23. Incidental Services

- 23.1 The supplier is required to provide at free of cost to Purchaser all Hardware and Software up gradation from time to time, during warranty and CMC period.
- 23.2 Further, any bugs/shortcomings detected by the purchaser/user as well as the supplier himself shall be rectified at free of cost to purchaser even beyond warranty period

24. Property Rights

The Supplier shall indemnify the Purchaser against all third party claims of infringement of patent, copyright, trademark, license of industrial design rights, software piracy arising from use of the store/goods or any part thereof in the Purchaser's country.

25. Arbitration

Disputes, if any, shall be subjected to the sole arbitration of Principal Secretary/Secretary(Health) to the Government of Himachal Pradesh, whose decision shall be final and binding on the parties.

26. Jurisdiction

The courts at Shimla will have the jurisdiction for trial of any matter, dispute or reference between the parties arising out of the contract. It is specifically provided that no court outside and other than Courts at Shimla shall have jurisdiction in the matter.

27. Force Majeure

Any failure of omission or commission to carry out the provisions of the contract by the supplier shall not give rise to any claim by either of the party to contract, if such failure of omission or commission arises from an act of God, which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane or any pestilence or from civil strikes, compliance with any stature and/or regulation of the Government, lockouts and strikes, riots, embargo or from any political or other reasons beyond the supplier's own control including war (Whether declared or not) civil war or state or insurrection, provided that notice or the occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to Force Majeure conditions.

28. Termination for default

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

- i) If the supplier fails to deliver or install system within the time period(s) specified in the contract, OR
- ii) If the supplier fails to perform any other obligation(s) under the contract.

29. Termination for Insolvency

The purchaser may at any time terminate the contract by giving written notice to the supplier, without compensation to the suppliers, if the supplier becomes bankrupts or otherwise insolvent (which shall be a breach of the contract on the part of the supplier), provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

30. Termination for Convenience

The purchaser may by written notice sent to the supplier terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience.

31. Up time guarantee:

The firm should provide uptime guarantee of 95%.

32. Downtime penalty Clause

- 32.1 During the comprehensive warranty period, the guarantee uptime as prescribed in tender document/technical specification shall have to be ensured otherwise the penalty as specified shall be enforced. No discount shall be given on account of public holidays / Sundays. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least TWELVE YEARS after handing over the unit to the institute.

If accessories/other attachment of the system are procured from the third party, in such case the responsibility to keep the items/equipment in working condition shall be the sole responsibility of the vendor and the bidder itself will have to sign the CMC with the Institute if required.

- 32.2 The principals or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

33. PRICE FALL CLAUSE

The offer of rates by the tenderer will be subject to the price fall clause i.e. if any item is offered at a lower rate by the tenderer in any other State/Place in India to any other person/Org./Institution, he shall forthwith notify such reduction or sale to the Principal IGMC Shimla and the price payable for the Stores supplied to IGMC after the date of coming into force the such reduction or sale, shall stand correspondingly reduced even to IGMC.

- 34.** The supplier shall furnish the following certificate alongwith each bill for payment for supplies made against in Rate Contract Tender.

“I/We certify that the Stores of description identical to the Stores supplied to the Government under the contract against Tender herein have not been offered/sold by me/us to any other person/organization/Institution upto date of bill/the date of completion of supplies against all supply orders placed during the currency of the tender/rate contract at the price lower than that of prices offered to the institute UNDER THIS CONTRACT/AGAINST TENDER”.

The bidders must attach copies of their existing rate contracts, if any, with DGS&D or any other State Government/Institution.

NOTE :- BIDDER must go through these terms and conditions very carefully and submit an undertaking alongwith his signature and stamp in token of acceptance of these terms and conditions in a separate sheet.

Principal
IGM.C, Shimla

CHECK List duly filled in to be attached with the Technical Bid

S.N.	Particulars	
1.	Undertaking for no gratification as per clause 1.7	Yes/No
2.	Non-blacklisting certificate as per Clause 1.8	Yes/No
3.	Authorization from original manufactures in case bid is being submitted by representative firms (Annexure-B)	Yes/No
4.	Forwarding letter (Annexure-C)	Yes/No
5.	Undertaking as per clause 5.15	Yes/No
6.	List of installations as per clause 5.16	Yes/No
7.	Undertaking on affidavit from the original manufacture as per Clause 18.8	Yes/No
8.	Undertaking for the supply of spare part as per clause 19.1	Yes/No
9.	Whether a list of institution/organizations where your firm has supplied this item recently, is attached alongwith satisfactory performance certificate from those institution/ organizations. As per clause 20	Yes/No
10.	Certificate of having satisfactory service arrangement and fully trained staff as per clause 32.2	
11.	In case you are manufacturer, have you enclosed the certificate.	Yes/No
12.	Whether the prices has been quoted on the prescribed proforma.	Yes/No
13.	Whether all the undertakings as required in the tender document are enclosed	Yes/No
14.	Whether EMD as asked has been attached.	Yes/No
15.	Whether Tender Document duly signed by the authorized signatory attached.	Yes/No
16.	Whether the technical specification of the material are attached.	Yes/No
17.	PAN and copies of Income Tax Returns for the last three years.	Yes/No
18.	Copies of TIN issued/certificate of registration.	Yes/No
19.	Undertaking for supply of spare part during the subsequent twelve years(form G)	Yes/No
20.	Any other certificate/undertaking as prescribed in the tender	Yes/No

Authorized Signatory:

Name of the firm/bidder:

To be enclosed with Technical Bid

ANNEXURE-B

PROFORMA FOR AUTHORITY FROM MANUFACTURERS

No.....

Dated.....

To,

Dear Sir,

Sub: Tender No.....

We..... an established and reputed manufacturers of having factories at.....and office at M/s..... hereby authorise (Name and Address of the Authorized representative) _____ to represent us, to participate in the tender, negotiate and conclude the contract on our behalf with you against Tender no.....

No company/firm or individual other than M/s..... is authorized to represent us in regard to this business against this specific tender.

Yours faithfully,

Signature and seal

Name.....

For & on behalf of M/s

.....
(Name of Manufacturers)

Note: This letter of authority should be on the letter head of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturers.

To be enclose with Technical Bid

Undertaking for supply, installation and maintenance of equipment

Dated:

To,

Sir,

Having examined the Bidding Documents of Tender No. _____
Dated _____ undersigned offer to supply, install, commission, operate and
maintain _____ and, we undertake, if our bid is accepted, to complete delivery
of all the items specified in the contract within _____ weeks calculated from the date of
receipt of your Notification of Award and to complete the installation, testing commissioning with
in..... We also undertake to ensure comprehensive maintenance and supply of
consumables on the rates offered/negotiated (in case our bid is accepted) for the entire period of
_____ years from the date of satisfactory installation.

Signature and Seal

.....

(In the capacity of)

Only Authorized to sign bid for and on behalf of.....

To be enclosed with Technical Bid

PROFORMA OF GUARANTEE FOR SUPPLY OF SPARES DURING POST WARRANTY PERIOD

To

Dear Sir,

In consideration of the (hereinafter referred to as "Purchaser" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assignees) having awarded to M/s..... with its Registered/Head office at (hereinafter referred to as the "Supplier" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assignees), a contract by issue of the Purchaser's letter of Award no..... dated entering into a formal contract to that effect with the Purchaser on vide agreement dated..... (hereinafter referred to as the contract).

We the supplier hereby give a guarantee for the supply of all necessary spares demanded for the routine and emergency maintenance of being supplied by us to for a period of not less than _____ years after the warranty period of 3 years and life time spares thereafter in case asked for by the purchaser.

We further clarify that for the first _____ years i.e. warranty period of _____ years, we are covered by the warranty clause as mentioned. For the remaining period of _____ Years and thereafter for the life time, a detailed list of spares will be supplied to the purchaser for the purpose of enabling him to decide spares needed for routine and emergency maintenance.

Dated..... day of.....20.....

Witness :

(Name of manufacturers)
Signature and Seal

(Signature)
Name : For & on behalf of M/s

PRICE BID PROFORMA

ANNEXURE-D

Sr. No.	Name of the equipment	Price quoted
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1.	Cost of Core Equipment. (Manufacturer/model/ make etc be specified) including all accessories as required in the technical specification with 5 years warranty	
	Cost of Optional items, if any, not to be taken into account for determining L-1	
2.	Taxes/Duties :-	
	i) Custom Duties	
	ii) GST	
	iii) Service Tax	
	iv) Entry Tax	
	v) Others(Pl. specify)	
3.	CMC (after 5 years warranty) 1 st year 2 nd year 3 rd year 4 th year 5 th year Taxes on CMC(if any)	
4.	Turn Key Job, wherever applicable.	
5.	Buy Back offer, wherever applicable.	
6.	Net Price	

It is certified that the cost of equipment shown above, has included all taxes/duties etc. and nothing above shall be charged over and above this cost.

Authorized Signatory:

Name of the firm/bidder:

To be enclosed with Technical Bid

ANNEXURE-E

BIDDER PARTICULARS

Bidder Serial Number Allotted on Tender Document: _____

1. Name of the Bidder :

2. Address of the Bidder :

3. Name of the Manufacturer (s) :

4. Address(es) of the Manufacturer :

5. Name and address of the person :
To whom all references shall be
Made regarding this tender inquiry.

Telephone :

Telex :

Fax :

e-mail address :

Witness :

Signature

Name

Address

Date

Signature

Name

Designation

Company

Date

Company Seal

ANNEXURE-A

**Technical Specification for Digital Flat Panel Radiography Unit with two Flat Panel
detector to be installed in IGMCM Shimla**

High powered X ray unit with two digital flat panels for various radiographic examinations, for the Department of Radiodiagnosis at IGMC, Shimla.

Unit should have the following specifications:

Sr. no.	Specification as per Tender
1	Generator
	<ul style="list-style-type: none"> • 800mA or more unit with microprocessor controlled high frequency X-ray generator with power output of 80KW or more. • The exposure range should be 40-150KV
	<ul style="list-style-type: none"> • The minimum exposure time should be 1ms or less.
2	X-Ray Tube
	<ul style="list-style-type: none"> • There should be provision for automatic exposure control to cover whole body.
	<ul style="list-style-type: none"> • Ceiling suspended
	<ul style="list-style-type: none"> • Dual focus tube • Small focal spot should be 0.6 mm or less and large focal spot should be 1.25mm or less.
	<ul style="list-style-type: none"> • Tube loading should be at least 30 KW for small and at least 80 KW for large focus.
	<ul style="list-style-type: none"> • Motorized movement of ceiling suspended tube in all axis. • Electromagnetic locks with collision protection sensor.
	<ul style="list-style-type: none"> • Field size programming should be possible. • Anode heat storage capacity should be 300 KHU or more. • X ray tube and collimator section should have automated image shuttering and cropping facility in collimator.
	<ul style="list-style-type: none"> • All the movements of the overhead tube suspension (3D column stand) should be fully motorized. It should be possible to override it manually. • There should be auto positioning of the overhead tube suspension against both the vertical detector and the table detector. This should be possible through selected protocol from both the console as well as from wall stand control. • Overhead tube suspension (3D column stand) should also have a screen with display of important parameters and controls.
	<ul style="list-style-type: none"> • Horizontal and vertical tube rotation should be +/- 180° • Should have motorized copper or equivalent filter to avoid unwanted radiation
3	Horizontal Bucky Table
	<ul style="list-style-type: none"> • Motor driven, adjustable height, floating table top of carbon fibre or equivalent material. • Compact Bucky table with fixed digital flat panel detector. • Mention range of vertical, horizontal and longitudinal movements of the table. • Foot switches for adjusting height, longitudinal/side to side movements, locking.
	<ul style="list-style-type: none"> • Detector movement should be synchronized with movement of the X-Ray tube. • Removable grid for SID of 100cms for horizontal table applications • Automatic exposure control should be available .
4	Vertical Bucky (Wall stand)
	<ul style="list-style-type: none"> • Motorized, counter balanced adjustable height vertical Bucky with digital flat panel detector. • Should be possible to tilt the Vertical detector system (-15° to + 90°) and should travel from 35 to 170 cms above floor level.
	<ul style="list-style-type: none"> • Detector movement should be synchronized with movement of the X-Ray tube. • Removable grid for SID of 180cms for vertical bucky applications • Automatic exposure control should be available
5	Detector System
	<ul style="list-style-type: none"> • Detector material should be made of amorphous selenium/ silicon with CSi scintillator. • Two Digital flat panel detector system with one of the detectors fixed into the Bucky table and the other wall stand detector being portable. • The size of the detector should 43X 43 cm with active matrix array of 2.4K X 2.4K or more with DQE > 55% at zero line pairs/ mm and pixel size less than 150

	<p>microns. Or Size of the detector should be 41 X41 cm with active matrix of 2K X 2K or more with DQE >68% at zero line pair/mm with resolution of 3.0 lines pair/mm and pixel size less than 200 microns.</p>
6	<ul style="list-style-type: none"> • Tube assembly movement to be automatically synchronized with both the horizontal and vertical detectors movement • Should allow centered/de-centered collimation <p>Operating (acquisition) Station</p>
	<ul style="list-style-type: none"> • Should have a high resolution TFT/LCD monitor of minimum 19" size or more (fully flat) with minimum 1024x1024 or more display matrix and antireflective front screen. • Image acquisition matrix should be minimum of 2k x 2K. • System should have auto protocol select • Operating console should have facility for patient identity entry, post acquisition image processing, viewing, reprocessing, hard copy filming and onward transmission should be possible.
7	<ul style="list-style-type: none"> • Preview image should be ready in 5 sec or less. <p>System should have auto protocol select</p> <p>Image Viewing, Post –Processing and reporting Station and Documentation– One Number. The vendor should provide 6 independent licences to be connected with other workstations of the department independent of their location. All these workstations should be able to visualize and postprocess all generated images.</p> <ul style="list-style-type: none"> • Should have independent monitor of high resolution barco monitor of 19" or more with minimum 1024x1024 or more display matrix and antireflective front screen. • Image display matrix should be of high resolution, minimum of 2 K x 2K. • Post acquisition image processing, viewing, reprocessing, hard copy filming and onward transmission should be possible.
	<ul style="list-style-type: none"> • Image processing functions like rotate, mirroring, zoom, move, and windowing filter should be possible. • There should be facility for measurements.
	<p>Should be connected to a Dry chemistry camera of 500 dpi or more</p> <ul style="list-style-type: none"> • Multiformat film printing should be possible with user selectable options. • It should be possible to create alphabetical, date wise and exam based, work list
	<ul style="list-style-type: none"> • Work list should be auto refreshing .
	<ul style="list-style-type: none"> • System should have facility for Dual energy subtraction system or equivalent (optional. Please quote the price separately).
	<ul style="list-style-type: none"> • System should have facility for volume RAD system or equivalent. (optional. Please quote the price separately) • System should have facility of Auto image stiching/image pasting for complete spinal column, extra long leg (sample film to be enclosed).
8	<p>Image Storage and Transmission</p> <ul style="list-style-type: none"> • Hard disc storage capacity should be of 3000 or more images • The systems should support storage of images on compact discs and DVD • 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, computer/PC etc. in DICOM format. • Easy integration and networking should be possible with any other existing/future networking including other modalities, HIS and RIS and PACS. Vendor will connect it to existing network without extra cost.
9	<p>Accessories</p> <ul style="list-style-type: none"> • Suitable UPS for the computer with 30 minute backup.
	<ul style="list-style-type: none"> • Voltage stabilizer for the complete system to be provided. • Vendor to install mike system for calling patients who are waiting outside and suitable communication system between X ray room & console room to suitably instruct the patient • Abdominal Compression device which can be attached to table railings for IVP studies.

	<ul style="list-style-type: none"> • Lead glass 100X150 cm to be provided. <p>Vendor will connect the DR system with other existing dry laser camera in the department.</p>
10	<p>Upgrading requirement:</p> <ul style="list-style-type: none"> • A free comprehensive software upgrade (compatible with the existing platform) guarantee for 10 years after installation.
11.	<p>Warranty</p> <p>Warranty of 5 years should be quoted for the whole system and accessories including X ray tube, detectors, batteries and all the items supplied by the vendor (including third party items) and consumables supplied with the unit.</p> <p>Even during the warranty period the desired up time of 95% of 365 days in a year (24 hr basis) must be ensured, no discount will be given on account of public holidays / Sundays. In case the down time exceeds the 5%limit, a penalty of Rs 20,000 (Twenty thousand rupees) per day along with extension of the guarantee period by the excess down time period will be carried out.</p> <p>If a particular system/subsystem (including third party items) is not working for more than three consecutive days and due to which patient work suffers, the firm will be asked to pay a penalty of Rs.10,000 (Rs. Ten thousand only) beyond three days for each day that it is not working.</p>
12.	<p>CMC</p>
13.	<p>CMC rates for 5 years on yearly basis including labour cost and cost of spare parts for whole equipment including all accessories including X ray tube, detectors, batteries and all the items supplied by the vendor (including third party items) and consumables supplied with the unit.</p> <p>The desired up time guarantee is 95% of 365 days (24 hrs basis) along with penalty clause of Rs.10,000 per day in case the machine is found not to be working for reasons other than force majeure conditions, no discount will be given on account of public holidays/ Sundays. The bidder to cover the losses, if any, due to force majeure conditions, should do the insurance. The rate of post guarantee CMC should be offered on yearly basis for at least 5 years, by the bidder and be offered in Indian rupees only.</p> <p>If a particular system/subsystem (including third party items) is not working for more than 3 days and due to which patient work suffers, the firm will be asked to pay penalty of Rs. 10,000 (Ten thousand rupees) beyond 3 days for each day that it is not working.</p> <p>SPECIAL TERMS AND CONDITIONS</p> <p>a) Point wise technical compliance report supported by the technical catalogue/ specifications must be submitted in all truthfulness and shall be essence of the technical bid.</p> <p>b) Technical specifications offered in the technical bids shall be verified to be in the claimed working specifications on the same quoted model working reliably in India or abroad.</p> <p>c) The offered unit and its installation must confirm to AERB guidelines and certification from AERB should be provided by the supplier.</p> <p>Certifications:</p> <p>I The quoted model should be AERB approved. In case of first installation of quoted model in India, NOC from AERB for import must be submitted and the payment will only be released after AERB type approval of the quoted model is provided .</p> <p>II. Offered model should be European CE and US FDA approved. Copy of certifications should be submitted with bid</p>
14.	<p>TURN KEY PROJECT will be added later when the space for installation of equipment will be available.</p>
15.	<p>Training :</p> <p>1 On-site training of all faculty members for 2 weeks at the time of installation and also</p>

for another 2 weeks after 2months of installation.

**Technical Specification for a New State of the Art high end color Doppler ultrasound
to be installed in IGMC Shimla**

1. The system should be latest sate of the art **high-end** with full digital technology and

should be for the whole body applications which would include abdominal, peripheral vascular, small parts imaging such as Thyroid, Intra-cavity applications, etc. system should be trolley mounted.

2. The system should incorporate facility for high resolution 2D, 3D, 4D, M-mode, PW, HPRF PW, Color Doppler imaging, Power Doppler imaging, Duplex & Triplex imaging modes. The system should be capable of simultaneous dual display of B-mode & color mode.

3. All transducers should have Broad Bandwidth technology for extremely high resolution imaging. Frequency range of Transducers should be 2-17 MHz or more. All transducers should have multi frequency selection (Preferably more than three).

4. The system should have 55000 or more digital acquisition channels and the system should have 256 Grey Scale or more.

5. The system should have a scanning depth of 28 cms or more.

6. The system should have a high dynamic range more than 180 dB.

7. The system should be able to support at least 3 transducers with universal ports allowing electronic switching between transducers.

8. The system should support Convex, Linear, Sector & Electronic Volume Probes.

9. The system should have a very high acquisition frame rate of at least 600 frames per second in B mode and more than 200 fps in /Color mode.

10. The System must have integrated high – resolution TFT/LCD/Single monitor of 19 Inches or more with tilt and swivel facility.

11. The system should have Tissue Harmonic imaging & should be available in Convex, Linear, Sector & Volume probes.

12. The system should be able to work in combined mode of Harmonic Imaging and Real time Compound Imaging to get excellent Image quality. The system shall offer Tissue Harmonic Imaging in Power Doppler Imaging mode.

13. The system should have contrast Harmonic Imaging and should have optimization settings to detect the Contrast Agents.

14. The system should have real time frequency and Spatial Compound imaging technology with multiple lines of sight to obtain the image at real time frame rates for improved visualization and better image quality.

15. The system should have image processing algorithms to analyse between targets and artifacts to as to sharpen target anatomy and reduce the speckle and artifacts for improved image quality.

16. The system should have a full alphanumeric keyboard/touch screen.

17. The system should have cine loop review facility in individual and mixed modes cine loop greater than 4000 frames and greater than 30 seconds of spectral Doppler and M mode. System should have 500 GB or more HDD.
18. The system should have the facility of digital storage and retrieval of B/W and color image data on built-in CD/DVD Drive.
19. Power Doppler Angio for perfusion studies should be available for visualization of flow in small vessels and system should be able to acquire flow in small blood vessels at very high frame rate.
20. The system should have automatic gain and STC/TGC controls in B-mode and velocity range and base line shift for Doppler through one touch operation.
21. The system should have trapezoidal imaging and steerable imaging for 2D image, Color box & Doppler with linear probe. Please mention the angle of steering for 2D & Color Box.
22. The system should have Panoramic imaging.
23. The System should be DICOM ready.
24. The system should have advanced 3D imaging package with the following :
 - a) Multi planner Views (MPR).
 - b) Surface & Volume rendering.
 - c) 3D grey scale (B-mode).
 - d) 3D power angio mode & 3D Color Doppler Mode.
25. The system should have Advanced 4D imaging package such as Live 4D, Single sweep, Multi-view (CT slice technology), Cavity mode etc. and system should be able to support all type of volume probes such as Convex Volume and TVS Volume Probe.
26. The system should have automatic real time quantification of Doppler Parameters like velocity, frequency, time, heart rate, slope, flow volume, pulsatility index, resistivity index, peak velocity, average volume, point value, area and diameter flow volume etc.
27. The system should have extensive calculation software package for general measurements, OBS,Gynae, Vascular, small parts & cardiac application.
28. Contrast ultrasound capability (CEUS) with time intensity curve graphs.
29. Machine should have shear wave elastography with facility of quantification with linear,Transvaginal & convex probes for evaluation of liver, thyroid, prostate, breast and others.
- 30.Fusion and GPS
 - a) The system shall provide a volume navigation tool which allows fusing real time ultrasound images with images acquired from other imaging modalities such as CT and MR
 - b)DICOM datasets from those modalities can either be retrieved via the DICOM Q/R function or via DICOM media(eg.USB devices)
 - c) Registration of those data sets and the real time ultrasound images is achieved by using anatomical landmarks.

- d) The registration is done by either plain registration or by marking multiple points within the volume.
- e) Tracking of the ultrasound transducers movement in space is done via a magnetic sensor system.
- f) The tracking system shall incorporate two magnetic sensors in order to increase registration accuracy.
- g) Potential magnetic distortion is indicated on the system monitor.
- h) Image fusion should be possible.
- i) The system shall be capable to operate in B Mode and color flow mode while performing a fusion.
- j) The system should be capable of displaying biopsy lines(for all transducers) while performing a fusion.

31. Equipment with above mentioned features to be offered with following broad bandwidth probes & accessories:

- A. Broad band convex array transducer with frequency range 2-5 MHz. or better.
- B. Broad band linear array probe with frequency range 7-17 MHz. or better.
- C. Broad band transvaginal/transcrotal probe with frequency range 5-9 MHz. or better.
- D. Convex Volume probe with frequency range 2-6 MHz. or better.
- E. Color Laser Printer.
- F. B & W thermal printer with 100 high density paper rolls.
- G. 2.0 KVA on line UPS for complete unit with 30 min. backup.

32. Please attach the original manufacture's product catalog and datasheets. Photocopied, computer generated catalogue and datasheet will not be accepted.

33. Five years complete warranty for the entire equipment, probes and accessories which should include service as well as parts with 98% uptime. In case of downtime exceeding 2% it will be extended by double the down time

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

35. The quoted model should be USFDA and European CE approved product.

36. The short listed bidders will have to give demonstration of their quoted model before finalizing the evaluation of their bids.

37. Principal vendor to provide undertaking with regard to providing maintenance /service and availability of spares for 10 years for the equipment in case local vendor changes.

Certifications:

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

Training :

1 On-site training of all faculty members for 2 weeks at the time of installation and also for another 2 weeks after 2months of installation.

Turnkey will be added later when the space for installation of equipment will be available.

