BIDDING DOCUMENT

TENDER NOTICE No.: 04/ 2016 - 2017 / CSSD-Biomedical Equipt./ IGIMS / Store

Supply, Installation & Commissioning of Bio-Medical Equipments / Instruments

TENDER NOTICE No 04 /2016 – 2017/ CSSD-Biomedical Equipt. / IGIMS / Store

Issued to:

Cost of Document: Rs.

Paid By: Cash: Receipt No.:

Demand Draft: No.:

Issuing Bank:

(Authorized Signatory)

INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,

SHEIKHPURA, PATNA - 800014.

INDEX

IMPORTANT DATES

Last date for Purchase of Bidding Document	Can be downloaded from Institute website
Last date for submission of completed bidding document	8 /7/2016 up to 4 PM. by registered/speed post/ Courier only
Date of opening of technical bid	9/07/2016 at 3.30PM P.M. in conference hall IGIMS, Patna.
Date of demonstration of equipment	To be informed to the qualified bidders qualifying after opening of technical bids.

INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,
SHEIKHPURA, PATNA -800014 (Bihar, India)

Sl. No. OF TENDER: _____

FILE NO. : Tender No.: _____

Tender form issued in favour of:

_____
_____

Dear Sir,

1. I/We hereby submit our tender for the
_____
_____

2. I/WE are enclosing herewith the Demand Draft No…… dated……..……. for **Rs. /-** drawn in favour of **Director I.G.I.M.S. - Patna (payable at Patna)** towards **EMD / Bid Security.**

(EMD AND COST OF BIDDING DOCUMENTS MUST BE SUBMIITED IN SEPRATE ENVELOP.TENDERS NOT ACCOMPANIED WITH EMD / BIDSECURITY ALONGWITH THE TECHNO-COMMERCIAL 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 I.G.I.M.S. - Patna including delivery, warranty, 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 & rewritten and Initialled.
6. Tenders are duly signed and stamped.(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 EMD/Bid deposited may be forfeited and our/my name may be removed from the list of suppliers

Yours faithfully,

(Signature of Bidder with full name and address)

CHECK LIST FOR TERMS AND CONDITIONS

A.: **To be filled by the bidder and submitted along with the Technical Bid.**

Sl. No.	Terms & Conditions as per Bidding Document	Page No.	Remarks
1.	**Status of Bidder:** • Manufacturer or Authorized Agent of the Manufacturer • Whether Public Undertaking, Public Ltd., Private Ltd. Company or Proprietary Firm/partnership firm • (Please attach Notary certified **MANUFACTURER'S AUTHORISATION FORM as per FORMAT placed at Annexure – III)**		
2.	**Power of Attorney as per Annexure - V** in favour of person to sign, submit and negotiate the bid.		
3.	Certificate towards market standing of minimum 05 years in the area of supply and or maintenance of bio-medical equipments.		
4.	Certificate for sole ownership / partnership		
5.	Statement of financial standing from bankers		
6.	Statements of turnover per year for last three successive years duly certified by the Chartered Accountants.		
7.	**Notary certified User List** (List of Govt. /Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.		
8.	**Notary certified Supply** order copy (Minimum 3nos. or more) issued by Govt./Semi Govt.//Reputed Pvt. Institutions/organization for the quoted items. (same model)		
9.	**Notary certified Performance certificate** of the same supplied machine (of quoted make and Model) issued by **Head of the deptt. or Institution** after a minimum period of six months of installation		
10.	Prerequisite (if any) for installation of the Machine, if any, to be provided by the Institute.		
11.	Whether rates quoted are inclusive of all taxes or not.		
12.	Whether rates are quoted as per format mentioned in the Bidding Document or not.		
13.	Affidavit to the effect that the bidder is not blacklisted by any Govt. agency or have no pending case either Civil or Criminal against them.		
14.	Affidavit, to the effect that the bidder is not supplying the quoted item(s) to any other Govt. / Pvt. Organizations / Institutions / Hospitals at the rate lower than the rate quoted against this tender.		
15.	**Quality Assurance Certificate** like ISI, ISO-9002, IP/BP, CE, FDA (US) or any other (please specify)		
16.	**Bid Security** amount deposited is enclosed or not. If yes, please mention the details.		
17.	**Original Technical Catalogue** of the quoted model		
18.	Certificate, to the effect that bidder will maintain the quoted item(s) during Warranty period of three years including all spares, accessories, consumables etc., (Please mention the name of the item / items with price, which are not supplied by the bidder free of cost with frequency of replacement)		

19.	Certificate, to the effect that bidder has quoted its rate for Comprehensive Annual Maintenance Contract inclusive of labour, spares, consumables, accessories etc. on per year basis for a further period of seven years after expiry of warranty period of three years in the **price bid**. (Please mention the name of the item / items with price, which are not supplied by the bidder free of cost with frequency of replacement during Comprehensive Annual Maintenance Contract period in the price bid)		
20.	Acceptance of all terms / conditions towards **after sales / services** as mentioned in the bidding document.(Clause No- 13 of " Instruction to Bidder " & clause no-3, 4 and 5 of Condition of contract.)		
21.	**Compliance Statement** with relation to the technical specification as mentioned in the bidding document duly supported by the original catalogue. The bidder must quote specification in the compliance column Mere writing" Complied shall not be accepted.		
22.	**Compliance Statement** with relation to the terms & conditions as mentioned in the document.		
23.	**PAN and copies of Income Tax Returns** for the last three years.		
24.	Duly attested copy of sales tax/Vat registration certificate.		

B: To be filled by the Bidder and submitted along with Price Bid

Sl. No.	**Terms & Conditions as per Bidding Document**	**Page No.**	**Remarks**
1.	**Item wise price for the item(s)** as mentioned in the Bidding Document and as per format attached as **Annexure – I(a) or I (b)**		
2.	**Rate for Comprehensive Annual Maintenance Contract** as per terms & conditions mentioned in the Bidding Document and as per format attached as **Annexure - II**		

Note: **If the above-tender details are not mentioned and required documents are not attached at appropriate places, the offer of the bidder(s) shall be summarily rejected. Hence, bidder(s) are advised to go through the bidding document carefully and tender be prepared with all the required documents to avoid rejection of offer.**

(Name of the Bidder with signature & seal)

ELIGIBILITY CRITERIA

01 Manufacturers or their authorized dealers/Indian subsidiaries/direct importers having a place of business in any of the States of India are eligible to participate in this tender.

02 The bidder and manufacturer of the equipment offered should be in the business of the supply and installation of same / similar equipment for the last five calendar years.

03

(a) The manufacturer should have completed at least 05(Five) nos. installations of the quoted items in Govt. /Pvt. Institutions /Hospitals in India. The installations mentioned by the manufacturer in their offer must be functional and performance certificate for the same issued by the user concerned also be attached with the offer.

(b) The bids quoted as the authorized representative of the manufacturer meeting the above criteria 02 (a) should have also supplied and installed at least 03(Three) nos. installations of the quoted items in Govt. /Pvt. Institutions/ Hospitals in India in last five years from the last date of submission of tender. The installations mentioned by the authorized representative in their offer must be functional and performance certificate for the same issued by the user concerned also be attached with the offer.

04 The Bidder should be public undertaking /Autonomous Body /Public Ltd./Pvt. Ltd. Company or proprietary firm /Partnership Firm and should be in medical equipment business since last five years in India. The Bidders having manufacturing facility in their name in India for the majority of the items offered by them shall be given preference.

05 The Bidder (manufacturer or their authorized agent) should have had average annual financial turnover of Rs. 50 Lakh during the last three years ending s 31st March 2015.

06 Bidders who have the capability to attend repairs of these equipment within the time mentioned in this bidding document and who are willing to provide stand by equipment or replace the faulty equipment if the repair/down time extends beyond 72 hours from the time of reporting of the fault within the next 48 hours (total down time should not exceed 5 days in one instance). The bidders who have the capability to ensure the uptime mentioned in this document (Documentary proof shall be submitted on the after sales facilities and expertise of the bidder.)

07 Bidders are not offering the equipment of a firm /company that has been blacklisted by Indira Gandhi Institute of Medical Sciences – Patna or blacklisted/debarred by any other State / Central Government's organization.

Note:

- Notwithstanding anything stated above, the Institute reserves the right to assess the Bidder's capability and capacity to perform the contract satisfactorily before deciding on award of contract, should circumstances warrant such an assessment in the overall interest of the purchaser.
- The Institute reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser of technical acceptability as per the tender specification, before the opening of the price tender.

INSTRUCTION TO BIDDER

GENERAL INSTRUCTIONS T0 BIDDERS

1. **Tendering System**

The tenders/Bids are to be submitted in two Parts i.e. **Part - I & Part II**.

PART - I titled as TECHNICAL BID shall contain the complete technical specifications and details on the competency of the bidder and also the commercial bid package with terms and conditions of supply, warranty, after sales service etc. (Except Price Bid Form). Apart from the documents and signed copy of the purchased tender document, the necessary enclosures should be submitted in this technical bid. In short, the technical bid should contain all the necessary documents to prove the technical competency and capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specification and the ability of the bidders for providing efficient after sales service to the satisfaction of the Tender Inviting Authority and the user institution.

PART - II titled as PRICE BID

2. The tender offers, duly filled, shall be submitted in sealed covers for **technical**. Such covers shall be super scribed as **"Tender No……. (here mention the tender no as specified) TECHNICAL BID for supply of ……..... (here mention the name of the equipment**

3. Quantity of items may increase or decrease. Director, I.G.I.M.S. - Patna reserves the rights to purchase different sub items/ components of items from different bidders.

This rate Contract will be valid for one FY and repeat Supply Order will be placed as per requirement of the deptt. of all the quoted and approved items.

4. The "Bidding Document" along with terms and conditions, technical specification can be obtained from the office of the Store Officer, IGIMS, Patna on payment of Rs. 2000/-(Rs. Two thousand only) Non – refundable for each Group by demand draft favouring Director , IGIMS, Patna payable at Patna.

5. The " Bidding Document" can also be downloaded from institute website www.igims. Org.. In case, downloaded bidding document is used ,Bidder(s) have to submit the cost of the Tender Document alongwith the completed documents in the form of demand draft in favour of Director , IGIMS, Patna, payable at patna towards cost of the " Tender documents" Bidder is required to attach seprate D D for the same in a seprate envelop super scribed with " cost of bidding document" if the cost of tender document is not submitted by the bidder, his offer shall be outright rejected .

6. Last date for submission of bidding document is 8/07/2016 up to 4.00PM by speed/Regd. post/ Courier only

7. **Earnest Money Deposit (EMD):**

Earnest Money2% of the cost of Equipment required to be submitted along with tender by Demand Draft from any scheduled Indian Bank (valid up to one year from the date of technical bid opening.) only along with the tender favoring Director, I.G.I.M.S. – Patna (payable at Patna). No interest is payable on EMD/ Bid security.

b. Bidder may quote more than one/several models. In such a situation EMD will be payable on the basis of highest priced model.

c. EMD of the unsuccessful bidders will be returned to them at the earliest after expiry of final bid validity and latest on or before the 30th day after the award of the contract without any interest.

d. EMD must be submitted in separate sealed envelope and endorsement of the same with DD number & date Bank Guarantee No. and its validity period be made with technical bids without amount stating that the same has been complied with price bid. If same is later found not enclosed tender will be cancelled for the party.

e. Non- submission of sufficient EMD along with the Technical Bid shall be one of the primary reasons for rejection of the offer in the first round**.**

f. Cheque, Cash payment, Money Order, Fixed deposit etc will not be accepted as EMD.

g. Public Sector Units within the State or State micro, small and medium enterprises registered with Govt. are exempted from remittance of EMD subject to submission of valid documents.

h. The EMD shall be in one of the following forms:

i. A demand draft in favour of Director, I.G.I.M.S. – Patna (payable at Patna);

OR

ii. A Bank Guarantee issued by a nationalized/ scheduled bank located in India, in the form prescribed in the tender document as Annexure- IV (valid up to one year from the date of technical bids opening) Bank Guarantee in any other format will not be acceptable and render the bid non-responsive.

iii. The successful Bidder's EMD will be discharged upon the Bidders signing the contract and furnishing the performance security. The EMD deposited in the form of DD of the successful Bidder can be adjusted towards the security deposit payable.

9. Bidder(s) should mention the DGS & D registration, if registered, and attach photocopy of DGS &D registration certificate Photocopy of Income tax & sales tax clearance certificate should be enclosed.

10. For Imported Goods, Indian Agency Commission must be declared in financial bid.

11. The Bidder's shall have to submit the following documents (Certified by Notary) in technical bid: -

a. User List (List of Govt. / Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.

b. Performance certificate of the same supplied machine (of quoted make and Model) issued by **Head of the deptt. or Institution** after a minimum period of six months of installation.

c. Prerequisite (if any) for installation of the Machine if any to be provided by the Institute.

d. If the manufacturing company and/or its Indian agent (for Foreign manufactured) have authorized some agency for participation in this tender for a limited period than in that case they (Manufacturer / Indian agent) shall have to submit an undertaking duly notarized by Public notary that if their tender is selected they shall be solely responsible for compliance of all the terms and conditions mentioned in the bilateral agreement for purchase and subsequent supply order even if their authorized agent is changed. Any tender offer without such certificate duly certified by public notary shall be rejected in technical scrutiny itself.

e. Bidder must submit a compliance checklist along with the technical bid itself.

f. (Any tender offer without submission of above mentioned document (i.e. a to e) shall be rejected during technical scrutiny**.)**

g. If any new System/ Latest model machine is a launched in the market and seller has not installed such quoted models they should submit an undertaking that he has not installed such models previously (Notarized by Public Notary). . They may submit supply order / performance certificate of previous model, which was recently installed by them.

12. Installation & site plan:-

Requirement regarding site/location etc for installation of equipment, if any, should be mentioned in the tender. Time required for installation of system after delivery must be mentioned. In case of delay in installation institute will have right to charge liquidated damage. Specify the following points for installation of the System: -

a. Total power consumption along with break up of main System and Accessories.
b. Whether the System needs uninterrupted power supply where ever applicable.
c. Maximum tolerated transfer time in case of interruption of power supply.
d. Whether the System needs any humidity control device.
e. Whether the System needs any separate power line/isolation Transformer.
f. Does the System need the electrical shielding?
g. Does it require special civil works for installation?
h. Whether Air conditioner is an essential requirement for the system.
i. Does it require any special civil works for Installation?

13. After Sales Service Conditions:

a. The Institute is in the pursuit of ensuring excellent after sales service for every user in respect of the equipments supplied under this contract. The after sales services terms and conditions will be strictly enforced and those Bidders who are willing to support the Institute in its endeavor to provide trouble free operation/performance of the equipments for the prescribed period need only participate in the tender.

b. The after sales service shall be performed during the warranty period and also during the Comprehensive Maintenance Period (CMC)/ Annual Maintenance Contract, if awarded. The detailed terms and conditions for after sales service are mentioned hereunder.

c. <u>Guarantee/Warranty Terms</u>:

i. The successful Bidder has to warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

ii. The successful Bidder further have to warrant that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Tender Inviting Authority's specifications) or from any act or omission of the successful Bidder, that may develop under normal use of the supplied goods.

iii. All the equipments including the accessories supplied as per the technical specification as mentioned in the bidding document should carry comprehensive warranty (including all spares, accessories and consumables) for a period mentioned in this document in the first instance. During this period, the successful Bidder shall replace all defective parts / accessories / consumables and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful Bidder during the period of comprehensive warranty. The items which are not covered under warranty should be clearly mentioned along with rate of the items . If any spares / accessories / consumables etc. are not replaced by the bidder during warranty period, bidder should mention it clearly with name of the items with frequency of replacement and its rate

iv. On expiration of the comprehensive warranty period, the successful Bidder shall be willing to provide after sales support for an additional period prescribed in this document.

v. The prospective Bidder, who are not manufacturers, shall submit an undertaking from the Original Equipment Manufacturers (OEM) that they are willing to provide spare parts for the period of warranty as mentioned and also during the additional CMC/AMC period, if awarded. The OEM shall also assure continuity of service to their product, in the event of change in dealership or the Bidders – their existing dealers - couldn't provide service during the warranty / CAMC period. The undertaking from OEM is an essential document forming part of the Technical Bid, without which the tenders will be rejected summarily in the first round itself.

vi. After sales service centre in Patna (Bihar) preferably or at least in East India should be available as part of the pre-qualification and the Bidder shall provide proof of their capability to undertake such maintenance/repair within the stipulated time.

vii. The successful Bidder shall provide preventive maintenance as per the frequency mentioned in this document during the warranty period. The Bidder shall attend any number of break down/repair calls as and when informed by the institute authority.

viii. Upon receipt of such notice for repair/breakdown from the institute, the successful Bidder shall, within the period as specified in this document, and with all reasonable speed, repair or replace the defective goods or parts thereof, without cost to the Tender Inviting Authority.

ix. If the successful Bidder, having been notified, fails to rectify the defect(s) within the period specified mentioned in this document, the Tender Inviting Authority may proceed to take such remedial action as may be deemed necessary, at the successful Bidder's risk and cost and without prejudice to any other rights which the Tender Inviting Authority may have against the successful Bidder under the contract.

x. Failure to attend the repairs in time or failure to attend the stipulated preventive maintenance visit or failure to replace the defective equipments or to provide stand by equipment if the fault/down time exceeds the stipulated period or to ensure the stipulated up-time in an year shall lead to forfeiture of the performance security and/or may lead to blacklisting/debarring of the defaulting Bidder.

xi. The equipment which requires quality assurance test shall be done at free of cost immediately after installation, during the comprehensive warranty period, during the CMC/AMC period, by the demand of User and also when major spares are replaced.

xii. Any mandatory approval required for installation shall be obtained by the successful Bidder in liaison with the respective authorities.

xiii. The Bidder shall submit the parameters which require calibration and the frequency of calibration required.

xiv. The Bidder shall undertake on-site calibration of the equipment every year as part of the after sales service during the period of comprehensive warranty, CMC/AMC or on demand from the user.

xv. The Bidders shall also have to submit whether periodic replacements of consumable items are required for proper functioning of their quoted machine/Equipment? If yes they should submit the list of such consumables along with price list and frequency of replacement per year, if the same is not replaced free of cost during warranty / guarantee period.

xvi. An undertaking of the principal regarding continuity of after sales and services (CAMC) @ the agreement rate even in case of changes of Indian agent during the life span of the equipment, must be enclosed in the technical bid. Further, it will be the responsibility of the manufacturer Indian agent to get counter signature on the agreement to be executed with them by the principal.

Xvii;- The offered warranty includes:

- Visits to the user institutions at frequencies prescribed as part of preventive maintenance.
- Testing & calibration as per technical/service/operation manual of the manufacturer or as per the period specified or as per the demand of the user.
- Quality Assurance tests (if applicable).
- The cost of labour for all repairs/ and all spares required for replacement during repairs all kinds of accessories, Probes, all types of sensors and transducers, Electrodes, Detectors, battery, battery for UPS, other vaccumatic parts etc wherever applicable and also the accessories and other devices supplied along with the equipments like stabilizer, UPS, AC, Computer, Compressor, Monitor, etc, which forms part of the equipment system, without which it cannot perform satisfactorily.
- The exclusion of warranty of any vital equipment parts will be compared with offers of other Bidders during evaluation of the bids and this may be taken into consideration in deciding the successful Bidder on the basis of expert advice.
- The Bidder shall provide up-time warranty of complete equipment as mentioned in this document, the uptime being calculated on 24 (hrs) X 7 (days) basis failing Warranty period will be extended for every additional day of down time equal to one week.
- All software updates, if any required, should be provided free of cost during Warranty period.

d. <u>Comprehensive Annual Maintenance Contract</u>:

- The decision to enter into CMC or AMC will be determined on the basis of cost and complexity of the equipment by the Tender Inviting Authority, at its discretion, prior to the expiration of warranty period.
- The Comprehensive Maintenance Contract (CMC) is otherwise an extended warranty. All the terms and conditions agreed by the successful Bidder for executing the comprehensive warranty of the equipment shall be extended during the period of CMC, only difference being the payment of CMC charges is absent during the period of comprehensive warranty.
- The cost of CMC, accessories and spares, reagents and consumables as in case may be quoted along with taxes applicable, if any. The taxes to be paid extra, to be specifically indicated. 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.
- Failure/refusal on the part of the successful tender supplying/installing the equipments to enter into CMC with the Tender Inviting Authority, at the end of the Comprehensive Warranty Period, if the Institute, as the case may be, desires so, shall lead to forfeiture of performance security and may also result in the blacklisting/debarring of the Bidder.
- The successful Bidder shall also indicate the rates for the CMC in price bid form and such rates are binding on the successful tenders after the expiration of the warranty period. The yearly rates for CMC shall remain the one and the same as quoted in the price bid form for the extended years.
- Cost of CMC (excluding taxes, if any) will be considered for Ranking/Evaluation purpose.
- The payment of the agreed CMC charges will be made as per frequency for payment after satisfactory completion of said period, on receipt of service report/ break down report from the user.

- The Bidder shall also have to submit whether periodic replacement of consumable items are required for proper functioning of their quoted machine/Equipment? If yes they should submit the list of such consumables along with price list and frequency of replacement per year if the same is not included in quoted Comprehensive Annual Maintenance Contract charges per year.

14. <u>Time Limits prescribed</u>

Sl. No	Activity	Time Limit
a.	Installation & Delivery period	12 weeks from date of issuance of Supply Order
b.	Comprehensive warranty period	3 years from the date of successful installation.
c.	CMC period	7 years
d.	Frequency of visits to all User Institution concerned during Warranty/CMC	One visit every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs/break down calls.
e.	Frequency of payment of CMC charges	Every six months after completion of the Period.
f.	Submission of Performance Security and entering into contract	10 days from the date of issuance of Letter of Intent
g.	Maximum time to attend any Repair call	Within 24 hours.
h.	Uptime in a year during warranty as well as during CAMC period.	95% of 365 days.

15. Firm have to provide a minimum **UPTIME GUARANTEE** of 95% (95% of 365 Days) per year during the warranty period as well as during the Comprehensive Annual Maintenance Contract.

16. While calculating the total unit price of the item / system to be procured, expenditure to be incurred in maintenance of the quoted item / system including all spare parts for a total period of seven years after expiry of the warranty period of three years shall also be taken into consideration. Accordingly, it is mandatory for the bidders to submit the rate for Comprehensive Annual Maintenance Contract (with spares) for a minimum period of seven years after the expiry of warranty period of three years.

17. Supplier will submit undertaking for ensuring uninterrupted supply of spares during the total life span of the equipments.

18. Indian agency commission and Installation charge if any will be paid in Indian rupees after successful installation and demonstration of the equipments.

19. Principal's Invoice of the quoted items must be submitted with the quotations.

20. Proof of the official Indian agent certificate of the firm must be attached. (Notary Certified Photocopy)

21. In order to fully and optimally utilize the equipment, training to Para Medical Staffs and Doctors should be provided. In continuation to this training, separate maintenance training for the machine and the sub systems should also be given to the "Equipment Maintenance Engineer" and "Equipment Maintenance Technicians". All the financial commitments in this regard shall be met by the bidder(s).

22. Bidder(s) have to submit an affidavit to the effect that they have not supplied the offered item(s) to any Govt., semi Govt. / Pvt. Organization, Institution, Nursing Home etc. at the price lower than the price offered to I.G.I.M.S. – Patna.

23. All the claims regarding meeting the specifications shall be duly supported by appropriate, latest technical catalogues/brochures from the manufacturer. Simply stating that the equipment(s) meets the specifications is not sufficient and any such quotations will be summarily rejected. Computer printed documents or Photostat copy or laser printouts will not be accepted as technical catalogues / brochures.

24. Bidder might be required to demonstrate the system at the discretion of the institute.

25. Notification of Award/Letter of Intent (LOI)

a. Before expiry of the tender validity period, the Institute will notify the successful Bidder(s) in writing, by registered / speed post or by fax or by email (to be confirmed by registered / speed post immediately afterwards) that its tender for equipment(s), which have been selected by the Institute, has been accepted, also briefly indicating there in the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. This notification is undertaken by issuing a Letter of Intent (LOI) by the Institute.

b. The successful bidder, upon receipt of the LOI, shall furnish the required performance security and submit an agreement in the prescribed format within ten days, failing which the EMD will forfeited and the award will be cancelled.

c. The Notification of Award shall constitute the conclusion of the Contract.

26. **Signing of Contract**

The successful bidder shall execute an agreement for ensuring satisfactory supply, installation, commissioning and the after sales service/support during the warranty period and during the Comprehensive Annual Maintenance Contract.

27. The Director reserves the right to accept or reject any or all tenders without assigning reasons.

28. The Director reserves the right to modify, add or delete any terms & conditions of the contract as and when required.

29. **Amendment of tender documents**:

a. At any time prior to the dead line for submission of Tender, the Institute may, for any reason, modify the tender document by amendment.

b. The amendment shall be notified and uploaded on the institute website www.igims.org only and such amendments shall be binding on them thereafter.

c. The Institute shall not be responsible for failure to inform he prospective bidders. Purchasers of tender documents are requested to browse the website of the Institute for information/general notices/amendments to tender document etc on a day to day basis till the tender is concluded.

30. The Dispute, if any, will be subject to Jurisdiction at Patna (Bihar).

Sd/-
Director,
I.G.I.M.S. - Patna

CONDITIONS OF THE CONTRACT

01. **Duty Free Clearance, Transportation, Forwarding & Handling Charges**:

Clearance charges at point of Entry / Air Port and on ward transportation charges with Insurance upto I.G.I.M.S. - Patna will be borne by supplier's Indian Agent for which this Institute will not pay the charges.

02. **Demurrage. Taxes & Octroi:**

No demurrage charges will be paid by the Institute in case of delay on the part of supplier. However, this Institute will provide all necessary documents required for clearance / transportation of the goods and for exemption of the taxes/octroi for which supplier/Indian agent will have to intimate/furnish his requisition of document required, if any, well in advance. Octroi will be payable by supplier / Indian agent, if required.

03. **Warranty Period**:

a. The "**Complete System**" shall remain under warranty period of **three years** from the date of satisfactory installation. The Complete System should include the basic unit and allied supporting components like UPS, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit if required for the system.

b. During warranty period of three years, bidder shall provide at least **four maintenance visits per year** at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval, a proportionate deduction in the form of penalty on pro-rata basis will be recovered from the bidder from the Bank Guarantee amount. In case the Bank Guarantee is not adequate, Institute shall have right to recover the losses / penalty from other sources as well.

c. Bidder shall also attend all breakdown calls within 48 hours of the receipt of the information from institute through fax/e-mail/mobile/sms etc.

d. During warranty period, **bidder** shall maintain and keep **95% uptime** per year of the "**Complete System**" as per calculation given below:-.

1 Year = 365 days
95% of 365 days = 347 Days per annum

e. The bidder shall compensate the uptime less than the specified above for **every additional day** of down time over and above 18 days stipulated above, warranty period will get extended by one week as penalty at no extra cost i.e. the extended penalty period will be equal to one week for every additional day of down time.

f. During warranty period, **bidder** will make the "**Complete System**" in satisfactory working condition. In case, any spare parts, accessories, PCB, etc. needs replacement due to normal wear and tear, **bidder** will supply and install the same for which no additional payment is to be made with a validity to cover warranty period.

g. In case, the **bidder** is not able to provide services (and the items / accessories is not functioning as the reason thereof) due to natural calamity (act of God), Political unrest, Riot and fire at the user site, then in such a situation the warranty period will be extended by the period for which the item / accessories could not be operated because of supplier not been able to provide services.

h. During warranty period, in case of any alleged damage due to accident / human error, a committee under the Chairmanship of Director, I.G.I.M.S. – Patna with one member from the bidder and one member from the Institute will decide the authenticity of the claim. The decision of the committee shall be final and biding on both the parties.

04. **After Sales Services**: -

a. After expiry of the warrantee/Guarantee period of the equipment, the Indian agent will have to undertake the Comprehensive Annual Maintenance contract (with spare parts, accessories, consumables etc.) of the Complete System for the further life span of equipment. The life span of the equipment shall not be less than ten years. In special circumstances the total life span of the Equipment/ items may be reduced by the Institute.

b. The Complete System should include the basic unit and allied supporting components like UPS, Stabilizer, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit if required for the system.

c. During Comprehensive Annual Maintenance Contract, bidder shall provide at least **four maintenance visits per year** at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval per year, a proportionate deduction in the form of penalty at the rate of 25% of contract amount per year will be deducted.

d. Bidder shall also attend all breakdown calls within 48 hours of the receipt of the information from institute through fax/e-mail/mobile/sms etc.

e. During Comprehensive Annual Maintenance Contract, **bidder** shall maintain and keep **95% uptime** per year of the "**Complete System**" as per calculation given below:-.

1 Year = 365 days
95% of 365 days = 347 Days per annum

f. The bidder shall compensate the uptime less than the specified above for **every additional day** of down time over and above 18 days stipulated above, warranty period will get extended by one week as penalty at no extra cost i.e. the extended penalty period will be equal to one week for every additional day of down time.

g. During Comprehensive Annual Maintenance Contract, **bidder** will keep the "**Complete System**" in satisfactory working condition. In case, any spare parts, accessories, PCB, all type of consumables etc. needs replacement due to normal wear and tear, **bidder** will supply and install the same for which no additional payment is to be made. .**If any spares / consumables / accessories etc. are not covered under Comprehensive Annual Maintenance Contract charges, it should be clearly mentioned with frequency of replacement and with rate. The validity of rate of such items should also be mentioned clearly. What will be the rate of escalation on the quoted rate after expiry of the validity of rate of such item must be mentioned.**

h. The payment of Comprehensive Annual Maintenance Contract will be made on half yearly basis after submission of satisfactory functioning report of the Complete System by the officials authorized by the Institute.

i. In case, the **bidder** is not able to provide services (and the items / accessories is not functioning as the reason thereof) due to natural calamity (act of God), Political unrest, Riot and fire at the user site, then in such a situation the Comprehensive Annual Maintenance Contract will be extended by the period for which the item / accessories could not be operated because of supplier not being able to provide services.

j. During Comprehensive Annual Maintenance Contract, in case of any alleged damage due to accident / human error, a committee under the Chairmanship of Director, I.G.I.M.S. – Patna with one member from the bidder and one member from the Institute will decide the authenticity of the claim. The decision of the committee shall be final and biding on both the parties.

05. **Performance Security**

a. There will be a performance security deposit amounting to 10 % of the total value of the equipment excluding taxes, which shall be submitted by the successful bidder within 10 days from the date of issuance of "Letter of Intent".

b. The contract duly signed and returned to the Institute shall be accompanied by a demand Draft or Bank Guarantee in the prescribed format.

c. Upon receipt of such contract and the performance security, the Institute shall issue the Supply Orders containing the terms and conditions for the execution of the order.

d. Failure of the successful bidder in providing performance security as mentioned above and / or in returning contract copy duly signed in time shall make the bidder liable for forfeiture of its EMD.

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

i. It shall be in any one of the forms namely Account Payee Demand Draft or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in this document endorsed in favour of the Institute.

ii. Institute will release the Performance Security without any interest to the successful bidder on completion of the successful bidder's all contractual obligations including the warranty obligations & after receipt of certificates confirming that all the contractual obligations have been successfully complied with.

06. <u>Delivery period/Liquidated Damage: -</u>

Goods should be delivered within three months after receipt of irrevocable and confirmed Letter of Credit. If the delivery is not affected by due date, the Director, I.G.I.M.S. - Patna shall have the right to charge liquidated damage on supplier/his Indian agent as under: -

i. 1st extension for a month or a part thereof @ 2% per month of C.I.F. value.
ii. 2nd extension for an additional month or a part thereof @ 3% per month of C.I.F. value subject to maximum Limit of 20% of the order items. All expenses incurred for extension of L.C. will be borne by supplier/his Indian agent.
iii. Cancellation.- If delivery is not done even after 2nd extension Institute shall have the right of cancellation of Supply order at its discretion..

07. <u>Payment: -</u>

100% payment through International Irrevocable Letter of Credit in favour of principal abroad, but 80% will be released on shipment of goods & balance 20% after satisfactory installation of equipment

on submission of Bank Guarantee of value not less than 20% of the cost of the quoted equipment (with a minimum validity to cover up the warranty / guarantee period) will be submitted by supplier. This Bank Guarantee will be released after expiry of guarantee period.

a. In case, the equipment is purchased in Indian Currency then the payment will be made as per following scheduled.

b. 90% payment will be released against delivery and successful installation of the equipment & balance 10% will be released on submission of 10 % Bank Guarantee of the total cost of ordered value. This Bank Guarantee will be released after expiry of guarantee period.

c. L. C. will be opened only after receipt of the 20% bank Guarantee of the total cost of equipment (with a minimum validity to cover up the warranty / guarantee period), confirmation letter of all our terms and condition, submission of agency certificate in favour of Indian agent who have submitted and quoted the price, name of the Bankers abroad; intimation about country of origin and 10 copies of Performa invoice of the ordered item. Indian Agency commission will be paid in Indian currency only to Indian agent, if any. No extra charges will be paid for installation/demonstration and training to personnel.

08. **Validity of Price:-**

Minimum up to one year from date of tender submission and it should be extendable.

09. **Part Supply**: No part supply/ wrong supply or short supply will be accepted by the Institute. The Director IGIMS, Patna will be the final authority and will have the right to reject full or any part of supply, which is contradictory to the terms and conditions agreed at the time of placement of order. In case of rejection of any supplied items due to nonconformity in quantity and/or quality, Institute will have right to charge liquidated damages, as it deems fit

10. **Packing & Marking:-**

Goods must be securely and adequately packed and protected in order to prevent damage, otherwise all losses and /or damage resulting from inadequate packing and/or inadequate protection or inadequate marking shall be borne by seller/seller's Principal abroad.

11. Supplier may have to provide required manpower for running the equipments at mutually agreed remuneration (Which shall not be more than remuneration payable for the particular category of staff at IGIMS) at the sole discretion of the Institute, till institute is able to arrange its own staff for the purpose.

12. Insurance: -

Insurance up to Patna will be borne/arranged by principal supplier/his Indian Agent.

13. Installation & site plan:

Requirement regarding site/location for installation of equipment, if any, should be mentioned in the tender. Time required for installation of system after delivery must be mentioned. In case of delay in installation institute will have right to charge liquidated damage.
Specify the following points for installation of the System: -

a. Total power consumption along with break up of main System and Accessories.
b. Whether the System needs uninterrupted power supply.
c. Maximum tolerated transfer time in case of interruption of power supply.
d. Whether the System needs any humidity control device.
e. Whether the System needs any separate power line/isolation Transformer.
f. Does the System need the electrical shielding?
g. Whether Air Conditioner is required for the System.
h. Does it require special civil works for installation?

14. The bidder should also quote for supply of "Un-Interrupted Power Supply" (UPS) with a battery back up of at least 30 minutes, **"**Constant Voltage Transformer (CVT)" of reputed manufacturer of required capacity along with Spike Suppressor or "Servo Voltage Stabilizer" as per requirement of the System. Bidder may quote the prices for all the above items (UPS/CVT/SERVO VOLTAGE STABILIZER) and the decision will be taken during technical evaluation of the item whether UPS is suitable or CVT / Servo Voltage Stabilizer will serve the purpose.

15. Responsibility:-

The principal as well as its agent will be severally and jointly responsible for ensuring the minimum life span of 10 years for the equipment. Both the said principal abroad and his Indian agent will have the

full responsibility for the proper functioning of the equipment/instruments within the warrantee period and thereafter during the life span of the equipment

16. The bidder is required to provide list of persons (along with their permanent and correspondence address) owing more than 1% share ownership in the company/firm (both principle and Indian Agent).

17. The bidder is required to submit compliance sheet, which should reflect details of clause-by-clause compliance of technical specifications as well as general terms & conditions failing which their offer shall be rejected.

18. In order to fully and optimally utilize the equipment, training to paramedical staff and Doctors should be provided. In continuation to this training a separate maintenance training for the machine and the sub system should also be given to the Equipment Maintenance Engineer and Maintenance Technicians of the Institute. All the financial commitment in this regard shall be met by the firm/Principal.

19. Penalties for non-performance

The penalties to be imposed, at any stage ,under this tender are;

a. imposition of liquidated damages,
b. forfeiture of EMD/performance security,
c. termination of the contract,
d. Blacklisting/debarring of the bidder.

20. **Termination of Contract**

a. Termination for default:- The Institute, without prejudice to any other contractual rights and remedies available to it (the Institute), may, by written notice of default sent to the successful bidder, terminate the contract in whole or in part, if the successful Bidder 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 Institute.

b. In the event of the Institute terminates the contract in whole or in part, the Institute 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 successful bidder shall be liable to the Institute for the extra expenditure, if any, incurred by the Institute for arranging such procurement.

c. Unless otherwise instructed by the Institute, the successful bidder shall continue to perform the contract to the extent not terminated.

d. Termination for insolvency: If the successful bidder becomes bankrupt or otherwise insolvent, the Institute reserves the right to terminate the contract at any time, by serving written notice to the successful bidder without any compensation, whatsoever, to the successful Bidder, 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 Institute.

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

21. **Fall Clause**:

The prices charged for the equipment supplies under the contract by successful bidder shall in no event exceed the lowest price at which the successful bidder sells the equipments of identical description to any other persons during the period of contract. If any time, during the contract, the bidder reduces

the sales price chargeable under the contract, he shall forth with notify such reduction to the Institute and the price payable under the contract of the equipments supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

22. **Applicable Law & Jurisdiction of Courts**

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

b. All disputes arising out of this tender will be subject to the jurisdiction of courts of law in Patna (Bihar, India).

Sd/-
Director,
IGIMS - Patna
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CHAPTER:

Schedule of the Requirement.

SCHEDULE OF THE REQUIREMENT

Sl No	**Name of the Department**	**Name of the equipment**
Group	Name of Department	Name of Machine Equipments
A		**As mentioned in the NIT**

ANNEXURES

Annexure - I (a)

PRICE SCHEDULED FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN

LOCATED WITHIN INDIA.

1	2	3	4	5							6
				Price per unit (Rs.)							
scheduled	Brief description of goods Make: Model:	Country of origin	Qty. nos.	Ex-factory/ex-warehouse /ex-showroom/ off-the shelf (a)	Excise duty(if any) % and value. (b)	Sales tax/ vat(if any % and value. (C)	Packing and forwarding charge (d)	Inland transportation , insurance for a period including 3 months delivery, loading/ unloading and incidental cost till consignee site. (e)	Incidental services (including installation and commissioning, supervision, demonstration and training) at the consignee site. (f)	Unit price (at consignee site basis(g) a + b + c + d+ e + f	Total unit price (At Consignee Site) Basis Rs. 4x5(g)

Total quoted price in Rs. ……..
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 warrantee shall be quoted separately as per price scheduled.

Place: Name:
Date: Business Address;-

Signature of Bidder;-

Seal of the Bidder;-

Annexure: I (b)

PRICE SCHEDULED FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4	5					6
				Price per unit (CURRENCY)					
schedule d	Brief descrip tion of goods Make: Model:	Country of origin	Qty. nos.	FOB price at port/ Airport of lading (a)	Carriage & Insurance (port of loading to port of entry) and other incidental cost . (b)	Incidenta l Services (Including Installati on & Commiss ioning, supervisi on, Demonst ration And Training) at the consigne e's site. (C)	Extended Insurance (Local transportatio n and storage) from port of entry to the consignee site for a period including 3 month beyond date of delivery . (d)	Unit Price on CIP Named port of Destinatio n + Extended Insurance (Local Transporta tion and storage) (e_)	Total Price on CIP Named Port of Destination + Insurance (Local Transportation and storage) 4x5(e)

To be paid in Indian Currency (Rs) : ……..
Total Tender Price in Foreign Currency:……
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 warrantee shall be quoted separately as per price scheduled.

3. The Bidder will be fully responsible for the safe arrival of the goods at the named port of entry in goods condition as per terms of CIP as per INCOTERMS, if applicable

Indian Agent;-
Indian agency commission: % of FOB

Name:
Signature of Bidder;-
Business address;-
Signature of Bidder
Seal of the Bidder;-

Place;-
Date

Annexure - II

COMPREHINSIVE ANNUAL MAINTENANCE CONTRACT PRICES SCHEDULE

S. No.	Item Description	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.	7th Yr.	Total Comprehensive Annual Maintenance Contract over a period of seven years after expiry of warranty period of three years from the date of successful installation. (a + b + c + d + e + f + g + h + i)
a	b	c	d	e	f	g	h	i	j
1.	Name of the Equipment: Make: Model: Qty.:								
2.	Name of the Equipment: Make: Model: Qty.:								

Scope of Contract (details as mentioned in the Clause No. – 13 of "Instruction to Bidder" & Clauses No.: 3, 4 and 5 of "Condition of Contract".):

a) The rate of Comprehensive Annual Maintenance Contract as mentioned above should cover the Complete System. Complete System should include the basic unit and allied supporting components like UPS, Stabilizer, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit.

b) **Preventive maintenance visit:** Four Maintenance visits at regular interval for usual maintenance & supervision failing which 25% of the contract amount per visit would be deducted as penalty.

c) **Break down maintenance visit:** As & when required

d) **Response Time:** within 48 Hours.

e) Uptime Guarantee: 95% of 365 days

f) The above-mentioned charges should includes labour charges for maintenance and breakdown visits per year, spares, accessories and all type of consumables required for the maintenance of the supplied items. If any spares / consumables /accessories etc. are not covered under above-mentioned charges; it should be clearly mentioned with frequency of replacement and with rate. The validity of rate of such items should also be mentioned clearly. What will be the rate of escalation on the quoted rate after expiry of the validity of rate of such item must be mentioned.

g) Payment of Comprehensive Annual Maintenance Contract would be made on half yearly basis after completion of work and satisfactory working report. In no case, advance payment is to be considered.

Seal and Signature of the bidder

ANNEXURE – III

MANUFACTURER'S AUTHORISATION FORM

(To be submitted by authorized dealers/representatives/importers)

No.
Dated:

To
The Director
Indira Gandhi Institute of Medical Sciences,
Sheikhpura,
Patna – 800 014 (Bihar, India)

Dear Sir,

Tender No :
Equipment Name :

1. We …… (name of the OEM) are the original manufacturers of the above equipment having registered office at …….. (full address with telephone number/fax number & email ID and website), having factories at _____ and _____ , do hereby authorize M/s._____ (Name and address of bidder) to submit tenders, and subsequently negotiate and sign the contract with you against the above tender no..

2. No company or firm or individual other than M/s._____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific tender.

3. We also hereby undertake to provide full guarantee/warrantee /Comprehensive Annual Maintenance Contract as agreed by the bidder in the event the bidder is changed as the dealers or the bidder fails to provide satisfactory after sales and service during such period of Comprehensive Warranty / Comprehensive Annual Maintenance Contract and to supply all the spares/ accessories / consumables etc. during the said period.

4. We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time.

(Name)
for and on behalf of M/s._____

Date: (Name of manufacturers)

Place:

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

ANNEXURE – IV
BANK GUARANTEE FORM

To The Director
Indira Gandhi Institute of Medical Sciences,
Sheikhpura,
Patna – 800 014 (Bihar, India)

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of tender no_____ dated _____ (herein after called "the contract") to supply The Director, Indira Gandhi Institute of Medical Sciences, (address) with ……. (description of goods and supplies).

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

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 amount 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 undertake to pay you any money so demanded notwithstanding any dispute or disputes raised by the supplier(s) in any suit or proceeding pending before any Court or tribunal relating thereto our liability under these presents being absolute and unequivocal.

We 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 no modification.

No action, event, or condition that by any applicable law should operate to discharge us from liability, hereunder shall have any effect and we hereby waive any right we may have to apply such law, so that in all respects our liability hereunder shall be irrevocable and except as stated herein, unconditional in all respects.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Supplier(s).

We, _____ (indicate the name of bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent, in writing, of The Director, Indira Gandhi Institute of Medical Sciences, Patna (Bihar). This Guarantee will remain in force up to (Date). Unless a claim or a demand in writing is made against the bank in terms of this guarantee on or before the expiry of (Date) all your rights in the said guarantee shall be forfeited and we shall be relieved and discharged from all the liability there under irrespective of whether the original guarantee is received by us or not.

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

ANNEXURE - V

POWER OF ATTORNEY

(On a Stamp Paper of relevant value)

I/ We…….(name and address of the registered office) do here byconstitute,appointandauthoriseSri/Smt ----------…….…(name and address) who is presently employed with us and holding the position of ……. as our attorney, to act and sign on my/our behalf to participate in the tender no…… for …… (Equipment name).

I/ We hereby also undertake that I/we will be responsible for all action of Sri/Smt…….. undertaken by him/her during the tender process and thereafter on award of the contract. His / her signature is attested below

Dated this the ___day of 201_ For_____

(Name, Designation and Address)

Accepted

_____

(Signature) (Name, Title and Address of the Attorney)

Date : _____

(1)Group-B(Orthopedics)

Fully digital mobile C-Arms for all routine and advanced Orthopaedics / Neurosurgical applications (Spine and Trauma Surgery).

1. Generator and X-ray tube

A) Generator should be microprocessor controlled with the following modes

a. Continuous fluoroscopy
b. Digital pulsed fluoroscopy
c. Digital Radiography mode

The range of KV should be 40-110 KV for each mode. Give details of

- mA for each mode
- pulse width
- pulse rate

B) X-ray tube should have a

a. Focal spot of nominal value suitable for fluoroscopy and radiography.
b. Nominal X-ray tube voltage 110 KV
c. Inherent filtration 3.0 Al equivalents or 1.5 Tungsten or better
d. Automatic dose control

C) Collimator Unit

a. Iris diagphragm for radiation fee collimation
b. Shutters / diaphragm for symmetric radiation free collimation and 360^0 rotation.
c. Indication for LIH.

2. C-arm

Fully counterbalanced isocentric C-arm movement with integrated cables and electromagnetic brakes.

Give details of –

a. Angulation and orbital movement
b. Horizontal movement
c. Longitudinal movement
d. Swivel range
e. Source to II distance
f. Depth of immersion

3. A. **Image intensifier and X-ray TV system.**

a. Image intensifier should be at least 9" with zoom facility (x2 & x3).
b. Electron optics should allow consistent high resolution across the entire image field. Give details.
c. Grid : Give details

B. **The X-ray TV System should be maintenance free with CCD technology**.

a. TV matrix at least 1K X 1K
b. Digital image rotation + 360^0

4. Image Display

a. 2 Nos. LCD monitors at least 18" in size.
b. Image matrix at least 1024 x 1024

5. Image acquisition storage and processing

a. Must be a fully digital continuous imaging chain for acquisition, processing, storage, archiving and documentation.
b. Disk storage of minimum of 10,000 2D images in at least 1K X 1K matrix

6. Image Documentation

a. The unit should be DICOM ready for networking to the hospital network and any PC.
b. Should be possible to archive images on CD R/W DICOM 3 format.

7. Essential Accessories

a. Suitable Online UPS at least 30 minutes back up for the C-arm.
b. Zero Lead aprons (light weight) 8 nos.
c. Thyroid shields 8 nos.

9. Warranty / after sale service

a. Three year comprehensive onsite warranty of entire system (Spares and labour) including X-ray tube and all accessories. This will be followed by 7 years CMC.
b. 95% uptime guarantee should be given. In case down time exceeds 5%, penalty in the form of extended warrantee, double the number of days for which the Equipment goes out of service, will be applied.

8. Essential Certification

The offered Model must have a valid quality certificates CE (Europe) or USA FDA, at the time of submission of tender

9. Safety

Equipment should have AERB Type Approval Certificate for radiation safety

(2) Portable Mobile X-ray Machine

1. 70-150 mA Machine with multiple flexible arms for easy manoeuvrability.
2. Combined X Ray generator.
3. Single focus.
4. Bridge rectification.
5. Should have all advanced features required for use in ICU.
6. Should be upgradeable to a higher version.
7. Remote control device (control range>5m)
8. Appropriate cassette holder
9. List of important spare parts and accessories with their part number and costing
10. Manufacturer should be ISO and CE certified for quality standards.
11. Equipment should have AERB approval Certificate for radiation safety.

(3)Syringe Infusion Pumps

1. The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system.
2. Must Work on commonly available standard 5ml/10ml/20ml/50ml/60 ml Syringes with accuracy of minimum of +/-2% or better, with automatic syringe size recognition.
3. Manufacturer should be ISO and CE certified for quality standards.
4. Flow rate programmable from 0.1 to 1000 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.
5. Bolus rate should be programmable to 40 to 1000 ml/hr or more with infused volume display and one key press bolus. Reminder audio after every 0.5 ml delivered bolus.
6. Display of Drug directory of more than 50 drugs, customised and adjustable.
7. Key board locking system for patient safety.
8. Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.
9. Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg.
10. Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.
11. Manual pusher with plunger protection guard.
12. Anti bolus system to reduce pressure on sudden release of occlusion.
13. Should have comprehensive ALARM package including: Occlusion limit exceed alarm. Near end of infusion pre-alarm & alarm, Volume limit prealarm & alarm, KVO rate flow, Low battery prealarm and alarm, AC power failure, Drivedisengaged and preventive maintenance.
14. Rechargeable Battery having at least 8 hours backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.
15. Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole.
16. The unit shall be capable of stored and operating continuously in ambient temperature of 10 - 50deg C and relative humidity of 15-90%
17. Power input to be 220-240VAC, 50Hz.
18. Comprehensive warranty for 5 years and provision of CMC for next 5 years.
19. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
20. User Manual and service manual in English.
21. Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
22. Performance report in the last 3 years from major hospitals should be enclosed.
23. User list to be provided with performance certificate.
24. List of important spare parts and accessories with their part number and costing

Group-C (Cardiology)

(1)Cardiac Cath Lab.

a:- **Cardiac Cath Lab. (MECHANISED SINGLE PLANE SYSTEM) - Qty.01**

State of the art single plane cardiovascular system with flat panel detector technology digital imaging system for diagnostic procedures and interventional cardiovascular procedures, valvulo plasty , vascular Angiography, paediatric interventional cardiology and online DSA. The system must include all package for Cardiac applications. The system should be of latest generation and options for future upgradations if required later on (should be future ready).

1.0 Single Plane Gantry system

1.1 The system should have slim design multidirectional C‘ arm gantry: ceiling suspended/ floor mounted providing full body coverage. Gantry movements should be rapid, motorized & collision proof. Manual override by the operator should be possible. There should be equivalent maneuverability for unobstructed resuscitation during cardiac arrest,while continuing to do fluro/cine at various angulations without any obstruction at head end.

1.2 It should be possible to pre-programme the gantry and table for multiple/several user defined examination positions. (at least 30).

1.3 Gantry should have fast speed for angulations and positioning. All movements should be motorised with minimum speed of 15 deg/sec for all positions..

1.4 Head to toe coverage with Single plane without repositioning the patient should be available.

1.5 Motorised peripheral position for peripheral and vascular interventions should be available.

1.6 Facility for motorised positioning/rotation of ceiling pivot by+/- 90 deg for improved workflow. Patient access should be possible from both left and right side

2.0 Table

2.1 Table should be floor mounted long table with carbon fiber table top with easy patient transportation capability.

2.2 Table should have at least +/- 15 deg head up/down table tilt and table pivot/ rotation facility

2.3 It should support patient load of min 160 kg or more.

2.4 Table should have a Radial procedure compatibility arm/accessories as part of standard.

3.0 X-Ray Generator:

3.1 100 KW or more high frequency generator with latest technology compatible with high resolution imaging along with facility to automatically adjust the dose according to the size of the patient.

4.0 X-Ray Tube:

4.1 X-Ray tube should be with fine focal spot (small & large) with high cooling rate to ensure continuous operation, capable of pulsed fluoroscopy on both focal spots. The large focus power output 65 KW or more. The Pulsed Fluoroscopy should be offered with pulse rate of 3.75 frames /sec to 30 frames/sec.

4.2 The X-Ray tube should have Anode heat storage capacity of at least 2.4 MHU or more to run continuously for 6-8 hours without shutting off.

4.3 X-Ray tube must be capable of long fluro time of at least 2 min at one go as occurs in CTO cases or long interventional procedures without getting heated.

5.0 Radiation protection:

5.1 The system should have integrated computer controlled (preferably automatic) X-Ray Beam filtering with copper filters of various sizesfor soft radiation filteration in both fluoro and acquisition mode .

5.2 The system should have positioning of collimator blades without radiation.

5.3 The system should have monitoring and display of X-ray dose during the patient examination. It should be possible to create a DICOM based dose report of the patient.

5.4 System should meet all National & International safety standards & comply with BARC & AERB guidelines.

6.0 Digital imaging System:

6.1 It should have flat panel detectors 30 cm X 30 cm to max of 30cmX 40cm.Optimal for both coronary and peripheral work.

6.2 Option for 3-4 zoom fields with smallest of atleast 6‖ or 15-16 cm in diagnol in both planes.

6.3 System should have acquisition and processing in 1024xl024 matrix up to 25/30 fps

6.4 System should have cine loop replay facility & Last image hold facility during fluoroscopy

6.5 System should have image storage capacity of at least 1,00,000 images in 1024 x 1024 matrix.

6.6 System should have capability of ECG display on the live image monitor and archive the ECG display along with angio images on CD, during the acquisition.

6.7 System should have on-line & off-line validated coronary analysis and ventricle analysis program. The software should have Auto calibration facility for stenosis measurement with geometrical and densitometry calculations. The analysis should be possible from table side in the examination room and from the control room and review station possibly.

6.8 The system should have table side control operation with touch screen for complete acquisition and post processing capabilities.

6.9 The system should have on-line DSA capabilities in 1024 x 1024 matrix with acquisition frame rate of 1 frame/sec to 7.5 frames/sec. 6.10 It should be possible to have digital rotational angiography and rotational DSA facility

6.11 The system should have facility for storage of fluoro loop scene of last fluro run (as long as the run). Unlimited and continuous forward fluoro storage facility with excellent quality of flouro images.

6.12 The system should have auto image transfer to PACS facility in background mode

6.13 The system should be quoted with 3D modeling/analysis of coronary arteries.

6.14 **The latest complete software and hardware for visualizing stent with extra high-resolution from table side control.**

6.15 It should be possible to do angle and distance measurements.

7.0 Monitors / Display :

7.1 The monitor display system in examination room should be ceiling suspended and it should be possible to position it on the left or right side of patient table. The monitor should be a single high resolution monitor of at least 56‖ and 8 megapixel resolution with PIP facility to display live and reference image from each plane, patient hemodynamic monitoring, 3D image and CT imaging or IVUS images.One medical grade back up monitor to be provided in console room and one in review station (outside the lab)

7.2 High resolution medical grade TFT/LCD monitors for live image of both planes in control room and monitor to display 3D image

8.0 Digital Archiving

8.1 System should have facility of image archiving on CD/DVD in 512X512 matrix.

8.2 Networking for auto Image transfer during procedure from cathlab in background mode without affecting the system operation into distant review stations.[2 in no].

8.3 All review station to have high end medical grade monitors.

9.0 3D Acquisition and Cross-Sectional Imaging :

9.1 The system should have cross-sectional CT like imaging based on rotational angiography.

9.2 System should have software/hardware package for guidance of valve implantation in TAVI procedure from rotational angiography data

9.3 It should be possible to have 3D image reconstruction of vascular structure , Left atrium of heart and aortic arch from rotational subtraction angiography data. The cross-sectional & 3D images should have processing capabilities in the examination room and control room with dynamic 3D roadmaping

9.3 System should have facility of auto positioning of C Arm depending upon 3D image . It should be possible to differentiate between devices like stent and artery in 3D image .

9.4 System should have 3D fusion of cardiac CT data on live fluro for optimized performance in Chronic total occlusion (CTO)cases.

10.0 **CATHLAB RECORDING SYSTEM (Electro-Physiology and Hemodynamic Recorder)**

10.1 The following features should be available in the recorder • 12 Lead ECG Amplifier with floating input • At least 2 pressures with floating inputs • Time and amplitude measurement with electronic calipers • Laser Printer with minimum 16 MB memory with minimum 1200 dpi

10.2 The patient connection box should be easy to install at the patient table in the examination room

10.3 18" color wave form monitor with programmable layout and digital monitoring readout – Two No in control room should be offered

10.4 Display on large 56‖ display in exam room should be offered

11.0 UPS 12.1 System should be offered with suitable online full back up UP Swith at least 30 min. battery backup for complete Cath Lab including cine and fluoroscopy. Emergency lighting should also be on UPS

12.0 Integrated Electrophysiology system with radio frequency ablator

12.1 EP recording system-

1.Minimum 40 intracardiac channels

2. digital amplifier with minimum 32 bit A/D converter with 2 KHZ resolution

3. Review software (PC ready)

4. Should be FDA and CE approved.

5. Sparate moitor for EP recording and review. Set up should not interfere with routine interventional work.

6.Should be upgradable to 3D mapping system.

7. EP stimulator should be standalone withminimum of 9 pre-programmed protocols and 10 user defined protocol.

8. RF ablator – latest generation system with minimum 130 watt output. Compatibility- thermistor and thermocouple. Should have facility of sequential ablation of upto 4 electrodes. Compatibility with irrigation pump.**Ablation catheters should also be included.**

ACCESSORIES to be supplied:

13.1 State of the art High Pressure Injector – One (table mounted)

13.2 Lead Glass 200 x 120 cm. (as per international radiation protection standard)

13.3 Good quality, light weight Lead Aprons skirt top types with hangers - 6nos and wrap around 12 nos. (as per FDA standard)

13.4 Thyroid Guard - 12 nos. (as per international radiation protection system)

13.5 Ceiling suspended radiation protection - 1 no. (as per international radiation protection system)

13.6 Table mounted radiation protection - 1 no. (as per international radiation protection system)

13.7 Biphasic defibrillator cum multipara monitor with external pacing facility.

13.8 ACT machine 1 no with one set of cartridges.

13.9 Integrated two way communication system between control room and examination room.

13.8 Light music system in the lab.

15.It should be CE & US FDA Approved

OPTIONAL;

IVUS and FFR

IVUS and FFR system should be offered with Intravascular Ultrasound (lVUS) with virtual histology (VHIVUS) with motorized pullback to be integrated to the main laboratory and be able to display in main monitors, It should have both online &offline analysis.

IVUS coregistration with angio images simultaneously must be possible.

FFR software and hardware must be integral part of the system (preferably cordless).

(2) Portable ECHO

Technical Specification for Portable Colour Doppler Echocardiography System with TEE capacity – 3 Unit

(Department Of Cardiology)

A state of art fully digital, compact portable Colour Doppler Ultrasound machine (weight < 6.5 kg) is required with following technical features:-

1. Unit should be able to give very high image quality with advance technology like imagine with at least 5 sight of lines for better cardiac contrast resolution, tissue differentiation and edge detection, equivalent to high end cart based systems. Please specify the technology.
2. System should be able to support speckle reduction imaging for better tissue differentiation and edge enhancement please specify the technology.
3. The system shall have ability to enhance tissue margins and improve contrast resolution by reducing artifacts and improving visualization of texture patterns & needle tip within the image, please specify the technology.
4. System should have both online (Read) as well as offline (Write) zoom facility.
5. Imaging modes of real time 2D, Colour Doppler, Pulsed wave Doppler, Continuous wave Doppler, Power Doppler must be available on all cardiac transducer.
6. System must have fast start up to scanning in less than 30second from off condition, for use in critical and emergency situation.
7. System should support transducer technologies like phase array, convex, linear, TEE etc.
8. Cine memory on all modes.
9. The system shall process a dynamic range that at least 165 db. The system must display at a maximum depth of 35 cm.
10. The system must have a dedicated calculation packages with PISA, TDI calculation packages, vascular calculations package.
11. The unit must be compact, portable and light weight , weighting less than 6.5 kg.
12. Unit must be sturdy, resistant to package and damage on fall/ hit against the wall or hard surface for out of the Hospital use.
13. Flat LCD /TFT monitor od at least 10 inches with ficker free image.
14. Alphanumeric soft keys keyboard with easy access scan controls, facility to sanitize the system keyboard to avoid cross contamination.
15. The system must have the ability to function by AC/Dc or battery power with the same degree of functionality, the battery life (run time) shall be at least 2 (Two) hours, this need to be demonstrated.
16. The system must have archive capacity for storage and retrival of images and clips. Data.
17. Data transfer facility should be available as standard, to transfer images etc. easily onto another system/computer etc.
18. System should posses software for Enhanced Visualization to track the needle clearly at sleep angles during the procedures while maintaining striking image quality of the target structures and the surrounding anatomy with simple On/Off functionality. The Facility should be available on both High frequency Linear and Curvilinear probed for superficial as well as deeper blocks.
19. Unit must be sturdy, resistant to breakage & damage on fall/ hit against the wall or hard surface.

20. The system shall support the all DICOM functionality, Storage, print and Work List, also ready to connect to PACS.
21. The manufacture shall provide a loaner system in case of failure of system.
22. The equipmentshould be mountable on trolley and locking mechanism should be inbuilt into the trolley for safety & security of the system.
23. System Configured application specific educational video tutorials should be provided as standard with the system.
24. System should have both European CE and US FDA quality certificate.
25. System should have ability to sanitize to control infection patient to patient.
26. Triple transducer connector (Facility to connect three transducer when system mounted in trolley symountainous and push button to switch probe)
27. System should be ability to provide painless connector facility.

Transducers to be supplied as standard

1. 1 -5 MHz multi- frequency , broadband phased array transducer for adult cardiac, abdominal, FAST imaging.
2. 4-8 MFz phase array paediatric Echocardiography with PW & CW facility.
3. 6-13 MHZ multi- frequency, broadband linear array transduce for vascular, nerve imaging with less than 40 mm size for vascular access, small parts, vascular, musculoske;etalInterscalene, Supraclavicular, Axillary, Musculocutaneous, Popliteal, Saphenous, Higher frequency will be preferred.

OPTIONAL TRANSDUCERS:-

4. 4. 2.5 MHz multi-frequency broadband curved array transducer for general purpose, abdominal, deep nerve access Specilly celiac, Sciatic nerve, Epidural, Sub gluteal & abdominal applications.
5. 5. 8-3 MHZ Trans esophageal Transducer for Trans Echocardiography applications.
6. 6. 6-13 MHz Linear (hockey Stick Shaped) Musculosheletal Nerve superficial vascular venous 6cm Depth (Intraoperative USE)
7. 7. Mobile cart with transducer holder and space for thermal printer should be provided as a standard with facility to Lock the system
8. 8. B/W &Color thermal Printer. Both Should be Quote.

ESSENTIAL REQUIREMENT: The firm/principal company must have minimum number of 100 Installations of the same model in India, attach list of installations, and also provide performance certificates. In case of Single Participation the firm should must be provided minimum 3 no of purchase order from national Govt. institution like (AIIMS/PGI/HLL life care) to consider in negotiation committee with presence of technical expert and user of the same department to finalized the product with demonstration.

(3) TMT Machine

TMT Machine

1 Description of Function

Exercise stress testing systems offer a wide array of unique diagnostic software options to evaluate myocardial function. Automatic arrhythmia detection, ST-segment analysis, and Twave alternans are a few examples. In conjunction with a treadmill or ergometer, these systems provide a controlled environment for the observation of the effects of increases in myocardial oxygen demand: exercise-induced systolic hypotension, exercise-induced angina, and/or the appearance of a heart murmur during exercise.

2 Operational Requirements

2.1 System complete with PC, Software, TMT and necessary cables is required with Bluetooth enabled wireless ECG transmission module.

3 Technical Specifications

3.1 System should acquire and analyze 12 leads.

3.2 System should be based on Windows platform with 17‖ color monitor having minimum resolution 1280 x 1024. 80 GB HDD, CD-RW, Mouse, UPS for analyzer.

3.3 Should provide standard Full Interpretation of Supine ECG with reasoning.

3.4 Display of real time 12 lead diagnostic qualities ECG waveform, average complexes beat of all 12 leads with superimposed color comparison along with digital value of ST level and slope. Print the graph on the recording paper.

3.5 Automatic detection, display, Storage and review of arrhythmia, Heart Rate, Double Product and METS. It should have online HR METs and ST running trends available on the screen during exercise.

3.6 System should have ability to manual edit of J & Isoelectric point during exercise. Filters for line frequency and special filters to reduce noise and baseline artifacts without compromising the ECG frequency response.

3.7 System should have full disclosure play back, review and storage of patient ECG raw data for unlimited numbers depending upon size of the hard disk. The unit should have the ability to readjust ―J-ST‖ interval measurement + 1 m sec points and generate a new report from stored raw ECG data.

3.8 System should provide multiple and customizable printing formats as per user‘s choice on A-4 size high resolution thermal printer for online real time printings. Compatible laser printer for printing reports on plain paper also to be supplied.

3.9 System must have ECG trigger output to interface with external automatic devices.

3.10 Heavy Duty Treadmill : Noise free TREADMILL with speed ranging from 0.5 to 20 kmph and grade of 0 – 22% with suitable servo stabilizer.

4 System Configuration Accessories, spares and consumables

4.1 System as specified

4.2 All consumables required for installation and standardization of system to be given free of cost.

5 Environmental factors None

6 Power Supply

6.1 Power input to be 220-240VAC, 50Hz

6.2 Suitable Servo controlled Stabilizer/CVT

7 Standards, Safety and Training

7.1 Should be FDA and CE approved product

8 Documentation

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 Certificate of calibration and inspection.

8.3 List of Equipments available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

Holter System

1. Holter system provides for 24/48 hours and 7 days of continuous ECG recording and analyzing for detecting heart rate Abnormalities which may otherwise go undetected.

2. Operational requirement Operational requirements

2.1 Should be able to record 24/48 hours and 7days of 3 lead ECG waveforms on small Holter Recorders

2.2 Should automatically detect and quantify different ventricular and supraventricular events , including atrial events (atrial fibrillation , isolated prematures , pairs , bigeminy , trigeminy , runs, shorts pauses, long pauses, bradycardia and tachycardia) and ventricular events (isolated ectopics, premature ectopics, interpolated ectopics late ectopics, R on T, bigeminy, trigeminy, couplets, triplets, and runs).

3. Technical Specifications

3.1 The system should be PC based with PC Specifications (HP/Compaq / Dell) (1 no: Desk top ; 1 No Lap top – 15‖ screen size min.) as following: Computer Processor: i5 core. Memory: 2 GB RAM, Network read facility.

Hard Disk: 500GB hard disk CD-ROM / WRITER: 52x-speed drive or faster. USB: Universal Serial Bus port.Min.4 ports Monitor: Color Super VGA 22‖ flat monitor capable of displaying 1280 x 1024 resolution. Printer: HP LaserJet 2300 or higher. Slot: Minimum one free PCI expansion for card reading. Software: Vista Ultimate or higher. Should be supplied with a desktop (1 No) and a lap top (1No).

3.2 Should provide continuous 12 Lead ECG capability that allows viewing and printing of a 12 Lead ECG from three channel ECG recording at any time during the 24\48 hour recording. The same recorder should have the capability of having 3 lead ECG for 7 days

3.3 Should employ multiple analysis modes, including prospective, paging and superimposition, retrospective and a combination of retrospective and prospective modes that analyses normal ECG and isolated abnormals automatically but stops on complex arrhythmia; Holter software should have HRV analysis, HRV time domain analysis, HRV spectral analysis, and QT

3.4 Should analyse three leads of ST segments with ST episode reporting and Heart rate variability on time and frequency domain

3.5 Should provide unlimited normal, abnormal, and artefact templates with automatic classification, template matching and ability to merge \ unmerge on any template.

3.6 Should automatically stop on and display arrhythmia patterns, patient diary entries and ST episodes.

3.7 Should provide a histogram to view all R to R intervals, all normal to normal intervals, all normal to ventricular intervals, all ventricular to normal intervals, and all ventricular to ventricular intervals.

3.8 Should provide QT and Pacemaker analysis

3.9 Should create custom reports templates

3.10 Trend Graphs –HR, RR interval, RR variance, 12-lead ST, SVPB, VPB

(III) Recorder specifications :

1. Should weigh no more than 120 grams with battery and flash memory installed.
2. Should acquire simultaneous three channel ECG with software to convert three channels to 12 lead ECGs in the scanning device.
3. Should come with pacemaker software that automatically removes pacing arte facts and annotates the recording with pacing pulses.
4. Should Store 24 or 48 hours of ECGS with no data compression.
5. Should use only one no AAA alkaline battery to provide up to 48 hours of three channel recording.
6. Should have a LCD display of the patient‘s ECG during hook up to verify proper electrode application.
7. Should use only 3 leads to record a three channel ECG.
8. Should be water resistant.
9. Should synchronize the recording start and end time with the recorder time clock
10. Should have voice recording to store patient ID
11. Recorder should be tamper proof – i.e., even if the battery or CF is removed accidentally, ECG should continue normally after the battery or CF is replaced.
12. Low battery alarm facility (audio/ visual)

4 Higher configuration computer and printer System Configuration Accessories, spares and consumables 5 The system should contain all the above accessories in integrated or as separate accessories Environmental factors The unit shall be capable of operating continuously in ambient temperature of 10 -40° C and relative humidity of 15-90% The unit shall be capable of being stored continuously in ambient temperature of 0 -50° C and HOLTER SYSTEM

(4). TECHNICAL SPECIFICATIONS OF HOLTER SYSTEM

1. Description of Function

1.1 Holter system provides for 24/48 hours of continuous ECG recording and analysing for detecting heart rate abnormalities which may otherwise go undertected.

2. Operational Requirements

2.1 Should be able to record 24/ 48 hours of ECG waveforms on small Holter Recorders

2.2 Should automatically detect and quantity different ventricular and supraventricular events, including atrial events (atrial fibrillation, isolated premature, pairs, bigeminy trigeminy, runs, shorts pauses, long pauses, bradycardia and tachycardia) and ventricularevents (isolated ectopics, premature ectopics, interpolated ectopics late ectopics, R on T, bigeminy, irigeminy, couplets, triplets, and runs).

3. Technical Specification

3.1 The system should be PC based with PC Specifications (HP/Compaq/Dell) (1 no Desktop; 1 No. Laptop PC) as following:- Computer Processor: Pentium IV; 733 MHz or higher. Memory: 51 2 MB RAM or Higher. Hard Disk: 80 GB or higher with at least 5 GB free space. Floppy Disk Drive: 3.5" floppy drive. CD-ROM/WRITER: 52x-speed drive or faster. USB: Universal Serial Bus port. Monitor: Color Super VGA 17" flat monitor capable of displaying 1280 x 1024 resolution. Printer: HP Laser Jet 2300 or higher. Slot: Minimum one free PCI expansion for card reading. Software: Windows 2000 Operating System or Higher. Should be supplied with a desktop (1 No.) and a laptop computer (1 No.).

3.2 Should provide continuous 12 Lead ECG capability that allows viewing and printing of a 12 Lead ECG from three channel ECG recording at any time during the 24/48 hours recording.

3.3 Should employ multiple analysis modes, including prospective, paging and superimposition, retrospective and a combination of retrospective and prospective modes that analyses normal ECG and isolated abnormal automatically but stops on complex arrhythmia;

3.4 Should analyse three leads of ST segments with ST episode reporting and Heart rate variability on time and frequency domain.

3.5 Should provide unlimited normal, abnormal, and artifact template with automatic classification, template matching and ability to merge/ unmerge on any template.

3.6 Should automatically detect and quantity different ventricular and supraventricular events, including atrial events (atrial fibrillation, isolated premature,

3.7 pairs, bigeminy, trigeminy, runs, shorts pauses, long pauses, bradycardia and tachycardia) and ventricular events (isolated ectopics, premature ectopics, interpolated ectopics late ectopics, R on T, bigeminy, trigeminy, couplets, triplets, and runs). 3.7 Should automatically stop on and display arrhythmia patterns, patient diary entries, and ST episodes.

3.8 Should provide a histogram to view all R to R intervals, all normal to normal intervals, all normal to ventricular intervals, all ventricular to normal intervals, and all ventricular to ventricular intervals.

3.9 Should provide QT and Pacemaker analysis 3.10 Should create custom reports templates with institution's logo 3.11 Trend Graphs_HR, RR interval, RR variance, 12-lead ST, SVPB, VPB 3.12 (III) Recorder specifications: Should weigh no more than 100 grams with battery and flash memory installed. Should acquire simultaneous three channel ECG with software to convert three channels to 12 lead ECG in the scanning device. Should come with pacemaker software that automatically removes pacing artifacts and annotates the recording with pacing pulses. Should Store 24 or 48 hours of ECGS with no data compression. Use AA alkaline battery to provide up to 48 hours of three channel recording. Should have a LCD display of the patients ECG during hook up to verify proper electrode application. Should use only 5/7 electrodes to record a three channel ECG. Should be water resistant should synchronize the recording start and end time with the recorder time clock. .

4. System Configuration Accessories, Spares and Consumables

4.1 PC with Pentium IV with specified configuration – 01 (original operating system software on CD)

4.2 Printer (HP Laser Jet 2300 or higher/equivalent - 01

4.3 Holter Analyser Software - 01

4.4 Holter Recorders - 02

4.5 Patient Cables -02

The system should contain all the above accessories in Integrated or as separate accessories.

5. Environmental Factors

5.1 The unit shall be capable of operating continuously in ambient temperature of 10-400C and relative humidity of 15-19%

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0 - 500 C and relative humidity of 15-90%

5.3 Shall meet IEC-60601-1- 2:2001 (or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

6. Power Supply

6.1 Power input to be 220-240 VAC, 50Hz,/440 V 3 phase as appropriate fitted with Indian Plug.
6.2 Resettable over current breaker shall be fitter for protection
6.3 UPS of suitable rating conforming to IS-3-2 shall be supplied for computer system

7. Standards and Safety

7.1 Should be FDA or CE approved product
7.2 Electrical safety conforms to stands for electrical safety IEC – 60601-1 General requirements and IEC - 606012-25 safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)

8. Documentation

8.1 User manual in English

8.2 Service manual in English

8.3 List of important spare parts and accessories with their part number and costing.

8.4 Certificate of calibration and inspection from factory.

8.5 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

8.6 List of calibration and Preventive maintenance equipments as specified in the Service/Technical Manual. Preventive maintenance has to be provide as per the manufacture guidelines.

(5) External Pulse Generator

1	**Must have constant current Driven output from 0.1mA to 15 mA**
2	**Must have pacing continuation after battery removal for at least 30 seconds.**
3	**Must be able to pacing in following modes; AAI ,AOO,VVI,VOO**
4	**Must have sensitivity Atrial ventricle 0.8-20mV.**
5	**Must have basic pacing rate between 30-200ppm**
6	**Must have Atrial overdrive pacing upto 800ppm**
7	**Must have minimum battery life of 250 Hours.**
8	**Should be provided with extension pacing cable and facility to connect. The temporary pacing lead direct to machine and through extention cable**
9	**Must have easy to find and replace AA batteries (9volt Alkaline leak proof compatible)**
10	**Should have local service facility.**
11	**Must submit user list and performance report in the last 3 years from major hospital should be enclosed.**
12	**User manual in English**
13	**Service manual in English**
14	**Must be European CE certified and US FDA approved**
15	**Lead displacement Alarm-Audi ble signal if lead impedance <100 ohm or 3000 ohm.**
16	**Low battery status signal Read light preferable**
17	**High Rate –One time audible signal if > 180PPM**
18	**Facility to fix the machine with flexible band and facility to hang the machine also.**

(6) Technical Specification
ETO Sterilizer

1. Description

"Ethylene oxide sterilizer" is defined as equipment which uses ethylene oxide as a biocide to destroy bacteria, viruses, fungus and other unwanted organisms. Ethylene oxide is used in sterilization of items that are heat and moisture sensitive

2. Operational Requirements

The ETO gas sterilizer should be fully automatic type for sterilization of heat sensitive goods such as anaesthetic tubing as other plastic disposable materials etc.

3. Technical Specification

3.1 Unit should be fully automatic and Microprocessor based and latest technology

3.2 Should be suitable for sterilization of heat sensitive disposables.

3.3 Should have interior dimensions of approximately-

Height : 16-20 inches
Depth : 20-25 inches
Width : 20-25 inches

3.4 Made up of gas resistant stainless steel with SS back plate as well as SS door. Sterilizer door should have a quick release locking arrangement.

3.5 Should have suitable provisions for exhaust, allowing gas in the chamber and for evacuating the gas.

3.6 Should be rectangular shape with the daily load as stated in capacity requirements.

3.7 Chamber flexibility with adjustable shelves to be provided and specified

3.8 The sterilant should be 100% Ethylene Oxide Gas in cartridge form.

3.9 Monitoring instruments (Gauges and controls) should be provided in the facia panel.

3.10 ETO sterilizer should be able to operate for the minimum essential following cycles programmes-

a) Sterilization cycle for heat sensitive objects with parameters to be specified
b) Automatic Aeration cycle / programme to extract residual gas out of the sterilized objects after each sterilization cycle as per International Standards / AAMI guidelines
c) Automatic chamber evacuation cycle with subsequent venting as per international safety norms to meet UOSHA
d) Humidity provision should be available.
e) Printer to specify load status
f) Error display and alerts for any failure.

3.11 Capacity: 5 cubic feet/per cycle with capacity to process 7-9 cubic feet/24 hr. Firm should clearly state cycle time (Time from start to finish including aeration time as per International standards or cleared as per US EPA) so that capacity and units to process total load in 24 hr can be calculated and supplied. Per US EPA) so that capacity and units to process total load in 24 hr can be calculated and supplied.

4. Consumables-

4.1 Disposable cartridges-200 Nos

4.2 Integrator Dosimeter/ Biological Indicator-200 Nos

4.3 Humidity chips/ Water bottles-200 Nos

4.4 Medical Grade Packing bags of 15 cms, 30 cms & 40 cms-5Rolls Each of 200 Meters

5. Accessories (Mandatory to be provided by supplier)

5.1 UPS of Suitable rating for safe switching from one source to another

5.2 Exhaust ducting to top of building

5.3 Trays/Baskets to be provided

6. Accessories (optional as required for machine)

6.1 Air compressor to be provided if required for the equipment

6.2 Dryer as required by the equipment

6.3 Exhaust and Vent Hoods as required by the equipment

7. Standards & safety

7.1 Manufacturer/Supplier should have ISO certification for quality standards.

7.2 Should be USFDA registered

7.3 Should have European CE Marks

7.4 Cartridges and Equipment should be USEPA registered

7.5 Electrical safety conforms to standards for electrical safety IEC-60601-1 general Requirements devices. Part 7: ethylene oxide sterilization residuals [standard] 1st ed. ISO 10993-7. 1995

8. Documentation and Training

8.1 Installation should be done by qualified personnel only along with adequate training/ certification for staff.

8.2 Only latest model should be quoted with certificate

8.3 Log book/ sterilization documentation for each load to be provided

8.4 Reference /user reports of 10 years working and supplies be provided.

8.5 Atleast 5 Teaching Institutions reference to be provided.

9. Others

9.1 Warranty for five year
9.2 AMC/CMC for subsequent 5 years with cost of spares.
9.3 Commitment to provide spares and accessories for the entire period (5 yrs. CMC + 5 yrs. AMC).
9.4 Last of consumable and spare parts along with price list with validity of 5 years to be provided.
9.5 Compliance certificate along with variability, if any, should be provided.
