

BIDDING DOCUMENT

TENDER NOTICE No.: 15/ 2015 - 2016 / Biomedical Equipt./ IGIMS / Store



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

TENDER NOTICE No 15 /2015 – 2016/ Biomedical Eqiptt. / 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

Sl. No.	Description	Page No.
01.	CHECK LIST	
02.	ELIGIBILITY CRITERIA	
03.	INSTRUCTION TO BIDDER	
04.	CONDITION OF THE CONTRACT	
05.	SCHEDULE OF THE REQUIREMENT	
06.	SPECIFICATION AND ALLIED TECHNICAL DETAILS	

IMPORTANT DATES

Last date for Purchase of Bidding Document	Can be downloaded from Institute website
Last date for submission of Completed bidding document	14/10/2015 up to 4.00PM A.M. by registered/speed post/ Courier only
Date of opening of technical bid	15/10/2015 at 3:00 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 SUBMITTED 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: <ul style="list-style-type: none"> • 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 AUTHORIZATION 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.	Mentioned Page no.
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	<p>(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.</p> <p>(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.</p>	
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 31 st 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 TO 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 either by cash or 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 14/10/2015 up to 4.00PM and will be opened on 15/10/2015 at 3.00PM.

7. Earnest Money Deposit (EMD):

Earnest Money 2% 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.

For Group-C- EMD for Rs.20, 000/- required to be submitted.

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 locted in India, in the form priscribed 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. Guarantee/Warranty Terms:

- 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. Comprehensive Annual Maintenance Contract:

- 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. Time Limits prescribed

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 be 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 the 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.
- 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:-

$$1 \text{ Year} = 365 \text{ days}$$
$$95\% \text{ of } 365 \text{ days} = 347 \text{ Days per annum}$$
- 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, 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 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 binding 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.
- 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:-
$$1 \text{ Year} = 365 \text{ days}$$
$$95\% \text{ of } 365 \text{ days} = 347 \text{ Days per annum}$$
- 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 binding 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. **Delivery period/Liquidated Damage: -**

Goods should be delivered within two 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. **Payment: -**

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 10% 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.

d: **For Instruments and consumables items (Cath Lab) of . (Group-C) 100% payment will be released after delivery and acceptance.**

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 warranty 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) owning 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 inter alia, 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**

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	Excise duty(if any) % and value.	Sales tax/vat(if any) % and value.	Packaging and forwarding charge	Inland transportation , insurance for a period including 3 months delivery, loading/unloading and incidental cost till consignee site.	Incidental services (including installation and commissioning, supervision, demonstration and training) at the consignee site.	Unit price (at consignee site basis)(g)	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:
Date:

Name:
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	Carriage & Insurance (port of loading to port of entry) and other incidental cost .	Incidental Services (Including Installatio & Commissi oning, supervisio n, Demonstr ation And Training) at the consignee 's site. (C)	Extended Insurance (Local transportation and storage) from port of entry to the consignee site for a period including 3 month beyond date of delivery .	Unit Price on CIP Named port of Destination + Extended Insurance (Local Transportati on and storage)	Total Price on CIP Named Port of Destination + Insurance (Local Transportati on and storage)
				(a)	(b)	(C)	(d)	(e_)	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	1 st Yr.	2 nd Yr.	3 rd Yr.	4 th Yr.	5 th Yr.	6 th Yr.	7 th 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/warranty /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 hereby constitute, appoint and authorise Sri/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 : _____

SPECIFICATION AND ALLIED TECHNICAL DETAILS

Technical Specification

Group-A- ENT

1. Operating Microscope for ENT (Basic)

Specification:

Magnification Power 5 step, apochromatic magnification changer ranges between: 3x to 21x, Color Filter Red-Free Green Orange, Objective Lens Distance 200 mm to 400 mm, Coaxial, cold light 12 V 100 W or above illumination with Fast-action lamp changer, 22" HD video. Integrated 3-CMOS/External SD video camera, Integrated /External video still image capturing on HDD and USB-media, motorized zoom focusing, Beam Splitter, Floor Stand, Electrical Power: AC 220V, 240V, 50/60 Hz

Manufactured, designed, developed under FDA/European CE certification

2. Various Surgical Instruments for Micro Ear Surgery

Specification:

Heavy Duty Micro Motors	1	forward & reverse cutting above at least 40,000 rpm with foot control
Hand straight piece	3	Compactable to 40,000rpm Micromotor
House Graft Press forceps	1	
Ferguson suction tubes	Two each	7 FR, 9 FR, 10 FR , 12 FR, 14 FR
Mc Gee forceps	4	3.5 X 6mm, serrated, straight
Micro instrument tray	Two	Forceps and micro point with silicone mat
Mc Gee forceps	2	4 X 6mm, serrated, right
Mc Gee forceps	2	4 X 6mm, serrated, left
Micro scissor (Bellucci)	2	4 X 8mm, straight
Micro scissor (Bellucci)	2	4 X 8mm, right
Micro scissor (Bellucci)	2	4 X 8mm, left
Micro cup forceps	2	1 X.9mm, Straight
Micro cup forceps	2	1 X.9mm, bent up
House-Dieter Malleus Nipper	2	1.3mm, down cutting
Fuller Teflon	1	80 mm length

prosthesis introducer		
Sickle knife	2	14.5 cm
Flag knife	2	15 cm
Rosen circular knife	2	1.6mm
Rosen circular knife	2	2.6mm
Microear needle	2	Curve
Microear needle	2	Straight
Micro ear hook	2	.3mm, 90 degree
Micro ear periosteal elevator	2	
House micro measuring rod	1	3.5,4,4.5,5mm
Measuring jig	1	
House micro curette	1each	1.5,1.8mm
Farrior ear speculum	2set	3.6cm
Holmgren self retaining aural speculum	2	
Ear forceps	2	14.5cm
Lampert micro ear periosteal elevator	2	18cm
Myringotome	1	Curve
Weitlanger self retaining mastoid retractor	2	13.5cm, 3:3mm teeth, blunt
Plester self retaining mastoid retractor	2	10.5cm, blunt, 2:flat
Langenbeck mini retractor	2	16cm
Hartmann forceps	2	Fine
Freer periosteal elevator	2	Light
Tungston carbide cutting burrs of all sizes	3sets	0.6mm to 7mm
Diamond burrs	2sets	0.6mm to 7mm

Manufactured, designed, developed under FDA/European CE certification

3. Instruments for Nasal Surgery **With specification**

Hartmann halle forceps		
Killian self	2	15.5cm, 27mm blade

retaining forceps		
Grunwald nasal forceps	Two set	13cm with 35mm, 50mm, 75mm, 85mm blade
Luc ethmoid bone forceps	2	21cm
Freer septum elevator	2	18/19cm
Ballenger swivel knife	2	
Killian septum gouge	1	3mm.
Ballenger septum gouge	1	5mm
Silver rhinoplasty chisel	1	18cm, 5mm, straight
Silver rhinoplasty chisel	1	18cm, 5mm, right
Silver rhinoplasty chisel	1	18cm, 5mm, left
Sheehan Osteotome	1	14cm,4mm
Maltz nasal rasp	1	34 X 7 drawing cut
Button end alar hooklet	1	
Freer mucosal hooklet	2	15cm sharp
Aufricht nasal retractor	2	
Nasal suction tip no- 1,2,3	4	Nasal suction tip no- 1,2,3
Lac' tongue depressor	Three SET	Lac' tongue depressor
Heymann turbinectomy scissor	Three sets	Tungsten carbide
Thudichum nasal speculum	One	Set of four
Antral curate	One set	4 X 10mm, Oblong cup
Ball Elevator	One	190mm
Asch septum straitening forceps	One	Heavy forceps, angles flat blade
Heuwieser	One	Fixed jaw curve 90 degree, jaw open backward 120 degree

antral forceps		
Strycken turbinectomy scissor	One	1 X 16mm, sharp cut
Weil-Blakesley forceps	One	2.5 X 8mm straight
Weil-Blakesley forceps	Two	3 X 10mm, 45 degree
Weil-Blakesley forceps	Two	3 X 10, 90 degree
Walsham forceps	Two	Straight blade
DCR Sickle knife	One	
Back biting forceps	One	2.5 X 7mm, rotating
Mushroom Stumberger forceps	One	Circular, straight
Sickle knife	One	Sharp, pointed
Hajek sphenoid punch	One	2.5 X 3mm
Through cut punch	One	Straight
Cheek retractor	Two	31mm wide swivel blade
Kerrison punch	Two	4mm bite, straight
Nasal sinus scissor	One	Adult size
Nasal suction	One	All size
Fiber optic head light with band	two sets	
Fiber optic cable	One	4.5 mm length 230 cm
Ultra compact mini xenon light source	One	300W
Manufactured, designed, developed under FDA/European CE certification		

4. Micro Debrider System for ENT Surgery

Specification

Console:

1. Console should be electrically operated and stand for the console should be provided.
2. Able to identify the connected handpiece.
3. Provide the power for microdrill for stapes and high speed drill for FESS hand piece.
4. Have the display of the speed and mode of motion ie Rotation/oscillation.
5. The built in irrigation and coolant facility.
6. Console foot switch should have the facility to change the rotation of the hand piece.
7. Foot switch control.

(I) Microdebrider hand piece: Rotatable (2 Nos.)

1. Handpiece should be light weight for better handling and should be able to rotate the blade upto 360 degree during the surgery for precise disease removal.
2. Microdebrider hand piece should have built in suction to be connected on line during the surgical procedure.
3. Microdebrider blade should have the online irrigation facility.
4. Should be able to attach the various blades and burs required for various procedures like FESS, DCR, Polyps, laryngeal surgery, adenoidectomy.
5. Handpiece blades should have the forward and reverse motion for burs and the oscillation modes for the blades.

(II) Blades should have different types of operating blades as mentioned under

1. For FESS Tricut Blades 4mm.
2. For FESS Angled blades 40 degree.
3. Blades for adenoid work.
4. Blades for laryngeal and subglottic work

Manufactured, designed, developed under FDA/European CE certification

5. Micro Debrider and High Speed Drill System for ENT

Specification:

Console & Footpedal

- Should be a versatile powered ENT system, that lets to choose just the power required for various ENT and Aesthetic related surgeries
- The system should be suitable for wide variety of procedures ranging from Rhinology, Transnasal procedures, Otologic procedures, Nasopharyngeal / Laryngeal / tracheal and Bronchial applications.
- Console should have in-built, user friendly interactive menu and illustrative help guide
- Should have a Touch screen monitor for better visibility of Speed and Modes.
- Should be able to adjust the irrigation levels and bur/blade speed with the touch screen control.
- The various parameters should be able to adjust either from touch screen panel or from the multifunction foot switch.
- Should be able to connect multiple hand pieces at a time like Debrider hand pieces (Upto 5000 RPM in Oscillating mode & 12000 RPM in Forward mode), Low speed Stapes drill (Upto 16000 RPM) ,High speed Otologic drills (Upto 80000 RPM) and Microsaws.
- Console should recognize various hand pieces and automatically adjust the settings.

- Should have in-built pumps for Irrigation (5cc / Min to 100cc / Min) .
- Should have multifunction ergonomically designed foot control with light emission for easy identification.
- Should be able to control Speed, Forward and Oscillation modes from Foot Pedal.
- Should be able to toggle between active hand pieces from the Foot control itself.
- Should have option for remote control Irrigation to operate from sterile area.
- Should have in-built Lens cleaning system for intra-operative cleaning of various Endoscope lens.
- Should have the provision to mount the console on various sizes of IV pole.

Debrider Handpiece :

- Should be able to work up to the speed of 12000 RPM in forward rotation and 5000RPM in oscillation mode.
- Should have finger tip control to rotate only the tip of the blade up to 360 degree.
- Should have straight suction path to reduce clogging and allow efficient tissue removal.
- Should have integrated blade locking system to lock the blade tip rotation.
- Should have integrated side grooves and cable clips to provide better tubing management.
- Should have Titanium body to avoid rusting.
- Should be light in weight and ergonomically designed.
- Should have different varieties of debrider Blades like Straight and Curved blades range starting from 12 degree and available upto 120 degree.
- Should have rota table laryngeal blades from 2.9 mm – 3.5 mm & 4 mm. Length from 18 cm, 22 cm, 22.5 cm, 27 cm & 27.5 cm.
- Should have Tonsillectomy , Adenoidectomy , Inferior Turbinoplasty blades.
- Should have Tip-rotatable subglottic, tracheal, bronchial blades.
- Should have frontal sinus straight & curved burrs, DCR burrs.

Stapes / Middle Ear advance surgery Handpiece :

- Handpiece weight should not be more than 2 OZ.
- Should have variable speed footswitch control.
- Should be able to vary the speed up to 12000 RPM.
- Should be able work as an independent self-powered system and also have the option to work with the console.
- Oto-Flex burrs should have color coding.
- Should have the application in Middle ear or Stapes footplate surgery.

Drill Handpiece :

- Should be ergonomically designed electrical Drill System with high Torque up to 38 mN-m and Power up to 120W
- Speed should be variable from 10,000 to 75,000rpm.
- Weight of the drill should not be more than 90gms and length should be less than 8.0 Cm with a diameter not exceeding 1.70cm
- Should have integrated cable to connect to console

- No Lubrication or seal should be required to run the motor
- Should have quick release and lock system for tools and attachments
- Should be suitable for Mastoid, Skull base and Neuro Otology applications
- Otology attachment of 7.5 cm length with straight & angled and attachment 7.0cm straight design for right balance in cutting efficiency, control, handling, and smoothness.
- An extensive selection of dissecting tools should be available in cutting and diamond surface in various diameters 0.6mm to 8mm
- In built irrigation should be available.
- There should be option to connect to skull base burs to access through endonasal approach

Trans Nasal Skull Base Burs / bipolar forcep :

- Should have burrs to enhance visualization with an endoscope and can help protect critical anatomy from a spinning bur shaft.
- Fully sheathed burr shaft to help protect surrounding tissue from spinning shaft
- 15° distal bend to enhance visualization when using an endoscope
- 13 cm length with slender hub and long tube for head and neck procedures
- Fully integrated irrigation to help cool bone and burr tube
- Inbuilt Suction should be available in Bipolar forceps
- Bipolar forceps should be available in straight sizes of 105mm & 170mm
- Up curve Bipolar forceps should also be available in 170mm
- Disposable suction tip should be available separately
- Bipolar cable should be universal in nature

Manufactured, designed, developed under FDA/European CE certification

6. Surgical Instruments for Oral Cavity and Throat Surgery

Name and Specification

Davis Boyle mouth gag	One	
Tongue blade for gag	One set	Width X length, 29 X 67mm, 33 X 75mm, 38 X 85mm, 40 X 92mm, 46 X 100mm
Tonsil holding forceps	One	Blohmke type, 205mm
Tonsil scissor	One	195mm
Eves tonsil snare	One	290mm
Anterior pillor retractor	One	240mm,
Adenoid curette	One set	For paediatric and adult
Tonsil dissector	One each	12mm and 15mm
Yankauer suction	One	290mm
Molt mouth gag	One each	13cm and 11cm
Tongue holding forceps	One	Young type, 15cm
Draffin bipod stand with plate	Two	
Peri Tonsillar (Quinsy) forceps	One	

Luc Tongue depressor	One	Set of three
----------------------	-----	--------------

Manufactured, designed, developed under FDA/European CE certification

7. Coblation System for ENT Surgery

Specification

Controlled ablation of tissues based on low temperature bipolar radiofrequency technology in electrolyte solution like normal saline. The machine should have no need for secondary patient earthing pad.

Operating temperature between 40 to 70 degree. There should be integrated saline pump for continuous irrigation.

The generator should have facility for foot switch.

There should be facility for coagulation and coblation.

The generator should be able to take all different probes for open and minimal invasive ENT procedure like; probes for tonsillectomy, turbinate reduction, adenoid, soft palate, Laryngeal, tongue and related applications.

The coblation probe should have multiple electrode technology to allow uniform production of plasma. The probe should have integrated cable.

Should have tungsten electrode

Probe should have malleable shaft. Bending tool should be available for bending the probe.

Suction probe should have integrated IV tubing.

Probe with dual function of coblation and shrinkage should have depth identification marks on the shaft.

Laryngeal probes should have at least six inches of working length and tip diameter less than 4mm.

Articulating instruments (forceps) for ENT can be used for surgical procedure for examination and treatment of nasal, paranasal, ear, nose and throat tissue. Articulating through cutting forceps vertical jaws and articulating grasping forceps vertical jaws should have more than 200 degrees of articulation with many distinct locking positions should have multiple tip.

Manufactured, designed, developed under FDA/European CE certification

8. Instruments for Tracheostomy Set

1	Tracheal dilator	Two	Trousseau type, 14.5cm
2	Tracheal hook	Two	Rose type, 13cm
3	Thymus retractor	Six	Lukens type, 17cm
4	Adson tissue forceps	Two	14mm
5	Mosquito artery forceps	Four	Small, fine, curved, titanium
6	Kilner needle holder	Two	Fine, small, tungsten carbide
7	Bard Parker blade	Two	HANDLE No. 3
8	Metzenbaum scissor or equivalent	Two	Straight, Tungsten carbide

9. Instruments for Microlaryngeal Surgery

1	Laryngoscope with fibre optic carrier	One each	Pediatric, adult, compatible for MLS
2	Anterior commissure laryngoscope with fibre optic carrier	One each	Pediatric, adult, compatible for MLS
3	Micro laryngeal forceps serrated jaws	One	25 cm
4	Micro laryngeal forceps cupped jaws	One	25 cm
5	Patterson biopsy forceps	One each	25 cm & 35 cm
6	Micro laryngeal scissor	One each	25 cm, straight, right curve, left curve
7	Jackson grasping forceps	One each	25 cm, 35 cm
8	Micro laryngeal sickle knife	One	Sharp, curve
9	Jackson alligator forceps	One each	25 cm, 35 cm
10	Vocal Nodule forceps	One each	25 cm, 35cm
11	Laryngeal suction tubes	One each	1.5 mm, 2 mm & 2.5 mm
12	Lewy laryngoscope holder	One	

Manufactured, designed, developed under FDA/European CE certification

10. Instruments for Rigid Esophagoscopy

Rigid esophagoscope Jackson type	One	Length:50cm, inner diameter: 10.7 X 12.6mm, outer diameter: 12.2mm X 16.2mm
Rigid esophagoscope Jackson type	One	Length: 30cm, Inner Diameter: 10.7mm X 12.6mm, Outer Diameter: 12.2mm X 16.2mm
Rigid esophagoscope Jackson type	One	Length: 20cm, Inner Diameter: 8.7mm X 10.6 mm, Outer Diameter: 10.2mm X 14.2mm
Foreign body forceps	One set	For metallic, vegetable foreign body and denture
Suction tube	One set	compatible to esophagoscope

Manufactured, designed, developed under FDA/European CE certification

11. ENT Workstation

one	<p>Main Unit</p> <ul style="list-style-type: none"><input type="checkbox"/> Durable steel casing, non rusting, long lasting<input type="checkbox"/> Large instrument surface made of stainless steel with dividers and heating system to heat the instruments, laryngeal mirrors and endoscopes.<input type="checkbox"/> Device to Heat the laryngeal mirrors<input type="checkbox"/> Compressed air system continuously adjustable from 0.1 to 4 bars for spray and politzerizing, spray liquid with autoclavable nozzle for cleaning<input type="checkbox"/> Handle for compressed air should be having a regulation valve<input type="checkbox"/> Medication reservoir be made of stainless steel, should be detachable and suitable for all type of medications.<input type="checkbox"/> Stainless steel tank for compressed air of capacity of 1.5 or more<input type="checkbox"/> Compressor unit should be completely separate from suction unit<input type="checkbox"/> Inbuilt motor suction unit with capacity of 35 liters per minute with maximum 92% vacuum.<input type="checkbox"/> Should have a vacuum gauge, bacterial filters, 1.5 liters liquid container and effective device to prevent overflow.<input type="checkbox"/> Suction tube should have automatic on off switch and small ear rinse funnel<input type="checkbox"/> Warm water rinsing device with autoclavable stainless steel handle with snap closure system and fine spray regulation valve<input type="checkbox"/> Separate stainless steel tank to prevent mineral build up and heat up to 38 degree temp<input type="checkbox"/> Cold water irrigation through existing water connection<input type="checkbox"/> Automatic liquid container discharge system should be provided<input type="checkbox"/> Suction tube cleaner with exchangeable re-usable adapter.<input type="checkbox"/> X-ray viewer integrated in a writing draw with automatic on /off switch(Optional)<input type="checkbox"/> Dispenser for cotton and paper<input type="checkbox"/> provision for attachment of microscope<input type="checkbox"/> Equip with waste container<input type="checkbox"/> Endoscopy centre with cold light source with two outlets with 300W LED/XENON/HALOGEN light bulb<input type="checkbox"/> Head light with fibre-optic cable to be used with above light source for examination<input type="checkbox"/> Head light rest made of stainless steel<input type="checkbox"/> Two warming quivers for rigid endoscope- should be removable for autoclaving and cleaning<input type="checkbox"/> automatic on/off switch for single light outlet with light barrier<input type="checkbox"/> Large writing surface<input type="checkbox"/> Draw for computer key board along with swivel support for computer monitor(Optional)<input type="checkbox"/> Power supply 220-240 volts/50 Hz<input type="checkbox"/> Integrated Mono and Bipolar cautery system with all cables & probes/forceps. (Optional) <p>ENT EXAMINATION MICROSCOPE:</p>
-----	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>The ENT examination microscope with integrated, fanless high transmission, high performance LED illumination in the microscope head.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Integrated, fanless high performance white-light-LED Luminescence: min. 120 klux (200 mm), 30 klux (400 mm) <input type="checkbox"/> Color temperature: 5.500 K <input type="checkbox"/> Optimized stereo effect by 24 mm stereo basis <input type="checkbox"/> In built LED light source with SD camera OR HD camera with a facility to take images, video & transfer the same to any smart phone via the wi fi card(Optional), <input type="checkbox"/> Mechanical support arm for the microscope <input type="checkbox"/> Expandable with scale projection at the image plane with an option of green filter <p>Objective: 200 mm, (fine focusing)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Objectives with manual fine focusing Visualization: <input type="checkbox"/> HD-camera with facility to record, take images and transmit the same through the wi-fi card to smart phone/ PC/ Laptop.(Optional) <p>wide-field eyepiece 10X to 16x magnification</p> <ul style="list-style-type: none"> <input type="checkbox"/> Colour filter green, with pivot mechanism(Optional) <input type="checkbox"/> The ENT microscope should be on castors with locking system- <input type="checkbox"/> Monitor holder,HD monitor,lateral double hand grip <p>ENT PATIENT EXAMINATION CHAIR</p> <ul style="list-style-type: none"> <input type="checkbox"/> Should be motorized and ergonomically designed examination and treatment chair facilitating the posture of both doctor and patient <input type="checkbox"/> Heavy base casing <input type="checkbox"/> All elements of chair should be anatomically shaped <input type="checkbox"/> Seat should have motorized lifting device <input type="checkbox"/> Seat should have height adjustment for children <input type="checkbox"/> Integrated foot switch for easy adjustment of height <input type="checkbox"/> Should have complete rotation 360 degree with locking device <input type="checkbox"/> Should be comfortably padded and folded back for enabling easy sitting of overweight and handicapped patient <input type="checkbox"/> Head rest-15cm with adjustable height. <input type="checkbox"/> Backrest adjustable and can be made to incline 10 degree forward to vertical position and backward completely to a horizontal position and can be rolled back <input type="checkbox"/> Movement of armrest and footrest should be synchronized with backrest movement <input type="checkbox"/> Chair should confirm to CE mark <input type="checkbox"/> Power supply:220-240Volts/ 50Hz <p>DOCTORS EXAMINATION CHAIR</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wide base, should have rolling casters for easy movement <input type="checkbox"/> Should have back rest <input type="checkbox"/> Easy height adjustment of hydraulic nature <input type="checkbox"/> Comfortably cushioned seat <p>RIGID ENDOSCOPES</p> <ul style="list-style-type: none"> <input type="checkbox"/> 4mm/0 & 30 degree nasal endoscope-1 in number <input type="checkbox"/> 2.7mm/0 & 30 degree nasal endoscope-1 in number <input type="checkbox"/> Magnifying 90 degree/70 degree Laryngoscope with facility to focus manually - 1 in

	<p>number</p> <p>Flexible High resolution nasopharyngoscope, diameter 3.2 mm, working length: 300 mm 0°, angle of view 80°, depth of focus: 5 mm infinite, bending 125 degree/125 degree 1 in number (Optional)</p> <p>STROBOSCOPY (INTEGRATED- same manufacture)</p> <p><input type="checkbox"/> The LED stroboscope should be noiseless with flash light & pilot light for vocal cord diagnostics based on LED technology</p> <p><input type="checkbox"/> The LED stroboscope should have the variable phasing & slow motion mode, adjustable with the footswitch.</p> <p><input type="checkbox"/> Should display voice frequency, sound pressure level, audio output for archiving the voice signal including attachable laryngoscope microphone also should have a body sound adapter for voice asthenic patient stethoscope adapter for clip microphone for a better connection of the microphone signal to the stroboscope control .</p> <p><input type="checkbox"/> The flash frequency should be 70 -1000 Hz, without reduction, sound level metering range 70-125 dB + / - 1 dB, operating modes , continuous light, slow motion 0.5 – 2 Hz, frozen image 0 degree – 400 degree, hunting over the footswitch adjustable, light durable approx., 50,000 hrs.</p> <p><input type="checkbox"/> The system should have an integrated LED light source, light durable approx., 50,000 hrs, brightness 220 kLux / 175 Lumen, length of the cable 1.9m</p> <p><input type="checkbox"/> The system should indicate the status of light- pilot light, flicker & slow motion.</p> <p>Display and recording system</p> <p>1. High resolving 1/3" CCD camera with high light sensitivity with Medical grade HD-LED/LCD monitor (min. 17-21").</p> <p>SOFTWARE:</p> <p><input type="checkbox"/> 1 no. Acoustic analysis/Recording of the voice signal software, archiving and recording the voice, and taking report. Should have editing facility, annotations like arrow, text marker ,lines, circle can be done on images, Should have audio as well as video capture facility</p> <p><input type="checkbox"/> 1 no. P.C.(Personal Computer) should consist of a CPU, Keyboard and Mouse for installation of software.</p> <p>The Principal Manufacturer Must Have Direct Presence In India For Direct Service Support.</p> <p>Local Representative For After Sales Service Must Also Be there.</p> <p>Training For Two Doctors Must Be Provided Locally.</p> <p>List of Installation in India</p> <p>All standard certificates required</p> <p>should have International CE/ FDA approval certification</p>
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

12. ENT Treatment Unit

- Atomizer-3

- Cold light source ,Dual Outlet & Head band
- Anti fog heater
- Instrument Tray
- Utility dust bin
- Bull lamp
- Automatic Suction
- Facilities for Ear syringing
- Electric driven motorized patients chair

Manufactured, designed, developed under FDA/European CE certification

<p><u>13. Electrical</u> <u>Otoscope</u></p>	<p>Five</p>	<p>Closed head design particularly suited to pneumatic testing</p> <ul style="list-style-type: none"> • Features removable 2.5 x magnifying lens, allowing the introduction of small instruments • Range of reusable speculum supplied • Disposable speculum also available, Dry Cell Battery Version, replacement Bulbs & Batteries available <p>Manufactured, designed, developed under FDA/European CE certification</p>
----------------------------------------------------------------	-------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

14. Various OPD Instruments

Head lamp	Two	
Bull's eye lamp	Four	
Head mirror	Four	with wide plastic headband
ET Catheters	Two	
Luc tongue depressor	Eight sets	13mm wide, 22mm wide, 19mm wide
Thudicum nasal speculum	Eight sets	
Cottle nasal speculum	Twelve	
Killian's nasal speculum	Four sets	
Hartman Aural Forcep	Eight	Crocodile action, 4.0mm x0.8mm extra fine serrated jaw
Aural Forcep	Four	Serrated jaw, bayonet, 14cm
Aural Syringe	Four	Conical metal pipe, with wings
Tilley Nasal Dressing Forcep,	Eight	Angled, 16.5cm
Kaluskar Fishbone Forcep	Four	12.5cm
Lister Bandage Scissors	Two	S/S, CE Marked, One probe Ended Blade, Autoclavable, Overall length 18cm
Wax Hook	Four	Blunt, 18cm
Gardiner Brown Tuning Fork	Two sets	set of 6, complete with oak box pitch 128Hz, 256Hz, 512Hz, 1024Hz, 2048Hz, 4096Hz
Gardiner Brown Tuning Fork	Four	Pitch 512Hz

Jobson Horne Probe Double ended	Eight	14cm, 18 cm
Tilley Lichtwitz Trocar & Cannula	Four	Luer lock, with tubing mount, 6fg,9fg
Laryngeal mirror with fixed handle	Four sets	6mm dia, 8mm dia, 10mm dia, 12mm dia, 14mm dia, 16mm , 18mm dia, 20mm dia, 22mm dia, 24mm di, 28mm dia, 30mm dia
Posterior rhinoscopic mirror	Four sets	6mm dia, 8mm dia, 10mm dia, 12mm dia, 14mm dia
Head mirror	Four	Ball & Socket fitting, adjustable webbing headband and 9cm dia mirror
Gallipot	Four	64mm x 44mm, 110ml (4oz) Stainless Steel
Kidney Dish	Eight	254mm x 115mm x 52mm Stainless steel
Rectangular tray	Four	15" X 12"
Nasal suction tip	Eight sets	no- 1,2,3
Ear Suction tips set of three	two sets	
Siegel's speculum	Four	
Aural speculum	Eight sets	
Formalin chamber	Three	
Sterilizer	Two	18" X 8"
Cidex tray	Two	
Dressing drum (6")	Three	
View box	Four	
Suction machine Hivac	Four	

Manufactured, designed, developed under FDA/European CE certification

15. Diagnostic Microscope for ENT

Apochromatic Optics with magnification Range 0.4x-2.5x or more;

Working distance $f=200\text{mm}$

Fine focusing range up to 40 mm motorize or manual

180 degree tiltable tube $f=170\text{mm}$ or Straight binocular tube $f=170\text{ mm}$ interpupillary distance adjustment from 55 mm to 75 mm

Pair of widefield push-in eyepieces 10x with sleeves and magnetic locks, diopter setting from -8D to +5D

Handgrips

Coaxial fiber optic illumination system. With proper backup.

Dual lamp system with quick change over

Continuously lamp intensity adjustment by control knob near to the surgeon

Stable and sturdy floor stand on four lockable castors, column (height: minimum 1.7 m)

spring-balance articulated arm, carrier arm, power supply unit, light guide 2 m, power cable

Sterilizable rubber caps for all knobs, dust cover.

Stereo Co observation system with 45° incline binocular with PD adjustment scale

Manufactured, designed, developed under FDA/European CE certification

16. Tympanometer

GENERAL SPECIFICATIONS:	Test Types: Tympanometry, Acoustic Reflex Threshold, Reflex Decay, Eustachian Tube Function (Intact and Perforated) Protocols: Diagnostic, Screening, Multi-component Tympanometry, Auto Sequence and User Defined Display: Internal Color Touchscreen and optional external HDMI monitor Interface: USB (keyboard, mouse, Flash Drive, PC communications) Printout: External Deskjet printer Probe Tone: <ul style="list-style-type: none">• 226 Hz (85 dB SPL \pm 1.5 dB) 678 Hz (72 dB SPL \pm 1.5 dB) 1000 Hz (69 dB SPL \pm 1.5 dB)• Accuracy: \pm 1%• Harmonic Distortion: Less than 1%
ADMITTANCE MEASUREMENTS:	Range: 226 Hz (-10 to + 10 mmho) 678 Hz (-21.0 to +21 mmho)1000 Hz (-32.0 to +32 mmho) Sensitivity Scale: Auto Scales to Appropriate Range, Manual selection also possible in Reflex Modes only Accuracy (226 Hz): <ul style="list-style-type: none">• Tympanometry Mode: \pm 5% of reading or \pm 0.1 mmho, whichever is greater• Reflex Mode: \pm 5% of reading or \pm 0.02 mmho, whichever is greater
PRESSURE MEASUREMENTS:	(load volume of 0.2 to 7.0 ml) Range: Normal = +200 to -400 daPa Wide = +400 to -600 daPa Accuracy: \pm 10% of reading or \pm 10 daPa, whichever is greater Sweep Rate: 12.5, 50.0, 200, 600 and 600/200 daPa/sec. Sweep Accuracy: 10% of nominal rate Maximum limits (in 0.5cc cavity): -800 daPa and +600 daPa
REFLEX MEASUREMENTS:	Stimuli: 250, 500, 1k, 2k, 4k, BBN, LBN, HBN, Click, External Input, Non-acoustic

	<p>Frequency Accuracy: $\pm 3\%$ Harmonic Distortion (THD): Less than 5% (measured acoustically) Noise Signals: (3 dB bandwidths) Low Band: 400 -1,600 Hz High Band: 1,600 -4,000 Hz Broad Band: 400 -4,000 Hz Intensity Range: 35 to 120 dB HL Step Size: 5 dB, 1 dB and 2 dB Calibration Accuracy: ± 3 dB Step Accuracy: ± 0.5 dB ON/OFF Ratio: 70 dB minimum</p>
ACCESSORIES SUPPLIED:	<p>Probe Assembly (including contralateral insert phone) Eartips (1 pkg. each standard, screening) Calibration Test Cavity, Cleaning kit, Probe Mount Kit (shoulder, clip, wrist band), User Quick Guide, Reference Instruction Manual</p>
QUALITY SYSTEM:	<p>Manufactured, designed, developed and marketed under FDA/European CE certification</p>

17. Advance BERA (with ASSR and OAE)

GENERAL SPECIFICATIONS:	<p>Test Types: AEP, ECochG, Cortical AEP, AMLR, EABR, ASSR, Distortion Product Otoacoustic Emissions, Spontaneous OAE, Input/Output DPOAE</p> <p>Transducers: Insert earphones, TDH Headphones, Bone vibrator, Loudspeaker</p> <p>Stimulus Specifications: Stimulus Types: Click, tone burst, tone pip Stimulus Polarity: Condensation, Rarefaction and Alternating Masking Types: Absolute or stimulus relative I Intensity: 0 to 130 dB SPL Repetition rates: 0.2 – 100 depending on modality High Pass Filtering: RC or Digital Butterworth Low Pass Filtering: Butterworth or Digital linear phase</p> <p>Amplifier: Interface To Main Unit: Proprietary high-speed, serial digital</p>
--------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>Number of Channels: 2 Isolated (type BF) for patient safety Electrode inputs: Differential Input Impedance: >1000 MW Frequency Response: 0.2-10,000 Hz</p> <p>ASSR</p> <p>Display: ASSR Thresholds, Estimated Audiogram, Results Summary, Trials Done Stimulus Specifications: Stimulus Types: AM/FM Masking Types: Absolute or stimulus relative Intensity: -10 to 130 dB HL Carrier Frequency: 250 – 8000 Hz Modulation Frequency: 20 – 200 Hz depending on carrier frequency AM Modulation: 0 – 100% FM Modulation: 0 – 15% Relative Angle: 0 – 359 degrees GSI Audera Amplifier: Dimensions: 3.93"(W) x 7.48"(D) x 1.57"(H) Weight: .94lb Interface To Main Unit: Proprietary high-speed, serial digital Number of Channels: 2 Isolated (type BF) for patient safety Electrode inputs: Differential Electrode connectors: 5 DIN 42802 safety connectors Input Impedance: >1000 MW Frequency Response: 0.2 – 10,000 Hz</p> <p>OAE (Otoacoustic emission)</p> <p>DPOAE Stimulus Tones: Frequency: 500 – 12, 000 Hz Level: 20 – 80 dB SPL, in 5 dB steps Accuracy: ± 3 dB Harmonic Distortion: <_ 1.8% at 80 dB SPL, IEC 711 coupler, 500 – 12,000 Hz Dynamic Range: 85 dB SPL, IEC 711 coupler, 500-12,000 Hz, F1 & F2 = 65 dBSPL Octave Ranges: 500-1000, 1000-2000, 2000-4000, 4000-8000, 8000-12000 Hz Points per Octave: 1 – 12 points F2/F1 Ratio: 1.1 – 1.8</p>
MAIN UNIT:	<p>Computer Interface: USB - Type I Trigger Controls Input/Output: Standard TTL logic level Mains Power Supply:230V Isolated Power: a) Main unit includes isolation transformer/ power supply which provides isolated mains power only for supported notebook computer and inkjet printer models.</p>

	b) Main unit provides isolated power to Amplifier/Digitizer or ProbeUnit.
CPU RECOMMENDATION:	Operating System: Windows 7 Professional Processor: 1 THz Minimum RAM: 2 GB Storage: 11 GB Hard Drive Additional Storage: CD R/W drive USB Ports: 2 Graphics: 1024 x 768 pixels
SUPPLIED ACCESSORIES:	Main Unit Reference Manual 2-Channel Amplifier with 9' cable AEP/CAEP Software Application or Licensing key to activate AEP/CAEP User's Manual Insert Earphones with 9' cable Loop-back cable Electrodes, 6mm cup, 12 pk Electrodes, 10mm cup, 12 pk Electrode Linker Disposable side snap electrodes, 25 pk Electrode Leads, Snap, 5 pk NuPrep Gel, 4 oz. tube Ten 20 Paste, 4 oz. tube Infant eartips, 3.5mm, 20 pk Infant eartips, 4.0mm, 20pk 3A foam eartips, 10mm, 100pk 3A foam eartips, 13mm, 100pk OAE Probe/Pod with Test Cavity OAE Calibration CD DPOAE Software Application or Licensing key to activate DPOAE User's Manual Shoulder Mount Kit Eartip Kit, Infant Eartip Kit, Child/Adult Eartip Kit, Adult Probe Cleaning Floss & Instructions - Green solid – test in progress - Yellow solid – seal check in progress - Yellow flashing – test stopped, probe problem/ seal check failed OAE Pod/Probe: I Interface to Base: 25 pin D-SUB connector
QUALITY SYSTEM:	Manufactured, designed, developed and marketed under under FDA/European CE certification
<u>18. OAE and</u>	<u>Hearing Screener ABR</u>

- Improved backlight and panel that is easier to read
- Probe holder for safer handling

Improved algorithms for faster test times
Storage capacity for up to 300 records
Wireless data transmission
software for easy data processing and printing
Choice of configuration

- OAE/ABR combination including
TE OAE and DP OAE

**DPOAE and TEOAE available for complete
OAE screening**
Automatic Operations for quick and easy
screening

- Probe fit and calibration
- 5 frequency pair available DPOAE
- 5 frequency bands available TEOAE
- Pass criteria set to NIH 2000 protocol
(configurable)

Programmable test frequencies for more
highly trained personnel (i.e. audiologist)
Set the environment to Noisy, Normal or Quiet to get the most accurate results
Real-time graphic test progress is available for accurate reporting
All test information is saved and stored for easy retrieval

ABR configuration
Automatic Operations for quick and easy screening

- Impedance test
- Probe fit and calibration
- Testing of up to 8 stimulus conditions per test
- Pass criteria set to NIH 2000 protocol
(configurable)

Ability to create a latency intensity function
Manual peak V scoring
Manual threshold search
Real-time graphic test progress is available for monitoring
Click and tone pip stimulus available
Stimulus rate of 32 to 62 stimuli per second
Stimulus level of 0 to 98 dBSPL

General terms for all above instruments/equipments

1. All above instruments/equipments must be European CE/US FDA approved product.
2. Comprehensive training for lab staff and support services till familiarity with the system.
3. User/Technical/Maintenance manuals to be supplied in English for eligible instruments.
4. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.

5. List of Equipments available for providing routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual
6. Price of individual instruments and/ or full set should be quoted.
7. Prior Demo if needed.
8. Instruments should be made from High Quality Surgical Grade Steel
9. Instruments should have Laser surface or ebonized or equivalent finish to provide appropriate reflection lowering finish.
10. CO=/Catalogue number & article number should be mentioned on each and every instrument.
11. There should be country of origin/Manufacturing engraved on each and every instrument.
12. Company should have relevant experience in successful execution of similar work at least in five Institutes of national importance and central government Institutes.
13. Company should be at least in its 5 years of operations at the date of Submission of tender.

Group-B- Cardiology.

(1) 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 T-wave 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.

	Should be able to record 24/48 hours and 7days of 3 lead ECG waveforms on small Holter Recorders
	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
	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).
	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
	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; Holter software should have HRV analysis, HRV time domain analysis, HRV spectral analysis, and QT
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

3.11	<p>(III) Recorder specifications :</p> <ol style="list-style-type: none"> 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 artefacts 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	
<p>Higher configuration computer and printer_</p>	<p>System Configuration Accessories, spares and consumables</p>
5	<p>The system should contain all the above accessories in integrated or as separate accessories Environmental factors</p> <p>The unit shall be capable of operating continuously in ambient temperature of 10 -40° C and relative humidity of 15-90%</p> <p>The unit shall be capable of being stored continuously in ambient temperature of 0 -50° C and</p>

HOLTER SYSTEM

(2) TECHNICAL SPECIFICATIONS OF HOLTER SYSTEM

Sl. No.	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 undetected.		

Sl. No.	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 ventricular events (isolated ectopics, premature ectopics, interpolated ectopics late ectopics, R on T, bigeminy, irigeminy, couplets, triplets, and runs).		
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Sl. No.	Technical Specification		
3.1	<p>The system should be PC based with PC Specifications (HP/Compaq/Dell) (1 no Desktop; 1 No. Laptop PC) as following:-</p> <ul style="list-style-type: none"> • Computer Processor: Pentium IV; 733 MHz or higher. • Memory: 512 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,		

	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	<p>(III) Recorder specifications:</p> <ul style="list-style-type: none"> ▪ 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. 		

Sl. No.	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.

Sl. No.	Environmental Factors		
5.1	The unit shall be capable of operating continuously in ambient temperature of 10-40 ⁰ C and relative humidity of 15-19%		
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0 - 50 ⁰ 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.		

Sl. No.	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 overcurrent breaker shall be fitter for protection		
6.3	UPS of suitable rating conforming to IS-3-2 shall be supplied for computer system		

Sl. No.	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 -60601-2-25 safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)		

Sl. No.	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.		

Group-C.

Supply of Cardiac & Other Instruments / Accessories / Consumables on Rate Contract Basis for Cardiac Cath Lab.

CATH LAB ACCESSORIES LIST

GROUP - 1	
S. No.	Name of Article with specification:
1.	Adult Introducer sheath with haemostatic valve and puncture needle Size: 4F to 10F.
2	Pediatric Introducer sheath with haemostatic valve and puncture needle, Size: 21G in 4, 5 & 6 F
3	Radial artery cannulation kit comprising of arterial sheath, puncture needle 21 G, guide wire OF 0.018"/0.021" and 50 cm long STRAIGHT TIP. SIZES 5F, 6F and 7F
4	Sterile puncture needle of 21 G, about 5 cm long, permitting insertion of 0.021"guidewire with plastic jacket covering needle part
5.	Sterile puncture needle of 18 G, about 7 cm long, permitting insertion of 0.035"/0.038"guidewire with plastic jacket covering needle part
6.	Manifold two port with knobs to turn right when open
7.	Manifold three port PTCA kit with to turn left when open, with pressure line, fluid containing and contrast connecting line, short tube to connect toughyborst and leurlock controlled syringe of 10 ml with finger grip.
8.	Three way stop cock with one male and two female ports and rotating adapter for coronary Angiography.
9.	Pressure line: 100-150 cm 4-6 mm compatible with manifold and three way ports.
10.	High pressure injector line to withstand pressure up to 1200psi, 75-150 cm length with Luer lock male port and rotator
11.	Sterile catheterization drape sheet for covering patients during catheterization/intervention procedure a) Short sheet. Covering from belly to legs with hole in the groin puncture sites (approx. 5 feet long) b) Long sheet. Covering from belly to legs with hole in the groin puncture sites (approx 9 feet long)
12.	Leur lock syringe for angiography (for multiple high pressure contrast injection in single patient) a) 5cc b) 10 cc
13.	Full surgical gown
14.	Coronary Angiography diagnostic catheters (left) 100 cm or longer for femoral approach and various curves (wherever applicable) of 3.0, 3.5, 4.0, 5.0 as required.
15.	Coronary Angiography diagnostic catheters (Right) 100 cm or longer

	for femoral approach and various curves (wherever applicable) of 3.0, 3.5, 4.0, 5.0 as required from time to time
16.	Coronary Angiography diagnostic catheters (left) 65 cm or longer for radial approach and various curves of 3.0, 3.5, 4.0, 5.0 as required from time to time
17.	Coronary Angiography diagnostic catheters (Right) 65cm or longer for Radial approach and various curves of 3.0, 3.5, 4.0, 5.0 as

	required from time to time
18.	Coronary Angiography diagnostic catheters (Tiger catheters) 100 cm or longer for radial approach and various curves time to time
19.	Coronary Angiography diagnostic catheters 100 100 cm or longer for radial approach and various curves cm or 3.0,3.5,4.0,5.0as required from time to time
20	a; Piggtail catheter:- Pigtail catheter straight and angled 145-155 high flow tight radius with 6-12 side holes ,4F-8f b) Pigtail catheter with radio opaque markers (marker pigtail)
21.	Angiographic guidewire. 0.035"PTFE coated J tip, length a)140-160 cm b)250-260 cm
	GROUP -ii
22	Angiographic guide wire. Extra stiff coated J tip, length a)140-160 cm b)250-260 cm
23.	Inflation device with manometer 0-30 ATM and luminescent dial face. Easy to operate with ergonomic design. High strength syringe to maintain high pressure setting without pressure loss and immediate pressure release
24.	PTCA insertion needle and torque device accepting 0.014",0.018" guide wire
25.	Y connector for PTCA - rotating hemostatic valve with spring type push and release mechanism. It should bled back control valve and without formation of micro/ macro air bubbles inside it during procedures
26.	Non spring screw type Y CONNECTOR for PTCA
27.	PTCA guiding catheter It should be large lumen, stainless steel braided, inner layer coated with PTFE. It should have soft tip with radioopaque marker band at the tip for femoral and radial route. 5F to 8F CURVE (3.0,3.5,4.0,5.0) JUDKIN LEFT with and without side holes
28.	PTCA guiding catheter JUDKIN LEFT with short tip
29.	PTCA guiding catheter JUDKIN right with and without side holes
30.	PTCA guiding catheter JUDKIN RIGHT with short tip
31.	PTCA guiding catheter IMA Guiding catheter
32.	PTCA guiding catheter MULTIPURPOSE Catheter
33.	PTCA guiding catheter AMPLATZ left 1 and 2 (AL-1,AL-2)
34.	PTCA guiding catheter AMPLATZ RIGHT 1 and 2 (AR-1,AR-2)
35.	PTCA guiding catheter EXTRA BACK UP LEFT
36.	PTCA guiding catheter EXTRA BACK UP RIGHT
37.	PTCA guiding catheter VODA LEFT

38.	PTCA guiding catheter VODA RIGHT
39.	RADIAL GUIDING CATHETER EBU FOR LEFT ECR FOR RIGHT
40.	Guiding catheter for peripheral interventions of various shapes, curves and sizes for femoral/radial/ brachial approach a) Renal curve b) Renal double curve c) Shepherd crook d) Multipurpose e) Carotid guiding catheter
41.	Radifocusguidewire(termou) J tip with hydrophilic polymer (length 150-160 cm) Size in inches a)0.018" b)0.025" c) 0.032" d)0.035" e) 0.038"
42.	Radifocusguidewire(termou) J tip with hydrophilic polymer (EXTRA length 260 cm) Size in inches a)0.018" b)0.025" c) 0.032" d)0.035" e) 0.038"
43.	Amplatz extra stiff guide wire , long length of 250-260 cm of 0.035" and 0.038"
44.	PTCA Pre dilatation, monorail balloon (semi compliant). Hypotube shaft design, low entry profile (0.017") and sequential tip for lesion accessibility and SF guiding catheter compatibility. Diameter(mm)1.25 -1.5, 2.0, 2.5, 2.75, 3, 3.25, 3.5, 4.0 Length - <10 mm to 30 mm or more
45.	PTCA pre-dilatation semi-compliant over the wire balloon with short balloon taper, low entry profile (0.017"). Diameter - 1.25 to 2.0 mm or more
46.	High pressure non-compliant balloon with high RBP (20 atm or more), smooth, rounded distal tip and no edge Overdilatation at higher pressure; with least balloon overhang at the edges will be preferred. Diameter (mm): 2, 2.5, 2.75, 3.0, 3.25, 3.5, 3.75, 4, 4.5, 5.0. Lengthmm: minimum 6-8mm to >20 mm.
47.	STEERABLE PTCA FLOPPY wire TIP WITH EXTRA SUPPORT 0.014"
48.	STEERABLE PTCA wire with hydrophilic coating ,0.014" FLOPPY TIP WITH EXTRA SUPPORT 0.014"
49	Steerable PTCA wire of intermediates and hard wire tip for doing CTO cases (CTO wire)
50	Thromboseter catheter for manual scrten of thrombi's.
51	Mother and child guiding catheter for doing complex PCTS
52	.FFR Wire
53.	Amplatz extra-stiff guide wire long length of 250 -260 cm of 0.035" and 0.038"

54. Pressure bag with manometer for IV infusion.

55. Dome kit with flushing System for Philips FD-10C model.

56. Physiological pressure transducer and connector for Philips FD-10C model.

57. Femoral percutaneous closure device (Thrombin mediated closure)

58. Radial closure device comprising of compression pad with anatomic softwrist support pad.

59	Auto perfusion catheter 6F Over the wire with side holes proximal and distal to balloon for hemodynamic stabilization of unstable patients during PTCA.
60	Micro catheter Over the wire system with end hole catheter Int Diameter 1.7 to 2F Shaft length 130-> 170 cm.
61	Deflecting tip micro catheter to cross acutely angulated vessels.
62	Snares: dual lane snare s stem with radio-opaque loop.
63	"Goose neck snare kit 2-10 mm
64	Bipolar temporary lead with introducer sheath. Adult (6-7 F)
65	Bipolar temporary lead with introducer sheath. Pediatric(4-5 F)
66	Single lumen balloon wedge pressure catheter (Swan GANZ) with end hole beyond baloon tip at distal end Size 4-8 F
67	NIH catheter Size 4-7 F
68	Balloon floatation angiographic catheter (Berman type) with side holes Size 5-7 F
69	Balloon floatation angiographic catheter (Berman type) with side holes and end holes and end holes at tip of the catheter for wire asseess Size 5-7 F
70	Counard catheter Size 5-7 F -Semi compliant peripheral balloons for doing peripheral vascular intervention (of various sizesa)
- Ballons of various sizes for doing valvuloplasty(PBV,BAV)	
67.	MITRAL VALVULOPLASTY DOUBLE lumen PTMC balloon with vent tube and hole in outer layer of the balloon , different sizes 1. With accessories 2. Without accessories
68.	PTMC double lumen balloon with no hole on the balloon wall, different sizes (a) with accessories. (b) Without accessories.
69.	IVC filter –Temporary.
70.	IVC filter-permanent
71.	Permanent IVC filter, MRI compatible.
72.	MULLIN SHEATH
73.	BROKENBOUGH NEEDLE
74.	Covered coronary stent graft of size 2.5,2.75,3.0,3.5 ,4.0
Group-iii	
75.	Pacemaker VVI/ AAI Advanced digital multi-programmable pacemaker with following features >Single chamber pacemaker >Digital signal processing

>Digital high sampling rates of P or R wave

>Automated ventricular rate stabilization during AF

Quick single window patient data and pacemaker data for advanced diagnostic and troubleshooting >Algorithm to minimize ventricular pacing will be preferred

- a) With 7f compatible passive fixation tined leads or screws in lead & lead introducer.
 - b) Pulse generator only
 - c) 7F compatible passive fixation tined lead or screw in lead & lead introducer only.
-

76.	<p>Pacemaker VVIR/AAIR</p> <p>Advanced digital multi-programmable pacemaker with following features >Single chamber pacemaker >Digital signal processing >Digital high sampling rates of P or R wave >Automated ventricular rate stabilization during AF Suick single window patient data and pacemaker data for advanced diagnostic and troubleshooting >Algorithim to minimize ventricular pacing will be preferred</p> <p>a) With 7f compatible passive fixation tined leads or screw in lead &lead introducer. b) Pulse generator only c) 7F compatible passive fixation tined lead or screw inlead & lead introducer only.</p>
77.	<p>Pacemaker VDD</p> <p>Pace Advanced digital multi-programmable pacemaker with Following features— >Single and dual chamber pacemaker >Digital signal processing >Digital high sampling rates of P and R wave >Automated ventricular rate stabilization during AF >Quick single window patient data and pacemaker data for advanced diagnostic and troubleshooting >Alogorithm to minimize ventricular pacing will be preferred a) With 7f compatible passive fixation tined lead or screw in lead &lead introducer. b)Pulse generator only c)7F compatible passive fixation tined lead or screw in lead & lead introducer only.</p>
78.	<p>Pacemaker DDD</p> <p>Advanced digital multi-programmable pacemaker with Following features— >Single and dual chamber pacemaker >Digital signal processing >Digital high sampling rates of P and R wave >Automated ventricular rate stabilization during AF >Quick single window patient data and pacemaker datafor advanced diagnostic and troubleshooting >Alogorithm to minimize ventricular pacing will be preferred a) With 7f compatible passive fixation tined lead or screw in lead &lead introducer. b)Pulse generator only c)7F compatible passive fixation tined lead or screw in lead & lead introducer only.</p>
79.	<p>Pacemaker DDDR</p> <p>Advanced digital multi-programmable pacemaker with Following features— >Single and dual chamber pacemaker >Digital signal processing >Digital high sampling rates of P and R wave >Automated ventricular rate stabilization during AF >Quick single window patient data and pacemaker data for advanced diagnostic and troubleshooting >Alogorithm to minimize ventricular pacing will be preferred a) With 7f compatible passive fixation tined lead or screw in lead &lead introducer. b)Pulse generator only c)7F compatible passive fixation tined lead or screw in lead & lead introducer only.</p>
80.	<p>Pacemaker DDDR / MRI COMPATIABLE with passive fixation steroid tipped tined leads or screw in leads with advanced features.</p>
81.	<p>Pacemaker VVI / MRI COMPATIABLE</p>

82 .	Pacemaker VVIR / MRI COMPATIBLE
83 .	Pacemaker VDD/ MRI COMPATIBLE
84 .	ICD SINGLE CHAMBER ICD should be small and physiological Algorithm to eliminate over –sensing of R wave, T wave, fractionated QRS and other extraneous signals Morphology bases SVT discrimination algorithm ATP during charging Wireless Telemetry Encourage intrinsic conduction More than 30 minutes of stored EGM, (a) Device with all leads (b) Device without leads
85 .	Permanent pacing lead (ventricular/Atrial endocardial bipolar, passive fixation with tines), steroid eluting, IS-1 header.
86 .	Permanent pacing lead (ventricular/Atrial endocardial bipolar, passive fixation with tines), steroid eluting, IS-1 header.
87 .	Permanent defibrillation lead , bipolar endocardial steroid eluting active and passive fixation lead.
88 .	ICD SINGLE CHAMBER / MRI COMPATIBLE
89 .	ICD DOUBLE CHAMBER ICD should be small and physiological Algorithm to eliminate over –sensing of R wave, T wave, fractionated QRS and other extraneous signals Morphology bases SVT discrimination algorithm ATP during charging Wireless Telemetry Encourage intrinsic conduction More than 30 minutes of stored EGM, (a) Device with all leads (b)Device without leads
90 .	ICD DOUBLE CHAMBER / MRI COMPATIBLE
91 .	ICD should be small and physiological Algorithm to eliminate over –sensing of R wave, T wave, fractionated QRS and other extraneous signals Morphology bases SVT discrimination algorithm ATP during charging Wireless Telemetry Encourage intrinsic conduction More than 30 minutes of stored EGM, (a) Device with all leads (b)Device without leads
92 .	BIVENTRICULAR PACING CRT-P
93 .	BIVENTRICULAR PACING CRT-D COMBO
94 .	ASD CLOSURE DEVICES of various devices USFDA , CE marked (a) Device only (b)Device with all the accessories like delivery sheath, loader, deploying cable etc.
95 .	PDA CLOSURE devices , CE marked (a)Device only (b) Device with all the accessories like delivery sheath, loader, deploying cable etc.
96 .	PDA Duct occluder (Type II and AS), USFDA APPROVED,CE Marked Diameter of all sizes (a)Device only. (b)Device with all the accessories like delivery sheath, loader, deploying cable etc.
97 .	VSD CLOSURE DEVICES of various devices

GROUP - iv

98.	DRUG eluting balloon Diameter (mm) 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 3.75, 4.0., Lenth (mm) 10-30- in various length. (a) Paclitaxel eluting balloon. (b) Paclitaxel eluting balloon using Iopromide coating.
99.	Bare metal Stents of various sizes
100.	Sirolimus coated drug eluting stent USFDA approved (a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
101.	Sirolimus coated drug eluting stent , CE marked (a)Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
102.	Sirolimus coated drug eluting stent , DCGI marked (a)Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
103.	Paclitaxel coated drug eluting stent , FDA marked (a) Stainless steel base (b) Cobalt chromium base (c)Platinum Chromium base
104.	Paclitaxel coated drug eluting stent , CE marked (c) Stainless steel base (d) Cobalt chromium base (c)Platinum Chromium base
105.	Paclitaxerel coated drug eluting stent , DCGI approved (a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
106.	Everolimus coated drug eluting stent , USFDA approved (a) Stainless steel base (b) Cobalt chromium base (c) (c)Platinum Chromium base
107.	Everolimus coated drug eluting stent , CE marked (a) Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
108.	Everolimus coated drug eluting stent , DCGI approved (a) Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
109.	Zotarlimus coated drug eluting stent , USFDA approved (a) Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
110.	Zotarlimus coated drug eluting stent , CE marked (a) Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
111.	Zotarlimus coated drug eluting stent , DCGI approved (a) Stainless steel base (b)Cobalt chromium base (c)Platinum Chromium base
112.	Sirolimus coated drug eluting stent , with bio-degradable polymer, USFDA approved (a) Stainless steel base

(b)Cobalt chromium base

113. Sirolimus coated drug eluting stent, with bio-degradable polymer, CE approved

	(a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
114.	Sirolimus coated drug eluting stent, with bio-degradable polymer, DCGI approved
	(a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
115.	Biolimus A9 coated drug eluting stent with bio-degradable polymer, USFDA marked
	(a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
116.	Biolimus A9 coated drug eluting stent with bio-degradable polymer, CE marked
	(a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
117.	Biolimus A9 coated drug eluting stent with bio-degradable polymer, CE marked
	(a) Stainless steel base (b) Cobalt chromium base (c) Platinum Chromium base
118.	Everolimus coated drug eluting stent with bio-resorbable vascular scaffold, available in different length and sizes.
119.	Aortic stent graft, self expandable, Bifurcated Diameter 20-28mm.
120.	Delivery System for Aortic Stent graft.
121.	Coronary stent Graft (PTFE) with low profile (<1.5mm) Diameter 2.5-4/4.5mm Length upto 30mm or more
122.	Peripheral stent Graft (PTFE) with low profile Diameter 4mm to 10mm or more, various length
123.	Coronary stent with ultra-thin polymer mesh wrapped around the stent working as embolic protection device used in post Myocardial infarction intervention with large thrombus burden to prevent distal thrombus embolization. Diameter: 2mm to 5.0mm and length from 10-12 mm to 38-40mm.
124.	Disposable surgical gown
125.	Disposable surgical mask.
126.	Disposable surgical cap
127.	Disposable surgical patient Drape- ECO (E) 111
128.	Gloves:- Surgical Size: 6 1/2 " Size: 7" Size: 7 1/2 " Size: 8"

SPECIAL hardwires have to be provided as and when required.
