

# **BIDDING DOCUMENT**

**TENDER NOTICE No: 07/2017- 2018/Bio-medical Equipment/IGIMS/Store**



**Supply, Installation & Commissioning of Bio-Medical Equipment's / Instruments**

**TENDER NOTICE No: 07/2017- 2018/Bio-medical Equipment/IGIMS/Store**

Issued to:

Cost of Document: Rs.2000/-

Paid By:           Cash:           Receipt No.:

Demand Draft:    No.:

Issuing Bank:

**(Authorized Signatory)**

**INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,  
SHEIKHPURA, PATNA - 800014.**

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**IMPORTANT DATES**

<b>Last date for Purchase of Bidding Document</b>	Can be downloaded from Institute website
<b>Last date for submission of completed bidding document</b>	26/07/2017 up to 4.00 PM. by registered/speed post/ Courier only
<b>Date of opening of technical bid</b>	27/07/2017 at 3.30 P.M. in Conference Hall IGIMS, Patna.
<b>Date of demonstration of equipment</b>	To be informed to the qualified bidders qualifying after opening of technical bids.

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

Sr. No. of Tender: \_\_\_\_\_

FILE NO. : Tender No.: \_\_\_\_\_

Tender form issued in favour of: \_\_\_\_\_

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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.**

<b>Sr. No.</b>	<b>Terms &amp; Conditions as per Bidding Document</b>	<b>Page No.</b>	<b>Remarks</b>
1.	<p><b>Status of Bidder:</b></p> <ul style="list-style-type: none"> <li>• Manufacturer or Authorized Agent of the Manufacturer</li> <li>• Whether Public Undertaking, Public Ltd., Private Ltd. Company or Proprietary Firm/partnership firm</li> <li>•</li> </ul> <p>(Please attach Notary certified <b>MANUFACTURER'S AUTHORISATION FORM</b> as per <b>FORMAT</b> placed at <b>Annexure – III</b>)</p>		
2.	<b>Power of Attorney as per Annexure - V</b> 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 equipment's.		
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.	<b>Notary certified User List</b> (List of Govt. /Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.		
8.	<b>Notary certified Supply</b> order copy (Minimum 3nos. or more) issued by Govt./Semi Govt./Reputed Pvt. Institutions/organization for the quoted items. ( same model)		
9.	<b>Notary certified Performance certificate</b> of the same supplied machine (of quoted make and Model) issued by <b>Head of the dept. or Institution</b> after a minimum period of six months of installation ( <i>Only applicable for medical equipment</i> )		
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.	<b>Quality Assurance Certificate</b> like ISI, ISO-9002, IP/BP, CE, FDA (US) or any other (please specify) <i>(Only applicable for medical equipment)</i>		
16.	<b>Bid Security</b> amount deposited is enclosed or not. If yes, please mention the details.		
17.	<b>Original Technical Catalogue</b> of the quoted model . <i>(Only applicable for medical equipment)</i>		
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) <i>(Only applicable for medical equipment)</i>		
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 <b>price bid</b> .  (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) <i>(Only applicable for medical equipment)</i>		
20.	Acceptance of all terms / conditions towards <b>after sales / services</b> as mentioned in the bidding document.( Clause No- 13 of “ Instruction to Bidder “ & clause no- 3, 4 and 5 of Condition of contract.) <i>(Only applicable for medical equipment)</i>		
21.	<b>Compliance Statement</b> 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.	<b>Compliance Statement</b> with relation to the terms & conditions as mentioned in the document.		
23.	<b>PAN and copies of Income Tax Returns</b> 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.	<b>Item wise price for the item(s)</b> as mentioned in the Bidding Document and as per format attached as <b>Annexure – I(a) or I (b)</b>		
2.	<b>Rate for Comprehensive Annual Maintenance Contract</b> as per terms & conditions mentioned in the Bidding Document and as per format attached as <b>Annexure - II</b>		

**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.	
	<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>	
03	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.	
04	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 <sup>st</sup> March 2016.	
05	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.)	
06	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 dept. of all the quoted and approved items.

4. The “Bidding Document” along with terms and conditions, technical specification can be obtained from the office of the Store Officer, IGIMS, Patna on payment of Rs.2000/- (Rs. Two thousand only) Non –refundable for each Group by demand draft favouring Director , IGIMS, Patna payable at Patna.
5. The “ Bidding Document” can also be downloaded from institute website [www.igims.org](http://www.igims.org). In case, downloaded bidding document is used ,Bidder(s) have to submit the cost of the Tender Document along with 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 separate DD for the same in a separate 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 26/07/2017 up to 4.00PM by speed/Regd. post/ Courier only and technical bid will be opened on 27/07/2017 at 03.30 PM in Conference hall IGIMS, Patna**

#### 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 favouring Director, I.G.I.M.S. – Patna (payable at Patna). No interest is payable on EMD/ Bid security.

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



- b. 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 30<sup>th</sup> day after the award of the contract without any interest.
  - c. 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.
  - d. 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.
  - e. Cheque, Cash payment, Money Order, Fixed deposit etc will not be accepted as EMD.
  - f. 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.
  - g. The EMD shall be in one of the following forms:
    - i.; A demand draft in favour of Director, I.G.I.M.S. – Patna (payable at Patna);
    - OR
    - ii; A Bank Guarantee issued by a nationalized/ scheduled bank located in India, in the form prescribed in the tender document as Annexure- IV (valid up to one year from the date of technical bids opening) Bank Guarantee in any other format will not be acceptable and render the bid non-responsive.
    - iii.; The successful Bidder's EMD will be discharged upon the Bidders signing the contract and furnishing the performance security. The EMD deposited in the form of DD of the successful Bidder can be adjusted towards the security deposit payable.
9. Bidder(s) should mention the DGS & D registration, if registered, and attach photocopy of DGS & D registration certificate Photocopy of Income tax & sales tax clearance certificate should be enclosed.
10. For Imported Goods, Indian Agency Commission must be declared in financial bid.
11. The Bidder's shall have to submit the following documents (Certified by Notary) in technical bid: -
- a. User List (List of Govt. / Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.
  - b. Supply order (minimum 3 nos. Or more issued by govt./semi govt./reputed pvt. institution/organisation for quoted items ( same model)
  - c. 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.
  - d. Prerequisite (if any) for installation of the Machine if any to be provided by the Institute.
  - e. 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.
  - f. **Bidder must submit a compliance checklist along with the technical bid itself.**
  - g. (Any tender offer without submission of above mentioned document (i.e. a to e) shall be rejected during technical scrutiny.)

- h. 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.

**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?

**12. After Sales Service Conditions:**

- a. The Institute is in the pursuit of ensuring excellent after sales service for every user in respect of the equipment's 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 endeavour to provide trouble free operation/performance of the equipment's 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 equipment's 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 of the item.
- 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 equipment's 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 spares, 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 equipment's 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.

13. **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.

14. 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.
15. **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.**
16. Supplier will submit undertaking for ensuring uninterrupted supply of spares during the total life span of the equipment's.
17. Indian agency commission and Installation charge if any will be paid in Indian rupees after successful installation and demonstration of the equipment's.
18. Principal's Invoice of the quoted items must be submitted with the quotations.
19. Proof of the official Indian agent certificate of the firm must be attached. (Notary Certified Photocopy)
20. 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).
21. 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.
22. 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.
23. Bidder might be required to demonstrate the system at the discretion of the institute.
24. **Notification of Award/Letter of Intent (LOI)**
- 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.
  - The successful bidder, upon receipt of the LOI, shall furnish the required performance security and submit an agreement in the prescribed format within ten days, failing which the EMD will

- forfeited and the award will be cancelled.
- c. The Notification of Award shall constitute the conclusion of the Contract.
25. **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](http://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).

**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 up to I.G.I.M.S. - Patna will be borne by supplier's Indian Agent for which this Institute will not pay the charges. The firm should quote as FOR IGIMS Patna including all expenditure.

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

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

**03. Warranty Period:**

- a. The “**Complete System**” shall remain under warranty period of **three years** from the date of satisfactory installation. The Complete System should include the basic unit and allied supporting components like UPS, Computer System, Printer, De-ionizer, Dehumidifier etc. to be supplied by the bidder along with basic unit if necessary for running the system.
- b. During warranty period of three years, bidder shall provide at least **four maintenance visits per year** at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval, a proportionate deduction in the form of penalty on pro-rata basis will be recovered from the bidder from the Bank Guarantee amount. In case the Bank Guarantee is not adequate, Institute shall have right to recover the losses / penalty from other sources as well.
- c. Bidder shall also attend all breakdown calls within 48 hours of the receipt of the information from institute through fax/e-mail/mobile/sms etc.
- d. During warranty period, **bidder** shall maintain and keep **95% uptime** per year of the “**Complete System**” as per calculation given below:-  
  
$$1 \text{ Year} = 365 \text{ days}$$
$$95\% \text{ of } 365 \text{ days} = 347 \text{ Days per annum}$$
- 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 if required.
- 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 if necessary for running the system.
- c. During Comprehensive Annual Maintenance Contract, bidder shall provide at least **four maintenance visits per year** at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval per year, a proportionate deduction in the form of penalty at the rate of 25% of contract amount per year will be deducted.
- d. Bidder shall also attend all breakdown calls within 48 hours of the receipt of the information from institute through fax/e-mail/mobile/sms etc.
- e. During Comprehensive Annual Maintenance Contract, **bidder** shall maintain and keep **95% uptime** per year of the “**Complete System**” as per calculation given below:-  
$$1 \text{ Year} = 365 \text{ days}$$
$$\mathbf{95\% \text{ of } 365 \text{ days} = 347 \text{ Days per annum}}$$
- 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 three months after receipt of irrevocable and confirmed Letter of Credit. If the delivery is not affected by due date, the Director, I.G.I.M.S. - Patna shall have the right to charge liquidated damage on supplier/his Indian agent as under: -

- i. 1<sup>st</sup> extension for a month or a part thereof @ 2% per month of C.I.F. value.
- ii. 2<sup>nd</sup> 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 2<sup>nd</sup> 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 20% bank Guarantee of the total cost of equipment (with a minimum validity to cover up the warranty / guarantee period), confirmation letter of all our terms and condition, submission of agency certificate in favour of Indian agent who have submitted and quoted the price, name of the Bankers abroad; intimation about country of origin and 10 copies of Performa invoice of the ordered item. Indian Agency commission will be paid in Indian currency

only to Indian agent, if any. No extra charges will be paid for installation/demonstration and training to personnel.

08. **Validity of Price:-**

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

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

10. **Packing & Marking:-**

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

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

12. **Insurance: -**

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

13. **Installation & site plan:**

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

Specify the following points for installation of the System: -

- a. Total power consumption along with break up of main System and Accessories.
  - b. Whether the System needs uninterrupted power supply.
  - c. Maximum tolerated transfer time in case of interruption of power supply.
  - d. Whether the System needs any humidity control device.
  - e. Whether the System needs any separate power line/isolation Transformer.
  - f. Does the System need the electrical shielding?
  - g. Whether Air Conditioner is required for the System.
  - h. Does it require special civil works for installation?
14. The bidder should also quote for supply of "Un-Interrupted Power Supply" (UPS) with a battery back up of at least 30 minutes, "Constant Voltage Transformer (CVT)" of reputed manufacturer of required capacity along with Spike Suppressor or "Servo Voltage Stabilizer" as per requirement of the System. Bidder may quote the prices for all the above items (UPS/CVT/SERVO VOLTAGE STABILIZER) and the decision will be taken during technical evaluation of the item whether UPS is suitable or CVT / Servo Voltage Stabilizer will serve the purpose.

**15. Responsibility:-**

The principal as well as its agent will be severally and jointly responsible for ensuring the minimum life span of 10 years for the equipment. Both the said principal abroad and his Indian agent will have the full responsibility for the proper functioning of the equipment/instruments within the warrantee period and thereafter during the life span of the equipment

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

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

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

**19. Penalties for non-performance**

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

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

**20. Termination of Contract**

a. Termination for default:- The Institute, without prejudice to any other contractual rights and remedies available to it (the Institute), may, by written notice of default sent to the successful bidder, terminate the contract in whole or in part, if the successful Bidder fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Institute.

b. In the event of the Institute terminates the contract in whole or in part, the Institute may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the successful bidder shall be liable to the Institute for the extra expenditure, if any, incurred by the Institute for arranging such procurement.

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

d. Termination for insolvency: If the successful bidder becomes bankrupt or otherwise insolvent, the Institute reserves the right to terminate the contract at any time, by serving written notice to the successful bidder without any compensation, whatsoever, to the successful Bidder, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Institute.

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

21. **Fall Clause:**

The prices charged for the equipment supplies under the contract by successful bidder shall in no event exceed the lowest price at which the successful bidder sells the equipments of identical description to any other persons during the period of contract. If any time, during the contract, the bidder reduces the sales price chargeable under the contract, he shall forth with notify such reduction to the Institute and the price payable under the contract of the equipments supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

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

- a. The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.
- b. All disputes arising out of this tender will be subject to the jurisdiction of courts of law in Patna (Bihar, India).

**Director,  
IGIMS - Patna**

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**CHAPTER:**

**Schedule of the Requirement.**

**SCHEDULE OF THE REQUIREMENT**

<b>Group -A- Physiology Department</b>			<b>Group- B- IT Items</b>		
<b>Sr. No.</b>	<b>List of Equipment's</b>	<b>Qty.</b>	<b>Sr. No.</b>	<b>List of Equipment's</b>	<b>Qty.</b>
1.	Computerized Autonomic Function testing	1	1.	Desktop, Printer, UPS, Copier & Cartridge etc.	As per need.
2.	EMG/EP Machine	1	<b>Group- C- Furniture</b>		
3.	PC Based Physiograph	2	1.	a) Laminated Wooden Sitting Bench cum Back Support & Wooden Bench.	As per need.
4.	<b><u>Instruments required for undergraduate teaching-</u></b> Perimeter(lister Type)-8 Nos.,Vitalometer-8 Nos., Reaction Time Apparatus-1 No.,Mosso Ergograph-08 Nos., Binocular Microscope-08 Nos.,Haemocytometer-20 Nos.,Sahli Haemoglobinometer-20 Nos, PH Meter-02 Nos.,Wrights Peak Flow meter-2 Nos.	As mentioned	<b>Group- D- RO System</b>		
1.			RO of Capacity 15LPH & Ro of Capacity 25LPH	As per need.	
5.	<b><u>Instrument for Amphibian Experiment-</u></b> 1.Sherrington Starling Kymograph (Preferable electrically driven) 2.Myograph stand 3.Inductarium 4.Simple key 5.Short circulating key 6.Pohl's commutator 7.Vibrating interrupter 8.Muscle through 9.Muscle liver 10.Muscle grip of femur clamp 11.Hook and weight set 12.Heart liver 13.Frog board for dissection 14.Enamel tray for above 15.Frog board cork-lined with boss-head	2 Set each			

## Group-A : Physiology Department

### Instruments Required for MBBS, Postgraduate teaching and Research

#### Computerized Autonomic Function testing system

Quantity: 01

#### Technical Specifications:

The system should be able to record and analyse.

- Non Invasive beat to beat Blood pressure monitoring in Human with Systolic, Diastolic and other hemodynamic parameters (CO, SV, TPR, Baro-reflex sensitivity, Blood Pressure variability etc.) by finger arterial pressure measurement.
- Continuous ECG monitoring and recording with real time HRV Analysis.
- Pulse, respiration, airflow, GSR, temperature measurements.
- Dynamometer to study handgrip strength profile with balance board for static posturography studies.
- Non Invasive Tonometer for Vascular function Testing
- Number of channels: 8 or more channels high speed USB Data Acquisition system.
- Range:  $\pm 2$  mV to  $\pm 10$  V and Sampling rate of 10 KHz or more per channel (aggregate speed).
- ADC resolution = 16 bits on all gain ranges
- Multichannel Universal Bio-amplifier for recording 12 leads ECG.
- The Beat to beat Blood pressures monitor should be supplied with HCU and Finger cuffs of 3 different sizes (i.e. small, medium & large) and has accuracy: 1% of full scale (max. 3 mmHg), zeroing automatic.
- Transducers for Pressure, Pulse Plethysmography, Respiration, Surface Temperature probe, Non-Invasive tonometer, Hand dynamometer and Wireless Heart rate kit with other accessories as required/
- Software: It should have various automatic analysis modules for ECG, HRV, Blood Pressure, Cardiac output, Peak analysis, spike histogram etc.
- Online & offline analysis with various export options common formats.
- The software should be provided with a 5 year of free updates and upgrade.
- Motorized electric Tilt table with (0 to 90 degree tilt), Tilt angle indicator, Electrical tilt mechanism 0° to 90° at fixed rate of speed of 4.8° per second or better. Locking casters, 3/4" clearances under frame. Maximum Patient Weight: 180-200Kg.
- Computer: Intel Core i7, Genuine Windows 7 professional, 20 inch LED Monitor, 4GB RAM, 500GB SATA Hard Drive, DVD. Facility for internet connectivity, Laser printer and UPS with 20 minutes back up for whole system required.
- Proper Demonstrations to be carried out before finalizing.

- Onsite training should be provided by the company experts for 7-10 days.
- Warranty 2 years.
- Documentations: CE, ISO and FDA, other safety certificates must be provided.
- The system should have world-wide installation, acceptance and recognition in published research papers globally. Performance certificates should be provided from the users using the system in India/abroad.

**EMG/EP MACHINE**

**Quantity:01**

**Technical Specifications:**

The system should be able to record and analyze:

Minimum 4 to 8 channel system with optical isolation having following requirements

- Should be supplied with Laptop PC for portable use
- Main Unit should be connected to the Computer through the latest and powerful USB2.0 Interface
- EMG protocol should have Free run needle EMG, Interference pattern, MUAP & Amplitude/turns analysis
- Nerve Conduction Studies should have MCS, NCS, F wave, H reflex, Collision, Blink reflex, RNST, Inching studies & temperature compensated values calculation
- Somato sensory evoked potentials, Auditory evoked potentials: ABR, MLR, SVR, EcochG.
- Visual Evoked potentials: VEP, ERG, EOG
- Should have option of opening up to 8 test protocols simultaneously.
- Should be able to perform Skin electrode impedance check at both junction box and console
- System must be supplied with Constant current stimulator
- In-built help file examination guide that shows examination information, and electrodes and stimulation positions for NCS and other examinations.
- System should have integrated operation panel with all system control.

Minimum functional requirement:

- EMG with continuous storage of live EMG for minimum 10 minutes up to 99 sites
- Should have QEMG with automatic MUP classification, amp/turns analysis with Interference Pattern.
- Should have the option entering patient information, EMG findings or diagnosis during examination.
- MCS, SCS, Repetitive Stimulation, F Wave, H Reflex & Blink Reflex automatic marking
- EMG play back with waveform and sound, should be possible

- Option of exporting EMG waveform data for review in any other windows PC, with provision to change acquisition settings is must
- Should be able to show temperature compensated values for the test to guide within the test
- System should have option of performing up to 42 NCS exams.
- Should have programmable measurement conditions examination conditions with user account locking facility.
- Auditory headphones with clicks, pips and tones
- Visual evoked potentials: Pattern reversal VEP & flash
- The electrical stimulator should have controls for stimulus delivery, intensity
- The software should have option of having Normative data for computation and online comparison with test values
- The software to have facility to quickly review the complete summary of the all the acquired traces and tabulate the results without need to go in each and every test protocol.
- The base unit of the system should provide all the controls for performing the test, switching to other test protocols and review of the test with control knobs for sensitivity, gain, marking cursors, pulse width etc.
- Should support multiple users with individualized settings.

#### Technical specifications

- Common mode input impedance > 1000Mohm
- The electrical stimulator should have Single, Double, Train stimulation modes
- Stimulator should have constant current stimulation with Current stimulation range of 0-100 mA
- Stimulator should have variable frequency of 0.1 to 100 Hz in variable steps
- Stimulator should have variable Stimulation delay of 0 to 100 ms
- CMRR: >106 dB (Balanced mode), >112 dB (isolation mode)
- System should have 16 bit A/D converter
- Low cut filter to be varied from 0.01 Hz - 500Hz
- High cut filter to be varied from 10Hz - 20KHz
- Noise: < 0.6  $\mu$ V RMS
- Sensitivity: 1- 500  $\mu$ V/div
- Should have artifact rejection inhibit range of  $\pm 1$ ,  $\pm 2$ ,  $\pm 3$ ,  $\pm 4$ ,  $\pm 5$  div on screen or off (No artifact rejection)
- Amplitude calibration 1 micro volt to 10 milli volt
- Electrode to skin impedance check: 2 to 20 K ohm
- Should have individual time base for each test protocol
- Should have Number of averaging between 1 to 9999
- Software adjustable notch filter
- Electrical Stimulation: artifact compensation forelectrical stimulator



- Should have trigger in/out for external interface.

The system should be supplied with following

- The computer should be supplied with the system, after passing the strict in-house quality checks by the manufacturer to comply with medical equipment standard. (Locally procured PC will not be considered)
- PC system should be branded and have intel i7 processor or better, 4GB RAM, 1TB HDD, Windows 7 or compatible latest OS, Colour Laser printer with 600 DPI resolution, Suitable UPS
- Customized Trolley (Makeshift trolley will not considered)
- Shielded electrodes - 2 sets
- EMG needle - 3 Set (2 adult & 1 Pead)
- Ground Electrode - 2 Nos
- NCV electrodes - 1 set
- Conductive paste - 3 Set(3 jar of 300 gms or more)
- Preparation gel - 2 Set(2 Tubes of 130 gms or more)
- Headphones - 1 No.
- LED Google - 1 No.

The system should be IEC, CE & FDA approved for electrical & EMG system safety standard.

- Facility for ECG leads (I, II, III, aVL, aVF, aVR etc) with real time cardiac axis and vector analysis. Time & frequency based HRV Analysis.
- Software with step by step instructions, protocol and experimental design for performing various experiments in physiology teaching applications. Also should have sample data for animal experiments for demonstrating to the students.
- User friendly software for recording, analysing and printing the data, the software should allow calibration of transducers, display of actual values, controllable gain, filter settings, baseline setting for event marking and annotation.
- It should be capable of measuring time interval between user selected points, display of data value at user selected point, editing of the records and re-annotation. It should be capable of displaying data in scope mode and chart mode. It should allow calculation of rate, slope from raw channels in offline as well as online mode.
- Online and offline data streaming with Excel, MatLab and other common formats.
- Necessary certificate for safe use for human. ISO, IEC/CE certificate.
- The computer should be supplied with the system, after passing the strict in-house quality checks by the manufacturer to comply with medical equipment standard. (Locally procured PC will not be considered)
- PC system should be branded and have intel i7 processor or better, 4GB RAM, 1TB HDD, Windows 7 or compatible latest OS. Colour Laser printer with 600 DPI resolution, Suitable UPS
- 
- Mandatory demonstration and training

#### Instruments required for undergraduate Teaching:

**PERIMETER (Lister Type):**

Quantity: 08

##### Specification

1. An instrument for accurate charting of the field of vision.
2. Consists of: A vertical stand on which a metallic arc is pivoted.
3. It also bear a circular black disc to read the meridian in which the arc in shape of a semicircle with radius 330 mm.
4. The apparatus comprises of a calibrated arc, revolving chart holder.
5. Its rotating in any direction and fix at any position with a tightening screw. The arc is graduated from 0° to 90° with a movable test object.
6. The object carrier which moves over the arc, contains five colours and five apertures of different diameter, calibrated scale.

- 7. At the back of the arc arrangement is provided for fixing of chart which has concentric circles corresponding to the degrees of arc.
- 8. Adjustable chin rest.
- 9. All fitted over a sturdy base with receptacle for keeping charts.
- 10. For table top use. 11. Complete with 100 charts

Vitalometer

Quantity: 08

Specification

Should Measures vital capacity from which tidal volume and expiratory reserve volume can be calculated.

Should have needle is reset after each reading by rotating dial. Includes 50 disposable mouthpieces

Reaction Time Apparatus

- Should be portable light weight
- Should be operated on external battery as well as electricity
- Resolution 0.00010C
- Auditory and visual reaction assessment should be possible
- Visual reaction assessment should be possible with multiple colours

Mosso's Ergograph	—	Quantity: 08
Binocular Microscope	—	Quantity: 08
Haemocytometer	—	Quantity: 20
Sahl's Haemoglobinometer		Quantity: 20
pH Meter	—	Quantity: 2
Calorimeter	— <i>Cancelled, Not required</i>	Quantity: 2
Projection microscope	—	Quantity: 1
Wrights Peak flow meter	—	Quantity: 2

**Instruments for Amphibian experiment:**

**Quantity: 2 Set**

- ❖ Sherrington Starling Kymograph (Presferably electrically driven)
- ❖ Myograph stand,
- ❖ inductorium,
- ❖ simple key
- ❖ short circulating key,
- ❖ pohl's commutator,
- ❖ vibrating interrupter,
- ❖ Muscle through,
- ❖ Muscle liver,
- ❖ muscle grip of femur clamp,
- ❖ Hook and weight set,
- ❖ heart liver,
- ❖ frog board for dissection,
- ❖ enamel tray for above,
- ❖ frog board cork-lined with boss-head

One Set

**PC Based Physiograph - 2 Sets.**

**Specification**

- Up to 16 channel Acquisition
- Parameters: ECG, EEG, EOG, EMG, ENG, Nerve Conduction, PFT
- Wave over-lap facility
- Pulse analysis
- Heart rate variability analysis
- Identify frequency component of EEG signal delta, theta, alpha and beta with FFT function
- PC Connectivity

**Cost: 5Lacs**

## **GROUP-B: IT ITEMS**

1.	<p><b><u>Desktop Specification- i7</u></b></p> <ul style="list-style-type: none"><li>➤ Processor Make- Intel</li><li>➤ Hard Disk- 1 TB or more</li><li>➤ Power Supply- 300 Watt or better</li><li>➤ Cabinet – Tower</li><li>➤ Should have USB Port 2.0 &amp; USB Port 2.0</li><li>➤ Type of RAM : 4 GB DDR4 or more</li><li>➤ RAM Speed -2133 MHz or better</li><li>➤ USB Port 3.0- 2 No. or more</li><li>➤ Processor- Intel Core i7</li><li>➤ Processor Generation: 6<sup>th</sup> or better</li><li>➤ Graphics : Intel HD Graphics 530 or latest</li><li>➤ Operating System (Pre-Loaded) – Windows 10 Professional</li><li>➤ RAM Expandability-64 GB or more</li><li>➤ DIMM Slots: 4 No.</li><li>➤ Optical Drive : DVD Writer</li><li>➤ Network Connectivity: 10/100/1000 on board Integrated Gigabit Port</li><li>➤ Monitor Resolution: 1366X768 Pixels or better</li><li>➤ Monitor Size: 18.5 inches or more.</li><li>➤ Monitor certification: TCO 6.0 or better</li><li>➤ Standard Keyboard-1 No.</li><li>➤ Optical Mouse- 1 No.</li><li>➤ Integrated Speakers</li><li>➤ Should be ROHS Complied</li><li>➤ Warranty Type- Onsite</li><li>➤ Warranty: 3 Years</li></ul>
2.	<p><b><u>Desktop Specification-i5</u></b></p> <ul style="list-style-type: none"><li>➤ Processor Make- Intel</li><li>➤ Hard Disk- 1 TB or more</li><li>➤ Power Supply- 300 Watt or better</li><li>➤ Cabinet – Tower</li><li>➤ Should have USB Port 2.0 &amp; USB Port 2.0</li><li>➤ Type of RAM : 4 GB DDR4 or more</li><li>➤ RAM Speed -2133 MHz or better</li><li>➤ USB Port 3.0- 2 No. or more</li><li>➤ Processor- Intel Core i5</li><li>➤ Processor Generation: 6<sup>th</sup> or better</li><li>➤ Graphics : Intel HD Graphics 530 or latest</li><li>➤ Operating System (Pre-Loaded) – Windows 10 Professional</li><li>➤ RAM Expandability-64 GB or more</li><li>➤ DIMM Slots: 4 No.</li><li>➤ Optical Drive : DVD Writer</li><li>➤ Network Connectivity: 10/100/1000 on board Integrated Gigabit Port</li></ul>

	<ul style="list-style-type: none"> <li>➤ Monitor Resolution: 1366X768 Pixels or better</li> <li>➤ Monitor Size: 18.5 inches or more.</li> <li>➤ Monitor certification: TCO 6.0 or better</li> <li>➤ Standard Keyboard-1 No.</li> <li>➤ Optical Mouse- 1 No.</li> <li>➤ Integrated Speakers</li> <li>➤ Should be ROHS Complied</li> <li>➤ Warranty Type- Onsite</li> <li>➤ Warranty: 3 Years</li> </ul>
3.	<p><b><u>Desktop Specification-i3</u></b></p> <ul style="list-style-type: none"> <li>➤ Processor Make- Intel</li> <li>➤ Hard Disk- 1 TB or more</li> <li>➤ Power Supply- 300 Watt or more</li> <li>➤ Cabinet – Tower</li> <li>➤ Should have USB Port 2.0 &amp; USB Port 2.0</li> <li>➤ Type of RAM : 4 GB DDR4 or more</li> <li>➤ RAM Speed -2133 MHz or better</li> <li>➤ USB Port 3.0- 2 No. or more</li> <li>➤ Processor- Intel Core i3</li> <li>➤ Processor Generation: 6<sup>th</sup> or better</li> <li>➤ Graphics : Intel HD Graphics 530 or latest</li> <li>➤ Operating System (Pre-Loaded) – Windows 10 Professional</li> <li>➤ RAM Expandability-64 GB or more</li> <li>➤ DIMM Slots: 4 No.</li> <li>➤ Optical Drive : DVD Writer</li> <li>➤ Network Connectivity: 10/100/1000 on board Integrated Gigabit Port</li> <li>➤ Monitor Resolution: 1366X768 Pixels or better</li> <li>➤ Monitor Size: 18.5 inches or more.</li> <li>➤ Monitor certification: TCO 6.0 or better</li> <li>➤ Standard Keyboard-1 No.</li> <li>➤ Optical Mouse- 1 No.</li> <li>➤ Integrated Speakers</li> <li>➤ Should be ROHS Complied</li> <li>➤ Warranty Type- Onsite</li> <li>➤ Warranty: 3 Years</li> </ul>
4.	<p><b><u>UPS for desktop</u></b></p> <ul style="list-style-type: none"> <li>➤ Type- offline/standby</li> <li>➤ Output Power Wattage-800VA</li> <li>➤ Should have over load protection.</li> <li>➤ Output wave form – Sine Wave</li> <li>➤ Transfer Time- 3-4ms</li> <li>➤ No. of outlet Plugs-3</li> <li>➤ Should have surge protection.</li> <li>➤ Should have low batter indicator.</li> <li>➤ Recharge time – 4-5 hrs. or less</li> <li>➤ Number of battery – 1 No.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Battery Type- Sealed Lead Acid 12V, 7AH-7.5 AH</li> <li>➤ UPS battery should be available in open market and should be compatible with the battery manufactured by Exide, Amaron, TATA etc.</li> <li>➤ Warranty Type- Onsite Warranty</li> <li>➤ Warranty – 1Year or more</li> </ul>
5.	<p><b><u>Printer Specification</u></b></p> <ul style="list-style-type: none"> <li>➤ Printing Method- Laser</li> <li>➤ Type- Single Function</li> <li>➤ Printing Output – Monochrome</li> <li>➤ Internal memory-2 MB or more</li> <li>➤ Max Print Resolution (Mono)- 600x600 dpi or better</li> <li>➤ Duty Cycle (monthly, A4)- 5000 pages or more</li> <li>➤ First print Out Time – 10 sec or less</li> <li>➤ Print Speed Mono-14 ppm</li> <li>➤ Duplex Print- Manual</li> <li>➤ Media Type Supported – Papers, Envelops, Labels, Cardstock, Postcards</li> <li>➤ Output Tray Capacity: 100 sheets or more</li> <li>➤ Output tray type: Face-Down</li> <li>➤ Input Tray Capacity: 150 Pages</li> <li>➤ Media Size supported: A4, A5, A6, B5, C5, DL</li> <li>➤ Power Requirement: 110 to 240 V, 50/60 Hz</li> <li>➤ USB Connectivity</li> <li>➤ Compatible with latest operating system</li> <li>➤ Warranty Type- Onsite</li> <li>➤ Warranty- 1 Year or more</li> <li>➤ Sales Package should contain one Printer, Power Cable, USB cable &amp; driver CD</li> <li>➤ <b><u>Supplier had to quote the rate of original &amp; new cartridge, which should be valid for 1 year from the date of supply.</u></b></li> </ul>
6.	<p><b><u>All In One Printer Specification</u></b></p> <ul style="list-style-type: none"> <li>➤ Printing Method- Laser</li> <li>➤ Type- Multi- function</li> <li>➤ Printing Output- Monochrome</li> <li>➤ Internal memory- 32 MB or more</li> <li>➤ Functions- Print, Copy &amp; Scan</li> <li>➤ Max Print Resolution 600X600 dpi</li> <li>➤ Duty Cycle (monthly, A4)- 5000 pages or more</li> <li>➤ Print Speed Mono- 14 ppm or more</li> <li>➤ Duplex Print- manual</li> <li>➤ Media Types- Papers, Envelops, Labels, Cards, Cardstock</li> <li>➤ Output Tray Capacity- 100 sheets</li> <li>➤ Input Tray Capacity- 150 pages</li> <li>➤ Input Tray Type- Standard Cassette</li> <li>➤ Output Tray Type- Face-Down</li> <li>➤ Media Size supported-A4, A5, B5, C5, C6, DL</li> </ul> <p><b><u>Scan</u></b></p> <ul style="list-style-type: none"> <li>➤ Optical Scanning Resolution-1200 dpi</li> <li>➤ Scan Type- Flatbed</li> </ul>



	<ul style="list-style-type: none"> <li>➤ Scan Area Size-216x297 mm or more</li> <li><b><u>Copy</u></b> <ul style="list-style-type: none"> <li>➤ Copy resize- 25% -400% or better</li> <li>➤ Maximum Copies- 99 cpm or more</li> <li>➤ Copy Speed Mono- 14 cpm or more</li> </ul> </li> <li><b><u>Power Requirement</u></b> <ul style="list-style-type: none"> <li>➤ Operate on-220-240V, 50/60 Hz.</li> </ul> </li> <li><b><u>Connectivity-USB Support</u></b> <ul style="list-style-type: none"> <li>➤ USB 2.0</li> <li>➤ Warranty Type- Onsite Warranty</li> <li>➤ Warranty – 1Year or more</li> <li>➤ Sales Package should contain one ALL in Printer, Power Cable, USB Cable &amp; Driver CD</li> <li>➤ <b><u>Supplier had to quote the rate of original &amp; new cartridge, which should be valid for 1 year from the date of supply.</u></b></li> </ul> </li> </ul>
7.	<p><b><u>All In One Printer Specification (with ADF &amp; Fax support)</u></b></p> <ul style="list-style-type: none"> <li>➤ Functions- Print, copy, scan</li> <li>➤ Multitasking supported-Yes</li> <li>➤ Print Speed- 20 ppm or more</li> <li>➤ First page out- 9.5 sec or less</li> <li>➤ Duty Cycle- 8000 Pg. or more</li> <li>➤ Print Technology- Laser</li> <li>➤ Print Quality Black -600x600 dpi</li> <li>➤ Processor speed- 600 MHz or more</li> <li>➤ Should have USB &amp; Ethernet connectivity</li> <li>➤ Should be Network Ready</li> <li>➤ Compatible with latest OS.</li> <li>➤ Memory- 128 more or more</li> <li>➤ Paper handling Output- 100 Sheet or more</li> <li>➤ Duplex Printing</li> <li>➤ Media Size supported –A4, A5, B5</li> <li>➤ Media Type- Paper, envelops, labels, postcards</li> <li>➤ Scanner Specifications</li> <li>➤ Scanner Type- Flat bed, ADF</li> <li>➤ Scan resolution- 1200 DPI or more</li> <li>➤ Scan speed- 7 ppm or more</li> <li>➤ Automatic Document Feeder capacity- 35 Sheets or more</li> <li>➤ Copier Specifications</li> <li>➤ Copy Speed-20 CPM or more</li> <li>➤ Copy Resolution-300x300 dpi or more</li> <li>➤ Copy resolution ( color text and graphics)- 400X600 dpi or more</li> <li>➤ Copy reduce/enlarge settings- 25 to 400%</li> <li>➤ Maximum Copies- 99 or more</li> <li>➤ Fax- Should have fax facility</li> <li>➤ Fax transmission speed- 30 kbps or more</li> <li>➤ Fax Memory- 250-500 pages</li> <li>➤ Fax Resolution- 300X300 dpi or more</li> <li>➤ Speed dials, maximum numbers- 50-100</li> <li>➤ Power- 220 V, 50/60 Hz.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Energy Efficiency- Energy Star Qualified</li> <li>➤ Package contains Printer, USB cable, Power Cable, Printer Driver CD &amp; Phone Chord.</li> <li>➤ Warranty- 1Year</li> <li>➤ Warranty Type- onsite</li> <li>➤ <b><u>Supplier had to quote the rate of original &amp; new cartridge, which should be valid for 1 year from the date of supply.</u></b></li> </ul>																								
8.	<p><b><u>Ink Tank Printer</u></b></p> <ul style="list-style-type: none"> <li>➤ Printing Method- Inkjet</li> <li>➤ Type- Multi- Function</li> <li>➤ Printing Output- Color</li> <li>➤ Functions- Print, Copy &amp; Scan</li> <li>➤ Print Speed Color- 15 or more</li> <li>➤ Print Speed Mono- 27 or more</li> <li>➤ Duplex Print- Manual</li> <li>➤ Media Type Supported- Paper &amp; Envelope</li> <li>➤ Output Tray Capacity- 30 Sheets or more</li> <li>➤ Input Tray Capacity- Standard Cassette</li> <li>➤ Input Tray Capacity- 50 Sheets or more</li> <li>➤ Media Type Supported- A4, A5,A6,B5, DI,C6</li> <li>➤ Scan</li> <li>➤ Optical Scanning Resolution- 600 dpi</li> <li>➤ Scan Type- Flatbed.</li> <li>➤ Fax</li> <li>➤ Resolution – 5760X1440 dpi or more</li> <li>➤ Copy</li> <li>➤ Maximum Multicopy- 2 Pages or more</li> <li>➤ Connectivity- USB 2.0</li> <li>➤ Warranty- 1 Year</li> <li>➤ Warranty Type- Onsite</li> <li>➤ <b><u>Supplier had to quote the rate of original &amp; new cartridge, which should be valid for 1 year from the date of supply.</u></b></li> </ul>																								
9.	<p><b><u>Cartridge for Various Printer Installed in IGIMS, Patna (Original &amp; new only)</u></b></p> <table border="1"> <tr> <td>Cartridge Type</td> <td></td> </tr> <tr> <td>HP- 12A Black LaserJet Toner Cartridge (Q2612A)</td> <td></td> </tr> <tr> <td>HP -88A Black LaserJet Toner Cartridge (CC388A)</td> <td></td> </tr> <tr> <td>Ricoh- Original Refill Toner Cartridge Pouch for all SP 100, SP200 Series</td> <td></td> </tr> <tr> <td>Ricoh-2000L Toner</td> <td></td> </tr> <tr> <td><b>Ricoh-2000L Cleaning Blade Ricoh-2000L developer</b></td> <td></td> </tr> <tr> <td>Canon-726M</td> <td></td> </tr> <tr> <td>Canon-726Y</td> <td></td> </tr> <tr> <td>Canon-726C</td> <td></td> </tr> <tr> <td>Canon-726BK</td> <td></td> </tr> <tr> <td>Canon-726PGBK</td> <td></td> </tr> <tr> <td>HP-5820 Ink Tank Printer</td> <td></td> </tr> </table>	Cartridge Type		HP- 12A Black LaserJet Toner Cartridge (Q2612A)		HP -88A Black LaserJet Toner Cartridge (CC388A)		Ricoh- Original Refill Toner Cartridge Pouch for all SP 100, SP200 Series		Ricoh-2000L Toner		<b>Ricoh-2000L Cleaning Blade Ricoh-2000L developer</b>		Canon-726M		Canon-726Y		Canon-726C		Canon-726BK		Canon-726PGBK		HP-5820 Ink Tank Printer	
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Canon-726C																									
Canon-726BK																									
Canon-726PGBK																									
HP-5820 Ink Tank Printer																									

		Consumables (separately quote the arte of each item)	
10.	External Hard Disk	External Hard Disk-1 TB	Capacity- 2 Tb, Portable, Date Transfer Rate- 5Gb/s or more with USB 3.0, Should have password protection setup, should have password protection setup, should be provided with pouch or cover for safety. Sales Package- Hard Drive, USB Cable, Quick Install Guide Warranty-3 Years or more
		External Hard Disk-2 TB	Capacity- 2 Tb, Portable, Date Transfer Rate- 5Gb/s or more with USB 3.0, Backward compatible with USB 2.0 Should have password protection setup, should be provided with pouch or cover for safety. Sales Package- Hard Drive, USB Cable, Quick Install Guide Warranty-3 Years or more
11.	<p><b><u>Copier Machine (Black &amp; White) General</u></b></p> <ul style="list-style-type: none"> <li>➤ Warm-up time – 10 Seconds or less</li> <li>➤ Memory- 256 MB or more</li> </ul> <p><b><u>Print/Copy/Scan</u></b></p> <ul style="list-style-type: none"> <li>➤ Print Speed- 20 PPM or more</li> <li>➤ Media Supported by Standard Tray-A3, A4, A5 or more</li> <li>➤ Media Supported by Bypass Tray-A3, A4,A5,A6 or more</li> <li>➤ Printer Toner Yield capacity should be 10000 sheets or more</li> </ul> <p><b><u>Paper Handling</u></b></p> <ul style="list-style-type: none"> <li>➤ Paper Input Capacity-250 Sheet/Tray</li> <li>➤ Bypass Sheet Capacity-100 Sheet/Tray</li> <li>➤ Paper output Capacity-250 Sheets or more.</li> </ul> <p><b><u>Connectivity</u></b></p> <ul style="list-style-type: none"> <li>➤ Network Supported</li> <li>➤ USB 1.1/2.0 Port</li> </ul> <p><b><u>General Specification</u></b></p> <ul style="list-style-type: none"> <li>➤ Built in Auto as well as manual duplexing.</li> <li>➤ Full color scanning</li> <li>➤ Should have Automatic Document Feeder.</li> <li>➤ Package should be come with Tonner, USB cable, Driver CD &amp; Power Cables.</li> </ul> <p><b><u>Power Consumption</u></b></p> <ul style="list-style-type: none"> <li>➤ Maximum-1550 watt or less</li> <li>➤ In sleep Mode- 2 watt or less</li> <li>➤ Should be Energy Efficient</li> <li>➤ <b><u>Supplier had to quote the rate of original &amp; new cartridge which should be valid for 1 year from the date of supply.</u></b></li> </ul>		
12.	<p><b><u>Projector</u></b></p> <ul style="list-style-type: none"> <li>➤ Display System- LCD/LED</li> <li>➤ Resolution-1024X768 or more</li> <li>➤ Lamp Life- More than 6000 Hrs.</li> <li>➤ Projection Screen Size- 30 to 300"</li> <li>➤ Light Output- More than 3000 lm.</li> <li>➤ Should have USB Port.</li> <li>➤ Should have HDMI Port.</li> <li>➤ Should have LAN Connection port.</li> <li>➤ Supplied with remote control.</li> <li>➤ Should have audio video connector.</li> </ul>		

	<ul style="list-style-type: none"> <li>➤ Warranty 1 Year or more.</li> </ul>
13.	<p><b><u>Laptop</u></b></p> <ul style="list-style-type: none"> <li>➤ Type- Note Book</li> <li>➤ Screen Size: 15 inch- 15.9 inch</li> <li>➤ Processor – Intel Core i5</li> <li>➤ Generation – 6<sup>th</sup> Gen.</li> <li>➤ RAM- 4GB or more</li> <li>➤ With latest Genuine Windows pre-Installed i.e. Windows 10 Professional</li> <li>➤ Should have dedicated graphics memory 1-2Gb.</li> <li>➤ Hard Disk-1 TB</li> <li>➤ Battery Backup- More than 3 hours</li> <li>➤ Should be supplied with Antivirus (1 Year validity, Adaptor &amp; Laptop Bag.)</li> <li>➤ Warranty Type- Onsite</li> <li>➤ Warranty- One Year or more.</li> </ul>

## **GROUP-C: FURNITURE**

### **Laminated Wooden Sitting Bench cum Back Support & Wooden Bench**

- 1. Supply of Laminated wooden sitting bench cum back support frame of steel tubular section 40mmX40mm & 25mmX25mm for foot rest & sitting , back support of 19mm laminated ply. The size of the wooden sitting bench cum back support 6'-0"X3'-0"X1'-4". Including necessary fittings, bitting and painting etc.**
- 2. Supply of wooden sitting bench. Frame of steel tubular section 40mmX40mm & 25mmX25mm for foot rest & sitting, of 19mm ply. The size of the wooden sitting bench 6'-0"X1'-4". Including necessary fittings, bitting and painting etc.**
- 3. Rate of fixing of Bench on floor including Iron Patti, Nut-Bolt & Labour Charges etc.**

## **GROUP-D: RO System**

### **RO 15 LPH**

- Suitable for purification of Brakish/tap Water
- High purification capacity up to 15 liters/hour
- Double Purification by RO+UF with TDS Controller
- High Flow rate RO Water Purifier
- Removes Dissolved impurities while retaining Essential Minerals
- Equally, Suitable for water from all sources such as bore-wells, tanks or tap water.
- Fully automatic operation with auto start and auto off.

- Built in SMPS that supports wide range of input voltage (100-300 V AC) for handling voltage fluctuations.
- Should have spin welded RO membrane housing
- Push-fit components for leak-proof performance
- Should have food grade, non-breakable, ABS plastic Construction.
- Installation should be free of cost at site.(For attachment with water coolers.)
- Product warranty shall be effective from the date of installation and includes all consumables like RO Membrane & UF Membrane, Carbon Filter etc.
- Warranty- 1 year or more.
- After sales service shall be provided at consumer's premises on demand basis.
- Supplier have to quote the rate of consumable required for effective management of RO after warranty including the service charges.

### **RO 25 LPH**

- Suitable for purification of Brakish/tap Water
- High purification capacity up to 25 liters/hour
- Double Purification by RO+UF with TDS Controller
- High Flow rate RO Water Purifier
- Removes Dissolved impurities while retaining Essential Minerals
- Equally, Suitable for water from all sources such as bore-wells, tanks or tap water.
- Fully automatic operation with auto start and auto off.
- Built in SMPS that supports wide range of input voltage (100-300 V AC) for handling voltage fluctuations.
- Should have spin welded RO membrane housing
- Push-fit components for leak-proof performance
- Should have food grade, non-breakable, ABS plastic Construction.
- Installation should be free of cost at site.(For attachment with water coolers.)
- Product warranty shall be effective from the date of installation and includes all consumables like RO Membrane & UF Membrane, Carbon Filter etc.
- Warranty- 1 year or more.
- After sales service shall be provided at consumer's premises on demand basis.
- Supplier have to quote the rate of consumable required for effective management of RO after warranty including the service charges.

### **RO 50 LPH**

- Suitable for purification of Brakish/tap Water
- High purification capacity up to 50 liters/hour
- Storage Tank Capacity Optional – 8/20 liters (Please mention the rate of both)
- Double Purification by RO+UF with TDS Controller
- High Flow rate RO Water Purifier
- Removes Dissolved impurities while retaining Essential Minerals
- Equally, Suitable for water from all sources such as bore-wells, tanks or tap water.
- Fully automatic operation with auto start and auto off.
- Built in SMPS that supports wide range of input voltage (100-300 V AC) for handling voltage fluctuations.
- Should have spin welded RO membrane housing
- Push-fit components for leak-proof performance
- Should have food grade, non-breakable, ABS plastic Construction.
- Installation should be free of cost at site.(For attachment with water coolers.)

- Product warranty shall be effective from the date of installation and includes all consumables like RO Membrane & UF Membrane, Carbon Filter etc.
- Product warranty shall be effective from the date of installation.
- Warranty- 1 year or more.
- After sales service shall be provided at consumer's premises on demand basis.
- Supplier have to quote the rate of consumable required for effective management of RO after warranty including the service charges.

**ANNEXURES**  
**Annexure - I (a)**

**PRICE SCHEDULED FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN  
LOCATED WITHIN INDIA.**

1	2	3	4	5							6
				<b>Price per unit (Rs.)</b>							
Sched uled	Brief descript ion of goods  Make: Model:	Countr y 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.	Packi ng and forwa rding charg e	Inland transportatio n , insurance for a period including 3 months delivery, loading/ unloading and incidental cost till consignee site.	Incidental services ( including installatio n and commissi oning, supervisio n, demonstra tion and training) at the consignee site. (f)	Unit price ( at consign ee site basis(g)  a + b + c + d+ e + f	Total unit price ( At Consign ee Site) Basis Rs. 4x5(g)
				(a)	(b)	(C)	(d)	(e)	(f)		

Total quoted price in Rs. ....

In Words: .....

**Note:**

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warrantee shall be quoted separately as per price scheduled.

Place:

Name:

Date:

Business Address; -

Signature of Bidder;-

Seal of the Bidder;-

**Annexure: I (b)**

**PRICE SCHEDULED FOR GOODS TO BE IMPORTED FROM ABROAD**

1	2	3	4	5					6
				Price per unit ( CURRENCY)					
Schedule d	Brief descrip tion of goods  Make: Model:	Country of origin	Qty. nos.	FOB price at port/ Airport of loading	Carriage & Insurance ( port of loading to port of entry) and other incidental cost .	Incidental Services ( Including Installation & Commissioning, supervision, Demonstration 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:-**

- a) 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 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.	6 <sup>th</sup> Yr.	7 <sup>th</sup> 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 equipment's 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 scope;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total amount of \_\_\_\_\_ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein. We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

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

We agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition no modification.

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

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

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

(Signature with date of the authorized officer of the Bank) .....  
Name and designation of the officer

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

**ANNEXURE - V**  
**POWER OF ATTORNEY**  
**(On a Stamp Paper of relevant value)**

I/ We.....(name and address of the registered office) do here  
by 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 : \_\_\_\_\_