BIDDING DOCUMENT

TENDER No.: 19_/ Mach-Equip/ 2013 - 2014 / IGIMS/Store

DEPARTMENT: _____

GROUP:

Name of the Equipment:

Tender No.: 19_/ Mach-Equip/ 2013 - 2014 /IGIMS/Store

Issued to:

Cost of Document: Rs. 5, 000/-
Paid By: Cash: Receipt No.:

Demand Draft: No.:
Issuing Bank:

(Authorized Signatory)

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

INDEX

IMPORTANT DATES

Last date for submission of Bidding Document	17 / 05 / 2013 up to 4.00 P.M. by registered/speed post/ Courier only
Date of demonstration of Equipment	To be informed to the qualified Bidders qualifying after opening of technical bids
Date of opening of the Price Bid	To be informed to the qualified Bidders qualifying after opening of technical bids

INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,

SHEIKHPURA, PATNA -800014 (Bihar, India)

Sl. No. OF TENDER: _____

FILE NO. : Tender No.: _____

Tender form issued in favour of:

_____

_____

Dear Sir,

1. I/We hereby submit our tender for the

   _____

   _____

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

   (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 is connection 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 initialed.

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 security money deposited may be forfeited and our/my name may be removed from the list of suppliers

Yours faithfully,

(Signature of Bidder with full name and address)

CHECK LIST FOR TERMS AND CONDITIONS

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

Sl. No.	Terms & Conditions as per Bidding Document	Page No.	Remarks
1.	**Status of Bidder:** • Manufacturer or Authorized Agent of the Manufacturer • Whether Public Undertaking, Public Ltd., Private Ltd. Company or Proprietary Firm **(Please attach Notary certified MANUFACTURER'S AUTHORISATION FORM as per FORMAT placed at Annexure – III)**		
2.	**Power of Attorney as per Annexure - V** in favour of person to sign, submit and negotiate the bid.		
3.	Certificate towards market standing of minimum 05 years in the area of supply and maintenance of bio-medical equipments.		
4.	Certificate for sole ownership / partnership		
5.	Statement of financial standing from bankers		
6.	Statements of turnover per year for last three successive years duly certified by the Chartered Accountants. (**Minimum Annual Turnover must be Rs. One Crore)** **(Note:- Rs.50; lakhs for Group- A,F,H &I)**		
7.	Bank Solvency of required amounts **(Rs. One Crore)** **(Note:- Rs. 25 lakhs for Group- A,F,H &I)**		
8.	**Notary certified User List** (List of Govt. / Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.		
9.	**Notary certified Supply** order copy (Minimum five nos. or more) issued by Govt./Semi Govt.//Reputed Pvt. Institutions/organization for the quoted items. (same model)		
10.	**Notary certified Performance certificate** of the same supplied machine (of quoted make and Model) issued by **Head of the deptt. or Institution** after a minimum period of six months of installation		

11.	Prerequisite (if any) for installation of the Machine, if any, to be provided by the Institute.		
12.	Whether rates quoted are inclusive of all taxes or not.		
13.	Whether rates are quoted as per format mentioned in the Bidding Document or not.		
14.	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.		
15.	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.		
16.	**Quality Assurance Certificate** like ISI, ISO-9002, IP/BP, CE, FDA (US) or any other (please specify)		
17.	**Bid Security** amount deposited is enclosed or not. If yes, please mention the details.		
18.	**Original Technical Catalogue** of the quoted model		
19.	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)		
20.	Certificate, to the effect that bidder have quoted their rates for Comprehensive Annual Maintenance Contract inclusive of labour, spares, consumables, accessories etc. on per year basis for a further period of seven years after expiry of warranty period of three years in the **price bid**. (Please mention the name of the item / items with price, which are not supplied by the bidder free of cost with frequency of replacement during Comprehensive Annual Maintenance Contract period in the price bid)		
21.	Acceptance of all terms / conditions towards **after sales / services** as mentioned in the		

	bidding document. **(Clause No. – 13 of "Instruction to Bidder" & Clauses No.: 3, 4 and 5 of "Condition of Contract")**		
22.	**Compliance Statement** with relation to the technical specification as mentioned in the bidding document duly supported by the original catalogue.		
23.	**Compliance Statement** with relation to the terms & conditions as mentioned in the document.		
24.	**PAN and copies of Income Tax Returns** for the last three years.		
25.	Duly attested copy of sales tax registration certificate.		

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

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

Note: If the above-mentioned 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 be prepared with all the required documents to avoid rejection of offer.

(Name of the Bidder with signature & seal)

ELIGIBILITY CRITERIA

ELIGIBILITY CRITERIA

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

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

03.

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

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

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

05. The Manufacturer or their authorized agent must have bank solvency of Rs. One Crore prior to issue of this notice. (Except. Sl. No. 1,6 ,8 & 9)

06. The firm should be registered with ESI & EPF from more than one year from the date of issue of this tender notice.

07. The Bidder (manufacturer or their authorized agent) should have had average annual financial turnover of Rs. One Crore during the last three years ends 31st march 2013.((Except. Sl. No. 1,6,8 & 9)

08. Bidders who have the capability to attend repairs of the equipments 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.)

09. Bidders who 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.

10. Firm / company who have withdrawn after participating in any of the previous tenders of Indira Gandhi Institute of Medical Sciences – Patna are not eligible to participate in this tender.

Note:

- Notwithstanding anything stated above, the Institute reserves the right to assess the Bidder's capability and capacity to perform the contract satisfactorily before deciding on award of contract, should circumstances warrant such an assessment in the overall interest of the purchaser.

- The Institute reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser of technical acceptability as per the tender specification, before the opening of the price tender.

INSTRUCTION TO BIDDER

GENERAL INSTRUCTIONS T0 BIDDERS

1. **Tendering System**

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

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

PART - II titled as PRICE BID shall contain only the 'Price Bid Form' duly filled in the prescribed Performa (Annexure - I) and Comprehensive Annual Maintenance Contract offer in prescribed format (Annexure – II). Price Bid not submitted in the prescribed performa will not be considered for evaluation and summarily rejected.

2. The tender offers, duly filled, shall be submitted in two separate sealed covers separately for **technical and price bids** respectively. 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)"** or **"Tender No……. (here mention the tender no as specified) PRICE BID for supply of ……..……..(here mention the name of the equipment)"** as the case may be. Both the sealed covers shall be enclosed in another sealed (third) bigger cover which should also be super scribed as **"Tender No……. (here mention the tender no as specified) TENDER 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.

4. The Bidding Documents along with terms and conditions, technical specification can be obtained from the office of the Store Officer, I.G.I.M.S. – Patna on payment of **Rs.5, 000/-(Rs. Five Thousand only, Non -Refundable) for each GROUP** either by cash or demand draft favoring Director, I.G.I.M.S. - Patna payable at Patna

5. The **"Bidding Document"** can also be downloaded from **institute website** **www.igims.org**. In case, downloaded bidding document is used, bidder(s) have to submit the cost of the Tender Document (i.e Rs. Five Thousand Only) along with the completed documents in the form of Demand Draft in favour of Director, I.G.I.M.S. – Patna payable at Patna towards cost of the **"Tender documents".** Firm is required to attach separate D.D. for the same in a separate envelope super scribed with **"Cost of Bidding Document".** If the cost of tender document is not submitted by the bidder(s), his offer shall be outright rejected and returned.

6. Last date for purchase of bidding document is _____/05/2013 up to 3.30 P.M.

7. Last date for submission of bidding document **17/05/2013 up to 4.00 P.M**. by registered post / speed post/ Courier only. Bidder(s) are requested to send the bid well in advance so as to ensure that bid reaches in time. Institute will not be responsible for any postal delay. **Bids received after due date and time shall be summarily rejected.**

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

a. **Earnest Money** @ 2% of the cost of equipment is required to be submitted along with tender by D.D./ Bank Guarantee from any scheduled Indian Bank (valid up to one year from the date of technical bids opening) along with the tender favoring Director, I.G.I.M.S. – Patna (payable at Patna). No interest is payable on EMD/ Bid security.

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

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

d. EMD must be submitted in separate sealed envelope and endorsement of the same with DD number, date and its validity period be made with technical bids stating that the same has been complied with price bid. If same is later found not enclosed tender will be cancelled for the party.

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

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

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

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

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

OR

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

i. The successful Bidder's EMD will be discharged upon the Bidders signing the contract and furnishing the performance security. The EMD 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 five nos. or more issued by Govt./Semi Govt.//Reputed Pvt. Institutions/organization for the 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 (Manufactured/ 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.

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

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

12. Installation & site plan:-

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

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

13. <u>After Sales Service Conditions</u>:

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

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

c. Guarantee/Warranty Terms:

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

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

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

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

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

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

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

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

x. Failure to attend the repairs in time or failure to attend the stipulated preventive maintenance visit or failure to replace the defective equipments or to provide stand by equipment if the fault/down time exceeds the stipulated period or to ensure the stipulated up-time in an year shall

lead to forfeiture of the performance security and/or may lead to blacklisting/debarring of the defaulting Bidder.

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

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

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

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

xv. The Bidder 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. The offered warranty includes:

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

d. Comprehensive Annual Maintenance Contract:

- The decision to enter into CMC or AMC will be determined on the basis of cost and complexity of the equipment by the Tender Inviting Authority, at its discretion, prior to the expiration of warranty period.
- The Comprehensive Maintenance Contract (CMC) is otherwise an extended warranty. All the terms and conditions agreed by the successful Bidder for executing the comprehensive

warranty of the equipment shall be extended during the period of CMC, only difference being the payment of CMC charges is absent during the period of comprehensive warranty.

- The cost of CMC, accessories and spares, reagents and consumables as in case may be quoted along with taxes applicable, if any. The taxes to be paid extra, to be specifically indicated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.

- Failure/refusal on the part of the successful tender supplying/installing the equipments to enter into CMC with the Tender Inviting Authority, at the end of the Comprehensive Warranty Period, if the Institute, as the case may be, desires so, shall lead to forfeiture of performance security and may also result in the blacklisting/debarring of the Bidder.

- The successful Bidder shall also indicate the rates for the CMC in price bid form and such rates are binding on the successful tenders after the expiration of the warranty period. The yearly rates for CMC shall remain the one and the same as quoted in the price bid form for the extended years.

- Cost of CMC (excluding taxes, if any) will be considered for Ranking/Evaluation purpose.

- The payment of the agreed CMC charges will be made as per frequency for payment after satisfactory completion of said period, on receipt of service report/ break down report from the user.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

26. **Signing of Contract**

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

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

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

29. **Amendment of tender documents**:

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

b. The amendment shall be notified in newspaper and on institute website www.igims.org and such amendments shall be binding on them thereafter.

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

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

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

CONDITIONS OF THE CONTRACT

CONDITIONS OF THE CONTRACT

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

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

02. Demurrage. Taxes & Octroi:

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

03. Warranty Period:

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

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

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

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

1 Year = 365 days

95% of 365 days = 347 Days per annum

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

f. During warranty period, **bidder** will make the "**Complete System**" in satisfactory working condition. In case, any spare parts, accessories, PCB, 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 / 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 with a validity to cover warranty period.

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

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

04. **<u>After Sales Services</u>**: -

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

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

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

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

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

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

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

g. During Comprehensive Annual Maintenance Contract, **bidder** will make 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 been able to provide services.

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

05. **Performance Security**

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

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

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

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

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

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

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

a. 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.

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

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

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

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

100% payment through International Irrevocable Letter of Credit in favour of principal abroad, but 80% will be released on shipment of goods & balance 20% after satisfactory installation of equipment on submission of Bank Guarantee of value not less than 20% of the cost of the quoted equipment (with a minimum validity to cover up the warranty / guarantee period) will be submitted by supplier. This Bank Guarantee will be released after expiry of guarantee period.

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

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

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

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. <u>Responsibility:-</u>

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

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

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

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

19. Penalties for non-performance

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

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

20. **Termination of Contract**

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

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

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

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

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

21. **Fall Clause**:

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

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

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

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

Sd/-
Director,
IGIMS - Patna
.

CHAPTER:

Schedule of the Requirement.

SCHEDULE OF THE REQUIREMENT.

Sl No	Name of the Department	Name of the equipment	Qty.
i			

ANNEXURES

Annexure - I (a)

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

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

Total quoted price in Rs. ……..

In Words: ……

Note:

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

Place:
Date:

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

Annexure: I (b)

PRICE SCHEDULED FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4	5					6
				Price per unit (CURRENCY)					
scheduled	Brief description of goods Make: Model:	Country of origin	Qty. nos.	FOB price at port/ Airport of lading (a)	Carriage & Insurance (port of loading to port of entry) and other incidental cost . (b)	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 . (d)	Unit Price on CIP Named port of Destination + Extended Insurance (Local Transportation and storage) (e_)	Total Price on CIP Named Port of Destination + Insurance (Local Transportation and storage) 4x5(e)

To be paid in Indian Currency (Rs) : ……..
Total Tender Price in Foreign Currency:……
In Words;-……

Note:-

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.

2. The charges for Annual CMC after warrantee shall be quoted separately as per price scheduled.

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

Indian Agent;-
Indian agency commission: % of FOB

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

Place;-
Date

Annexure - II

COMPREHINSIVE ANNUAL MAINTENANCE CONTRACT PRICES SCHEDULE

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

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

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

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

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

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

e) **Uptime Guarantee: 95% of 365 days**

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

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

Seal and Signature of the bidder

ANNEXURE - III

MANUFACTURER'S AUTHORISATION FORM

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

No. Dated:

To

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

Dear Sir,

Tender No :
Equipment Name :

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

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

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

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

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

Date: (Name of manufacturers)

Place:

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

ANNEXURE - IV

BANK GUARANTEE FORM

To

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

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract 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 contract 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 contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;
NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total 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 or modification.

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

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

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

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

ANNEXURE - V

POWER OF ATTORNEY

(On a Stamp Paper of relevant value)

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

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

Dated this the ___day of 201_ For_____

(Name, Designation and Address)

Accepted

_____

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

Date : _____

QUALITY CONTROL REQUIRMENT.

(Proforma for equipment and quality control employed by the manufacturer(s)
Tender Reference No.
Date of Opening;- No.
Time;
Name and Address of the Tenderer;-
Note;- All the following details shall relate to the manufacturer(s) for the goods quoted for

a. Name of the Manufacturer.
b.. Full address of the premises
c. Telegraphic address
d. Telex number
e. Telephone number
f. Fax number

02. Plant and machinery details.
03. Manufacturer ring process details
04. Money (single shift) production capacity of goods quoted for
    a. normal
    b. maximum
05. Total annual turn over (value in Rupess)
06. Quality control arrangement details.
    a. for incoming materials and brought out components.
    b. for process control
    c. for final product evaluation.
07. Test certificate held.
    a. type test
    b. BIS/ISO certificate
    c. any other.
08. Details of staff;-
    a. technical
    b. skilled.
    c. unskilled.

SPECIFICTION AND ALLIED TECHNICAL DETAILS

Technical Specifications

Sl. No.1- Group – A: O T Complex

-

I	**ICU BED** **OPTION A(a):-** ICU bed with adjustable backrest, upper leg. height and trendelburg/Reserve Trendelenburg position on seprate crank mechanism, provided at foot end of bed. Main bed – frame made of high quality rectangular steel tube with anti-bacterial Epoxy powder coating. Polymer (ABS) molded head and foot board (detachable/removable) Dimensions. (1) Overall approx. diamension; 2160to 2180mm Lx 1010 to 1020 mm W (ii) Bed frame approx. dimension 2070 to 2095mm L x 920 to 960mmW (iii) Minimum height 490 mm approx without mattress (iv) Maximum height 700 mm approx. without mattress. - 125mm dia caster wheels, height grade synthetic, 2 with -brakes and 2 without braks(Individual Braks at head and foot end) - Four corner side buffers. Pre-treated and powder coated finish **Accessories** X-ray permeable backrest with cassette holder. Four section PU foam mattress Oxygen cylinder cage. Heavy duty SS telescope IV pole Which can be inserted into the sleeves on either side of the bed. SS lifting pole.. Bumper wheels on all four corners- The wall deflection buffers at the all the four corners of the bed cushion on against collisions. Maximum weight capacity: 200kg. Integrated bed extension 100mm Mattres.;- Good quality four section PU mattress **OPTION (B)Electrically Operated. ICU Bed:-** ICU Bed with electrically operated remote controlled back rest tilting 0-80º, knee rest tilting 0-35°, trendelenburg tilting 0-20°, Reverse trendelenburg tilting 0-20°. Bed should have a special function by which both back rest & knee rest is operated together to make Chair postion of the bed. Size: L 2140mm to 2200mm × W 940mm to 1060mm × H 480-730mm (Adjustable Height). All functions controlled with Actuator, 220 - 240 V AC, 50 Hz. (110 V on request). Removable & interchangeable high quality ABS engineering plastic head panel and foot panel. Head panel and foot panel equipped with safety lock and roller bumpers.

	Epoxy coated mild steel frame work and 4 section perforated top. Bed Fitted with 4 section swing away side railings . Built-in emergency battery backup to maintain all functions during electricity failure. 125mm dia noiseless castors with simultaneous braking system which locks / unlocks 2 castors with single pedal press. Provision for S S I.V. Rod on both sides of the bed. Trolley base of bed is covered with fiber sheet cover for minimum espouse of trolley metal parts. Back Board with emergency release (CPR) function. . Maximum weight capacity: 200kg. Bumper wheels on all four corners Integrated bed extension 100mm Mattress;- Good quality four section PU mattress.
II	**WARD CARE BED;-** Fix height , Fowler Position Overall Aprox size; 1980mmLX 910mm W X 610mm H Four section perforated top. Two seprate screw machnism fitted with collapsible fix handle for backrest & kneerest. Head & Leg side moulded panels. Four side saline arrangement location .Leg fitted with shoes.Finish pretested in tank hot process & powder coated. Optional with following items:- 1;- 100mm foam mattress with rexin cover (M-0157) 2;- Saline arrangement (E-0001) 3;- Crib Arrangement (E-0012) 4;- 125mm Dia. caster two with breaks (E-0003) 5;- Urine Bag Hooks (E-0011) 6;- SS Collapsible side Rail (Ex-1001) 7;- Powder coated collapsible side Rail (EX-1001)

III	**PATIENT BED SIDE LOCKER** - N.H Type - Overall Approx Size. - 400mmLX400mm WX820mmH - Machine pressed CRC sheet cabinet and three side closed having box and drawer,S .S top tray type three side boarder locker with 50mm dia. Non rusting caster. Buffers at rear. - Finish pretested in 11 tank hot process & powder coated.

IV	**BED OVER HEAD TABLE:-** Technical specification Option- (A) • overall size;810mm (L) x355mm(W) x800-1050mm(H) • Height agjustable • Tubular steel frame work • Laminated top • Four 50mm HFvelling castors • Pre- treated Epoxy powder coated • Knock construction.

	Option- (B) Approx.Top size;760mmLX400mm W Single section membrane pressed top with raised edges. Tubular frame work with 50mm dia .Non rusting caster. Height 730mm to 1090mm adjustment by geared mechanism fitted with collapsible handle. Finish pretested in tank hot process & powder coated.
V	PATIENT TRANSFER TROLLEY **Emergency & Recovery Trolley** Overall Approx size. 1910mmLX710mmWX 650mm to 900mmH STRECHER APPROX SIZE 1830mmLX556mm W Two section top. height adjusted by foot operated hydraulic pump. X-ray permeable removable stretcher, Backrest Raised on Rachet. Trendelenburg / Reverse. Trendelenburg operated on gas spring. Four caster, 125mm Dia.Two with breaks.Complete with corner buffers, sliding x-ray cassette holder, Accessories tray, Oxygen cylinder arrangement ,S .S Telescope iv Road and Swing away side rails. Finish pretested in tank hot process & powder coated Foam mattress with rexin cover
VI	**MEDICINE TRLLEY** Overall Approx size 750mmLX 380mm WX 930mm H Twelve moulded drawers, two drawers with utility container. One S.S tray on top Tubular frame work filled with 100 mm dia castors Finish pretested in 11 tank hot process & powder coated.
VII	**O . T Drug Trolley** Overall Approx Size 670mm Lx460mmWx1530mm H Complete S S Structur with 24nos. small hand bins & 12 nos. Big hands bins. one tray on top. Four 125 mm dia. castors two with two breaks S. S finish matt.

LED O. T Light,:

- Extremely flat, compact and laminar flow compliant surgical light based on LED technology.
- The light head shall consist of several, systematically arranged light emitting modules, using Light Emitting Diodes to form a multi-lens matrix for a shadow free and homogeneous illumination of the surgical field.
- Surgical light should consist of: Central axis, horizontal extension arm, height adjustable spring arm, vertical and horizontal bow and the one-point suspended light head consisting of 5 or 3 light emitting modules.
- Other optional accessories / added features may also be quoted.

(a)Suspension system:

- Main light on lowermost axis position

- Extension arm: 1 or 2 extension arms per axis All arms freely rotatable (without stops) at all vertical joints.

(b) Light Head:

- Made of powder coated aluminum diecast with smooth and clean surfaces that are easy and safe to clean.
- Dust and Splash – proof
- One – point suspended

The light head can be pre-equipped with preparation and the respective cabling for the camera system. (Optional)

(c)Light system:

Surgical light with cold and shadow-free light, high lighting intensity and very homogeneous large- area and in-depth illumination of the surgical field through
multi lens matrix technology.
Light field adjustment and focusing via steriliseable handle in the center of the light head.
No heat emission through IR radiation.
Gaps and spaces between the single light emitting modules of the light head should support the effect of laminar air flow systems.
Sterilizeable knob at the lower side of the light head for control of all light function

Optical & photometric characteristics

1. Technology : LED
2. Diameter of lighthead: >45cm
3. Illumination (lux): > 100000
4. Field diameter: >20cm
5. Colour rendering index: 95
6. Colour temperature: 3.500 – 5000 K
7. Temperaure rise in the area of surgeon's head: $<1^0$ C
8. Life span: >20,000hrs
9. Ambient light illumination: 50-300 lux
10. Illuminated field: 100cm

Camera (Optional):

- 1CCD chip camera for installation either in the central handle of the light head ao at aseparate carrying arm.
- Control of the camera functions via external control unit . In addition , picture rotation and camera zoom can be adjusted via the sterelisable knob at the respective light head
- Signal transmission and power supply via inlaying cabling with slip rings in all vertical joints.
- CCD sensor 1/4 " CCD
- Standard PAL / NTSC
- Pixels 400,000 PAL, 380,000 NTSC
- Zoom 25 Xoptical , 12 X digital
- Signal/ Noise ratio <50 dB
- White balance automatic/ manually
- Gain automatic / manually
- 1* USB
- 1* Audio in/out

Sl. No – 2: Group-B (For Cardiology/ RCC / An aesthesia)

C-Arm with Image Intensifier

A Mobile C-Arm Image Intensifier suitable for use in Operation Theatre for Surgical Procedure should be provided . The Control Panel should be fully feather touch for easy cleaning and disinfections

A IMAGE INTENSIFIER

1:- Image Intensifying Tube :- 9 Inches, Triple Field.

2:- CCD Camera: High Resolution compact CCD camera

3. monitor (2 nos) 19" grade (monochrome) monitor along with trolley

B C-ARM MOVEMENTS

1 Rotation + _ 180 Degree

2 .motorized up / down At least 430 mm

3. horizontal travel least 210 mm

4. are orbital movement at least 120 degree

5.wig wag +_ 12.5 degrees

6. source to image distance should be more than 900mm

7.. depth of "C" should be at least 55 mm or more

.

C X_RAY GENERATOR

1. High frequency (40 KHz) or more
2. output power should be at least 5 KW or more
3. Rotating anode tube of focal spot 0.3 mm & 0.6mm or less
4. Radiographic mA 8-mA or more
5. Fluoroscopic mA 0.1 5mm (normal mode) pulsed fuloro for high definition fluoro should be more than 10 mA

D CONRTROL : control should have the following

1. Digital display of KV Fma & FLR time
2. Technic selector switch for fluoro & Rad mode selection
3. KV selection from 40 to 120 KV in steps (Rad /Fluoro)
4. An inbuilt Radiographic timer to select mAs in steps for 200mAs
5. A 5 minutes cumulative timer with buzzer
6. Fluoro mA from 0.1-5 mA continuously variable
7. Monoblock temp sensor thermal safety out off
8. provision must exit on control panel for easy identification of faults to minimize the downtime
9. Servo voltage stabilizer A servo voltage stabilizer with suitable rating is provided
10. Automatic brightness control provided to operate the machine in aautomatic mode for hands free operation .
11. Collimator should be provided
12. Emergency fluoro to be provided

E MEMEORY SYSTEM should include the following

100 frame memory with the following features should be provided

1. Feature of LIVE / PULSE / LIH
2, Averaging 1 to 16 frame
3. Contrast enhancement function
4. Temp & permanent storage up to 100 frame
5. Negative image feature
6.zoom feature (x2 & x3
7. mirror feature
8.image rotation feature
9. PAN drive provision
10Keeps date & time
11QUAD view
12;Image Panning
13; Pc connectivity through LAN Port

F Power requirement; The unit should be operable on single phase 230v+- 10% AC .50Hz

G; Other requirement;
The equiptt. must be CE certified
The company must be ISO& EN ISO certified
The unit should approved by AERB

Group- C (G .I Surgery)

l. FIBEROTIC CHOLEDOCHOSCOPE WITH LIGHT SOURCES

SPECIFICATION

1. 4.5mm diameter, 1.7mm channel, 188cm length
2. 4.9mm diameter, 2.2mm channel, 38cm length
3. Box for keeping the instruments

Note:- tenderer should quote rate of each items separately. Institute shall procure the items required only from the approved tenderer.

Technical Specification of . Harmonic with ACE, with Complete set : -

1. **Ultrasonic generator** with 55.5 KHz frequency functional for both Laparoscopic and Open surgery & compatible with 5mm and 10mm blades.
2. **5mm ACE** Lap and open shear for cutting and haemostasis.
3. **Wave** technology shear for open colorectal surgery & abdominal hysterectomy etc.
4. **Focus technology shear with Blue hand piece** for open procedures like Breast, Thyroid & head & neck surgery etc.
5. **Hand piece** with in- built transducer & silicon cable for all shears & blades of Harmonic.
6. CF isolated generator confirming to safety standard IEC601.1 class, electromagnetic compatibility, UL 2601-1 & defibrillator protection.
7. **Footswitch & cable** with max & min pedals**.**
8. **Cart** to House the equipment**.**
   a. Frequency – 50/60Hz. Current Consumption -: 3 Amp & relative humidity 10-90% non-condensing.

9. System should have a universal connector to connect ultrasonic energy and advanced RF energy instruments.

10. System should have automatic instruments reorganization.

11. System should be CE approved.

12. System should have a touch screen display for fast and setup, operation and on-screen diagnostics.

13. System should have a high resolution display with wide viewing angles.

14. System should have the ability for software updates via UBS memory stick.

15. System should be a single generator that provides ultrasonic energy and Advanced RF energy technology for soft tissue dissection and vessel sealing.

16. System should have a potential equalization terminal for compatibility with other medical system requiring such connection.

17. System should conform to the following international standards EN (IEC) 60601-1 EN (IEC) 60601-1-2, EN(IEC) 60601-2-2, EN (IEC) 60601-1-8

18. System should provide class 1 protection against electric shock.

19. system should have a single footswitch for operating ultrasonic energy or advanced RF energy instruments

20. system should have a ability to select hand hand switch or footswitch activation or both or ultrasonic and advanced RF energy instruments and the ability to change selection during use

21. system should have 6 international language options with English language as default
System should not have an auto switch off mechanism

22. system should not have minimal lateral thermal spread more than 1 mm

23. system should have standby mode to ensure safety'

24. system should come equipped with system diagnostics and troubleshooting guide to pin point any problems in the systems.

25. system should have onscreen warning display system for generator overheating generator software upgrade handpiece errors and instrument errors

26. system should be power ultrasonic energy instruments with 55.5 KHz frequency and have the ability to power ultrasonic energy instruments in the frequency range of 30-80 KHz in future.

27. The hand piece for the system should come with an inbuilt transducer .

28. system should be compatible for open surgery and for laparoscopic surgery.

29. system should be compatible with both 5mm and 10mm instrument ..

30. system should have atleast 5 power setting levels with power level display for ultrasonic energy instruments.

31. system should be able to power energy instruments with microprocessor controlled bipolar electrosurgical radiofrequency technology with a quasi-sinusoidal forced impedance output.

32. system should be equipped with smart advanced RF energy technology to measure the tissue impedance and control the power delivery

33. system should be equipped with advanced RF energy techno logy that can simultaneously seal and transect vessels up to and including 7mm large tissue pedicles and vascular bundles.

34. system should be equipped with advanced RF energy technology that provides temperature controlled energy delivery which should maintain tissue temperature approximately at 100 degree Celsius .

35. system should have advanced RF energy hand instruments with a unique electrode configuration to minimize the lateral thermal spread .

36. system should have advance RF energy hand instruments with technology to deliver high compression uniformly across seal area .

37. system should have RF energy hand instruments that provide tissue/vessel seal strength to withstand bursting pressure of 7 times the systolic pressure .

38. All hand probes for open lap procedures should be able to simultaneously cut and coagulate tissues .

39. system should be able to power advanced RF energy hand instruments of 5mm shaft diameter for both open & laparoscopic procedures with round tip (5mm tip width)in the following shaft lengths (14cm.25cm 35cm &45cm) and should be both hand &foot activated .

40. system should be able to power ultrasonic energy hand instrument of 5mm shaft diameter for both open & laparoscopic procedures with the following specifications open surgery instruments .

a- 9cm shaft curved tapered tip for precise dissection seal 5mm vessels as well as lymphatic with 16mm active blade &240- degree activation triggers support multiple hand positions .
b. 17cm shaft curved tapered tip for precise dissection seals s5mm vessels as well as lymphatic with 16mm active blade & 240 degree activation triggers support multiple hand positions .
c 5mm hand activated curved coagulating shears capable of sealing blood vessels upto 5mm in diameter 23cm shaft length enrgonomic handle .
d curved blade having telescoping shaft (10cm-14cm) with integrated hand activation control buttons.
D Dissecting hook having telescoping (10cm-14cm) with integrated hand activation control buttons .

LAPAROSCOPIC SURGERY INSTRUMENTS

- 5mm lap hand activated curved coagulating shears capable of sealing blood vessels upto 5mm in diameter 36cm and 45 cm shaft length ergonomic handle .
- 5mm lap dissecting hook 32cm long

SYSTEM SHOULD COMPRISE OF THE FOLLOWING HARDWARE

- Generator
- Footswitch & cable

ACCESSSORIES

- Handpiece (Transducer
- Haandpilece (Blue)
- Generator Cart
- Adaptors for ultrasonic and advanced RF energy instruments RF Energy instruments .
- Hand probes (one each of 5mm shaft diameter for both open laparoscopic procedures with round tip (5mm tip width) in the following shaft lengths (14cm 25 cm &35 cm and should be both hand & foot activated both open and lap devices should b able to simultaneously cut and coagulate tissues .

ULTRASONIC ENERGY INSTRUMENTS

* 9cm shaft & 17cm shaft curved tapered tip for precise dissection seal 5mm vessels as well as lymphatic with 16mm active blade &240 degree activation triggers support Support multiple hand position one pc each
* 5mm hand activated curved coagulating shears capable of sealing blood vessels upto 5mm in diameter with 232cm , 36cm shaft lenglth ergonomic handle one pc each
* 5mm lap dissecting hook 32 cm long – one pc

Laparoscopic set with various Hand accessories..

Sl No	Specification.	Qty.
1	Flexible Trocar Sleeves- Plastic sheet with retaining thread staright distal tip, including membrance valves, 5.5mm, 60 mm length Trocar – conical tip Membrane valves.	10
2	Atramatic grasping forceps perforated with horizontal serrations double jaw action , modular system, 5mm , 310mm length Handle- Pistol Design rotatable with locking mechanism with HF. Complete instruments: Jaw insert, sheath tube (insulated) handle	04
3	Grasping forceps "Babcock grasping surface with fine horizontal serration double jaw action ,modular system ,5mm, 310mm, length Handle –pistol Design rotatable with locking mechanism with HF complete instruments :jaw insert sheath tube (insulated) handle	04
4	Atraumatic grasping forceps smooth double jaw action modular system ,5mm, 310mm, length Handle – pistol Design rotatable with locking mechanism with HF Complete instruments : jaw insert sheath tube (insulated) hand	04
5	Grasping and dissecting forceps fine pyramidal shaped teeth tape red ,14mm, double jaw action modular system 5mm, monopolar and 310mm, in length Handle – Pistol Design rotatable with socking mechanism with HF Complete instruments : jaw insert sheath tube (insulated), handle	04
6	Graspin forceps with teeth , double jaw action, 310mm, length modular system, 5mm, Handle – Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert, sheath tube (insulated), handle	04
7	Grasping and dissecting forceps, "Maryland dissector" curved with fine horizontal serration double jaw action ,310mm length , 5mm, modular system Handle – Pistol Design rotatable with licking mechanism with HF Complete instruments : jaw insert sheath tube (insulated), handle	06
8	Grasping and dissecting forceps, fine pyramidal shaped teeth tapered , 18mm, double jaw action , 310mm, length , 5mm, modular system Handle – Pistol Design rotate ble with licking mechanism with HF Complete instruments: jaw insert sheath tube (insulated), handle	04
9	Grasping and coagulation forceps distal horizontal serrations with jaw hollow , double jaw action , 310mm, 5mm, modular system Handle--- Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert, sheath tube (insulated), handle	04
10	Grasping and dissection forceps fine horizontal serrations, double jaw action 310mm, length 5mm, modular system Handle – Pistol Design rotatable with locking mechanism with HF	04
	Complete instruments: jaw insert sheath tube (insulated), handle	
11	Grasping and dissecting forceps perforated fine horizontal serration 20mm, long single jaw action 310mm, length 5mm, modular system Handle – Pistol Design rotate with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated) handle	04
12	Grasping and dissecting forceps perforated fine horizontal serrations 15mm, long single jaw single jaw action 310mm, length 5mm, modular system Handle --- Pistol Design rotateble with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated), handle	
13	Grasping forceps "Babcock" large distal grasping surface with fine horizontal serration double jaw action 5m, 310mm in length Handle—Pistol Design rotatable with locking mechanism with HF Complete	04

	instruments: jaw insert , sheath tube (insulated), handle	
14	Atraumatic grasping forceps both jaw opening "Babcock" ,310mm, length 10mm, modular system Handle---Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated), handle	04
15	Atraumatic plate shaped grasping forceps, both jaw opening 310mm, length ,10mm, modular system Handle—Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated), handle	04
16	Grasping forceps by Debakey both jaws opening 310mm, length modular system 10mm, Handle—Pistol Design rotatable with licking mechanism with HF Complete instruments: jaw insert sheath tube (insulated) handle	04
17	Graspng forceps spoon shaped 335m, length 10mm, modular system Handle---- spring assisted closing action extended finger spur and cleaning channel	04
18	Scissors "Metzenbaum," curved left double jaw action 310mm length 5mm ,modular system Handle—Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated) handle Spare inserts	08
19	Scissors straight tapered double jaw action 310mm length 5mm, modular system Handle – Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated) handle spare inserts	08
20	Hooking Scissors serrated single jaw action 310mm length 5mm, modular system Handle—Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated), handle	08
	Spare inserts	
21	Micro –scissors "Metzenbaum" left curved double jaw action 5mm, monopolar 310mm, length modular system Handle--- Pistol Design rotatable with locking mechanism with HF Complete instruments: jaw insert sheath tube (insulated) handle Spare inserts	08
22	Bipolar grasping forceps 300mm, length 5mm, modular system. Handle—sliding handle Complete set: jaw insert sliding sleeve outer tube sliding handle	04
23	Bipolar Coagulation forceps by Reich 410mm, length 5mm, modular system Handle—sliding handle with thumb plate and outer tube Complete set : jaw insert thumb plate with outer tube	04
24	Hook electrode 340mm, 5m, monopolar insulated	04
25	Sparula electrode 340mm, length 5mm, monopolar insulated	04
26	Suction Irrigation tubes 5mm, with to way tap with central and lateral opening 290mm, length (It should have multi purpose suction irrigation system having following specification :irrigation & suction handle irrigation & suction set consisting of irrigation and suction hose cap for irrigation and suction handke irrigation and suction tube set with connection pin autoclavable irrigation and aspiration tubing set disposable suction irrigation tube 100mm, dia with working length 310mm, high frequency hook electrode with suction and irrigation channel)	
27	Multifunction coagulation suction tubes 5mm, HF instruments monopolar with suction and irrigation channels with HF probe	04
28	Modular needle holder straight with carbide insert 310mm, length 5mm, Handle—Axial Design rotatable with locking mechanism one jaw opening locking mechanism can be disabled. Complete set: inner section with sheath tube handle	04

29	Modular needle holder curved left with carbide insert 5mm, 310mm, length Handle – Axial Design rotatable with locking mechanism one jaw opening locking mechanism can be disabled. Complete set Inner section with sheath tube handle	04
30	Knot pusher 330m, 5mm,	02
31	Grasping forceps 400mm, length 5mm, modular system with curved jaw for fundoplication Handle—Pistol Design rotatable with locking mechanism with HF Complete instruments : jaws and handle	04
32	Dissector 400mm, length 5mm, modular system with curved jaw for fundoplication Handle—Pistol Design rotatable with locking mechanism with HF	04
33	Injecton and puncture cannula 22G, 345mm length, with 3mm luer connector	04

Additional instruments required.
Liver retractor- fan shaped/ malleable rod (as used in bariatrics)
Dorsey Intestinal grasping forceps 310/370 mm/5mm (aesc: Po112R)
Intestinal grasping forceps (long jawed 60mm; 10mm) (Po215R)
DUVAL- 5MM, 310MM (PO104R)
DUVAL- 10MM, 370MM (PO104R)
PENINGTON TISSUE GRASPING FORCEPS 10 MM, 370 MM (PO105R)
DEBAKEY ATRAUMATIC CLAMP, JAW 50MM, 5 MM, 420MM OR JAW 40 MM/ 310MM/5MM(P0137R)
DEBAKEY ATRAMAUTIC CLAMP, JAW 50MM, 10MM, 370MM (PO118R)
Metal Trocar with sleeve of 10.5 and 11mm ---6 Pcs

SPECIFICATION FOR THE DEFINITION ENDOVISION CAMERA

1. High definition endovision camera with recording system
The system should be fully digital HDTV endoscope video camera. The system should have the maximum resolution of 1920 x 1080 pixels progressive scan and the consistent use of 16;9 format for input & output to guarantee genuine HDTV

THE SYSTEM SHOULD HAVE SPECIAL FEATURES ;

Visible improve imaging ; CCD sensing chip should optimizes image quality & digital source sampling thus maximizing hi-fidelity image transmission .
Optimizes to any size ; the system should have itegrated parfocal optical zoom (f=14-30 mm 2x) to enhance the qulity of image size & cross specialty standardization of the camera system , regardless of the telescope used .
Plug and Go ; The system should automatically optimize all settings the system should be ready to use as soon as it is connected to the camera control unit
Zoom white balance control and two peripheral controls on camera head
Camera system should be compatible with communication Bus system for remote controlled op0eration to the
various features of the camera along with other equipment .

Technical specifications
Image : 3x1/3" CCD –Chip
Pixels : 1920 x 1080
AGC ; Microprocessor controlled
Video output ; Y/C signal to DVI – D Socket (2 x) HDTV signal SDI
Signal DV for digital recording
Certified to IEC 601-1, 602-2-18 CE Label
2 Specifications for fully high definition medical monitor
HDTV 16;10 widescreen monitor The monitor should have HDTV display in original 16;10 HDTV format 1080 p/50 & 1080 p/60 display possible Drip water

protected dustproof housing LCD crystal display Max Resolution of 1920 x 1200 pixels resoluation of more than 1100 lines screen diagonal 23 " -26" desk top with pedestal Ext power supply DC 24 100-240 V (AC) 50 (60ft) max 80 W standard En 60 601-1 EN 60 601-1-2

LIGHT SOURCE

Xenon light source 300 watts

Xenon light source 300 watts for high light intensity with accurate focusing arrangements . it should have an easy system to replace the lamp it should have a colour temperature of 5600k. It should have3 different selection modes for automatic video and integral video . Universal jaw adaptor for to adapt any make of fiber optic cable

- LED
- LIGHT OUTLET -1
- LIGHT INERNSITY ADJUSTMENT 0-100% MANUALLY
- STAAND BY MODE
- SAFETY FEATURE OF LIGHT CABLE FOR PREVENTING ACCIDENTAL TIMES

- LCD TOUCH SCREEN
- LIGHT CABLES

5.Mobile Trolley – High quality international

Mobile universal video trolley including 4 shelves 3 of which are fully height adjustable integrated cable ducts 4 anitsstatic smooth –running double casters 2 of which can be locked dimensions approx 675 x 1500 x 700 mm

Basic electrics to connect upto 12 electrical unit mains voltage 230 v consisting of 1 housing 1 unit socket outlet 1 main switch 6 unit cables

Traansformer module mains voltage 230 isolating transformer

Drawer unit for mobile trolley approx 550 x 125 x 550 weight 10.5 kg ISO monitor (only in conjecction with the transformer module) 230 v camera head holder for 3D endocamera

Holder for light cables with connectors

Cover assembly onto trolley consting of lockable tinted safety glass doors and lockable rear panel

6. High flow Electronic Insufflator (40 liters or more)

* High degree of patient safety and easy to use

Clear adjacent displays for set value and actual values located displays for targets and actual value

Touch key for precise preselection of set values

Visual and acoustic alarm signals in the event of patient overpressure

Fully automatic electronically controlled gas refill in case of gas loss when changing instruments

SECUVENT Security system ; constant monitoring of intra abdominal pressure any overpressure is reduced immedicately

Pressure (mm/Hg) -0-30 (3990 pa)

Display for intraabdominal pressure (mm/Hg) -0-50 (6650pa)

Power supply -100-240 VAC 50/60 Hz

Neonatal and bariartric mode

Physical demonstration of quoted equipment is mandatory

SPECIFICATIONS FOR CAUTERY

The units should have:-

Sr. No.	Particulars
5.5.20.1	Electro surgical generator equipped with a microprocessor based continousus feedback system, which continuously taken feedback of the impedance of tissues and delivers constant power to the surgical.
5.5.20.2	Three modes of monopolar coagulation-forces, spray &soft.
5.5.20.3	(Pure cut & two blends) blends of cut with varying degrees of haemostasis and a special mode for under water application.
5.5.20.4	User settable auto stop mode in soft coagulation to switch off power automatically after the coagulation of tissue/blood vessels, to minimize carbonization.
5.5.20.5	Bipolar cut application.
5.5.20.6	User settable auto stop in bipolar coagulation.
5.5.20.7	Programmable memory setting and present memory settings for different specially applications.
5.5.20.8	Safety alar for leakage current, patient plate, disconnection and continues activation of the unit.
5.5.20.9	Auto self whenever the unit is switched on.
5.5.20.10	Capability to auto store last set values on the front panel, if units is shut off.
5.5.20.11	Double pedal explosion protected switch and silicon rubber patient plate.
5.5.20.12	IEC 601-01 compliance and ISO 9001 certified.
5.5.20.13	Should be independent monopolar and Bipolar generators with isolated outputs.
5.5.20.14	The monopolar generator provides CUT/Blend CUT and COAG facilities frequency 480 khz.
5.5.20.15	Bipolar generator should have a foot control switch.
5.5.20.16	Operative modes should have identification by different audio tones and different panel lights.
5.5.20.17	Provision for control by pencil switch or footswitch with protection to recognize COAG command to cutting.
5.5.20.18	Patient plate supervised during monopolar operation.
5.5.20.19	Disconnected patient plate will disregard hand or foot switch commands.
5.5.20.20	Audio visual indication for patient plate disconnection.
5.5.20.21	Natural convection cooling with silent operation.
5.5.20.22	Separate output socket for BIPOLAR.
5.5.20.23	Output mode should be cut more than 375 watts, coag. More than 125 eatts and Bipolar more than 60 watts.
5.5.20.24	Should be suitable for underwater procedure TURP/TCRE, General Surgery, Endoscopy procedure, Plastic/Cosmetic, Orthopedic/Arthoscopy, Pediatric, ENT Neuro Surgeon, ENDO-CUT for Gastro Surgeon.

SL- No.4 GROUP_ - D (Gastroenterology)

Video Endoscope set-A Consisting of :-

1:-_ TECHNICAL SPECIFICATION OF VIDEO – PROCESSOR

- Based on colour CCD chip technology

should have facility for automatic gain control, selective iris setting and variable contrast setting .

- Should be compatible with light source monitor and video-endoscope - to be purchased with the set .
- Durable high efficiency key board
- .Power supply – 220 to240 volt , frequency 50-60 HZ

TECHNICAL SPECIFICATION OF LIGHT SOURCE

13. Light source fitted with Xenon short arc lamp -300 w. with average lamp life of approx 500 hours
14. Emergency Halogen lamp 100-150 W having lamp life of approx 100 Hours .
15. Automatic brightness control
16. Compatible with Video processor, monitor and Video-endoscope being purchased with this set.

MONITOR

1. Medical grade high definition flat panel L C D /LED color monitor of size 17 inch with full screen picture capability
2. Antiglare control
3. Facility for PIP and POP will be considered an extra advantage
4. Setting memorization when power is off
5. Power supply 220to240 Volt – frequency 50-60 HZ
6. Compatible with Video processor, light source and Video-endoscope being purchased with this set.

2 :-TECHNICAL SPECIFUCATION OF U G.I VIDEO ENDOSCOPE

1. DIRECTION OF VIEW: FORWARD VIEWING
2. FIELD OF VIEW:- 140 DEGREE OR MORE
3: DEPTH OF FIELD: 3- 100 mm
4; DISTAL .END OUTER DIAMETER;- < 9.5mm
5:- RANGE OF TIP DEFLECTION;- UP -21° DEGREE ;DOWN -90 DEGREE LEFT-100 DEGREE; RIGHT 100 DEGREE
6. INSTRUMENT CHANNEL DIAMETER : 2.8 MM OR MORE
5. WORKING LENGTH: APPROX. 1030MM

SHOULD BE COMPATIBLE WITH VIDEO PROCESSOR , MONITOR AND LIGHT SOURCE- BEING PURCHASED WITH THIS SET.

Specify the list of accessories supplied with upper GI video -endoscope

.

3:- SPECIFICATION FOR VIDEO- DUODNOSCOPE

1. DIRECTION OF VIWW:- Side view
2. DEPTH OF FIELD:- 5- 60 mm(pprox.)
3. FIELD OF VIEW:- 100mm or more
4. OUTER DIAMETER:- 11-13 mm or less
5. INSTRUMENT CHANNEL:- 4.2mm or mere
6. RANGE OF TIP DEFLETION-UP 120 Degree ;down 90 Degree. Right. 110 , Left, 90 or More
7. WORKING LENGTH - APPROXIMATLY 1240mm
8. COMPATABLE WITH VIDEO- PROCESSOR AND LIGHT SOURCE TO BE PURCHASED IN THE SET.
9. Specify the List of accessories supplied with DUODENOVIDWO-SCOPE.

4 ;- SPECIFICATION FOR VIDEO- COLONOSOPE

1. DIRECTION OF VIEW:- FORWARD VIEW
2. FIELD OF VIEW:- 120 DEGREE(Approx.)
3. DEPTH OF VIEW:- 5-100mm.(APPROX)
4. OUTERR DIAMETER:- 12mm-14 mm. Or less.
5. INSTRUMENT CHANNEL: 2.8mm or More
6. TOTAL WORKING LENGTH- BETWEEN 1300-1700MM
7. COMPATIBLE WITH VIDEO- PROCESSOR AND LIGHT SOURCE TO BE PURCHASED IN THE SET.
8. SPECIFY THE LIST OF ACCESSORIES TO BE SUPPLIED WITH VIDWO-CLONO-SCOPE.
9. VARIABLE STIFFNESS OF INSERTION TUBE WILL BE CONSIDERED AS ON EXTRA ADVANTAGW .

Video Endoscope set-B Consisting of:-

1:-

VIDEOENEDOSCOPY SYSTEM

Video Processor Module:-Should have following technical specifications

- Portable and light weight.
-
- Capable of storage up to 35 to 45 patient's data.
-
- Capable of registering & recalling scope information

- Zoom capability for images (Medium & Full Height for difficult procedures) & sharpness control.

- Edge and Structure enhancement facility.
  Preferably should have separate unit for light source.

- Should be equipped with HD TV imaging capability for observing of Capillaries, mucosal structures and other patterns .

- Should have Narrow Band Imaging/ FICE capability to enhance the visibility of capillaries and other structures on the mucosal surface and it should be compatible with FICE/N.B.I.video-endoscopy supplied with the set.
-
- Digital signal processing for signal received from colour CCD Chip . equipped with high resolution , high definition T.V imagining capacity .

- Should have convenient digital-to- digital recording facility for both still and Moving images.

- Should have PIP (picture in-picture) display for any combination of endoscopic images, fluoroscopic images , ultrasound images etc.

Light Source:

- Should have following technical specification /features;

- Lamp-Xenon short arc lamp ozone free 300 W or more

- Emergency lamp of at least 100W – 150W backup , which should automatically ignite , in case the main lamp gets defective .

- Should be compatible for narrow band imaging / FICE or equivalent technology in the video endoscopic sets .

- Function of automatic switch off when unit has been used for an extended period of time and facility for automatic brightness control.

- Should be separate unit from video processor

VideoMonitor : Should have following technical specifications

- 19-20 inches or more in size

- Flat panel LED/LCD High definition colour monitor

- Anti – Glare coating for less reflection

- Should be fully digital HD TV compatibility

- Should have progressive scanning facility

- Should have PIP facility(Endoscopic view as well as fluoroscopic view in single screen.)

- Power supply -220-240 Volt .

- Software modules for recording of endoscopic images along with regular hardware . High resolution colour laser printer, Hot burn C.D facility e.t.c
  and leakage tester with trolley .

2:-

Upper G.I Video endoscope with Narrow Band Imaging FICE/Equivalent picture Capability

- Should have following technical specification /features:
- Autoclavable Air – Water & Suction valves for hassle free maintenance
- Maximum Scope Switch in order to permit user with instant Decision.
- Minimum biopsy forceps visible distance 3mm or less to 100 mm or more
- Dedicated Flushing Adapter for ensuring Optimum Scope cleaning /disinfection.
- Should have Narrow Band Imaging /FICE/equivalent capability with high-resolution HD TV imaging.
- Should have close focus observation without electronic magnification .
- Facility to inform and keep track of Maintenance schedule to be inbuilt within endoscope.

Field of view : Not less than 140 degree
Distal end & Insertion tube dia : 9-10 mm
Distal end bending at least : Up > 210deg. Down> 90 deg.
Right & left > 100 deg.
Working length : 1000 mm and more
Instrument channel diameter : 2.8mm
Direction of view- : Forward viewing
Mention all the accessories supplied with endoscope and Endoscope should be compatible with video processor and monitor being purchased with set.

Lower G.I Videoendoscope with Narrow Band Imaging FICE/ equivalent picture capability :-

Should have following technical specification / features: Autoclavable Air – Water & Suction valves for hassle free maintenance

- Maximum scope Switch in order to permit and user with Instant decision,
- Minimum biopsy forceps visible distance 3mm of less to 100 mm or more
- Facility to inform and keep track of maintenance schedule to be inbuilt within endoscope.
- Dedicated Flushing Adepter for ensuring Optimum scope cleaning / disinfection .

- Should have Narrow Band/ Imaging/FICE/ equivalent capability with high-resolution HD TV imaging
- Should have close observation without electronic magnification HDTV imaging
- Scope guide facility to provide real time 3D visualisation of scope position and configuration –it will be considered extra advantage.
- Variable stiffness compatibility
- Mention all accessories supplied with the
- Endoscope should be compatible with video monitor and processor to be purchased with the set.
- Field of view : Not less than 160 degree
- Distal end & Insertion tube dia. : 12-14 mm
- Distal end bending at best : Up & Down 180 deg
  : Right and left 160 deg

Working length . 1600mm or more
Instrument channel diameter :- 3-4mm

Therapeutic ERCP Videoendoscope : Should have following technical specifications / features :

- Maximum scope Switch in order to permit user with Instant decision.
- Should be possible to effectively clean and remove blood/ tissue particles behind the elevator, by way of removal of distal- cap.
- Dedicated Flushing Adapter for ensuring optimum scope cleaning/ disinfection for all the channels.
- Minimum biopsy forceps visible distance 10mm or less .
- Facility to inform and keep track of maintenance Schedule to be inbuilt within endoscope .
- Autoclavable Air – Water & Suction valves for hassle free maintenance.
- Should have locking mechanism at the forceps elevator to lock the Guidewire in position .

Field of view : Not less than 100 degree
Direction of view : 5 to 6 deg Backward oblique
Depth of field : 5 mm to 60 mm
Distal end outer diameter : 11 mm to 13mm
Distal and bending : Up > = 120 deg . Down > 90 deg.
Right >110 deg . Left> 90dg
Working length : 1200 mm to 1300mm
Instrument channel diameter : 4.2mm

Mention all accessories supplied with the endoscope .Endoscope should be compatible with video monitor and processor and electrocautery to be purchased with the set

3:_Ultra Sound Machine

This ultrasound machine should be a state of the art with full digital technology for the application for trans –abdominal examination with color Doppler

1 Description or Function
High resolution Grey scale ultrasound with color Doppler for trans-abdominal examination

2 Operational Requirements
2.1 latest generation electronic phased array system with 4000 electronic channel system should be DICOM ready and capable to being interfaced with HIS/RIS/PACS
2.2 should be field up gradable to next generation system on site new software be upgraded free of cost for at least 3 years
2.3 Frequency compounding or better technology for bett3r resolution and penetration

3 **Technical Specification**
3.1 phased array probe system with 4000 electronic independent channels
3.2 256 gray shades for sharp contrast resolution
3.3 Probe to be supplied which should be latest generation wide band transducer

3.4 Harmonic imaging –system should have harmonics on all the probes following modes in harmonic with separate setting for
3.5 Trapezoidal image
3.6 Automated gain control for additional level of flexibility to image quality control
3.7 Real time high frequency 2D for higher resolution
3.8 Monitor should be 15" or more high-resolution colour monitor Tilt and swivel monitor should be able to view in all angles and all light condition
3.9 Various maps for pre and post processing
3.10 User defined system and application presets for multi-user department
3.11 Minimum 4.8 GB optical disc drive /80 GB hard drive for image storage and retrieval (standard with system)
3.12 Cine loop memory-than 100 frames

a.High frame rate review for better clarity of play back images study in slow motion
b.Quad loop with memory for pre and post images comparison of an procedure .
c.Memory-256 frames or more in QUAD loop
d. Frame grabber facility for post analysis
3.13 Facility for high definition digital acquisition review and editing of complete patient studies
3.14 Frame rate should be 1000 FPS or more.

4 **System configuration Accessories spares and consumable**
4.1 convex probe 2 -5 MHz and linear HR probe (more than 7.5Hz)
4.2 B/W thermal printer of latest moder
4.3 DVD / CD recorder with DICOM media transfer

5 Environmental factors
5.1 The unit shall capable of operating continuously in ambient temperature of 30 deg c and relative humidity of 80%
5.2 pre requisites should be clearly spelt out in terms of room requirements

6 Power supply
6.1 power input to be 220-240v Ac , 50Hz fitted with Indian plug
6.2 Reset table over current breaker shall be fitted for protection
6.3 suitable servo controlled stabilizer /CVT
6.4 Online UPS of suitable rating with voltage regulation and spike protection for 30 minutes back up.

7 Standards safety and training
7.1 should be FDA or CE approved product
7.2 electrical safety conforms to standards for electrical safety IEC-60601/IS -134540 particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment
7.4 type of protection against electric shocks class 1 degree of protection against electric shocks for ultrasound d probes type "BF" for ECG electrodes type CF
7.5 manufacturer / supplier should have ISO certification for quality standards

8 Documentation
8.1 user manual in English
8.2 service manual in English
8.3 list of important spare parts and accessories with their part number and costing available in stock with the supplier

9 Maintenance and serviceability
9.1 Remote service network connectivity
9.2 optional service agreement
9.3 online phone support
9.4 clinical application support

CAPSULE ENDOSCOPY SET

A COMPLETE SET INCLUDING THE FOLLOWING

02. DATA RECORDER
03. WORK STATION
04. CAPSULES .

WORKSTATION

01 WORK STATION WITH HIGH QUALITY COLOR INK JET PRINTER AND CUSTOMISED UP TODTE SOFTW ARE.
02 SHOULD BE ABLE TO EXPROT DATA THROUGH J PEG IMAGE AVI MOVIES, STML REPRORTS.
03 DISPLAY SHOULD CONSIST OF IMAGE, LOCATION TRACK AND TIME BAR LATEST SOFTW ARE .

DATA RECORDER

RECORDING LENGH APPROX 10 HOURS OR MORE.

CAPSULE

- At least 10 capsules should be supplied with the set.
- Dimension should not be more than 26 mm x 11mm

5:- Argan Plasma Coagulation System

ARGON BE MERSYSTEM.

SHOULD CONSIST OF:

01. ARGON BEAMER SYSTEM WITH TROLLEY WITH ARGON GAS SUPPLY SYSTEM, PATIENT PLATE AND DOUBLE FOOT SWITCH.
2 LECTRO SURGICAL UNIT.
3 FLEXABLE AUTO- CLAVABLE GIT PROBES.

ARGTEM BEAMER SYSTEM.

1. SYSTEM SHOULD BE SUTABLE FOR USE DURING VARIOUS G.I ENDOSCOPIC PROCEDURES.
2. ALL SISPLAY AND SIGNAL SETTING CAN BE SELECTED INDIVISUALLY .
3. FACILITY FOR PROGRAME STORAGE POSITION FOR CUSTOMISED SETTINGS
4. ADEQUATE SAFTY FEATURE .
5. SHOULD CLEARLY MENTION ABOUT THE AVAILABILITY SUPPLY AND APPROX. PRICE OF ARGON GAS) .

ELECTRO SURGICAL UNIT.

- SHOULD HAVE MONOPOLAR CUTTING COAGULATION AND BLENDED CURRENT FACILITY AND BIPOLAR COUGULATION MODE .
- SHOULD HAVE TIME CONTROLLED CUTTING MODE (ENDOCUT)
- SHOULD HAVE ADEQUATE SAFETY FEATURES.

FLEXIBLE G.I T PROBES.

01 GIT flexible APC probe 2.3 mm dia and working length about 2.2 meters .

02 G.I.T flexible A.P.C Probe 3.2mm día meter and working length about 2.2 meters .

03 .I.T Flexible A.P.C Probe Dia 1.6 mm and 1.5meter long

04 Appropriate connection cable.

6:- Electro Surgical Unit

Unit should Have

1 Monocular cutting Coagulation & Blended current facility and bipolar and Coagulation mode.

2 Have time control cutting mode and special mode of under water application (ENDOCUT)

3 Equipped with Micro- Processor based continuous feedback system which continuously take feedback system of the impidence of tissue and delivered constant power

4 Capacity to auto start last set values on the front panel, if unit shutoff.

5 Should have adequate high quality safety measures including safety alarm for leakage of current, patient plate, disconnection and continuous activation of unit

6 Foot switch, patient plate and required cable connection

7 Suitable for the various GI procedure including gastro- intestinal endoscopic procedure like endoscopic papilotomy and polypectomy etc.

Sl No. 5- Group- E (RIO)

TECHNICAL SPECIFICATIONS

I;- Double Frequency Nd: Yag laser

Name of equipment: Double frequency Nd; yag laser

Tech ; specification:

Model ISO /CE certified standard models Laser console

a) laser type;-
frequency doubled solid state diode pumped laser continuous wave

b) Wave length 532 nm

c) Laser output power 1.5 watts at the tissue

d) Aiming beam ; - Diode laser 635 nm

E)Electrical requirement ; 100-240 V 50/60 Hz

F;- Pulse Interval -100ms -6000ms

g) pulse duration 10-2500 ms

h) Cooling:- thermoelectric

Laser Delivery system : slit lamp delivery system with standard haagstreit model slit lamp with LIO

Laser link :- spot size continuously adjustable from 50-1000 microns parfocal fiber 50 microns N .AO. 1

Accessories ; laser safety glasses transport case with good cushioning required contact lenses panfunduscope lens (mainster or volk) and focal lens for macular lasers

UPS required ;- for backup support 15 minutes backup

II:_ SPECIFICATION FOR VITRECTOMY MACHINE

Name of equipment	**Vitrectomy machine**
Specification	**Vacuum** **1) should have the facility to generate direct venture vacuum of up to 650 mmHg through cassette system having 2 independent aspiration ports Dual pump peristaltic and venturi** **CUTTER** **1) should have the ability to driver vertical guillotine vitrectomy cutter UPTO 6000 cuts /minute** **2) should have the facility to allow surgeon to select from 3 different duty cycled options at any given cut rate** **3)should have the 3-D technology to linearly control vacuum and cut-rate simultaneously in vitrctomy mode** **<u>IOP control</u>** **1) should have the capacity to monitor infusion pressure constantly** **2) should have the capacity to compensate the infusion pressure constantly with results in a more stable IOP** **<u>Illumination</u>** **1) The system should have at least dual port xenon illumination .** **2) The system should recognize the gauge of illumination connected and adjust the illumination accordingly** **3) The system should have the facility to monitor the bulb life to avoid surprises** **1) The system should have RFID capacity which recognizes the porbe connected and automatically loads the settings.** **<u>MIVS</u>** **1) should have the capacity to support MIVS options like 23 G and 25G** **2) should have a single entry system** **The system should have the automated silicon oil injection capability** **The system should have Auto fluid /Air Exchange** **The system should have Auto Gas fill (C3F8 and SF6) option** **Should have the fully programmable footswitch with the facility of diathermy .** **should have the facility for extrusion of subretinal fluid . should have the facility of voice re-confirmation should have programmability to store various parameters** **should have the facility of fragmentation with the help of 4 crystal Ultrasound hand piece.** **Phacofragmrter handle a) 20Gb) 23G if available** **Should have phaco mode BIOM LENS** **UPS required for 15 minutes backup**

Sl No-6- Group-F (Urology)

1:- Technical Specification of Adult Resectoscope/Cystoscope/ Urethrotome

CYSTOSCOPE ---

-Adult cystoscope should have both sheath of 17F and 22 F with obturator. It should have both examination and working insert with albaran bridge(One way/two way suitable for the use of upto 10F catheters/forceps) . All accessories must be quoted with the instrument. The examination lense should be foreobliqe (30 degree Hopkins-2)

RESECTOSCPE

Continues flow 24 F resectoscope with visual obturator Iglesias type working element. The resectoscope should be Quoted with all standard accessories including telescope

URETHROTOME
20 F urethrotome sheath with dedicated working element

II:- TECHNICAL SPECIFICATION OF PEDIATRIC RESECTOSCOPE/CYSTOSCOPE/URETHROTOME

PEDIATRIC RESECTOSCOPE/CYSTOSCOPE AND URETHROTOME SHOULD QUOTED WITH ALL STANDARD AND OPTIONAL ACCESSORIES.

III:- :- Ureteroscope-7 to 9 f

Sl No-7- Group- G-(R O System)

Equipment Technical Specifications for Water Treatment System (R O System)
for
Haemodialysis Machines:

1 **Description of Function**

1.1 Water Treatment system is required to produce pure water for dialysis.

2 **Operational Requirements**

2.1 The system should be sufficient for online operation of 15-20 machines with pure water capacity of 1000-1200 litres per hour.

3 **Technical Specifications**

3.1 The system should comprise of pre treatment modules such as sand filter, activated carbon filter, water softener, 5-micron particulate filter and deionizer before the reverse osmosis unit and post R.O Bacterial Filters (1 micron) and UV light Disinfection for yielding high purity water.

3.2 All pre treatment modules should have programmable back wash and regeneration facility. These stages should be designed to handle water flow of **1500-2000 litres/hour**.

3.3 R.O. Unit should be compact in sleek cabinet, housing two R.O. membranes of equal output connected in parallel for being used alternately every two- three hours by automated valves, a high pressure pump and bypass mechanism. The control unit should be microprocessor/ microcontroller controlled. A 5-micron filter should protect the membrane.

3.4 The entire unit should have adequate monitoring of input and output water conductivity, feed water pressure and rejection flow rate.

3.5 The system should have protection alarm against low feed water, high output conductivity and high temperature of pump motor.

3.6 The system should include online water distribution to 10-to 12 machines in loop so that the unused water may be fed back to treatment unit, thus saving on water rejection.

3.7 The unit should have programmable and automatic rinsing/flushing facility, at regular intervals, when system is not in use, to prevent drying of filter media and R.O. Membrane.

3.8 The system should have programmable disinfection /de-calcification facility using commonly available disinfection / decalcification chemicals.

3.9 The system should accept feed water with TDS upto 1500 mg/litre and hardness up to 1 dH with 0.5% rejection of TDS & hardness and 99% rejection of bacteria and endotoxins.

3.10 The unit should be designed for maximum saving of raw water, with efficiency of 60-70%.

3.11 The water distribution loop, booster pump and storage water tank should be made up of stainless steel. Storage water tank should have capacity of at least 5000 litres with water level controller, outlet valves and easy cleaning provisions.

4 **System Configuration Accessories, spares and consumables**

4.1 System as specified-

4.2 The vendor should provide a system on a turnkey basis including all civil and electrical works including two booster pumps in parallel for providing water delivery. The vendor should inspect the site for this purpose.

4.3 The vendor should supply adequate filter cartridges, media or resins to last for at least 3 years. The vendor may visit the site and check the water quality.

4.4 The vendor should provide preventive maintenance which includes chemical checks, bacterial and pyrogen checks periodically during the warranty period.

4.5 The hospital will provide vacant space, water outlets and electrical points as specified by the vendor. Other plumbing works and civil works will have to be undertaken by the bidder. Vendor should ensure that there is no environmental damage of any kind takes place.

4.6 **Power Supply**

Power input :220-240V/ 50 Hz AC Single phase or 380-400V AC 50 Hz Three phase fitted with appropriate Indian plugs and sockets.

4.7 Output water quality should match AAMI (Association for the advancement of Medical Instrumentation) standards for Haemodialysis Water(Al < 0.01 mg/L; Ca < 2 mg/L; BACTERIA< 200 CFU/ml)

4.8 Should be FDA / CE / UL or BIS approved product.

4.9 The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

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

4.11 Certificate of calibration and inspection.

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

4.13 User list to be provided with performance certificate.

4.14 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%.

4.15 The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%

Sl No. 8- **Group-H (RCC)**

i:-

Specification of Medical Physicist Accessories

1	ISO alignment Device- • Radiation and light field congruence • Collimation rotation QA • Field size QA • Table isocentricity • ODI accuracy			
11	Gamma zone monitor • Low & high alarm • Range-0.1mr/hr to 1R/hr. • Four digit display • Threshold ranging 2 to 100 mv			
III	Kodak EDR -2m and X-omat film – • size -10 * 12 inch • PC-50 pc • High therapeutic • Sensative with cobalt-60 and Ir-192 source			
v	Motorized water phantom • According to TG-51 & TRS-398 • Must be operate in treatment room by SCU • Variable depth			
vi	Digital Bleeper mr * Continuously monitors , radiation exposure and provide instant accurate reading • Measure gamma and scatter radiation • Display can easily be read with instrument in pocket • Good energy and polar response • Energy range- 45 KEVto 6 Mev • Model- Bleeper Mr.			
vii	PTW SDS well type ion Chamber			

II:-

Specification of Mould Roomaccessories

1	Mould Room		
	Thickness-0.5cm		
	Bolus Materials, density-1.03 g/cc • Made up- solid homogenious uniform, tissue equivalent oil gel • Approved by FDA • Size 30 degree 30M, 40 degree 40cm •		
ii	Patient marker • skin marker • Not clear by water •		
iii	Rectal marker • Comparises of Tungsten ball • Adjustable anus marker • It should be show the rectal distance from the radiations source.		
iv	Body caliber • Straight scale with 55 cm length • Central axis and off axis measurement		
V	Orfit • It may be reused in five times. • Head& Neck, Pelvic		
Vi	Digital water bath • Digital Controlled (LEDO water bath 64* 50* 20 (d) cm size • Maximum temperature-70 degree calcicus • Can accommodate larger thermoplastic sheets including hip pelvic. •		
Vii	Heat Gun • * With 10 meter external cable. • Compatible with PTW-ion Chamber. Minor modification for thermoplastic orfit may possible.		
Viii	Shoulder traction		
iX	Fluoroscopy QA kit • Wide range digital kilo – voltage meter • Digital x-ray pulse counter • Radiation check • Low -50 0 90 Kvp resolution • High-80 to 150 Kvp, o.1 Kvp resolution. • Range 0-to 199 mAs • Accuracy +- 2% of reading		

	• Power requirement 09 v alkaline battery		

Mould Room accessories/Specification

	Items name	Technical specification of
	3-d STYROFOAM/ Block compensator cutter	Computer controlled based on CT pixel data milling Styrofoam milling of ally directly for compensator. Maximum cutting area withing one block; 380 x 380mm Maximum dimension of foam block ; 450x 420mm Maximum cutting speed; 1000/s Repeat positioning accuracy; <0.1mm Cutting accuracy : < 0.5 mm Cutting accuracy : 0.5mm System dimensions; 535x 705mm
	Water bath	Digitally controlled 9 led) water baty of 64x50x 20(d) cm size. Can accommodate larger thermoplastic sheets including hip- pelvic.
	Heat gun	With temperature range for thermoplastic cutting
	KAvo hangng motor with hand piece & accessories	For thermoplastic modification
	Ostaloy	100kg (Bismith 50% lead 25% cadmimum 13% tin 12%
	Alloy melting pot	Highly durable melter has heavy gauze stainless inner and outer walls, full trap ceramic heaters. Temperature control and internal heater fitted ball valve dispenser to avoied solidification of alloy inside tap.
	Block tray cart/Block tray cabinet multiple hole	Storage/ transfer of block
	Drill press with drill bit set	Should have tap dispenser
	Lathe machine	For cutting perpex sheet designed applicator and fabricating new gadgets
	Block tray/ shielding tray	Block mounting tray temple tray exac. Tray available with standard or custom hole and slot pattern in polycarbonate or acrylic for any brand of cobalt with multiple holes.
	Cooling Plates	water cooled plate size 24”x12”x1” thick aluminum plate with water intake and discharge nozzles. Quick clamp cooling tray.
	Blocks	Testicular shield , pituitary shield, eye shield lance shields
	Electric drills	Drills 3/8” huck 0-1200 RPM 6.7 Amps. 120 V Pistal grip drill tool weight 3.3 ponds cord length 8” tool length 10.5” includes soft grip handle and spindle lock with composite gear case

		steel gears. cut
	Drill presses	Drill presses are ideal for drilling blocks and trays . the presses have a fine argain heavy caste iron head base. Table and column to reduce vibration and increase strength and rigidly for safe accurate operation.
	Soldering iron.	This long tapered 45 watt soldering iron with chisel tip is used for trimming alloy block.
	Screws & washers	These stainless steel hex/ washer screw are used to secure alloy to treatment trays. TWhe washers are used under the screw headed to prevent the tray from cracking
	Immobilization devices	Including neck rest ABCDEF , KNEE REST & KNEE CRUTCH ABDOMEN & PELVIC POSI-TIONING CF HIUP FIX ESIGN CF ORFIT DESIGN , BELLY BOARD LEG. IMMOBILIZER PRONE NECK REST PRONE PILLOW LATERAL BASE PLATE , TITLLING BASE PLATE SHOULDERS RETRECTOR THORACIS PLATE, PEDIATRIC NECK REST. BASE BPLATES FOR PLASTER OF PARIS . ORFIT MOULDS LIKE HEAD, HEAD & NECK, PELVIC & SMALL REGIION , BITE BLOCK SYSTEM, BELLY BOARD, BREAST IMMOBILIZATION STYSTEM, WITH ORFIT COMFORT CUSHION, UNIFRAME BASE PLATE, VERSA BOARD CARBON FIBER BASE PLATE , WHOLE BODY BASE PLATES COUCH EXTENTION BOARD , VACCUM CUSHION SETS PILLOW SETS, MOUTH BITE DEM=NTAL MATERIALS , PITUITARY PILLOW SETS, MOUITH BITE DENTAL MATYERIALS PITUATARY NECK REST (3+4) ZIG NECK COMPENSATOR BLOCK TATTOO NIDLE BOLUS OF DIFFERENCES SIZES ETC.
	FOR PROTECTION	WORK APRON PROTECTIVE GLASSES PROTECTIVE GLOVES RESPIRATORS DECONTAMINATION
	POSITINING LASER	ONE SAGITTAL & TWO CROSS LASERS
	TABLE	SIMILAR AND COMPATIBLE WITH TREATMENT COUCH
	FLAT BOARD	TO BE USED IN CT SCAN ROOM TO COMPATABLE WITH TABLE TOP COBALT MACHINE & SIMULATOR

Sl No.9- Group- I-(Patholgy)

Microscope

I:-(Trinocular)

Trinocolar microscope with digital camera . Software included for image acquision with computer 18 inch monitor with printer and suitable UPS under annual maintenance contract the instrument should have the following properties .

Optical system	**CF 160 infinity optical system par focal distance 60mm**
Illumination	**High luminescent white LED illuminator (Eco-illumination 6v20w/6v30v halogen lamp compliant multi-voltage (100v-240v**
Eyepieces (F.O.V.)	**CFIE 10x(20mm) CFIE 15 x (12mm)**
Focusing	**Coaxial coarse/fine focusing Right fine, Left coarse/fine, Focusing stroke26.5mm, Coarse 30.7 mm/ rotation Fine 0.2 mm/ rotation Coarse motion torque adjustable Refocusing function**
Eyepiece Tube	**E2 TB Binocular tube * E2-TF Trinocular tube Eyepiece / port 100/0, o/100 360 Rota table C-TE2 Ergonomic Binocular tube inclination 10-3G degree Extension up to 40**
Nosepiece	**Quadruple nosepiece (within main body**
Stages	**Rectangular stage (within main body) with specimen holder cross travel 78(x) x 54 (Y) mm**
Objectives (NA)/W,D. mm	**CFIE plan achromat 4x(0.10/30) CFIE plan achromat 10x(.0.25/0.7)CFIE plan achromat 40x(o.65/0.65)CFIE plan achromat 100xoil (1.25/0.23) CFI achromat DL and other higher grade CFI60 objective can be used**
Condensers	**E2 Abbe condenser N.A 1.25 aperture diaphragm with position guide makings for respective CFIE plan objectives E2 phase condenser N.A 1.25 aperture diaphragm with position guide marking for repective CFIE achromat DL objectives for the model without field diaphragm C-C achromat condenser achromat swing out condenser 2 -100x Dark field condenser (dry) C-C phase contrast condenser**
Observation Methods	**Bright field Epi-fluorescence dark field phase contrast simple polar zing**
Intermediate Attachment	**E2 FM Epi – fluorescence attachment 2 filter cubes mountable Y -THS Teaching Unit B (side –by- side) Y- THF Teaching unit (face-to-face) Y-IDT Drawing tube Y-IER Eye level Riser**
Power consumption (max)	**Normal value 3 w (LED model) 41 w (halogen model)**

(II);- Microscope (Binocular)

Maintenance free minimum two warranty focusing mechanism by ball bearing movement by uniaxial focusing control for both coarse and fine adjustment (single uniform speed for precision focusing movement having the following properties in details.

Optical system	CFI optical system
Illumination	High luminescent white LED illuminator 6v 20w halogen lamp compliant multi voltage (100 v 240 v) minimum 50,000 hrs of lamp life
Focusing	Coaxial coarse / fine focusing cross roller focusing stroke 22mm coarse 37.7mm rotation fine 0.2 mm / rotation coarse motion torque adjustable
Tubes	Binocular tube
Nosepieces	Quadruple nosepiece (within main body) revolving mechanism with multiple ball bearings elastic nosepiece grip ring
Stages	Rectangular mechanical stage (within main body with specimen holder with vernier calibrations cross travel 75(X) x (Y)40mm
Objection	Precise centered anti-fungal eye piece with multi layer anti-reflection hard coating & having – precise entered antifungal plan Achromat ultra high resolution plan Achromatic objective 4x,10x, 20x, 40x, & 100x (spring loaded
Condensers	YS-CA Abbe condenser N.A 1.25 aperture diaphragm with position guide marking for respective objectives 33 mm filter attachable phase condenser
Observation Methods	Bright field Dark field phase contrast
Optional accessories	Phase contrast attachment object marker brickfield ring unit mirror unit cord hanger storage case Variable intensity control for the bulb detachable AC power cord and three pin sockets Absolute cool & white illumination Dust cover & clearing kit No heat during usage of equipment

(III) **;-Block Cabinet capcities 20000 Blocks ;-**

1; Block cabinet capacity 20000 block made of Mild steel duly powder quoted
2; The internal drawers should made of MS duly powder coated channel drawer having 4 to 8 compartment with capacity of approx. 125 blocks with embedding ring.
3:- Index card holder and handle provided on each drawer.
4: Handle provided on front panel
5:- With door & provided with lock & key

IV;- **Semi Automatic Roatary Microscope**

- Motorized feeding system with manual sectioning
- coarse feed also be motorized
- horizontal specimen feed 26-27mm vertical specimen stroke upto 52mm
- Horizontal specimen orientation +/25mm vertical specimen orientation+/-20mm
- Max specimen size 50x66x30mm (WxHxD)
- Specimen orientation Horizontal 8 and vertical 8
- With blade holder for disposable blades
- With universal fast Release cassette clam suitable for jet cassettes
- with large section waste tray
- comply with international quality control certification like ISO CE etc
- Accessories

  with suitable voltage stabilizer (ISI certified)

  disposable blades 200 blades & others

IV;- AUTOMATIC TISSUE PROCESSOR

It should be a semi – enclosed tissue processor with the perfect combination of proven technology and a modern, functionally enhanced design. Gentle specimen processing and maximum safety at all stages of processing are the result of robust engineering desgn based on proven and precise mechanics' in conjunction with a modern user interface. It should have following properties;-

Carousel type with12 stations.

Configuration; Basic instrument Vacuum function fume control system vacuum funmction with fume control system.

Option two basket loading

Tissue basket made of metal with varying capacities of up to more than 80 cassettes

Ergonomic control panel with foil protected keyboard and LCD

Infiltration time separately programmable for each station.

Dealyed start function up to 9 days

Possibility of interrupting an automatic process for reloading or removing cassettes for special applications before the end of a run

Easy editing and changing of programs even during a processing run

Audible alarms error messages and warning codes

Advances safety concept

Wide range of accessories.

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