Page 1 of 28 Cost- Rs.1000

Tender Enquiry No. F.No.24/Eqpt/36/-RIS (Admin)

VAT- Rs.135

TENDER NOTICE Equipments for Department of Medicine AIIMS, Rishikesh, Virbhadra Marg, Rishikesh, Dehradun

Total Cost-1135

Date: 7th Sep, 2013

On behalf of the Director, All India Institute of Medical Sciences, Rishikesh tenders in sealed cover are invited under **two-bid** system from manufacture and their authorised dealers/ distributors for providing for Equipments for Department of Medicine AIIMS Rishikesh.

The interested manufactures and their authorised dealers/ distributors are required to submit the technical and financial bid separately. The bids in Sealed Cover-I containing "Technical Bid" and Sealed Cover-II containing "Financial Bid" should be placed in a third sealed cover super scribed "**Tender For Department of Medicine**" and should reach at the office of "**The Administrative Officer, AIIMS, Virbhadra, Marg Rishikesh (Dehradun) - 249201,** by or before on 03.00 PM on **30-09-2013.** The bid received after due date and time will not be entertained whatsoever may be the reason. The technical bids shall be opened on the next day i.e **01-10-2013** at **03.00PM** at AIIMS, Rishikesh. In the event of any of the above mentioned date being declared as a holiday / closed day, the tenders will be opened on the next working day at the appointed time. The date of technical evaluation of items and opening of financial bid of technically qualified agencies will be announced later.

The tender document containing technical bid form, financial bid form, technical description/specification & item and terms & conditions can be purchased from AIIMS, Rishikesh from **09-09-2013 to 29-09-2013** between 10.00 AM and 02.00 PM on non-refundable payment of Rs.1135.00 (Rupees one thousand one hundred thirty five only) or can be downloaded from website <u>www.aiimsrishikesh.edu.in</u>. Those who download the tender document from website should enclose Demand Draft/Pay Order for Rs.1135.00 (Rupees one thousand one hundred thirty five only) (non-refundable) in favour of **"AIIMS, Rishikesh"**, payable at **Rishikesh**, not later the date of **29-09-2013** along with their technical bid in the Cover-I "Technical Bid". The amount of bid security (EMD) for **Instrument for Department of Medicine** as given in table-1 of tender documents should be paid in the form of FD/BG/TD/CD in favour of **"AIIMS, Rishikesh"** payable at **Rishikesh** and will be placed in cover-1 with technical bid. The Tender Documents are not transferable.

Any future clarification and/or corrigendum(s) shall be communicated through Administrative Officer on the AIIMS, Rishikesh website: <u>www.aiimsrishikesh.edu.in</u>.

Rakesh Kumar Administrative Officer AIIMS, Rishikesh

TENDER DOCUMENT "Equipments for Department of Medicine" AIIMS, Rishikesh

TECHNICAL BID

(In separate sealed Cover-I super scribed as "Technical Bid")

1.	Name & Address of the manufacture and their authorised dealers/ distributors/Agency with phone number, email, name and telephone/mobile	
2.	Specify your firm/company is a manufactures/ authorised dealer/ distributor/ Agency	
3.	Name, Address & designation of the authorized person (Sole proprietor/partner /Director)	
	Have you previously supplied these items to any government/ reputed private organization? If yes, attach the relevant poof. Please provide a notarised affidavit on Indian Non Judicial stamp paper of Rs. 10/- that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. If you don't fulfil this criteria, your tender will be out rightly rejected.	
5.	Please attach copy of last of Income Tax Return	
6.	Please attach balance sheet (<i>duly certified by Chartered Accountant</i>) for <i>last three (3) years</i> (Annual minimum turnover should not be less than 25 lakhs)	
7.	PAN No. (Please attach copy)	
8.	VAT/Service Tax Registration Number. (Please attach copy)	
9.	Acceptance of terms & conditions attached (Yes/No). Please sign each page of terms and conditions as token of acceptance and submit as part of tender document with technical bid. Otherwise your tender will be rejected.	
10	Power of Attorney/authorization for signing the bid documents	
11	Please submit a notarised affidavit on Indian Non judicial stamp paper of Rs. 10/- that no case is pending with the police against the Proprietor/firm/partner or the Company (Agency). Indicate any convictions in the past against the Company/firm/partner. Please also declare that proprietor/firm has never been black listed by any organization.	
	. Please submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that they will provide complete warranty for all equipments for 2 (two) years & CMC for 5 (five) years of these equipments.	
13	Please furnished a notarised affidavit on Indian Non judicial stamp paper of Rs.10/- that they will supply spare parts for next 10 years at reasonable price.	
	Details of the FD/BG/TD/CD of bid security (EMD) /BG/TD/CD No:	Detail of cost of Tender for Rs. 1135/- (if
Dat	ze:	downloaded from website)
Рау	vable at-	DD No. Date:
		Payable at-

Declaration by the Tenderer:

This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained herein and undertake myself/ourselves to abide by them.

Encls: 1. DD/Pay Order (if tender form is downloaded from the website of this Institute)

- 2. FD/BG/TD/CD
- 3. Terms & Conditions (each page must be signed and sealed)
- 4. Financial Bid

(Signature of Tenderer with seal)

Name:

Address :

Place:..... Date:....

Tender Sl.No:

Sign of issuing Authority

"Equipments for Department of Medicine" AIIMS, Rishikesh

FINANCIAL BID

(In sealed Cover-II super scribed "Financial Bid")

To,

Administrative Officer AIIMS Rishikesh, Virbhadra Marg Rishikesh (Dehradun)

Dear Sir,

Our quoted rate for supplying the Equipment of Department of Medicine for AIIMS, Rishikesh will be as follows.

S.No.	Name of Equipments	Unit Price (In Rs.)		Unit Price (In Rs.)	
		With 2 years warranty (if applicable)		CMC for 5 years (In Rs.) (if applicable)	
		(In figure)	(In words)	(In figure)	(In words)
36(1).	Multipara Monitor				
36(2).	ECG Machine				
36(3).	Haemodialysis Machine				
36(4).	Infusion Pump				
36(5).	Defibrillator				
36(6).	Ultasound Portable Machine With ECHO AND BIOPSY PROBE				

The unit cost should be mentioned as per table 1. The above quote should include all applicable taxes and F.O.R. AIIMS, Rishikesh. L1 will be decided on the basis of unit cost of individual equipment.

Declaration by the Bidder:

- 1. This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained in Tender document regarding terms & condition of the contract, rules regarding purchase of equipments for Department of Medicine. I/we agree to abide them.
- 2. No other charges would be payable by Client and there would be no increase in rates during the Contract period.

(Signature of Bidder with seal)

Place:	 	 	

Date:....

Name:

Seal:

Address

Tender Sl.No:

Sign of issuing Authority

"Equipments for Department of Medicine" AIIMS, Rishikesh

Terms & Conditions

(A) **Information and Conditions relating to Submission of Bids**

1. The tender document containing eligibility criteria, scope of work, terms & conditions and draft agreement can be purchased from AIIMS, Rishikesh on any working day from **09-09-2013 to 29-09-2013** between 10.00 AM to 02.00 PM on payment of non refundable charges of Rs 1135/- (Rupees one thousand one hundred thirty five only) or can be downloaded from website <u>www.aiimsrishikesh.edu.in</u>. Those who download the tender document from Website should enclose a Demand Draft/Pay Order for Rs 1135/-(Rupees one thousand one hundred thirty five only) in favour of **"AIIMS, Rishikesh"**, payable at Rishikesh, not later the date of **29-09-2013**, along with their bid in the Cover-I containing "Technical Bid".

2. The interested firms/suppliers are required to submit the Technical and Financial Bids separately in the format enclosed. The bids in sealed Cover-I containing **"Technical Bid"** and sealed Cover-II containing **"Financial Bid"** should be placed in a third sealed cover super scribed **"Tender for Purchase of equipment Department of Medicine"** should reach AIIMS, Rishikesh by or before 03.00 PM on **30-09-2013**. The Technical bids shall be opened on next day i.e **01-10-2013 at 03.00 PM** at AIIMS, Rishikesh in presence of the bidders or their authorized representatives who choose to remain present. The Tender received after due date & time will be rejected and no claim shall be entertained whatsoever may be the reason.

3. The pre bid conference would be held on **18-09-2013 at 03.00 PM** in the office of Dy Director (Administration), AIIMS, Rishikesh. All firms representative who are attending the pre bid meeting, shall produce an authorisation letter from their firm on the firm's letter head. They are required to put their query in writing before the committee.

4. All the duly filled/completed pages of the tender should be given serial /page number on each page and signed by the owner of the firm or his Authorized signatory. In case the tenders are signed by the Authorized signatory, a copy of the power of attorney/authorization may be enclosed along with tender. A copy of the terms & conditions shall be signed on each page and submitted with the technical bid as token of acceptance of terms & conditions. Tender with unsigned pages/incomplete/partial/part of tender if submitted will be rejected out rightly.

5. All entries in the tender form should be legible and filled clearly. If the space for furnishing information is insufficient, a separate sheet duly signed by the authorized signatory may be attached. No overwriting or cutting is permitted in the Technical Bid as well as Financial Bid unless authenticated by full signature of bidder. Any omission in filling the columns of Financial Bid form (Schedule of Rates) shall debar a tender from being considered. Rates should be filed up carefully by the tenderers. All Corrections in this schedule must be duly attested by full signature of the tenderers. The corrections made by using fluid and overwriting will not be accepted and tender would be rejected.

6. The bidder shall pay the respective amount of Bid Security (EMD) as mentioned in table-I along with the Technical Bid by Demand FD/BG/TD/CD in favour of "AIIMS, Rishikesh" drawn on any Nationalized Bank/ Scheduled Bank and payable at Rishikesh and must be valid for (6) six month. Bids received without Earnest Money deposit (EMD) shall stand rejected and thus shall not be considered for evaluation etc at any stage. The original EMD will be put in cover-I containing Technical bid.

- a) The Public Sector Undertaking of the Central/State Govt. are exempted from furnishing Earnest Money along with tender.
- b) The firms Registered with DGS & D/SSI and any approved source of Centre/States Govt. are not exempted from furnishing Earnest Money in so far as this institute is concerned.
- c) Earnest Money deposited with AIIMS, Rishikesh in connection with any other tender enquiry even if for same/similar material / Stores by the tenderer will not be considered against this tender.

7. The bid security (EMD) without interest shall be returned to the unsuccessful bidders after finalization of contract.

8. The successful bidders has to constitute a contract on Indian non judicial stamp paper of Rs.100/- (Rupees one hundred only) and also required to furnish the security deposit @ 10% of contract value in the form of FD/BG/TD/CD of any nationalised bank in favour of AIIMS, Rishikesh & payable at Rishikesh only. The EMD deposited by successful bidder may be adjusted towards Security Deposit as demanded above. If the successful bidder fails to furnish the full security deposit or difference amount between Security Deposit and EMD within 15 (fifteen) days after the issue of Letter of Award of Work, his bid security (EMD) shall be forfeited unless time extension has been granted by AIIMS, Rishikesh.

9. The EMD shall be forfeited if successful bidder fails to supply the goods/equipment in stipulated time or fails to comply with any of the terms & conditions of the contract or fail to sign the contract.

10. The bid shall be valid and open for acceptance of the competent authority for a period of 180 (one hundred eighty) days from the date of opening of the tenders and no request for any variation in quoted rates and / withdrawal of tender on any ground by bidders shall be entertained.

11. To assist in the analysis, evaluation and computation of the bids, the Competent Authority, may ask bidders individually for clarification of their bids. The request for clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.

12. After evaluation, the work shall be awarded normally to the Agency fulfilling all the conditions and who has quoted the lowest rate as per financial bid after complying with the all the Acts / provisions stated / referred to for adherence in the tender.

13. The competent authority of AIIMS, Rishikesh reserved all rights to accept or reject any/ all tender(s) without assigning any reason. It can also impose/relax any term and condition of the tender enquiry after due discussion in pre bid conference. This will be communicated to all tenderers in writing. AIIMS, Rishikesh also reserves the right to reject any bid which in his opinion is non-responsive or violating any of the conditions/specifications without any liability to any loss whatsoever it may cause to the bidder in the process.

14. Tender must be submitted on the prescribed Tender Form otherwise tender will be cancelled straightway.

15. The tender form is not transferable.

16. Canvassing in any form is strictly prohibited and the tenderer who are found canvassing are liable to have their tenders rejected out rightly.

(B) OTHER TERMS & CONDITIONS OF THE TENDER

1. Rates quoted should be inclusive of all applicable taxes, packing, forwarding, postage and transportation charges at FOR AIIMS Rishikesh.

2. All the rates should be mention in Indian national currency (INR) only. The rates quoted in foreign currency will not be entertained in this tender enquiry & such tenders will be cancelled straightway.

3. Rates should be mentioned both in figures and in words. The offer should be typed or written in Ink Pen/ Ball Pen without any correction. Offers in pencil will be cancelled. Telegraphic/ Telex/ Fax offers will not be considered and cancelled straightway.

4. The supplier shall submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. Therefore, if at any stage it has been found that the supplier has quoted lower rates than those quoted in this tender, the Institute (the purchaser) would be given the benefit of lower rates by the Supplier. **If such affidavit is not submitted, tender will be out rightly rejected.**,

5. If the price of the contracted articles is/ are controlled by the Government, in no circumstances the payment will be higher than the controlled rate.

6. Tender will be regarded as constituting an offer open to acceptance in whole or in part at the discretion of the competent authority of the institute for a period of 180 days (6 months) valid from the date of opening of the tender by the committee.

7. The time for the date of delivery/ dispatch stipulated in supply order shall be deemed to be essence of the contract and if the supplier fails to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch in the supply order, liquidated damages may be deducted from the bill @ 0.5% per week subject to maximum of 10% of the value of the delayed goods or services under the contract. The competent authority of the institute may also cancel the supply. In such a case, bid security of the supplier shall stand forfeited.

8. In case the quality of goods supplied are not in conformity with the standard given in tender and as per the samples supplied or the supplies are found defective at any stage these goods shall immediately will be taken back by the supplier and will be replaced with the tender quality goods, without any delay. The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required description / specifications and liquidates damages shall be charged.

9. In case the tenderer on whom the supply order has been placed, fails to made supplies within the delivery schedule and the purchaser has to resort risk purchase, the purchaser (AIIMS, Rishikesh) may recover from the tender the difference between the cost calculated on the basis of risk purchase price and that calculated on the basis of rates quoted by tenderer. In case of repeated failure in supplying the order goods the supply order may be cancelled and bid security deposit will be forfeited.

10. The Specification and quantity of the item needed is mentioned in **<u>Table I</u>** but it is approximate detail and is subject to increase/decrease at the discretion of the competent authority of AIIMS, Rishikesh. The payment would be made for actual supply taken and no claim in this regard should be entertained.

11. Where the specifications are as per tenderer's range of product & tenderer's offer should mention that the item meets all specifications as per the tender enquiry and if there are improvements/deviations the same should be brought out on separate Letter Head of the firm. It would be discretion of the competent authority of the institute to accept or reject such deviations which are not in accordance with our required specifications as per given in **Annexure-I.**

12. It must be mentioned clearly whether tenderer is a manufacturer/sole distributor/sole agent for the items for which he is quoting.

- a. **Manufacturer** must add a certificate that item(s) is manufactured by them as per range of products.
- b. **Sole Manufacturers** must add a certificate that they are the sole manufacturer of the Item for which they are quoting in this tender enquiry & item is /are their proprietary Item in India. The rate certificate is also required from the sole manufactures that the Rates quoted are the same as they quote to other State/Centre Govt./reputed Private Organisation and DGS&D rate for the similar item(s) and these are not higher than those quoted by them.
- c. **Authorized agents** must add authority letter from their Manufacturer/Principals on the letter head of the manufacturer/principals in proforma given in attach duly supported by a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- (Rupees ten only) that they are quoting Rates on behalf of them. The authorization letter must give/mention the purpose for which it is allowed. The validity period of the authorization letter must be mentioned in the authority letter otherwise tender will be liable to rejection.

13. The Tenderers should furnished a copy of **S.T. /C.S.T./VAT registration number**, the **State / U.T. of registration** and the date of such registration. Tenders not complying with this condition will be **rejected**.

14. The tenderers should submit along with the tender, a photostat copy of the last Income Tax return and copy of current valid income tax <u>clearance certificate (IT CC)</u> otherwise tender may be ignored.

15. In case asked, tenderer must personally supply a sample/give the demonstration of the **equipments** to the competent authority of the institute and in that case all the expenses will be borne by the supplier.

16. Full description & specifications, make/brand and name of the manufacturing firm must be clearly mentioned in the tender failing which the tender will not be considered. The tenderer must also mention whether the goods are imported / indigenous. Descriptive literature /catalogues must be attached with the tender in original failing which tender may be ignored.

17. Any failure or omission to carryout of the provisions of this supply by the supplier shall not give rise to any claim by supplier and purchaser one against the other, if such failure or omission arise from an act of God which shall include all acts of natural calamities from civil strikes compliance with any status and or requisitions of the Government lockout and Strikes, riots, embargoes or from any political or other reasons beyond the suppliers control including war (whether declared or not) civil war or state of incarceration provided that notice of the occurrence of any event by either party to the other shall be within two weeks from the date of occurrence of such an event which could be attributed to force majeure.

18. The Courts at Rishikesh/ Dehradun alone and no other Court will have the jurisdiction to try the matter, dispute or reference between the parties arising out of this tender/supply Order/contract.

19. Tenderer will have to provide complete warranty for all equipments for 2 (two) years & CMC for 5 (five) years of these equipments. Financial bid should be quoted accordingly. In this regard, the tenderer shall submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that they will provide complete warranty for all equipments for 2 (two) years & CMC for 5 (five) years of these equipments.

20. If at any time, any question, dispute or difference whatever shall arise between supplier and the institute (Purchaser) upon or in relation to or in connection with the agreement, either of the parties may give to the other notice in writing of the existence of such a question, dispute or difference and the same shall be referred to two arbitrators one to be nominated by the institute (Purchaser) and the other to be nominated by the supplier. Such a notice of the existence of any question dispute or difference in connection with the agreement shall be served by either party within 60 days of the beginning of such dispute failing which all Right sand claims under this Agreement shall be deemed to have been forfeited and absolutely barred. Before proceeding with the reference the arbitrators shall appoint/nominate an umpire. In the event of the arbitrators not agreeing in their award the Umpire Appointed by them shall enter upon the reference and his award shall be binding on the Parties. The venue of the arbitration shall be at Rishikesh, (Uttarakhand, India). The arbitrators/Umpire shall give reasoned award.

21. Tenderer should ensure and give an affidavit on Indian Non Judicial stamp paper of Rs.10/- with technical bid that spare parts and consumables for these equipments/instruments will be available and rates will be reasonable for next 10 (ten) years.

I / We hereby accept the terms and Conditions given in the tender

(Signature & Stamp of the bidder)

Note- Please sign each page of document including terms & conditions & tender

Table-I

Details of items & their tentative quantity and EMD

The following items manufactured by international firms of repute with CE and FDA approval are required.

S.no.	Item	Qty.	Total EMD
36(1).	Multipara Monitor	06	55,500/-
36(2).	ECG Machine	01	3,000/-
36(3).	B6(3). Haemodialysis Machine		30,000/-
36(4).	Infusion Pump	20	17,000/-
36(5).	Defibrillator	02	21,600/-
36(6).	Ultrasound Portable Machine With ECHO AND BIOPSY PROBE	01	66,000/-
		Total EMD :	- 1,93,100/-

ANNEXURE-I

SPECIFICATION

36(1). Specification of Multipara Monitor

- i. Essential measurement parameters such as Spo2, TEMP, ECG, PR/HR, RESP and NIBP these provides high cost performance ration to give information right at the patients side, such as post operative care, lower acuity environment, and patient transfer.
- ii. Lightweight, compact, portable
- iii. 10 inch wide color TFT LCD
- iv. SpO2 pulse- tone modulation (pitch Tone)
- v. Multi- leads ECG, waveforms (7 leads) display
- vi. Arrhythmia analysis, multi lead S-T segment
- vii. Built in rechargeable Lithium ion battery
- viii. Network capability
- ix. Powerful data storage capacity (96 hours graphic and tabular trends of all parameters, 500 NIBP measurement, 60 alarm events)
- x. Optional accessories for adult, paediatrics and neonate
- xi. Compatible with invasive BP, CVP, PCWP monitoring
- xii. Accessories for measurement of SpO2, TEMP, ECG, PR, RESP rate and NIBP, invasive BP, CVP

36(2). ECG MACHINE

COMPUTERIZED MULTI CHANNEL ECG MACHINE

- i. Should have 12 channel simultaneous acquisition
- ii. Should have sensitivity range of 5mm/mV, 10mm/mV, 20mm/mV + 5%
- iii. Should have scrolling speed of 5mm/s, 10mm/s, 25mm/s & 50mm/s
- iv. Should have built in ECG interpretation module
- v. Should be able to simultaneously print 6 channels of ECG in real time
- vi. Should have built in thermal printer to print in automatic and manual modes
- vii. Should have large backlit LCD display to display 6 channels
- viii. Should have built-in defibrillation protection
 - ix. Should have manual, automatic and continuous modes for measurement
 - x. Should have internal re-chargeable battery source to support continuous operation
 - xi. Should operate in ambient environment of temperature (10-50□C) & relative humidity (25% 95% non condensing)
- xii. It should be light weight and portable unit
- xiii. Should be supplied with standard accessories power adapter (1 no.), Patient connector cable (1 no.), gel (1 no.) electrodes set (1 no.), thermal paper rolls (2 nos.)

36(3). Technical Specification for Haemodialysis Machine

1.	General Requirements		
(i)		Microprocessor Based Control	Should be microprocessor controlled & capable of providing therapies such as conventional HD, online HDF, HF & feature such as online priming Acetate & Bicrab dialysis, Volumetric UF, Sodium/UF profiling online help option (in case of alarm conduct) BPM, OCM
(ii)		Graphical User interface (Display)	 High resolution TFT touch screen with functional keys & provide cumulative graphical display of treatment data & physiological trends including sodium & UF profiles. Freely rotatable & adjustable design. Should display different menus (preferably 9) indicating blood system, preparation, dialsate, UF, Treatment, Reinfusion, Cleaning system parameter, & screen saver
			option. Should have integrated patient card reader system where at least 03 treatment data can be recorded.
(iii)		Safety Features	Should be a close system design with volumetric balancing system, i,e, volume in = volume out for fresh & used dialysate.
			Volumetric dilution of concentrates with RO water & volumetric UF
			Self test after switching ON, start up T1 test before each treatment, to ensure functioning of all hardware components.
			Leak sensor & connection test as additional safety.
2.	Performance Requirements		
(i)	Blood Circuit	Vascular Access	Single Needle click clack should be available blood pump with feature such as flow range of 30-600 ml/min, with 10 ml increments & accuracy upto +10% Effective blood rate should be displayed in accordance to the setting & tubing size with diameter 2 mm- 10
			could be used. An emergency hand crank should be provided to enable

1			reinfusion in case of power failure.
			Emergency button enabled bolus, UF control , BPM control.
			Air free pressure measurement on arterial line, in view of reducing chance of blood clot.
			Protective cover for whole entire EBM (Extracorporeal Blood ckt.)
(ii)		Heparin Pump	Should be automatic or manual start /stop with infusion rate of 0.5-10 ml/hr in 0.1 ml/hr increments & + accuracy.
			Heparinization stop time should be user adjustable in 1 min increment & positive / negative extracorporeal blood ckt pressure should not affect infusion rate.
			Auto Bolus administration should be programmable from 1-20 ml/hr.
(iii)		Pressure Monitoring &	Venous pressure monitoring & adjustable in case of alarm condition.
		Alarms	(Range :- 100 to + 500 mm Hg Accuracy: 7%
			Arterial pressure monitoring & adjustable in case of alarm condition.
			(Range: - 300 to + 300 mm Hg, Accuracy: +7%)
(iv)		Air Detection	Ultrasound design should be activated for air & micro bubbles over entire blood flow range.
			Sensitivity of detection mechanism should be specified in terms of air bubble size & on detection of excessive air, venous clamp should activate & blood pump stop.
			Reference point for level detector measurement should be about 13 + 4 mm, from upper adge of venous chamber.
3.	Dialysis Circuit	Treatment/ Therapies	Should facilitate Acetate & Bicarbonate dialysis. Variable sodium & bicarbonate options
			Volumetric UF & sodium/UF profile options.
(i)		Dialysate flow rates	A range of 100-1000 ml/min should be available with resolution of 100 ml/min, with accuracy + 10% & provide good clinical outcome on EDDF therapy for acute patient.

		Auto flow function should be available with ON/OFF feature, in view to save electricity & water consumption & synchronize with blood flow changes ecoflow function should be available when preparation phase is finished to save dialysate, water , electricity pre-programmed more than 10 types of concentrated should be available & its change should not be necessary for calibration
(ii)	Temperature Control & Alarm	Control range : 34.0 to 39.0 deg Celsius with 0.5 increment Alarm limits: 33.5 to 40.0 deg Celsius
(iii)	Conductivity Control & Alarm	Range : 12.8 to 15.7 mS/cm Accuracy: + 0.1 mS/cm Dialysate conductivity should be adjustable by sodium concentration, for Acetate Dialysis with range from 125 to 151 mm ol/ I in increment of 1 mm ol/I. For Bicarbonate dialysis, range from 125 to 151 mmol/I in increment of +8 mmol/I.
(iv)	Blood leak detection	Photo detector used & alarm should be activated for blood loss rates <0.5 ml.min, with HCT of 20-25%
(v)	Volumetric UF	Control Range: 0-4L/hr, given by set values of UF volume & treatment time, with accuracy +_ 1 % UF volume : 0-9.99L adjustable in 1 ml increment Treatment time: adjustable up to 9 hr 59 min. In 1 min increment
		TMP monitoring: - 100 to + 400 mm Hg. Isolated ultra filtration process should be provided.
		Equipment should be capable of on – line preparation of bicarbonate dialysis fluid & it should be handle by one hands only
(vi)	Ultra – pure Dialysate filter	Should have hygienic connection for ultra pure dialystae filter Should have end toxin retention capacity not less than 10IU. Machine should have an automatic programme to
		change filter, including emptying & filling cycles. Filter should have life span not less than 12 weeks or
		The should have the span hot less than 12 weeks of

			100 treatments
			Filter should be arranged in cross flow setting & equipment should perform flushing during treatment automatically every 1 hr. Filter change reminder should be available.
4.	Online Fluid Circuit	For HDF	Both option of Pre-dilution of blood should be available
			Automatic control substitution program with pre/post dilution identity integrate function, dialyser integrate function, effective blood flow rate integrate, HCT integrate function, Total protein integrate and UF rate integrate functions.
			Equipment should have 2 ultra-pure filters to prepare the online substitution fluid
			Should be capable of online preparation of substitution fluid for priming and rinsing of extracorporeal ckt for HD/HDF/HF/ or as injection-bolus and reinfusion at the end of treatment
			Substitution fluid delivery rate : 25 to 600 ml/min in 1 ml/min increment, with accuracy +/- 0.1ms/cm & exchange volume-210L (max.)
5.	Dialysis Parameter Display	Equipment should display parameters	Arterial pressure, venous pressure, blood flow rate, Dialysate conductivity, TMP, UF volume, UF rate, Remaining treatment time, Heparin infusion rate, Alarm info etc.
6.	Online Clearance Monitor (OCM)	Equipment should have	Inbuilt measurement & monitoring of effective Urea clearance K, Dialysis dose Kt/v, & Plasma sodium during dialysis.
			This measurement should be done without any additional cost & disposable during each treatment
			Measuring Accuracy: Clearance +/-6% Kt/V+/-9%
			OCM conductivity evaluation should be 12 bit with 2 channels & 2 CD cells (1 cell for basic machine function) & Measuring range: 12.8-15.7 mS/cm, Accuracy: 0.05 mS/cm
			OCM temperature evaluation shuld be 12 bit with 2 channels & 2 NTC (1 NTC for basic machine function) & Measuring range: 33.5-41 C, Accuracy: 0.2 C
7.	Blood Pressure Monitor	Equipment Should	Should be build in non-invasive device for measuring the patient blood pressure automatically Measuring

	(BPM)	have	range should be Cuff pressure range: 10.325 mmHg or wider choice Systolic range: 30-280 mmHg or wider choice MAP range: 20-255 mmHg or wider choice Diastolic range: 10-240 mmHg or wider choice Pulse rate range: 20-245 1/min or wider choice Alarm values should be Systolic range: 90 & 165 mmHg MAP range: 70 & 120 mmHg Diastolic range: 50 & 100mmHg Pulse range: 40 & 150 1/min
8.	Battery Backup		The equipment should be able to operate and monitor the extracorporeal circuit without interruption for 20- 30 min in case of AC power failure by backup battery.
9.	Disinfection and Cleaning		Both chemical and heat disinfections should be performed Sodium hypochlorite should be used as cleaning disinfectant Various programmable cleansing cycles should be provided with different phases and timings in accordance with different disinfectants. Should be one-touch fully automatic operation including pre-rinse, chemical-intake for combined disinfection & decalcification, post-chemical mandatory rinse, and automatic power-off, without the need of any end –user handling during this whole disinfection process.

36(4). INFUSION PUMP

SYRINGE INFUSION PUMP

1. Description of Function

i. The Syringe Infusion Pump provides uniform flow of fluid by precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of I.V. medication in critical medical care.

2. Operational Requirements

- i. The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system. This should be able to integrate in the HIS
- ii. Demonstration of the equipment is a must.

3. Technical Specifications

- i. Flow rate for 50 ml syringe should be programmable from 0.1 to 1000 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.
- ii. Should accept all makes of 5ml, 10ml,20ml,50ml & 60 ml syringes
- iii. Manual Bolus rate should be programmable in the range of 100 1000 ml/hr or more with infused volume display.
- iv. Reminder audio after every 0.5 ml delivered bolus. SAVE last Bolus rate even when the AC power is switched OFF.
- v. Display of Drug Name and total infused volume with a provision of memorizing 10~15 names by the operator.
- vi. Should have bright display of drug name, flow rate, battery indicator, infused volume all at a time
- vii. Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.
- viii. Selectable Occlusion pressure trigger levels selectable from 300/500/700 mmHg or higher limits
 - ix. Accuracy should be of minimum of +/-2% or better.
 - x. Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.
 - xi. Anti bolus system to reduce pressure on sudden release of occlusion
- xii. Should have comprehensive alarm package including: Occlusion limit exceed alarm, Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery prealarm and alarm, Occlusion pressure pre alarm and alarm, AC power failure, Drive disengaged and preventive maintenance.
- xiii. Should have digital & analog display of Occlusion pressure indicator
- xiv. Should display remaining battery life in Hrs & minutes on operating flow rate
- xv. Should have Universal mounting accessory on both vertical & horizontal stand.
- xvi. Should have facility of auto dose calculation

4. System Configuration Accessories, spares and consumables

- i. Syringe Infusion Pump –01
- ii. Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole. -01

5. Environmental factors

- i. Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
- ii. The unit shall be capable of operating continuously in ambient temperature of 10 40deg C and relative humidity of 15-90%
- The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%

6. Power Supply

- i. Power input to be 220-240VAC, 50Hz. Power cable should be fitted with Indian plug and adapter.
- ii. Should have a Rechargeable Battery/UPS of suitable rating with voltage regulation and spike protection for 5~6 hour backup for about 5ml/hr flow rate with 50ml syringes.
- iii. Resettable overcurrent breaker shall be fitted for protection

7. Standards, Safety and Training

- i. Should be FDA approved product
- ii. Manufacturer should have ISO certification for quality standards
- Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)
- iv. Drop Test-Withstands 1 meter drop to any edge, corner or surface.
- v. Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.
- vi. Should meet IEC 529 Level-2 (IP2X) for enclosure protection solid foreign object ingress.
- vii. Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
- viii. Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
- ix. Comprehensive warranty for 5 years and provision of AMC for next 5 years.

8. Documentation

- i. User Manual in English
- ii. Service manual in English
- iii. List of important spare parts and accessories included in the warranty with their part number and costing
- iv. List of important spare parts and accessories not included in the warranty with their part number and costing

- v. Certificate of calibration and inspection from factory.
- vi. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
- vii. The job description of the hospital technician and company service engineer should be clearly spelt out
- viii. List of Equipments available for providing calibration and routine maintenance support as
 - ix. per manufacturer documentation in service /technical manual.
 - x. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/datasheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
 - xi. Must submit user list and performance report within last 5 years from major hospitals.

36(5). DEFIBRILLATOR

1. Specification for defibrillator with recorder Description of Function

i. Defibrillator is required for reviving the heart functions by providing selected quantum of electrical shocks with facility for monitoring vital parameters.

2. Operational Requirements

- i. Defibrillator should be Bi- Phasic, light weight and latest model
- ii. Should monitor vital parameters and display them
- iii. Should print the ECG on thermal recorders.
- iv. Should work on Manual and Automated external defibrillation (AED) mode. Manual selection up to 270 J.
- v. Should be capable of doing synchronized & asynchronized cardioversion
- vi. Can be operated from mains as well as battery
- vii. Should have defibrillator testing facility
- viii. Demonstration of the equipment is a must.

3. Technical Specifications

- i. Should be a Low Energy Biphasic defibrillator monitor with Recorder, having capability to arrest all arrhythmia within a maximum energy of 360 Joules
- ii. Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles.
- iii. Should have Automatic Lead switching to see patient ECG through paddles or leads
- iv. Should measure and compensate for chest impedance for a range of 25 to 150 ohms
- v. Should have a built in 50mm strip printer/ thermal recorder
- vi. Should have charging time of less than 3 seconds for maximum energy. Charging indicator should be there.
- vii. Should have bright electroluminescent display for viewing messages and ECG waveform of 4 seconds
- viii. Should have external & internal paddles with paddles contact indicator for good paddle contact. Single Adult and pediatric paddles should be available.
 - ix. Should have event summary facility for recording and printing at least 250 events and 50 waveforms.
 - x. Should be capable of printing Reports on Event summary, configuration, self test, battery capacity etc
- xi. Should have facility for self test/check before usage and set up function
- xii. Should have SP02 and NIBP integrated facility
- xiii. Should be capable of delivering energy in increments of 1-2 joules up to 30J and increments of maximum 50J thereafter.
- xiv. Should have user friendly color coded operation

4. System Configuration Accessories, spares and consumables

- i. Defibrillator -01
- ii. Paddles Adult/Paediatric (pair) -01
- iii. Paddles –Internal (pair) -01
- iv. Patient cable -02
- v. ECG Rolls -50
- vi. Disposable pads-10 nos.
- vii. NIBP Cuff Adult medium sized 02
- viii. NIBP Cuff Paediatrics- 02
 - ix. NIBP Cuff Infants- 02
 - x. Reusable SPO2 Finger Probe-Adult -02
 - xi. Reusable SPO2 Paediatric Finger Probe 02
- xii. Complete set of ECG Leads- 02

5. Environmental factors

- i. The unit shall be capable of operating continuously in ambient temperature of 10 400 C and relative humidity of 15-90%
- ii. The unit shall be capable of being stored continuously in ambient temperature of 0 500 C
- iii. and relative humidity of 15-90%
- iv. Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

6. Power Supply

- i. Power input to be 220-240VAC, 50Hz. Power cable should be fitted with Indian plug and adapter.
- ii. Resettable overcurrent breaker shall be fitted for protection
- iii. Should have a Rechargeable Battery capable of usage for at least 90minutes or 30 discharges.

7. Standards, Safety and Training

- i. Should be FDA approved product
- ii. Manufacturer should have ISO certification for quality standards
- Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)
- iv. Drop Test-Withstands 1 meter drop to any edge, corner or surface.
- v. Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.
- vi. Should meet IEC 529 Level-2 (IP2X) for enclosure protection solid foreign object ingress.
- vii. Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
- viii. Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
- ix. Comprehensive warranty for 5 years and provision of AMC for next 5 years.

8. Documentation

- i. User Manual in English
- ii. Service manual in English
- iii. List of important spare parts and accessories included in the warranty with their part number and costing
- iv. List of important spare parts and accessories not included in the warranty with their part number and costing
- v. Certificate of calibration and inspection from factory.
- vi. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
- vii. The job description of the hospital technician and company service engineer should be clearly spelt out
- viii. List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service /technical manual.
 - ix. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/datasheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
 - x. Must submit user list and performance report within last 5 years from major hospitals.

36(6). <u>ULTRASOUND PORTABLE MACHINE WITH ECHO AND BIOPSY</u> <u>PROBE</u>

6. (a) Technical specification For Portable Colour Doppler Ultrasound Unit

- i. A state of art fully digital, compact portable Colour Doppler Ultrasound machine (weight <5 kg) is required with following technical features:-
- ii. Unit should be able to give very high image quality with advance technologies like compound imaging with at least 5 sights of lines for better cardiac contrast resolution, tissue differentiation and edge detection, equivalent to high end cart based systems. Please specify the technology.
- iii. System should be able to support speckle reduction imaging for better tissue differentiation and edge enhancement please specify the technology.
- iv. The system shall have the ability to enhance tissue margins and improve contrast resolution by reducing artefacts and improving visualization of texture patterns & needle tip within the image, please specify the technology.
- v. System should have both online (Read) as well as offline (Write) zoom facility
- vi. Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler, Continuous wave Doppler, Power Doppler must be available on all cardiac transducers.
- vii. System must have fast start up to scanning in less than 30 seconds from off condition, for use in critical and emergency situations.
- viii. System should support transducer technologies like phased array, convex, linear, TEE etc.
- ix. Cine memory on all modes.
- x. The system shall process a dynamic range that is at least 165db. The system must display at a maximum depth of 35 cm.
- xi. The system must have a dedicated cardiac calculation packages with PISA, TDI calculation packages, vascular calculations package.
- xii. The unit must be compact, portable and lightweight, weighing less then 5 kg.
- xiii. Unit must be sturdy, resistant to breakage & damage on fall/ hit against the wall or hard surface for out of the hospital use.
- xiv. Flat LCD/ TFT monitor of at least 10 inches with flicker free image.
- xv. Alphanumeric soft keys keyboard with easy access scans controls, facility to sanitize the system keyboard to avoid cross contamination.
- xvi. The system must have the ability to function by AC/DC or battery power with the same degree of functionality, the battery life (run time) shall be al least 2 (Two) hours, this need to be demonstrated.
- xvii. The system must have archive capability for storage and retrieval of images and clips. Data.
- xviii. Data Transfer facility should be available as standard, to transfer images etc. easily onto another system/computer etc.

- **xix.** System should posses software for Enhanced Needle Visualization to track the needle clearly at steep angles during the procedures while maintaining striking image quality of the target structures and the surrounding anatomy with simple On/Off functionality. This Facility should be available on both High frequency Linear and Curvilinear probes for superficial as well as deeper blocks.
- xx. Unit must be sturdy, resistant to breakage & damage on fall/ hit against the wall or hard surface.
- xxi. The system shall support the all DICOM functionality, Storage, Print, and Work List, also ready to connect to PACS.
- xxii. The manufacture shall provide a loaner system in case of failure of system.
- xxiii. The equipment should be mountable on trolley & locking mechanism should be inbuilt into the trolley for safety & security of the system.
- xxiv. System configured application specific educational video tutorials should be provided as standard with the system.
- xxv. Screen more than 15 inches will be provide as standard scope of supply
- xxvi. System should be latest art at the time of supply.

6. (b) Transducers to be supplied as standard

i. 6-13 MHz multi-frequency, broadband linear array transducer for vascular, nerve imaging with less then 40 mm size for vascular access, small parts, vascular, musculoskeletal Interscalene, Supraclavicular, Axillary, Musculocutaneous, Popliteal, Saphenous. Higher frequency will be preferred.

ii. 2-5 MHz multi-frequency broadband curved array transducer for general purpose, abdominal, deep nerve access Specially Celiac, Sciatic nerve, Epidural, Subgluteal & abdominal applications

iii. 1-5 MHz multi-frequency, broadband phased array transducer for adult cardiac, abdominal, FAST, imaging.

iv. 4-8 MHz Phased Array paediatric Echocardiography with PW & CW facility,

v. High Frequency Linear transducer 6-13 MHz for nerve blocks, vascular access, Vascular Imaging with small foot prints less than 26 mm for anaesthesia applications in paediatric patients.

vi. 5-8 MHz multi-frequency, broadband micro convex array transducer for paediatric abdominal, neonatal head applications

vii. Mobile cart with transducer holder should be provided as a standard

6. © **ESSENTIAL REQUIREMENT:** The firm must have minimum number of 150 installations of the same model in India, attach list of installations, and also provide performance certificates.

6. (d) WARRANTY: The unit, transducers and all accessories should be covered with comprehensive onsite warranty for five years commencing from the date of issue of installation certificate

MANUFACTURER'S / PRINCIPAL'S AUTHORIZATION FORM

(Clause 12 (C)s of the tender)

То
The Administrative Officer, All India Institute of Medical Sciences Rishikesh
Dear Sir,
TENDER:
We,, who are established and reputable manufacturers of, having factories at
and, hereby authorize Messrs (name and
address of agents) to bid, negotiate and conclude the contract with you against Tender
No for the above goods manufactured by us. No company or firm or
individual other than Messrs are authorized to bid, negotiate and
conclude the contract in regard to this business against this specific tender.
We hereby extend our full guarantee and warranty as per the conditions of tender for the goods
offered for supply against this tender by the above firm.

The authorization is valid up to _____

Yours faithfully, (Name)