

TENDER NOTICE

SHRI VASANTRAO NAIK GOVT. MEDICAL COLLEGE, & HOSPITAL, YAVATMAL

In accordance with G R No.SPO-2014/C N 82)/Part III/Industry - 4 dated 30.10.2015 issued by Government of Maharashtra, Dean Shri Vasantnao Naik Govt. Medical College, & Hospital, Yavatmal invites sealed separate tenders in Two Envelope System for procurement of **Items Mentioned below** for the year 2016 – 2017

(This tender form along with its Annexure will have to be written/type in entire duly filled and attested per page as per instructions)

Scheduled to tender No.:-	GMCY/YTL/STORES/TENDER NOTICE/15029/16 Dated 19/11/2016
Period for download blank tender form from website www.vngmcytl.org	From Dt 21 /11/2016 to Dt.05 /12/2016
Last date of submission of tender	On Dt. 06 /12/2016 upto 12.00 noon
Date of opening of envelope No. 1	On Dt.06 /12/2016 at 12.30 PM

Envelope No. 1 (Technical Bid) of the tender will be opened at College Council Hall, on 06/12/2016 at 12.30 noon in the presence of tenderer or their authorized representatives who remain present with the authority letter

Tender Sr. No	Name of the Item	Quan Requ	Tender Form Price	EMD to be submitte with the Tender
01	ROTARY MICROTOME	1	500	3800
02	BAND SAW FOR SECTIONING BODY & LIMB	1	500	5950
03	DEFIBRILATOR (TB Chest)	1	500	3600
04	MULTIPARAMONITOR (TB Chest)	4	500	5400
05	T PIECE RESITETOR	2	500	3800
06	DEFIBRILATOR (Paediatrics)	1	500	4000
07	VALUMETRIC INFUSION PUMP	6	500	4350
08	MULTIPARAMONITOR (Paediatrics)	3	500	4800

09	SYRING PUMP	6	500	5400
10	IMPIDENCE AUDIOMETER	1	500	5600
11	VOICE & SPECH ANALYSIS SYSTEM	1	500	5800
12	AIR CONDITIONER	5	500	4100
13	EQUIPMENTS FOR L.B.C.	1	500	3000
14	DEEF FRIZER	2	500	2800
15	DIGITAL CAUTARY MACHINE	1	500	3500

INSTRUCTIONS TO TENDERERS

The Tenders shall be submitted on or before due date in two envelope system in the Office of the Dean, Shri Vasantrya Naik Govt. Medical College, Yavatmal

The Tender form will be available online only. No tender form will be sold/issued manually from Dean Shri Vasantrya Naik Govt. Medical College, & Hospital, Yavatmal

The tender form price should be submit in the form of Postal Order/DD alongwith the tender in the Technical bid in favour of Dean, Shri Vasantrya Naik Govt. Medical College, Yavatmal.

Tenderer have to submit separate tenders for each item alongwith all required encloser. The tenderer should mention clearly Tender Sr. No, Name of the Item, & There Name & full adress alongwith email id & Contact No on the main envelope

TECHNICAL BID (Part - I)

Technical bid shall contain following documents duly certified by Notary/Gazetted Officer.

1	<p><u>Proforma</u> To be submitted along-with Technical Bid as mentioned in <u>(Annex- I)</u>. In case of every offer whether indigenous or imported the name of manufacturer, address together with brand /make /model should be indicated in the tender. Any conditional offer of the tenderer will be rejected</p>
2	<p><u>Earnest Money deposit (EMD):-</u> The tenderer should pay EMD preferably in the form of Bank Guarantee Valid for 1 year/ Demand Draft of any Nationalized Bank only valid for 6 months from the date of opening of technical bid. The E.M.D. should be drawn in favour of "Dean Shri Vasantrya Naik Govt. Medical College" payable at Yavatmal. Tenderers who are exempted from payment of EMD should produce letter for exemption for the mentioned item from following Firms registered with 1) CSPO 2) S.S.I. Units registered with Director of industries Maharashtra State only for items manufactured by them. 3) N.S.I.C. & 4) DGS&D ARE EXEMPTED FROM PAYING EMD. The attested photo copies of the registration should be attached with the tender. The EMD will be forfeited if the tenderer fails to enter into contract according to terms</p>

	& conditions, if accepted. EMD of the unsuccessful tenderers shall be refunded within due course of finalization of order.
3	Product Catalogue:- Original Catalogues / brochures showing details of <u>Technical Specifications of Equipment</u> should be enclosed. All specification should be substantiated by data sheets in original. Photocopies of the Catalogue / Brochure will be rejected.
4	Copy of Value Added Tax (VAT)/TIN Registration Certificate.
5	Sales Tax / VAT Clearance Certificate:- Attested copy of Sales Tax / VAT clearance Certificate clearance up to 31st December, 2015 or wherever applicable sales tax exemption certificate from sales tax authority. Challan copy will not be accepted.
6	Authorization Letter:- A dealer quoting on behalf of manufacturer must attach authorization letter from the manufacturer to sell the equipment & to do after sales services as per (Annexure - II)
7	I.S.O. OR I.S.I. Certificates :- In case of equipment with I.S.O or I.S.I mark, as per tender requirement relevant certificates from ISO or ISI should be attached.
8	Compliance Chart :- As per Annexure - III (If quoting for more than one model then separate formats should be enclosed for different models in the same envelope.)
9	Users list :- The tenderer should submit user list of Quoted model as per Annexure - IV.
10	Make / Model Detail of Products supplied to Govt. of Maharashtra in last 04 years as per (Annexure - V).
11	After Sales Service:- Details of <u>Minimum 02</u> sales service centres in Maharashtra with complete address, phone nos., fax Nos. and E-Mails as per (Annexure - VI).
12	Terms & Condition Acceptance Certificate should be submitted as per (Annexure - VII).
13	Proforma of Commercial bid (without Price) should be submitted in Envelope No. 01 (Tech. Bid) as per Annexure VIII
14	Original Tender Form:- Tenderer's are required to sign and put official seal of the company on every page of the tender form. They are also required to sign on every page of the specification copy and affix the seal of the company at the right hand corner of the bottom of the page. Authentication for Documents :- The responsibility to produce correct authentication for documents rests with the tenderer. If any documents is detected to be forged, bogus etc., the tender shall be rejected and EMD shall be forfeited. Any contract entered under such condition shall also be liable to be cancelled at any time during its currency and further penal action like criminal prosecution, blacklisting etc against the said contractor and / or the partners shall be instituted.
	If ANY OF THE ABOVE DOCUMENTS / INFORMATION AS ENLISTED FROM No.1 TO No.14 IS NOT ATTACHED WITH THE TENDER, THE TENDER IS LIABLE TO BE TREATED AS INVALID.

However if any discrepancy is found in the administrative documents, which have no effects on the cost in price packet Envelope, the tenderer shall have to clarify / comply within the stipulated time, their tender will be treated as Invalid..
--

Commercial -Bid (Part -II)

The Commercial Bid (Part-II) Should contain the price. The cost should be quoted in Indian currency only. Tenderer should quote the price proroma mentioned in **Annexure -VIII**.

All financial offers must be prepared and submitted in COMMERCIAL BID (PART II). Date of opening of commercial bid will be informed accordingly. Commercial quote in any other format shall be rejected. Conditional offers shall not be considered and shall be treated as non-responsive.

OTHER TERMS & CONDITIONS CONCERNING THE TENDER

1	No. price should be quoted in part I (Technical Bid). If any price is quoted in technical bid, the entire tender will be tender as INVALID
2	Envelope No.2 will be opened only when the documents as mentioned in Envelope No.1 are in order, as per requirements and as per specifications. Valid tenderer will be informed accordingly.
3	<p>i) The Envelop No. 2 (Commercial Bid) will be opened of only those tenderers who have submitted all the documents as per tender terms and conditions in the envelop no. 01 and are technically qualified. The demonstration of tenderer who had quoted lowest price will be taken. If two tenderers had quoted same cost of equipment, then the demonstration of both the tenderer will be taken.</p> <p>ii) Unsatisfactory performance at demonstration will disqualify the tenderer.</p> <p>iii) The demonstration should be done if possible at the institute . In case of heavy / bulky equipment the demonstration may be arranged at a place where the equipment is already functioning and as per convenience of the concern technical committee at the cost of the tenderer. In exceptional cases the technical committee will have the power to waive the demonstration.</p>
4	It shall be binding on tenderer to produce inspection certificate from agency specified stating that equipment is as per the technical specification laid down in the tender. Fees for such certification shall be borne by the tenderer.
5	The tender should be kept open for acceptance for a <u>minimum period of 120 days</u> from the date of opening of the Envelope No. 1 (Technical Bid).
6	There will not be any price negotiations after opening of Envelop No.2.
7	<p>The successful tenderer will have to pay a security deposit of an amount <u>equivalent to 3% of the cost</u> of the equipment offered in one of the following form.</p> <p>a) Bank guarantee valid for three years issued by any Nationalized bank in concurrence with the Reserve Bank of India, Mumbai.</p> <p>b) National Saving Certificate, national Defense Certificate, <u>Fixed Deposit Receipts</u> or Postal Saving Bank account placed in the name of the Dean,</p>

	Shri Vasantrao Naik Govt. Medical College, Yavatmal for a period of three years.
8	The delivery of goods should invariably be made within 6 weeks for indigenous items and 12 weeks for imported items, from the date of confirm order. If the date of delivery cannot be strictly adhered to, then extension required by the tenderer should be stated in the bid. No excuses for delay by any statutory like custom etc. Will be taken into consideration for extension of the period of delivery. The primary responsibility for supply of goods in time will be rest with the supplier.
9	Penalty on late delivery :- In the event of the late delivery of goods, the purchaser will recover from contractor by way penalty as per the norms mentioned in the GR of Dt 30 October 2015 on page no 90
10	Warranty Period :- (including supply of spares). The warranty period shall be for Two years from the date of commissioning of all equipments supplied as certified by the consignee. The successful tenderer must ensure 100% uptime during warranty period in case of down time, warranty period will be extended for period of down time. The tenderer will have to give Bank Guarantee (of Nationalized bank) of 5% of ordered value valid for 10 years towards performance guarantee for warranty for those items which needs to regular maintainance. If the equipment is not attended within 24 hours for Mumbai and 48 hours for other places the supplier will be liable to pay a penalty of 0.05% of purchase cost for every day of delay. Such penalty shall be recovered from the amount of bank guarantee. Certificate of such uptime / downtime shall be issued by the end user. Which shall be binding for the supplier. Replacement of parts and service thereof due to manufacturing defects during warranty period will be entirely at the supplier's cost. The expenditure incurred for procurement of space, transport, installation, commissioning and various duties there of shall be borne by the supplier.
11	Annual Maintenance Contract (Labour Charges) / Comprehensive Annual Maintenance Contract (Labour with Spares) :- The tenderer will have to agree to enter into a annual maintenance contract (AMC) (Labour Charges) @ 2% of the ordered value up to Rs. 10 lacs of the equipment Where required tenderer will have to agree for comprehensive maintenance (CMC) inclusive of all spares @ 5% of the ordered value of the equipment. The period of such AMC / CMC will be of 8 years after completion of warranty period, In case of non-compliance of AMC/CMC the supplier will be liable to pay a penalty. Such penalty shall be recovered from the amount of bank guarantee submitted as per sr.no. 10 payment for AMC /CMC on yearly basis will be made by the user institution, at the end of year after satisfactory performance report from the end user.
12	Payment : Initial payment of 90% of the contract value will be made on delivery and installation. Remaining 10% of the contract value will be paid only on satisfactory commissioning of the machinery and submitting Security Deposit, Performance Deposit and Purchase Agreement within 30 days.

13	The tenderer should install the equipment in the concerned department of the institution, give demonstration free of cost and train the staff of the department (number as specified by the user.)
14	If the machine is manufactured in a foreign country and the purchase orders were issued in Indian currency, if the exchange rates have been increased, no financial implications will be accepted by the concerned institution or by the Govt.
15	<u>Complaint/s :-</u> Any complaint / representation regarding tender will be entertained only after depositing of <u>Rs. 5,000/-</u> in form of <u>Demand Draft</u> in the name of Dean, Shri Vasantrya Naik Govt. Medical College, Yavatmal. Subsequently necessary action will be taken by the Dean and decision of Dean will be binding upon the complainant. If the complaint turns out to be false or invalid the amount will be forfeited. The Amount shall be refunded if after scrutiny the complaint is found to be true. No further complaint/ representation from the same complainant for the same tender will be entertained.
16	<u>Jurisdiction of the Courts :-</u> In case of any claim, dispute or differences arising in respect of tender, the cause of action shall be deemed to have arisen in Yavatmal and all legal proceedings in respect of any such claim, dispute or difference shall be instituted in a Competent Court in the city of Yavatmal

THE DECISION OF THE DEAN, SHRI VASANTRAO NAIK GOVT. MEDICAL COLLEGE & HOSPITAL, YAVATMAL WILL BE FINAL AND BINDING. THE DEAN, SHRI VASANTRAO NAIK GOVT. MEDICAL COLLEGE & HOSPITAL, YAVATMAL RESERVES THE RIGHTS TO REJECT ANY OR ALL TENDERS WITHOUT ASSIGNING ANY REASON.

I have read all the terms and conditions of the tender carefully and I agree to abide by them.

Signature of Tenderer with Seal

List of Annexure

Annexure No.		Description
Annex No. I	:	Proforma to be submitted along-with Technical Bid
Annex No. II	:	Manufacturer Authorization Letter
Annex No. III	:	Technical Compliance Chart
Annex No. IV	:	User List of Quoted Model
Annex No. V	:	Detail of Products supplied to Govt. of Maharashtra in last 04 years.
Annex No. VI	:	Details of After Sales Service Station
Annex No. VII	:	Terms & Condition Acceptance Certificate
Annex No. VIII		Proforma for Price Justification
Annexure IX	:	Proforma of Commercial Bid
Annex No. X	:	Technical Specification.

Annexure - I

(on Bidders Letterhead)

PROFORMA TO BE SUBMITTED ALONG WITH TECHNICAL BID

1. Name and address of the firm :-
2. Registered Head Office Postal address :-
3. Telephone No. & FAX & **E-Mail** :- :-
4. In case of proprietorship / Partnership firms, names of proprietors / partners/ Directors with address and percentage of share
5. Ownership status of the firm
(Maharashtra Govt. / Central Govt./Jt. Sector /co - operative /SSI /Private)
6. Whether tendering as a manufacturer / Agent/ Distributor
7. **Name & Phone no. who should be contacted by this office in case of any urgent problem.**
8. Location of other manufacturing work/factory/factories owned by the firm (if any).

I / we hereby declare that particulars furnished above are true to the best of my /our knowledge and belief and that if any of the particulars is found to be materially incorrect / misleading, my /our tender shall be rejected and I / we are liable for penal action as per terms specified in the " term and conditions of tender".

Date :-

**Full Signature of the tenderer
with official seal and address**

ANNEXURE II

Manufacturer's Letter Head

Ref :-

Date :-

To,
The Dean,
Shri Vasantnao Naik Govt. Medical
College & Hospital, Yavatmal

Dear Sir,

I /We the undersigned who is/are authorized signatory/signatories of the
Manufacturing Firm M/s.....
(Name & complete address)
do hereby authorizes M/s to quote
(Name & complete address)
rates/collect the orders/raise the bills for the items manufactured by me/us under
the Tender No.

I/We have gone through all the terms and conditions and read important
instructions of the tender and will be binding on me /us and also the Distributor/
Dealer / Agent M/s.appointed by
(Name & complete address)
me/us during the whole contract period including extension period of the said
contract.

We hereby confirm that after sale services of our product will be provided by
above said authorized distributor.

Manufacturer's Authorized Signature with Stamp and Seal

ANNEXURE III
Technical Compliance Chart

(on Bidders Letterhead)

Equipment Name - _____ Make & Model: _____

Sr No	Tender specifications as asked in the tender form	Equivalent specifications quoted by the tendered with the name of the manufacturer	Whether the tender quoted by the supplier is as per specifications asked for Indicate against each item clearly YES/NO	If the tender quoted is not as per specifications then variations/deviations should be clearly indicated against each item asked for.
1	2	3	4	5

ANNEXURE IV
User List of Quoted Model

(on Bidders Letterhead)

Name of the Equipment:- _____

Sr No	Model No	Name and Address of Institute	Authorized Contact Person	Tel, Fax & Mobile No	Date of Supply
1	2	3	4	5	6

ANNEXURE V

Detail of Products supplied to Govt. of Maharashtra in last 04 years.

(on Bidders Letterhead)

Specify how much quantity of products were supplied to the Government of Maharashtra in the last four years as shown below (use separate sheet if necessary).

Year	Name of the Equipment	Quantity of supply	Amount of business Rs	Name of the store Institute to whom supply is made
1	2	3	4	5

ANNEXURE VI

Details of After Sales Service Station

(on Bidders Letterhead)

Name of the Equipment:- _____

Sr. No.	Name of the Agency	Full Address with Pin code	Contact Person Name	Contact Numbers with STD code		
				Tel (Off)	Fax	Mobile No.
1	2	3	4	5	6	7

ANNEXURE VII
(on Bidders Letterhead)

Terms & Condition Acceptance Certificate

Ref :-

Date :-

To,
The Dean,
Shri Vasantnao Naik Govt. Medical
College & Hospital, Yavatmal

Ref:- Tender Document No _____ Date_____

Respected Sir,

I /We the undersigned have examined the above mentioned Tender Enquiry document, including Amendment / Corrigendum No. _____ Dt _____ (if any), the receipt of which is hereby confirmed.

If our tender is accepted we undertake to supply the goods & perform the services as mentioned in Tender Enquiry Document in accordance with the delivery schedule.

We further understand that you are not bound to accept the lowest or any tender you may receive against your tender enquiry.

We confirm that we fully agree to the terms and conditions specified in above mentioned Tender Enquiry document including Amendment / Corrigendum if any.

Sign and Office seal of the Tenderer

ANNEXURE - VIII

Proforma for Price Justification

(on Bidders Letterhead)

Tender No.

Date :-

To,
The Dean,
Shri Vasantnao Naik Govt. Medical
College & Hospital, Yavatmal

Ref:- Tender Document No _____ Date _____
Higher Price / Lower Price Certification

Respected Sir,

I /We _____ hereby certify that the price quoted by us in tender no. _____ are our best price based on tender quantities.

We also wish to disclose that the prices lower than price quoted may be applicable to other Govt. Dept. / Institution or any other institute and such lower prices are solely on account of terms of sales and other condition applicable during Pendency of such contract.

Sign and Office seal of the Tenderer

ANNEXURE - IX

Proforma of Commercial Bid

[COMMERCIAL OFFER]

Note:-For price / commercial bids, online forms will be provided during bid preparation stage where bidders should quote the prices as per the bid requirement.

- 1)Tender Ref No. :-
2) Due on :-
3) Sr No & Name of Equipment :-

PART -A

Description	Basic Unit Price	VAT / CST (%)	Octroi (%)	Any Other Taxes	Total	Quantity	Total Price X — Quantity
	(a)	(b)	(c)	(c)	(a)+(b)+(c)+(d)=(f)	(g)	(f) X (g)

We fully agree to the terms and conditions specified in Tender document, including amendment / corrigendum if any

**Full Signature of the tenderer with
official Seal & Address**

PART -B (Essential Accessories)

Description	Basic Unit Price	VAT / CST (%)	Octroi (%)	Any Other Taxes	Total	Quantity	Total Price X — Quantity
	(a)	(b)	(c)	(c)	(a)+(b)+(c)+(d)=(f)	(g)	(f) X (g)

We fully agree to the terms and conditions specified in Tender document, including amendment / corrigendum if any

**Full Signature of the tenderer with
official Seal & Address**

PART -C (Optional Accessories)

Description	Basic Unit Price	VAT / CST (%)	Octroi (%)	Any Other Taxes	Total	Quantity	Total Price X — Quantity
	(a)	(b)	(c)	(c)	(a)+(b)+(c)+(d)=(f)	(g)	(f) X (g)

We fully agree to the terms and conditions specified in Tender document, including amendment / corrigendum if any

**Full Signature of the
tenderer with official Seal &
Address**

CHECK LIST OF THE TENDER DOCUMENTS

List of Documents/ Information should be submitted with Tender.

The following documents should be submitted with the Tender Document with page number on each document as per the order given below.

Sr. No.	PARTICULARS	Page No
	<u>Envelope No. I (Technical Bid)</u>	
1	Proforma as per Annex No. I	
2	Detail of the Postal Order submitted as a tender form price Rs. 500/-	
3	EMD : Copy of demand draft / Bank Guarantee/ certificate for exemption of EMD	
4	Copy of Value Added Tax (VAT)/TIN Registration Certificate	
5	Sales Tax /VAT Clearance Certificate	
6	Copy of Certificate of registration under company registration act 1913 & 1956 (If Applicable)	
7	Manufacturer Authorization Letter as per Annex No. II	
8	Technical Compliance Chart as per Annex No. III	
9	User List of quoted model as per Annex No. IV	
10	Detail of Products supplied to Govt. of Maharashtra in last 04 years as per Annex No. V	
11	Details of After Sales Service Station as per Annex No. VI	
12	Terms & Condition Acceptance Certificate as per Annex No. VII	
13	Proforma of Commercial Bid (without Price) as per Annex No. VIII	
14	Scope of Supply (Technical Offer)	
15	Original Product Catalogue / Brochure	
16	Original Tender Form duly signed and official seal of the company on every page of the tender. Original specification copy only for quoted Item duly signed as per Annex X	
17	Copy of memorandum and articles of Association (If Applicable)	
18	The requisite certificate ISO, ISI, UL, BIS, CE, USFDA etc. as per Technical Specification in Annex. No. X (If Applicable)	
19	Total Documents in Technical Bid Page No. _____ to _____	
	<u>Envelope No 2(Commercial Bid)</u>	
20	COMMERCIAL OFFER as per Annex No. VIII	

Full Signature of the tenderer
with official Seal & Address

ANNEXURE - X

**SPECIFICATION OF TENDER ITEM NO 1
Department of Anatomy**

Manual Rotary Microtome

Advanced Microtome

Modular system with exceptional precision

Best suited for research and routine work in biological, medical or histology lab, guaranteed over extension protection and sliding – clutch anti – locking system in the coarse advance, highest precision of sections. The equipment is supplied complete with cassette holder, knife holder base, standard knife holder object orientation unit, section waste tray , microtome knife 15 cm

Technical data :--

Ranges of thickness 0.5 um to 99 um

Increments of minimum 0.5 um

1 um step from 1 um to 99 um adjustable

horizontal specimen advance 28 mm

Vertical stroke 60 mm

Specimen size up to 30 mm x 30 mm

Specimen orientation X and Y axis 8degree , Zaxis 360 degrees

Specimen advance automatic in 2 speeds

Electrical data 230 volts, 50 cycles single phase AC

Advance for trimming 1- 99 um adjustable

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 2

.....

Department of Anatomy

SPECIFICATION FOR Band saw for sectioning body and limb

Name of instrument	Specifications :-
Band saw for sectioning body and limb	<ul style="list-style-type: none">• Max. job height 200 mm• Max . throat 200 mm• Table size L x w in mm 600 x 600• Blade speed in mtr/ min. 20-100• Blade size (IXWXT in mm) 3505 x 27 x 0.9• Saw motor capacity 3 HP• Coolant motor capacity 0.16 HP• Overall size (LxWXH in mm) 900 x 700 x 2100 approx weight 400KG

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 3

.....

SPECIFICATIONS FOR DEFEBRILATOR (Dept of T B & Chest)

Technical Specifications

1	Biphasic Defibrillator with monitor ,recorder with synchronized cardio versionel)
2	Non fade display LCD/TFT
3	Biphasic transthorasic (external) defibrillation wave form delivery system.
4	Cardio version: Defibrillation output synchronized to ECG with synchronized indicator
5	Energy charging control on front panel and apex paddle
6	Visual indication of charging process.
7	Visual indication of charging process.
8	Charge indicator visual indication for charging process
9	Audible indication of charge upto selected energy level selected energy level value displayed on monitor
10	Charging time less than 10 sec for max energy

Energy delivery : Control on sternum and apex paddle

Wave form trace speed 25mm/sec

Screen size: Approx 5.5 inch Or more diagonal.

Parameters

ECG

Numeric: Heart rate

Waveform;ECG trace

- Lead selection: Paddle and lead .2,2&3 through patient cable
- Variable Gain: To adjust size of ECG waveform.

Output Parameters

ENERGY

- Delivered energy Adjustable from 2to 20 jules for external defibrillation.
- Adjustable from 3to 5 jules for internal /pediatric defibrillation

ALARMS

- High and low heart rate , Low battery warning

Other features

- Recording for ECG waveform and printing of defibrillation energy
- Pacing facility
- AED facility
- 3 channel recorder speed :25mm/sec
- AC220V/50Hz
- Built in rechargeable battery with charger for three hour operation and minimum 50 shocks at max. energy
- External pediatric paddle attachment
- Country of Origin US ,EU, JAPAN,
- 02 years warranty with parts.

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 4

.....

SPECIFICATION FOR Multipara monitor (Dept of T B & Chest)

Technical specification

1	Monitoring of paediatric and Adult patients
2	Operating features and characteristics
3	Non fed display coloured LED, TFT 12 inch display
4	Drug dose calculation
5	Touch screen display
6	Freeze and cascade facilities
7	Detection and alarms for all parameters
8	Minimum nine waveforms ,seven lead ECG waveform displayed at same time.
9	Waveform trace speed : 25and 50mm/sec
10	Comfortable with central monitoring system through wireless/hardwire

PARAMETERS

1 ECG

1	Deferential inputs protected against defibrillator
2	Leads selection: 6 position(lead 1,2,3 aVR,aVL and aVF) and V(chest lead
3	7 lead ECG waveforms
4	Heart rate range 10 To 300 dpm
5	Wave form real time
6	Lead of detection alarms on lead failure
7	Variable gain: Selectable ½ 1,2 /mv
8	Heart beat indications : beep /tone with QRS detection

2) NON INVASIVE BLOOB PRESSURE (NIBP)

1	Method Oscillometric principle
2	Numeric : systolic and diastolic and mean pressure
3	Rising Cough/continuous pressure display
4	Ability measure neonatal and paediatric BP range
5	Cuff pressure range :mmhg
6	Selectable autoinflat interval settings

3) TEMPERATURE

- Numeric: Temperature selectable in c and f
- Channels : 2 channels

PULSE OXYMETER

1	Numeric : % oxygen saturation
2	Range : 0 To 100%
3	Waveform : Plethysmograph pulse with pulse strength indicator
4	Function of oxy-Crg analysis

RESPIRATION

1	Impedance methods using ECG leads for sensing
2	Respiration range rate 1-150bpm
3	Sweep speed : 6.25, 12.5mm/sec
4	Settable apnea alarm

OPERATING REQUIRMENTS

1	AC220v/50Hz
2	Built in Battery and charger for at least 2 hrs on ac power failure at full parameter
3	Country
4	Of origin USA, Eu, JAPAN
5	02-years warranty with parts
6	It should be upgradable for ETco2 probe

Note: the system must be complete with all sensore,probes cables ar any other accessories required for measuring all the above selected parameters

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 5

.....

Department of Paediatrics

SPECIFICATION FOR T- Piece resuscitator

Manometer Range : 10-80 cm H₂O

Manometer accuracy : +/- 2.0% Of full scale defelection

Maximum pressure relief :@ 8 lit/min 5 to 70 cmH₂O it should be set at40 cm H₂O

Peak Inspiratory pressure (PIP) : @ 5lit/min 2 to 70 cmH₂O

@ 8lit/min 3 to 72 cmH₂O

@ 10lit/min 4 to 73 cmH₂O

@ 15lit/min 8 to 75 cmH₂O

Positive End Expiratory Pressure (PEEP) : @ 5lit/min 1 to 5 cmH₂O

@ 8lit/min 1 to 9 cmH₂O

@ 10lit/min 2 to 15 cmH₂O

@ 15lit/min 4 to 25 cmH₂O

Height : 250 mm (9.8") **Width** : 200 mm (7.9") **Depth** : 104 mm (4.1 ")

Weight : 1.9 Kg

Delivered oxygen concentration: 100 % depending on gas supply

Input gas flow range : Min 5 lit/min to max 15 lit/min

Operating time (400L cylinder) : @ 8 lit/min 50 minutes

Useable up to 10 kg patient.

Must be supplied with

Gas supply line, Gas inlet adapter, Test lung, Spare Max pressure relief cap, Animated user guide, Operating instructional & product technical manual along with CD

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 6

.....

Department of Paediatrics

SPECIFICATION FOR Defibrillator

General

- Should have Display of 320 x 240 pixel, blue LCD with LED backlit
- Display area should be 120mm x 90 mm
- It should not weigh more than 4 Kg.
- The dimensions W230 X D300 X H180 without paddle

Power supply

Ac mains through adaptor

Input : 150-260 VAC, 50 Hz **Output :** 17@ 4A **Battery :** 12V 3.8 MAh

Back up time : 2 hours minimum on full charge in ECG mode, should be able to deliver 50 shocks of 150 Joules.

Fuse : 5A/250V slow blow fuse

Environmental

Operating Temp. : -5 to + 50 0 C **Humidity :** up to 95%

Defibrillator

Operating mode : Manual **Waveform :** Biphasic **Energy:** 2 to 200 joules

Synchronous Cardioversion : Energy delivery should begin within 60 milliseconds of the QRS complex

Charging time : Less than 8 seconds

Paddle assembly : External paddles assembly with coil retractable high voltage cable .Adults & pediatric paddle integrated to same handle.

Check mode : Manual test mode

Operation : By front panel keyboard

ECG

Frequency response : 0.5 Hz to 35 Hz **Patient isolation :** Optical isolation

Lead selection : Lead I, II, & III **Gain setting :** 0.5, 1.0, 2.0 **CMRR :** >90 db

Sweep speed : 12.5, 25.0, 50.0 mm/sec **Waveform 1**: ECG **Waveform 2** : 4 sec delayed

Data output ; Analog output of ECG

Digital filter : Digital signal processing for good quality of ECG

Freeze mode : To freeze last 4 seconds ECG , Heart rate

Range : 30-250 BPM **Accuracy** : +/- 2 BPM **Resolution** : 1 BPM

Tone : Beep on every QRS detected

Low alarm limit range : 30-240 (step of 5) **High alarm limit range** : 40-250 (step of 5)

Printer

Paper type : Thermal Paper 50mm width, 20 meters **Print width** : 40 mm

Event printing : ECG mode stores & prints 10 seconds of ECG data

ECG in Defib mode : Stores & prints 10 sec of ECG data

Defib mode :Stores & prints 10 sec of defib data i.e. 5 sec pre critical & 5 sec post critical.
Memory should be able to store atleast 10 events.

Manual Defib check mode : Prints the status of check mode.

Print Data : Time, date, ECG lead, Mode & shock status & selected energy.

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 7

.....

Department of Paediatrics

SPECIFICATION OF VOLUMETRIC INFUSION PUMP

- Peristaltic Infusion Pump, **USFDA Approved.**
 - **Should deliver Rate 0.1 ml/hr to 999.9ml/hr Smallest increment of 0.1 ml/hr**
 - **Pump Should deliver volume pre-selection 0.1ml to 9999.9 ml**
 - **Time pre-selection max 99 hr 59 min**
 - Automatic calculation of Delivery Rate – from volume and Time
 - **Purge Parameters : Bolus Volume 0.1 to 99.9/500.0ml
Bolus Rate 1 to 600ml/hr.**
 - Three Method for giving bolus :-
 - a. Bolus with volume pre-selection.
 - b. Bolus without volume pre-selection.
 - C Interval Bolus
 - **Dosage calculation.**

It should calculate the delivery rate in ml/hr by putting the parameter like concentration, weight of patient optional and entry of dosage
 - **Piggyback Function Possible.**
 - Online rate change possible
 - Loud Pump should have alarm Tone.

The Loudness of the audible alarm should be adjustable through Keypad.
 - Pump should deliver Standby Infusion Pause : max 99 h 59 min ., pre-set values remain stored
 - Drug Selection : should Display od up to 9 drug names
 - Pump should deliver Deactivation of Drop Control – In conjunction with volume pre- selection
 - **Data Lock** : It should lock the keypad against unwanted alteration of the parameter entered.
 - Pump should deliver Variable occlusion pressure Low & High
 - **Pump should work with any slandered Medical Grade PVC I.V. Sets**
 - Pump should deliver Battery capacity Display : In Hr and Min
 - Pump should deliver Interpreted Service Program For individual configuration of the Function Spectrum
 - **Pump should deliver Large illuminated LCD Display**
 - History Function
- It should be equipped with a History Function Memory of events.

The memory records should show last 350 events time and date related:

Set delivery rate

Changes of the tare

Switching on/off

Start/stop of Infusion

Remote Control

Operating & Device alarms

- **Safely systems** : Drop control – operation possible with or Without Drop sensor
- Flow Clamp - Prevents Free Flow when pump Door is opened
- Air Detector – Minimizes the Risk OF Air Infusion

• **Visual And Acoustic Alarm With Automatic Pump Stop Function:**

- Pressure Alarm
- Drop Alarm
- Air Alarm
- Standby Alarm
- Volume Infused alarm
- Standby Alarm
- Door open Alarm
- Battery pre-Alarm
- Recall Alarm
- KOR- Alarm
- Invalid Rate

• **KOR Keep Vein open Rate** : For

Delivery Rate 10 ml/hr = 3 ml/hr

Delivery Rate 10 ml/hr = 1 ml/hr

Delivery Rate 1 ml/h = STOP

- External extra – low voltage 12VDC
- Staff call Max 24V/1A/24VA
- Battery Type : -Lithium
- **Battery Operating Time 3.0 hr at highest delivery rate**
- Date & time should be adjustable.
- **Info Query** : current Volume, Current Time, Dosage, Battery Capacity , Hours of operation

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 8

.....

Department of Paediatrics

Technical Specification of Multi Parameter patient monitor.

General Features:-

- 12.1" LCD display with high resolution.
- Large number display for long distance vision.
- Nellcor digital SPO2 technology.
- 168 hours tabular & graphical trends & storage
- Backlight buttons, easy to operate at night.
- Lithium battery
- Extra large alarm lights.
- **Safety:** IEC60601 (GB9706)
- **Dimension:** 340mm (W) x 270mm (H) x 215mm (D)
- **Power supply:** 90-280 volts AC 50/60 Hz.
- **Alarm Indication:** Visual as well as audible alarm.
- **Application:** Pediatric, Neonatal & adults.

1) ECG

- **Leads:** I, II, III, aVL, aVF, V
- **Gains:** 2.5 mm/mv, 10 mm/mv, 20mm/mv, 40mm/mv, auto.
- **Input Impedance:** $\geq 5\text{M}\Omega$
- **Common mode rejection Ratio:** $\geq 100\text{dB}$.
- **Bandwidth:** 0.5-40Hz (monitoring mode)
0.5-120 Hz (diagnostic mode)
0.5-25 (surgical mode)
- **Protection:** Segregation breakdown voltage 4000VAC, 50/60 Hz, Resistant to high frequency electro static, myoelectricity, AC, Drifting interference.
- Indication of detachment of electrodes should be available.
- Playback of cardiogram should be available.
- **Scanning speed:** 12.5 mm/s, 25mm/s, 50mm/s.
- **Heart rate range:** 0-330BPM.
- **Accuracy:** +/- 1 BPM.

2) NIBP

- **Method:** Automatic oscillometry.
- **Operation Modes:** Single (Manual), Cycle (Automatic), Rapid (Continuous).
- **Measurement:** systolic pressure/ diastolic pressure, / mean
- **Range:** Adult: 0-300 mmHg
: Pediatric: 0-235 mmHg
: Neonate: 0-135 mmHg
- **Unit:** mmHg/Kpa selectable
- **Auto measurement:** 1,2,4,5,10,20,30,45,60,90 minutes, 2,4,8,12 hours

3) RESPIRATION

- **Method:** Impedence Measurement
- **Measuring Range:** 0-180 bpm (max. 180 bpm)
- **Alarm limit:** 0-180 bpm, upper & lower limit continuously adjustable.
- Apnea alarm should be available.

4) SPO2

- Digital SPO2 technology
- **Range:** 0-100%
- **Accuracy:** +2% (70-100%), +3% (35-69%)
- **Range of pulse rate:** 20-250 BPM+/- 1BPM.

5) TEMPERATURE

- **Channel:** 2 channels
- **Range:** 0-50 ° C
- **Unit:** Celsius, Fahrenheit
- **Resolution:** 1mmHg
- **Accuracy:** +0.1 ° C
- **Alarm Range:** 0-50 °C

Should supply at least 100 chest leads with multiparamonitor.

Should supply two SPO2 probes with instrument.

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 9

.....

Department of Paediatrics

SPECIFICATION OF SYRINGE INFUSION PUMP

- 1) **Power Supply:** - AC power source 180 to 270v, 50Hz, automatic charge over battery at least less than 180v.
- 2) **Battery:** - Nicd 12v rechargeable battery. Operates on battery for 4 hours @ 5 ml/ Hr flow rate on 50 ml syringe.
- 3) **Applicable syringe:** - 10ml, 20ml, 30ml, 50ml & 100ml syringe from any brand syringes.
- 4) **Flow rate range:**- 0.1 to 240ml/Hr (10ml syringe)
0.1 to 400ml/Hr (20ml syringe)
0.1 to 600ml/Hr (30ml syringe)
0.1 to 840ml/Hr (50ml syringe)
0.1 to 999ml/Hr (100ml syringe)
- 5) **Infused Volume Range:-** 0.1 to 999ml
- 6) **Elapsed time:-** Visual display of elapsed time from 00.00 to 99.59 (Hr-min)
- 7) **Accuracy:-** mechanical accuracy +1% including syringe + 3%
- 8) **Bolus :** Purge bolus & auto bolus
Bolus rate:- Programmable by user from 200ml/ Hr for 10 ml syringe, 360ml/Hr for 20ml syringe, 560ml/ Hr for 30ml syringe, 800ml/Hr for 50ml syringe, 999ml/Hr for 100ml syringe.
- 9) **Bolus volume:** - Programmable by user from 0.1ml to 5 ml in 0.1ml increments (auto Bolus).
- 10) **five programme Mode:** - 5 programmable dosages can be stepped up or stepped down by interval programmed by user. Sequential programme of 5 different flow rate at different time or volume target.
- 11) **Drug library available.**
- 12) **KVO Programmable** by user from 0.0ml/hr to 9.9ml/hr in 0.1 ml increments.
- 13) **Occlusion pressure** 10 steps selection from OFF to 9 for occlusion sensitivity.
- 14) **Alarms:**
 - AL1- Syringe holder distributed during infusion.
 - AL2- Target volume recharged.
 - AL3- Target time reached.
 - AL4- Battery discharge.
 - AL5- Monitor unable to drive.
 - AL6- End of syringe.

AL7- PCA probe disconnected

AL8- Occlusion.

15) **Flow rate setting**

Type 1- set flow rate only

Type 2- Set flow rate & target volume.

Type 3- Set flow rate & target time.

Type 4- Set target volume & target time thereby flow rate is automatically calculated & set.

Type 5- Can vary the set flow rate, target volume & target time while infusion.

16) **Indication:** - Audible & visual alarm for

a) Near empty- 3 min approx before end of syringe.

b) Battery low- 10 min approx before full discharge.

c) Operation on battery.

17) **Special function:** - Adjustable buzzer volume (off to 9)

Last data retrievable.

18) **PCA dose** can be present from 0.1 to 10 ml in 0.1 ml increments. Locking time interval between two dose 0 to 24 hours in steps of 1 min , delivered & non delivered display.

19) **Safety Testing:** - IEC 601-01

20) **Dimension:** - 275x161x112

21) **Weight:** - 2.5 Kg

22) Custom syringe, automatic syringe.

23) **Display** LED & LCD

24) **Accessories:**- Power cord , operator manual.

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 10

.....

Department of ENT

Specifications for Impedance audiometer

- 1.Tympanometer: Auto
- 2.Tympanometry Manual
- 3.Probe Tone 226
- 4.Probe Tone 1000
- 5.Reflex Threshold: Ipsi and Contra
- 6.Reflex Decay
- 7.ETF-P
- 8.Admittance Recorder:
- 9.B and G Tympanogram
- 10.Acoustic Reflex Step Size dB: 5and 10
- 11.Acoustic Reflex Frequency(Ipsi and Contra): 500Hz, 1000Hz, 2000Hz,4000Hz.
- 12.Noise Reduction : low pass and high pass
- 13.Decay Range: 50to 100dBHL
- 14.Contralateral TDH 39 Headphone
- 15.Tympanometry pressure range : -300 to + 200 daPa.
- 16.Displayed data: graphics- Tympanogram & reflex tests should be displayed live while being recorded.
- 17.Numeric values- Middle ear pressure (daPa)
Ear canal volume
Compliance
Tympanogram width (daPa)
- 18.Setup functions: Selection of reflex test frequencies.]
Selection of printer type and port
Selection between printout or data transmission to PC
- 19.Storage for : Tympanogram, numerical values and reflex test for both ears

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 11

.....

Department of ENT

SPECIFICATIONS FOR SPEECH DIAGNOSIS AND THERAPY SOFTWARE

BASIC & ADVANCED ANALYSIS MODULE:

- **Recording and registration**

- A. Facility to record a client's voice sample
- B. Assessing the quality of recording
- C. Saving the voice sample
- D. Registration of the client

- **Phonatory measurements**

- A. F0 and Intensity measure – Mean, Standard Deviation, Fluctuations
- B. Jitter and Shimmer measurements – Cycle to cycle variations in speech/source
- C. Harmonic to Noise Ration (HNR)
- D. Long term average spectrum (LTAS) of voice source; alpha, beta, gamma
- E. Long term average spectrum (LTAS) of speech; alpha, beta, gamma
- F. Dysphonia Index (DSI)
- G. GNE

- **Report Generation and Comparison with the Normative**

- A. Facility to generate a report of the measurements on a customized letter head
- B. Facility to generate a graphics report of relevant graphs
- C. Facility to save the measurements into a database
- D. Facility to compare the measured parameters against normative

- **Advanced Display module**

- A. Facility for advanced graphics display of
 - F0 & Intensity – Histogram, Phonetogram
 - Jitter and Shimmer – Histogram, Correlogram, Tremor graph
 - LTAS
 - LTAC (HNR)

Facility to select the desired part of the signal and obtain statistics of the selected part

- B. Facility to generate synthetic vowel with controlled perturbations for validating the software

- **On-line module**

- A. Voice Initiation and Sustenance
- B. Maximum Phonation Duration
- C. Dysphonia Index

- D. Phonetogram
- E. S/Z Ratio (On-line measurement)
- F. Nasalence (On-Line measurement – requires special hardware developed by VSS)
- G. Diadacho kinetic rate (DDK) and Rythmicity

- **Glottal measurements**

- **(Laryngeal or Acoustic glottography or Acoustic glottogram)**

- A. Inverse filtering based on LP and/or formant based technique
- B. Opening, Closing, Closed, Leakage intervals relative to pitch period
- C. Spectral measures: Harmonic ratio, spectral roll-off

- **Spectrographic measurements**

- Wide-band, Narrow-band, very-wide-band options
- Gray scale/coloured, options to change contrast, gain, frequency axis etc
- Option to superpose measured F0

Documentation

The following manuals should be supplied with the software:

Tutorial Manual

On-line measurements manual

Case studies manual

Validation manual

Quick Reference Guide

Technical Support Manual

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 12

.....

Department of Pathology

Technical Specifications of Air Conditioner

- 1) It should have capacity of 2 Ton.
- 2) It should have designed to meet the needs of high density computing while maintaining precise temperature levels.
- 3) Products should be designed for use within hospitals and other medical applications. Higher levels of filtration.
- 4) It should have two way swing .
- 5) It should have on & off timer.
- 6) It should have auto cleaning system.
- 7) It should have cooling system

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 13

.....

Department of Pathology

Technical Specifications for Liquid Based Cytology

- It should have brushless DC motor
- It should have maximum speed of 2500 RPM
- It should have run time of 1 to 5 mins
- It should have speed setting of 500 to 2500 RPM
- It should have speed accuracy of +/- 100 rpm
- It should have 2 specimen holder capacity.
- It should have maximum RCF of 350 x g
- It should have rotor type of 25 degree centrifuge
- It should have acceleration time of 25 seconds.
- It should have deceleration time of 35 seconds.
- It should have size (L x B x H) of 260x244x203mm.
- It should have weight of 4 kg.
- It should have power supply of 100-230 VAC, 50/60 Hz.
- It should have power requirement of 35 W.

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 14

.....

Department of Microbiology

Specification for Deep Freezer 500 litres

General feature

Capacity (ltrs) :- 500 ltrs

Defrosting Type :- manual

Dimensions (LxWxH) 52x101x83.5

Door Type :- Top opening

No. of Doors :- 02

Star rating :- 05 star

Power :- voltage 230

ANNEXURE - X

SPECIFICATION OF TENDER ITEM NO 15

.....

Department of Orthopedics

Specifications of Cautary Machine

- Max Power 400 watts
- Supported Patient Plates Split & Non Split
- Auto Stop Mode
- Monopolar Cut Modes: Pure Cut, Low Cut, Blend
- Monopolar Cut Modes Endo Cut (9 levels)
- Monopolar Coagulation Modes Spray, Fulgurate, Desiccate
- Monopolar Coagulation Modes :Soft
- Bipolar Modes : Cut, Force , Micro
- 300 Memory programs
- Simultaneous Coagulation Facility : (2 Surgeons Can Coagulate Simultaneously)
- Upgradation facility
- APC Compatiblity
- Separate Isolated Outputs : For Monopolar & Bipolar
- HF Leakage Control
- Memory of Previous Activated Settings
- –“T-Out’ (Max. Continuous HF delivery Time can be set between 10to 30 sec.)
- 3 Pedal Foot –Switching (NO Need to Select between Mono to Bi)
- Inbuilt Stabilizer (Delivers Consistent performance between 150 VAC to 285 VAC)