

No:LUH/Gen-Br/-

Office of the
Medical Superintendent
Liaquat University Hospital
Hyderabad / Jamshoro
Dated: / / 2017

To,

The Director of Information (Advertisement),
Government of Sindh, Block No:96,
Sindh Secretariat, KARACHI.

SUBJECT:- **PUBLICATION OF TENDER NOTICE.**

Seven copies of Tender Notice of this hospital is sent herewith with the request that it may kindly be published in widely circulated English, Urdu & Sindhi Newspaper in single insertion.

No:LUH/Gen-Br/-

46197/99.

Medical Superintendent
Liaquat University Hospital
Hyderabad / Jamshoro
Dated 23-12-2017.

Copy forwarded for information to:-


1. The Secretary, Government of Sindh, Information & Technology Department, Karachi with request the same may be pasted on www.sindh.gov.pk.
2. The Managing Director, Sindh Public Procurement Regulatory Authority Government of Sindh, Karachi with request the same may be pasted on www.pprasindh.gov.pk.
3. Notice Board.

SPPRA INWARD DIARY

NO : 3913

DATED : 26-12-17

Advertisement I


Medical Superintendent
Liaquat University Hospital
Hyderabad / Jamshoro

TENDER NOTICE

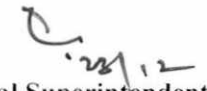
- 1) According SPPRA Rules 2010 (Amendment-2013) sealed tender on prescribed proforma are hereby invited from well reputed firms, interested Agent / Sole Agent/ Foreign Companies Distributors in Pakistan for the purchase of Machinery / Equipment for 50 Bedded Medical & Surgical ICU Under ADP Scheme 654 (2017-18) Liaquat University Hospital, Hyderabad/Jamshoro for the financial year 2017-18. The last date for submission of tender documents is 16th January, 2018 up to 11.30 A.M and will be opened on same day at 12.00 Noon in the presence of participants.

2)

Tender Enquiry No.	29/2017-18
	Purchase of Machinery / Equipment for 50 Bedded Medical & Surgical ICU
Bidding Procedure	Single Stage Two Envelope
Bid Security	2.5% of the total bid value
Bid Validity	90 days
Tender Fee	Rs 2,000/- each (non-refundable)
Issuance of Tender Documents	29.12.2017 to 15.01.2018 @ LUH, Hyderabad.
Submission of Tender	16.01.2018 at 11:30 A.M @ LUH, Hyderabad.
Opening of Tender	16.01.2018 at 12:00 Noon @ LUH, Hyderabad.

- 3) Complete set of tender documents containing Schedule of Requirements, Technical Specification with Term & Conditions can be purchased with a non-refundable fee in Rs 2,000/-Cash from the office of undersigned Liaquat University Hospital (LUH), Hyderabad.
- 4) The Medical superintendent LUH, Hyderabad / Jamshoro reserves the right to increase or decrease the quantity of any item of schedules as and when it is deemed necessary according to SPPRA Rules. The Procuring agency may reject all or any bids subject to the relevant provision of SPPRA Rules.
- 5) Tender documents can be downloaded from SPPRA website.
- 6) Bid shall include all government taxes (if applicable)
- 7) Deduction in the bills will be done as per government rules.
- 8) Bid Security @ 2.5% of the total bid value of quoted items is to be submitted by the bidders in shape of pay order / demand draft in favour of Medical Superintendent Liaquat University Hospital Hyderabad / Jamshoro whereas an amount of the contract 5% performance security is to be obtained from contractor as per SPPRA Rules.
- 9) In case of discrepancies between the Tender Notice and the Tender Documents, the Tender Documents shall take precedence.
- 10) In case of announcement of public holiday or any favorable circumstance, the bids shall be submitted and opened as per given schedule on the next working day.
- 11) Queries can be addressed at the following numbers or in person during office hours @ LUH, Hyderabad.

Ph: 022-9210207
Fax: 022-9210208


Medical Superintendent
Liaquat University Hospital
Hyderabad



NOTIFICATION

NO.HD (P&E) 1-2 (61) / 2017. In supersession of this department's notification No.HD (P&E) 3-5 (77) / 2017, dated 16.03.2017, NO.HD (P&E) 3-5 (74) / 2013, dated 03.08.2017, NO.HD (P&E) 3-5 (85) / 2017, dated 03.08.2017, NO.HD (P&E) 3-5 (78) / 2013, dated 11.09.2017, NO.HD (P&E) 3-5 (55) / 2015, dated 11.09.2017 and SO (PM&I) 2-1 / 2017-18 / PM-05 (LUH), dated 07.08.2017, the Government of Sindh, Health Department is pleased to re constitute a Procurement Committee under Clause-7 of Sindh Public Procurement Rules 2010 (Amended 2017), comprising of the following members for purchase of machinery / equipment, vehicles and furniture / fixture to be purchased under revenue component of "ADP schemes & SNE" in respect of Liaquat University Hospital Hyderabad;

- | | |
|---|-----------------|
| 1. Additional Medical Superintendent (General),
Liaquat University Hospital, Hyderabad. | Chairman |
| 2. Additional Medical Superintendent (Technical)
Liaquat University Hospital, Hyderabad. | Member |
| 3. Professor / Associate Professor / Assistant
Professor / Expert / Technical Person of Relevant field,
Liaquat University of Medical & Health Sciences (LUM&HS)
Jamshoro. | Member |

The committee will responsible to observe all the codal formalities as per Sindh Public Procurement Rules 2010 (Amended 2017), the TORS / Functions / Responsibilities of procurement committee in accordance with SPP Rule-8 (Amended 2017) are as under;

- Preparing bidding documents;
- Carrying out technical as well as financial evaluation of the bids
- Preparing evaluation report as provided in rule-45,
- Making recommendations for the award of contract to the competent authority;
- Perform any other function ancillary and incidental to the above.

(DR.FAZLULLAH PECHUHO)
SECRETARY HEALTH

NO.HD (P&E) 1-2 (61) / 2017

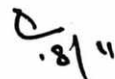
Karachi, dated 07-11-2017.

C.c.to:

- The Vice Chancellor, Liaquat University of Medical and Health Sciences Hyderabad / Jamshoro with request to advice the member to attend the meetings for above said committee.
- The Managing Director, Sindh Public Procurement Regularity Authority, Karachi.
- The Medical Superintendent, Liaquat University Hospital Hyderabad / Jamshoro.
- The District Accounts Officer, Hyderabad.
- All members of the committee.
- P.S. to Secretary, Health Department, Govt. of Sindh, Karachi.
- P.S to Additional Secretary (Dev), Health Department, Govt. of Sindh, Karachi.


Deputy Director (Dev)









NO.HD(P&E) 3-2 (427)/2014
GOVERNMENT OF SINDH
HEALTH DEPARTMENT
 (Procurement, Monitoring and Inspection Cell)
 Karachi dated the 10th APRIL, 2017.

NOTIFICATION

No.HD(P&E)3-2(427)/2014. In supersession to this department's notification of even number dated 9-03-2017 and in pursuance of Rule 31 of the Sindh Public Procurement Rules, 2010, a Departmental Complaint Redressal Committee, comprising of following officers is hereby re-constituted as under to resolve complaints of aggrieved bidders:

- | | | |
|---|--------------|------------------|
| 1. Special Secretary,
Health Department. | 1914 25-4-17 | Chairman |
| 2. Representative from Accountant General Sindh, | | Member |
| 3. Independent expert from relevant field concerning
(to be nominated by the Head of Procuring Agency) | | Member |
| 4. Deputy Secretary (PM&I) | | Member |
| 5. Deputy Secretary (General) | | Member/Secretary |

ToRs.

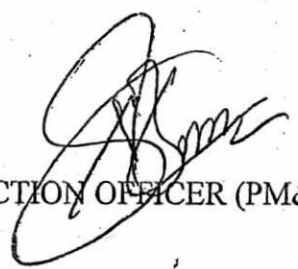
- To perform according to Rule 31 of SPPRA, 2010.
- To Perform any other function ancillary and incidental to the above.

- DR. FAZLULLAH PECHUHO -
 SECRETARY TO GOVERNMENT OF Sindh

No.HD(P&E)3-2(427)/2014.

Karachi dated the 10th APRIL, 2017

1. The D.G.Health Services, Sindh, Hyderabad.
2. The District Health Officers (All)
3. Medical Superintendents (All) Liaquat University Hyderabad
4. All the Member of the Committee.
5. The PS to Secretary Health Department, Govt. of Sindh, Karachi.
6. Office order file.


 SECTION OFFICER (PM&I)



Gen B
 24/4

TENDER FEE RS.2000/-
(NON REFUNDABLE)



**LIAQUAT UNIVERSITY HOSPITAL
HYDERABAD / JAMSHORO**

**PURCHASE OF MACHINERY /EQUIPMENT FOR THE
YEAR 2017-18 FOR ADP SCHEME NO. 654
(50 BEDED MEDICAL AND SURGICAL ICU)**

TENDER INQUIRY NO.29/2017-18.

DUE ON 16.01.2018 AT 11.30 A.M

Single Stage - Two Envelope Bidding Procedure

IMPORTANT DATES

Issuance of Tender Documents	27.12 .2017 to 15 .01.2018
Submission of Tender	16.01.2018 at 11.30 AM
Opening of Tender	16.01 .2018 at 12:00 NOON

Instructions to Bidders

- 1) The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.
- 2) Bid Security @ 2.5% of the total bid value of quoted items by the bidder in shape of pay order / demand draft / bank guarantee in favour of Medical Superintendent Liaquat University Hospital Hyderabad / Jamshoro.
- 3) Bids shall remain open for 90 days from the date of opening. A bid valid for a shorter period shall be rejected as being non-responsive.
- 4) The bid prepared by the Bidder shall comprise the following mandatory documents to be eligible:
 - (a) Tender Purchase Receipt (*original*)
 - (b) Bid Security
[Copy in Technical Proposal with words & figures hidden. Original in Financial Proposal]
 - (c) General & Special Conditions of Contract (*duly filled, signed & stamped by Bidder*)
 - (d) Schedule of Requirements & Technical Specifications (*duly filled, signed & stamped by Bidder*)
 - (e) Manufacturer's Authorization
 - (f) Undertaking
 - (g) Certificate
 - (h) Bidder's registration & membership with a valid copy of:
 - (i) Income Tax & GST Registration Certificate
 - (ii) Professional Tax Certificate (Sindh)
 - (i) Bidder's Financial Status:
 - (i) Company Profile
 - (ii) Bank Certificate / Bank Statement showing turn-over of business of Rs.20.00 Millions or more per annum for last three years.
 - (iii) Income Tax Return for last three years.
 - (j) Bidder's After Sale Services in Sindh:
 - (i) Service Workshop
 - (ii) tools list
 - (iii) Qualified & Trained Personnel list
 - (k) Original Equipment Manufacturer (OEM) or Brand quoted by the Bidder
 - (i) Brochure or Catalogue (*Original*)
[Note: Photocopies, Photographs or Word document not acceptable.]
 - (ii) References of the quoted model (*local*)
 - (iii) References of the quoted model (*international*)
 - (iv) ISO 9001 Certificate
 - (v) ISO 13485 Certificate (where applicable)
 - (vi) CE / FDA / JIS Certificate
 - (l) Bid Form & Price Schedules (*duly filled, signed & stamped by Bidder*)
[Note: Bid Form & Price Schedules should be enclosed inside Financial Proposal envelope.]
- 5) Goods must be quoted with all the standard accessories.
- 6) The Purchaser will evaluate and compare the bids on itemized basis OR on the basis of a group OR a combination of groups OR as total package.
- 7) Prices shall be quoted in Pakistani Rupees on DDP and Foreign Currency on C&F basis.

- 8) The bidders shall quote their prices inclusive of all duties / taxes / Octroi transportation etc, and all other expenses on free delivery to Consignee's end.
- 9) Price should be quoted both in figures and words, failing which the offer will be ignored.
- 10) The prices quoted by the Bidder shall be fixed during the performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price or conditional will be treated as non-responsive and rejected.
- 11) The bidding procedure for this tender will be Single Stage - Two Envelope Procedure as follows;
 - (a) The Bidder shall prepare bid comprise one single envelope containing separately financial proposal and technical proposal in original. Envelopes shall be marked as "**FINANCIAL PROPOSAL**" and "**TECHNICAL PROPOSAL**" in bold and legible letter to avoid confusion. The financial and technical bids, each consisting of the documents listed above.
 - (b) TECHNICAL PROPOSAL; the bidder must provide the original Data sheet and Technical brochure, Income Tax, Sales Tax, Sole Agency certificate and other documents; otherwise the bid will be ignored.
 - (c) FINANCIAL PROPOSAL; the bidder should provide bid security / earnest money at the rate of 2.5% of the quoted value. A photocopy of the same should be attached with Technical Proposal but its value must not be disclosed and this can be achieved by placing a piece of paper on the place where amount is mentioned.
 - (d) Procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
 - (e) No amendments in the technical proposal shall be permitted during the technical evaluation;
 - (f) Financial proposals of technically qualified bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
 - (g) Financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders; and
 - (h) Bid found to be the lowest evaluated or best evaluated bid shall be accepted.
- 12) All pages of the bid, except for un-amended printed literature, shall be initialed by the bidder.
- 13) The bid shall contain no alterations, omissions, or additions, unless such corrections are initialed by the person or persons signing the bid.
- 14) Bids shall be submitted either by the manufacturer or its authorized distributor, if submitted by the manufacturer itself then bid of authorized distributor will be rejected.
- 15) The Purchaser reserves the right to increase/decrease or delete the quantities of goods etc at the time of award of contract and also reserves the right to enhance the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions of goods at any time during the contract period as per SPPRA Rule. The purchaser reserves the right to accept or reject any bid, and to annual the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders on the grounds for the Purchaser's action
- 16) Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected. If there is a

discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept the correction of errors, its bid will be rejected.

17) PAYMENT

(a) For Goods supplied from within the Procuring Agency's country on DDP basis:

(i) Payment shall be made in Pak Rupees.

(ii) 100% payment will be made to the Bidder after delivery of goods to consignee. Bidder may submit their invoices along with original delivery challan(s) in duplicate duly signed and stamped by the Store/authority and inspection note. The Inspection Committee will prepare and submit a report of physical inspection with a certificate to the effect that the goods conform to the specifications laid down in the bidding documents.

(b) For Goods supplied from outside the Procuring Agency's country:

(i) The Procuring Agency shall establish letter of credit for the 80% of contract value in favor of Principal/Manufacturer upon submission of all the requisite documents. Balance 20% payment will be made in Pak Rupees to Bidder after import and delivery of equipment to consignee end and installation thereof.

(ii) Bidder will be responsible to bear all the charges for L/c establishment, insurance cover note, storage/demurrage charges, custom clearance and delivery of goods till consignee's end.

18) The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract under the relevant provisions of SPPRA Rules 2010, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

19) Prior to the expiration of the period of bid validity, the Purchaser will notify the successful Bidder through Advance acceptance. This will constitute the formation of the contract. Within seven (07) days after receipt of the Advance acceptance, the successful Bidder shall furnish the performance security @ 5% of the contracted amount and will sign the contract agreement.

20) Distributor once nominated by the manufacturer will be for the whole contract period and manufacturer cannot change its distributor during the year in any case.

21) In case of discrepancies between the Tender Notice and the Tender Documents, the Tender Documents shall take precedence.

Duly accepted by

Sign & Stamp

Bidder Name

General & Special Conditions of Contract

- 1) The Procuring Agency is the Liaquat University Hospital Hyderabad / Jamshoro.
- 2) The Bidder is: _____
- 3) The Contract shall be governed by and interpreted in accordance with laws of the Islamic Republic of Pakistan.
- 4) Store is required by 31 May 2018. The bidder may however give their short guaranteed delivery period by which the supply will be completed from the date of purchase order.
- 5) The manufacturer should provide an undertaking that if his authorized contractor fails to carry out any assignment in total or in part, manufacturer will be responsible to carry out the same.
- 6) Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor.
- 7) The Contract Price shall be made to the Contractor as specified in the Contract Agreement, subject to the general principle / procedure of the Government of Sindh.
- 8) The term period of warranty / guarantee mean the period of 05 years from the date on which the Stores have been installed at Purchaser's site.
- 9) During the period of warranty / guarantee, the Contractor shall remedy, at his / her expense, all defects in design, materials, and workmanship that may develop or are revealed under normal use of the goods upon receiving written notice from the Purchaser.
- 10) The contractor shall provide guarantee for supply of accessories for goods for at least 05 years.
- 11) The Contract shall be executed in accordance with the Contract Documents and procedures.
- 12) The Purchaser or its representative / Committee shall inspect the stores to confirm their conformity to the Contract specification. The inspection will be conducted at the premises of consignee after receipt of supply.
- 13) If the Contractor fails to attain Completion of the supply within the Time for Completion shall pay to the Purchaser liquidated damages at the rate of 0.2% per week of the Contract Price, or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount of 10%. Once the "Maximum" is reached, the Purchaser may consider termination of the Contract.
- 14) The Contractor warrants that the supplied item or any part thereof shall be free from defects in the design, engineering, materials etc. In case of defect in any part at the time of supply it shall be replaced with new one instead of repair.
- 15) The purchaser, without prejudice to any other remedy for breach of contract by written notice of default sent to the supplier, may terminate this contract in whole or in part:
 - (a) If the supplier fails to deliver any or all of the contracted items within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser.
 - (b) If the Supplier fails to perform any other obligation(s) under the Contract.
 - (c) If the supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

- 16) The bidder shall provide at least three performance certificate of quoted items.
- 17) The bidder shall confirm the refund of cost difference if the same goods is/was supplied at lower rates to any other Govt./Semi Government institution or Armed Forces in the Province or outside in the same fiscal year.
- 18) The Purchaser reserves the right to increase/decrease or delete the quantities of goods etc. at the time of award of contract and also reserves the right to increase/ decrease the quantity of goods and services originally specified in the contract without any change in unit price or other terms and conditions of goods at any time during the contract period.
- 19) Bidders shall purchase separate receipts for each alternate offer in case they want to submit alternate offer for any items. All the bids with alternate offers having no separate receipt (Original) will be liable to reject.
- 20) Stamp duty @ 0.35% of the value of the Contract will be realized /charged by the District Accounts Office, Hyderabad, while making payment to the contractors for award of each contract.

Duly accepted by

Sign & Stamp

Bidder Name

Bidder Evaluation Criteria

The following merit point system for weighing evaluation criteria will be applied for technical proposals.

S. No.	Parameter	Yes / No	Max Points	Points
1	Conformity to the Technical Specifications		20	
	a) Fully compliant with the required specifications		20	
	b) Compliant with minor deviation $\leq 10\%$ (subject to main function is not affected)		15	
2	Warranty		20	
	a) Warranty (period more than required)		20	
	b) Warranty (period as required)		15	
3	Bidder's Legal Status, Certification & Experience		15	
	a) NTN & GST Certificate		2	
	b) Professional Tax Certificate		2	
	c) SECP Incorporation Certificate		2	
	d) ISO 9001 Certificate		1	
	e) Purchase Orders of last year worth ≥ 1 million rupees (2 point/each order copy)		8	
4	Bidder's Financial Status		9	
	a) Bank Certificate		3	
	b) Income Tax Return for annual business of ≥ 20 million rupees (last three years)		3	
	c) Audited Financial Statement (last three years)		3	
5	Bidder's After Sales Services in Sindh		6	
	a) Service Workshop		3	
	b) Qualified & Trained Personnel (BE/BSc/DAE) with Bio-Data		3	
6	Original Equipment Manufacturer (OEM) or Brand Quoted		30	
	a) Manufacturer's Authorization		5	
	b) Manufacturer's Website		2	
	c) Brochure or Catalogue (original)		2	
	d) ISO 9001 Certificate		2	
	e) ISO 13485 Certificate		2	
	f) CE		2	
	g) FDA		4	
	h) JIS		2	
	i) References of OEM brand / model			
	(i) Government / Semi-Government Teaching Hospital / Institute		3	
	(ii) Armed Forces / NGOs Hospital / Institute		2	
	(iii) Private Renowned Teaching Hospital / Institute		2	
	(iv) International Hospital / Institute		2	
Total Points			100	

Note:

- If a bidder fails to (a) obtain minimum 15 Marks, against the criteria "Conformity to the Purchaser's Specifications", and (b) have valid Manufacturer's Authorization, his offer will not be considered for further evaluation and rejected.
- Bidders achieving minimum 70 marks will be considered only.

Documents Checklist

Please review the following list of all possible documents to be enclosed with the Technical Proposal.

S. No.	Document Description	Yes / No	Page No.
General Bid Documents:			
1	Tender Purchase Receipt (Original)		
2	Bid Security (Pay Order / Bank Draft)		
3	General & Special Conditions of Contract		
4	Schedule of Requirements		
5	Technical Specifications		
Bidder's Documents:			
6	Manufacturer's Authorization (<i>as per sample form</i>)		
7	Undertaking (<i>as per sample form</i>)		
8	Certificate (<i>as per sample form</i>)		
9	Income Tax & GST Registration Certificate		
10	Professional Tax Certificate (Sindh)		
11	SECP Incorporation Certificate (<i>if applicable</i>)		
12	Company Profile		
13	Bank Certificate		
14	Income Tax Return (last year)		
Original Equipment Manufacturer (OEM) or Brand Quoted:			
15	Catalogue / Brochures (original)		
16	ISO 9001 / ISO 13485		
17	CE / FDA / JIS		
18	References of the quoted brand & model (<i>local</i>)		
19	References of the quoted brand & model (<i>international</i>)		
Additional Documents:			

Note:

- Mandatory documents are mentioned in 'Instructions to Bidders'.
- All pages of the bid, except for un-amended printed literature, shall be initialed by the Bidder.

Bidder's details for notice purposes:

Bidder Name:	
Address:	
Tel No	
Fax No.	
Contact Person:	
Mobile No.	
Email Address:	

[SAMPLE FORM: A]**Manufacturer's Authorization Form**

To:

Medical Superintendent
Liaquat University Hospital
Hyderabad / Jamshoro

WHEREAS **[name of the Manufacturer]** who are established and reputable manufacturers of **[name and/or description of the goods]** having factories at **[address of factory]**

do hereby authorize **[name and address of Agent]** to submit a bid, and subsequently negotiate and sign the Contract with you against **Tender Enquiry No. [reference of the Tender Notice]** for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per Terms & Conditions of the tender document and General Conditions of Contract for the goods offered for supply by the above firm against this tender.

[Signature for and on behalf of Manufacturer]

[Date]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be enclosed inside the Technical Proposal by the Bidder.

[SAMPLE FORM: B]**Undertaking**

WHEREAS [Bidder Name] hereby undertake against the Tender Enquiry No. _____ to abide by the following clauses.

- a) Whether our tender accepted for total, partial or enhanced quantity for all or any single item. I/We also agreed to supply and accept the said item(s) at the rates for the supply of contracted quantity within the stipulated period shown in the contract.
- b) We understand and confirm the refund of cost difference if the same goods is/was supplied at lower rates to any other Govt./Semi Govt. institution in the province in the same fiscal year.
- c) If any of the information submitted in accordance to this tender Enquiry found incorrect, our contract may be cancelled at any stage on our cost and risk.

[Signature for and on behalf of Bidder]

[Date]

Note: This undertaking should be on a stamp paper of Rs. 100/- arranged by the Bidder. It should be enclosed inside the Technical Proposal by the Bidder.

[SAMPLE FORM: C]**Certificate**

To
Medical Superintendent
Liaquat University Hospital
Hyderabad / Jamshoro

WHEREAS [Bidder Name] hereby certify against the Tender Enquiry No. _____ to abide by the following clauses.

- a) We guarantee to supply the stores exactly in accordance with the requirement specified in the tender documents.
- b) We guarantee letter that the supplied Stores is the original / brand new product.
- c) Our firm is not black listed in any Government Department.

Authorized Sign & Stamp

[Bidder Name]

Note: This certificate should be on the letterhead of the Bidder and should be signed by a person competent and having the power of attorney to bind the Bidder. It should be enclosed inside the Technical Proposal by the Bidder.

[SAMPLE FORM: D]**Contract**

THIS AGREEMENT made the ____ day of _____ 20____ between [name of Procuring Agency] of [country of Procuring agency] (hereinafter called "the Procuring agency") of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called "the Supplier") of the other part:

WHEREAS the Procuring agency invited bids for certain goods and ancillary services, viz., [brief description of goods and services] and has accepted a bid by the Supplier for the supply of those goods and services in the sum of [contract price in words and figures] (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Bid Form and the Price Schedule submitted by the Bidder;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications;
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract; and
 - (f) the Procuring agency's Notification of Award.
3. In consideration of the payments to be made by the Procuring agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring agency to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Procuring agency hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Purchaser**Supplier**

Authorized Signature & Official Stamp

Authorized Signature & Official Stamp

Procuring Agency Name

Bidder Name

Address

Address

Contact No.

Contact No.

[SAMPLE FORM: E]**Performance Guarantee/Security Form**

To:

[Name & Address of the Procuring Agency]

Whereas [**Name of Bidder**] (hereinafter called "the Bidder") has undertaken, in pursuance of Contract No. [**number**] dated [**date**] to supply [**description of goods**] (hereinafter called "the Contract").

And whereas it has been stipulated in the said Contract that the Bidder shall furnish to the Procuring Agency with a Bank Guarantee by a scheduled bank for the sum of 5% of the total Contract amount as Security for compliance with the Bidder's performance obligations in accordance with the Contract.

And whereas we have agreed to provide a Guarantee: for the said Bidder

Therefore, we hereby unconditionally and irrevocably guarantee, on behalf of the Bidder, up to a total of [**Amount of the Guarantee in Words and Figures**] and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the Contract and without requiring the Procuring Agency to initiate action against the Bidder and without cavil or argument any sum or sums within the limits of [**Amount of Guarantee**] as aforesaid. The amount stated in the demand made under this guarantee shall be conclusive proof of the amount payable by the Guarantor under this guarantee.

The obligations of the Guarantor under this guarantee shall be valid for four months after the completion of delivery of supplies by the Bidder to the Procuring Agency of the full quantity of the goods for which this Guarantee is being given, and until all and any obligations and sums due have been paid in full.

[Signature and Seal of the Guarantors / Bank]

Address

Date

Schedule of Requirements

S. No.	Item Description	Qty	Model	Brand	Country of Origin	Delivery
<u>PART-A</u>						
1.	ICU Ventilator	18				
2.	Multiparameter Monitor (NIBP, Temperature, Pulse Oximeter, HP/PR, ECG) with central monitor (4)	40				
3.	Multiparameter Monitor (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)	10				
4.	Capnography monitor	10				
5.	Anesthesia machine	1				
6.	Operation Theater Table with all accessories	1				
7.	Operation Theater Light with all accessories	1				
8.	Chemistry Analyzer (Mini)	2				
9.	Defibrillator	3				
10.	Crash Cart Trolley with Equipment (Defibrillator & Monitor etc)	2				
11.	Mobile X-ray Machine 300mA	2				
12.	Ultrasound Machine	2				
13.	ECG Machine	4				
14.	Syringe Pump	15				
15.	Infusion pump	15				
16.	PCA pump (Patient Controlled Analgia pump)	8				
17.	CPAP-BIPAP Equipment/Device	4				
18.	Suction machine (heavy duty)	20				
19.	Central oxygen compressed air suction (10 beded)	5				
20.	Oxygen Concentrator	10				
21.	Nebulizer Heavy duty	10				
22.	Glucometer	8				
23.	X-ray illuminator	8				
24.	Mobile OT light	2				
25.	Laryngoscope set	5				
26.	Bronchoscope	1				
27.	Bispectral Index (BIS) Monitor	2				
28.	Blood Gas Analyzer	1				

S. No.	Item Description	Qty	Model	Brand	Country of Origin	Delivery
29.	Spirometry system	2				
30.	Video Laryngoscope/glide scope	1				
31.	Split Air conditioner 1.5ton with stabilizer and installation	20				
32.	Ceiling mounted/floor mounted Air conditioner 4ton with installation	5				
33.	Refrigerator 12 feet	7				
34.	Intercom system 20 lines	1				
35.	Mobile screen	16				
36.	Weight scale	8				
37.	Autoclave	1				
38.	Computer P-IV with HP laser printer and scanner with all accessories	5				
39.	Multimedia projector with laptop	1				
40.	Dialysis machine	2				
41.	RO Plant	1				

PART-B

1.	Multiparameter Monitor (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)	10				
2.	X-ray machine 300ma	1				
3.	Ultrasound Machine	1				
4.	Ultrasound Machine (Portable)	1				
5.	Central Oxygen Compressed Air and suction (10 beded)	2				
6.	Nebulizer heavy duty	5				
7.	OT Light two dome	2				
8.	OT Table with traction set	2				
9.	ECG Machine	2				
10.	Refrigerator 12 cft	2				
11.	Electric water cooler (100 liter)	1				
12.	Ceiling mounted /floor mounted air conditioner (4 tons) with installation.	5				

PART-C

1.	Mobile X-ray 300mA	1				
2.	Ultrasound Machine	1				
3.	Electric water cooler (100 liter)	1				

Sign & Stamp _____
Bidder Name _____
Contact Person _____
Contact No. _____

Technical Specifications

PART-A

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
1.	<p><u>ICU VENTILATOR</u> Touch screen LCD 12" or more display with turbine Modes of Ventilation Non Invasive ventilation in all modes ACMV, SIMV, Spontaneous Ventilation Volume based : V-CMV; V-SIMV Spontaneous based: CPAP + Pressure support, CPAP+ Volume support Volume controlled pressure target ventilation. Tidal volume : 5 - 2000 ml Pcontrol 3 - 70 cmH2O Psupport 0 - 80 cmH2O Peak flow (mandatory) up to 115 lpm Auto control mode. I-Times 0.1 - 10.0 sec Oxygen concentration 21 - 100% Breath Types Breath Triggering Flow triggering 0.1 - 20lpm Monitoring display Delivered oxygen concentration 21-100% Trend Data (70 hours or more) Pressure: Ppeak, Pmean, PEEP/CPAP, Pplateau, Flow: Inspiratory flow & Expiratory flow Minute volume Spontaneous tidal volume Time: Inspiratory & Expiratory time Lung mech: Cstat, Auto PEEP, RSBI, PMax PO.I/PiMax Online /Virtual report facilities as standard Loops : flow & pressure volume loop, pressure & time loop , flow & time loop Alarm: complete set of alarm for gas, pressure, volume, power cut off,</p>	18			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>patient disconnect etc. Battery backup of 2 hours or more. Built in trolley from same Manufacturer Patient circuit support arm 10 x disposable Patient circuit FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
2.	<p><u>MULTIPARAMETER MONITOR</u> (NIBP, Temperature, Pulse Oximeter, HP/PR,ECG) with central monitor(4) MULTI PARAMETER MONITOR Colored touch display monitor up to 15" or more. Adult, Neonatal & pediatric modes of operation, detection and alarms for all parameters Waveform display 8 or more. Wave form trace speed : 25 and 50mm/sec <u>ECG</u> Leads selection: I, II, III, aVR, aVF, aVL, V, V1-V6, TEST Selectable neonatal & pediatric operation Ability to detect neonatal & pediatric heart rate range, qrs widths and amplitudes. Numeric heart rate Real time wave form Variable gain: 0.5,1,2&4 Heart beat indication <u>NIBP</u> Pressure , oscillometric principal. Systolic , diastolic and mean pressure Rising cuff/continuous pressure display <u>Temperature:</u> Numeric temperature selectable Temperature with probe (external and rectal) Ability to measure neonate and pediatric temperature range <u>Pulse Oximeter</u> Number oxygen saturation measurement Range: 0-100% Sensor for neonate/infant and pediatrics Respiration impedance method using</p>	40			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>ECG leads for sensing. Breathing rate range, sweep speed Selectable apnea alarm Built-in battery with charger for at least 2 hours or more HL-7 compatible 4 Nos. Central Station Multi-Channel 19" or more colored Central Monitor with recording facility on Laser Printer High and low alarms on all parameters selected on bedside monitors. should have facility for 2nd displays Hard wire system with capabilities of Tele Monitoring as a future upgrade. Capability to store 48-hours trend data Capability to store and review data of 72-hours full disclosure ECG as well as 5 other waveforms for each patient. 64 wave form, multi wave freez etc. The system must be complete with all sensors, probes and cables and accessories. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
3.	<p><u>MULTIPARAMETER MONITOR</u> (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG) Colored touch display monitor up to 15" or more. Adult, Neonatal & pediatric modes of operation, detection and alarms for all parameters Waveform display 8 or more. Wave form trace speed : 25 and 50mm/sec <u>ECG</u> Leads selection: I, II, III, aVR, aVF, aVL, V, V1-V6, TEST Selectable neonatal & pediatric operation Ability to detect neonatal & pediatric heart rate range, qrs widths and amplitudes. Numeric heart rate Real time wave form Variable gain: 0.5,1,2&4</p>	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Heart beat indication</p> <p><u>NIBP</u> Pressure , oscillometric principal. Systolic , diastolic and mean pressure Rising cuff/continuous pressure display <u>Temperature:</u> Numeric temperature selectable Temperature with probe (external and rectal) Ability to measure neonate and pediatric temperature range</p> <p><u>Pulse Oximeter</u> Number oxygen saturation measurement Range: 0-100% Sensor for neonate/infant and pediatrics Respiration impedance method using ECG leads for sensing. Breathing rate range, sweep speed Selectable apnea alarm</p> <p>IBP 2 channel IBP Measurement Range: -50 ~ 300mmHg Impedance Range: 300 ~ 3000Ω Alarm: -10 ~ 300mmHg Pressure Transducer: sensitivity, 5μV/V/mmHg Built-in battery with charger for at least 2 hours or more The system must be complete with all sensors, probes and cables and accessories. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
4.	<p><u>CAPNOGRAPHY MONITOR</u> Portable 5" touch screen TFT display 2 trace waveform Unit must be capable for measurement of ETCO2 for neonatal, pediatric and adult patient. Method of sampling : side stream or main stream Sampling rate should be 100Hz or better Unit complete with Sample Line Filter</p>	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	T Adaptor Nasal cannula Adult Airway Adapter 10 nos. Neonatal Airway Adapter 10 nos. Trolley FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
5.	<u>ANESTHESIA MACHINE</u> Touch screen display. ETCO2 and automatic Gas Monitoring Electronic Flow meter. Various monitoring wave form and parameters in different colors Spontaneous, PSV-plus, SIMV, SMMV, VCV, PCV, Pressure with Volume Guarantee and Cardiac Bypass modes. Gas mix option Integrated TFT rough display 10" or more. Patient weight : 3, 10, 25, 50, 70 and 100kg Key pads for ventilator settings – Oxygen alarm, Minute volume, Tidal volume, Pressure limit and Target, PEEP, Rate – BPM, and I:E Ratio 2 Station Selectatec back bar with integrated pressure relief valve Integrated CO2 absorption system, 1.6 liter or more. Integrated oxygen monitor 6 tube of flow meters for three gas Flow meter : O2: 0-1L/min, 1-10 L/min N2O: 0-1L/min, 1-10L/min Air: 0-1L/min, 1-10L/min Gas System : O2 deficiency alarm Common gas outlet with Oxygen flush hook Breathing Circuit hook Three drawers unit Writing tablet Working mode: closed, semi-closed, semi open Four cylinder yokes plus pipeline Electronic ventilator Driven mode: electrically controlled Ventilator for adult and pediatric	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Spontaneous, PSV-plus, SIMV, SMMV, VCV, PCV, Pressure with Volume Guarantee and Cardiac Bypass modes. Tidal volume: 20-1500ml Ventilator frequency : 4-60bpm I:E ratio : 1:05 to 1:6 Electronic PEEP: 5-20cmH2O Battery back 4 hours Electronic alarms: Automatic and user settable Alarms: Mains failure, low battery, low pressure, low volume, apnea etc. Vaporizer: Halothane OR Enflurane OR Isoflurane OR Sevoflurane FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
6.	<u>OPERATION THEATER TABLE WITH ALL ACCESSORIES</u> Radiolucent tabletop. Built-in X-ray Cassette Channels Table width 520 mm or more without rails. Table Height (min) 680 mm to (max) 1120 mm Lateral tilt - 20 / +20 degree or more Trendelenburg 30° maximum from horizontal Reverse Trendelenburg 30° maximum from horizontal Back plate adjustment up 80° max or down 50° max Leg plate adjustment up 30° maximum or down 90° maximum. Spread of split leg plates 90 degree. Head plate adjustment -90 / +90 degree Patient Weight capacity 360kg or more. Electro-Hydraulic Surgical Table Complete with : Anesthesia Screen, Arm Boards , Basic Straps , Safety Clark Sockets FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	1			
7.	<u>OPERATION THEATER LIGHT WITH ALL ACCESSORIES</u> OT Light two dome Over head operating light 160,000 LUX INTENSITY 3 Steps of color Temperature selectable	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	95Ra of Highest Level of CRI R9 90 of red color rendering ability Focal Size (Dia.20cm ~ Dia.30cm) Dilution Effect with 96 LED units (75% ~ 100%) 4 Smart Sensors for maximizing dilution effect Channel Illuminating Technology Intuitive control with one touch panel Dimming Range : 25% ~ 100 % Endo Mode at 8,000 Lux Detachable & Autoclavable Hand Grip 96 Number of LED Diameter of Head size :65cm or more Illumination Ec at 1m working dist 160,000 or better Ance: Min. 40,000 Dimming range : 5 ~ 100 % Endo mode: 8,000 CRI : 95 Color temperature: 3,800/4,300/4,800 FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
8.	<u>CHEMISTRY ANALYZER (MIND)</u> Light Source: Quartz halogen lamp 12V-20W. Wave Length range: Automatic by 12 positions filter wheel. 6 standard interference filter : 340,405,505,546,578,& 620nm. Photometric range: -0.1 to 2.3 Absorbance . Blanking : Automatic zero setting. Operator interface : Membrane key board, for direct function and alpha- numeric entry. Measurement procedure: kinetic with linearity check. Kinetic, with linearity check and sample slope blank. Two point kinetic with or without reagent blank; end point with or without reagent blank. Bi-chromatic end point, with or without reagent blank. End point, with sample blank and with r without reagent blank. Multiple Testing : up to nine replicates: means, SD & CV.	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Measurement time: programmable , 2 to 998 seconds for kinetic and two point type of test. For end point fixed at 2 seconds. Delay time: Programmable , 0 to 999 seconds. Calibration: factor, one-point , two point and multipoint. Flow Cell: Metal with quartz window measuring volume 25ul. Temperature control: by means of peltier elements. Fixed temperature at 37°C FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
9.	<u>DEFIBRILLATOR</u> Defibrillator with monitor & recorder Biphasic & truncated wave form 5" or more screen. Synchronized output with ECG Control of energy charges / delivering on main panel and apex paddle. Charging indicators Manual and AED mode energy up to 200J or more. Charging time for full energy should be less than 6 sec. Display of heart rate, ECG through paddles and lead I,II& III patient cables. Built-in recorder for printing Alarm for high and low heart rate, low battery warning. Built in rechargeable battery with charges for more than 100 shocks Auto test/self-check With pediatric and adult external paddles. ECG cable AC 220V/50Hz operated SpO2 and Pacemaker Optional FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	3			
10.	<u>CRASH CART TROLLEY WITH EQUIPMENT (DEFIBRILLATOR & MONITOR ETC)</u> ABS structure, resistant to erosion Five(5) drawers: 2 small and 3 big. Each inner with partitions can be organized freely into different size	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>units for placement of medicine With handles to move the emergency cart Defibrillator tray Telescopic I.V. pole and CPR board Sliding side shelf Bumper protector on corners Oxygen tank holder at the back High strength ABS material, with side rails around All drawers should with central locker Defibrillator with monitor & recorder Biphasic & truncated wave form 5" or more screen. Synchronized output with ECG Control of energy charges / delivering on main panel and apex paddle. Charging indicators Energy up to 200J or more. Charging time for full energy should be less than 6 sec. Display of heart rate, ECG through paddles and lead I,II& III patient cables. Built-in recorder for printing Alarm for high and low heart rate, low battery warring. Built in rechargeable battery with charges for more than 100 shocks Auto test/self-check With pediatric and adult external paddles. ECG cable AC 220V/50Hz operated FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
11.	<p>MOBILE X-RAY MACHINE 300MA Should be user friendly and foldable designed to ensure a wide range of uses: Hospitals, Clinics, ICU's..... Should be compact & Mobile Should have High Frequency Generator of 20kW or more Radiographic Voltage should not be less than KVP 120 kVp, Radiographic mA should not be less than 300 mA, mAs should not be less than 300 mAs</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Should have Auto Diagnostic System with error code</p> <p>Should have high frequency generator of 25 Khz</p> <p>Should have handle brake to holds the unit</p> <p>Should have high Quality Wheels with brakes</p> <p>Should have Dual focal spot of 0.3 mm & 1.0 mm</p> <p>Heat storage should not be less than 140KHU</p> <p>Should be complete with Power supply cable of at least 6 -8 m X-Ray exposure switch Cable, 3-4 m FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
12.	<p><u>ULTRASOUND MACHINE</u></p> <p>Digital Portable Color Doppler Ultrasound with Digital Former and Multi Frequency Probe</p> <p>15-inch high definition LCD monitor.</p> <p>Two or more active transducer sockets.</p> <p>Full patient database and image management solutions.</p> <p>Built-in battery supports 1.5 hour scanning capability</p> <p>Complete DICOM 3.0 compatibility.</p> <p>Frequency compound Imaging.</p> <p>Tissue Harmonic Imaging.</p> <p>Panoramic Imaging.</p> <p>Trapezoid Imaging.</p> <p>Modes: B Mode, Multi-B Mode, M Mode, Color Mode, DPI Mode, PW Mode, THI Mode etc</p> <p>Applications: Abdomen, Vascular, Cardiology, Gynecological/Obstetrical, Urology, Musculoskeletal, Interventional ultrasound, Small parts, Anesthesiology, Nerves, Pediatrics and Emergency etc. 800 or more frames/sec.</p> <p>256 levels Gray Scale</p> <p>128 elements Probe</p> <p>15 or more B Mode Focus</p> <p>20dB to 320dB Dynamic Range</p> <p>Magnification 1.0 to 15.0 times.</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>300GB Image Storage frame cine Review Complete with: Convex Probe: Frequency: 2.0 – 6.0 MHz. Gel Bottle. 1 kVA Stabilizer. B/W Thermal Printer. High Grade and Quality Local Trolley. FDA 510(k) approved CE Marked Or equivalent Preferably: UK/USA/Japan/EEC Besides equipment having FDA (510) K and CE Approval from other countries can be considered.</p>				
13.	<p><u>ECG MACHINE</u> 6 Chanel ECG Machine with alphanumeric key board, LCD display of 5.5” or more. Pace maker detection. Indicators for loose leads Auto and manual modes. Printer Paper speed (cm/s) : 1, 2.5, 5. Sensitivity (cm/mV): 0.25,0.5,1.2 Diagnostic analysis and interpretation as standard Memory : 100 or more records, 10 sec long strip Paper type: roll/A-4 Battery backup for 75 minutes for monitoring and 30 min for printing in both automatic and manual mode. Complete with: Set of electrodes, patient cable, power cord, gel, paper roll 58mm / 25m and dust cover. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>	4			
14.	<p><u>SYRINGE PUMP</u> Syringe pump for use in ICU, CCU, NICU or Operation room for the infusion of chemical such as vasopressor drugs, anti cancer drugs, oxytocic, nutrituin, drug for chemotherapy medication and blood transfusion. Use of 100ml syringe. Anti bolus and anti siphon function. 3 sensors .</p>	15			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Lockable keypad. Flow rate rang : 0.1-99.9ml/h, 100-155ml/h, Volume infused: 0.1-99999ml, Volume to be infused: 0.1-99999ml Compatible syringe: 10,20,30,50/60, 100ml or more Audio-Visual Alarms Low battery, Very low battery, Occlusion, X min pre-alam, (KVO) XX ml/h, End of infusion Syringe empty, Illegal syringe .Plunger not fitted, Clamp opened, Internal error Nurse call system Built – in battery with 8 hours back up FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
15.	<u>INFUSION PUMP</u> Volumetric peristaltic infusion pump. Flow rate 0.1 to 99.9 ml/h. Unit compatible with most IV set. Memory function in case of power failure to retain the most recent flow rate & total volume. Comprehensive alarm for Air in line, occlusion, door open, low battery, infusion complete, empty container. Built in battery charger. Unit complete with IV sets. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	15			
16.	<u>PCA PUMP</u> (Patient Controlled Analgia pump) syringe sizes of 2/ 3; 5; 10; 20; 30; 50 /60 ml accuracy: $\pm 2\%$ tolerance and $\pm 5\%$ tolerance over 96 h High-power NiMH rechargeable battery Flow rate: 0.01 – 999.9ml/h, 0.1 – 1200ml/h Bolus Dosing units: mcg, mg, IE, mEq Monitoring timeframe: 1 – 24 hrs Dose volume limit for monitoring interval: 0.1 - 99999 ml FDA/CE/JIS Marked	8			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	OR Equivalent USA/UK/EEC/Japan				
17.	CPAP-BIPAP EQUIPMENT/ DEVICE FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	4			
18.	SUCTION MACHINE (HEAVY DUTY) Noise less suction machine with a noise level of not more than 47db for smooth and calm operation. Should have 4 extra strong wheels (1of them antistatic and 2 of them with brakes) Should have suction capacity of 40l/min Vacuum pressure 650 -700 mmhg ON/OFF switch Should have Knob for Suction Control Should be piston type, oil free , maintenance free Should have 2 Polycarbonate collection jar of 4 liters with safety valve to prevent overfilling Should be Complete With Suction tube of 3-4 m 2 No Collection jar of 4 liters With foot switch Power cord Anti-Bacterial filter FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	20			
19.	CENTRAL OXYGEN COMPRESSED AIR SUCTION (10 BEDED) Control Panel should handle at least two sources i.e. Two sided cylinders. The Manifold should be of high quality and automatic for switch over. System should be able to maintain continuous supply in case of power failure. Capacity for 20 beded ward.	5			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p><u>WALL OUTLET.</u> Outlet should have double lock quick connect and gas specific. The latch / locking release mechanism should be incorporated on the gas outlet with geometrical key indexing and should have a parking facility so that in the event of release of probe by pressing the spring loaded center, the probe / flowmeter does not fall down.</p> <p>Gas outlets wall mounted, Complete in Box/casing gas Specific, Self sealing valve, indexed to eliminate interchangeability/erroneous tapping of gas and cover plate.</p> <p>Oxygen Qty.20 Nos. Suction/Compressed Air Qty.2 Nos.</p> <p><u>Air Venturi System with Gauge</u></p> <p>The injector should be connected to wall source of pressure gas using direct probe or rail mounting system. Max. Vacuum 650 to 700 mbar. System should be supplied with 02liter Un Breakable & Sterilizable collection jar.</p> <p>System should be for monitoring of gauge for the gases.</p> <p><u>OXYGEN FLOW METER WITH HUMIDIFIER & PROBES 20 nos.:</u></p> <p>With autoclave able and unbreakable humidifier bottle and probe.</p> <p><u>COPPER PIPING (High quality material):</u> Supply and installation of copper pipe, deoxidized and for use in piped medical gas systems, therefore it should be guaranteed that the tubes are leak-tight, free of pores, blisters etc,</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Tube should be drawn according to medical supply standard. Material :- Copper tubes, including fixing clips for walls, sleeves, reducers etc Complete for 20 bedded ward.</p> <p>Bidder are advised to mention the measurement in meters in their bid.</p> <p><u>Oil Free Duplex Air Compressor System</u></p> <p>DUPLEX SYSTEM 100% oil free Medical Air Compressor with air dryer, filters, Bypass system, Electrical Panel</p> <p>Air Compressor with a minimum house power 2-3HP. Piston Displacement Free Air Flow Tank :40-50 liters Complete with air dryers and filtration. Complete electrical work for compressed air and air dryer.</p> <p>Bidder are advised to visit the site before submitting their bid.</p> <p>Or equivalent UK/USA/EEC/Japan.</p>				
20.	<p>OXYGEN CONCENTRATOR FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>	10			
21.	<p>NEBULIZER HEAVY DUTY Nebulizer Compressor: Piston.Fuse: T1,6 A/250V. Operating Pressure:0.90 bar. Air flow: 14l/min. Noise Level: 50db. Temporary Use: 30/30 min. ON/OFF. Class of Risk : IIa. Accessories: Adult face mask 01. Pediatriy Face Mask . Faster jet Bulb . Mouthpiece. Nasal prong. Connection tubing.</p>	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
22.	<u>GLUCOMETER</u> FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	8			
23.	<u>X-RAY ILLUMINATOR</u> for 4 films. Illumination: high frequency fluorescent lamps with demining control. With stainless steel finished Complete with clip for mounting and dismounting the x-ray films. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	8			
24.	<u>MOBILE OT LIGHT</u> 120,000 LUX INTENSITY 3 Steps of color Temperature selectable 95Ra of Highest Level of CRI R9 90 of red color rendering ability Focal Size (Dia.20cm ~ Dia.30cm) Dilution Effect with 96 LED units (75% ~ 100%) 4 Smart Sensors for maximizing dilution effect Channel Illuminating Technology Intuitive control with one touch panel Dimming Range : 25% ~ 100 % Endo Mode at 8,000 Lux Detachable & Autoclavable Hand Grip 96 Number of LED Diameter of Head size :65cm or more Illumination Ec at 1m working dist 160,000 or better Aance: Min. 40,000 Dimming range : 5 ~ 100 % Endo mode: 8,000 CRI : 95 Color temperature: 3,800/4,300/4,800 FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	2			
25.	<u>LARYNGOSCOPE SET</u> Anesthesia rigit laryngoscope Miller blades : 1,2,3,4 Mackintosh : 2,3,5	5			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	With LED Light Battery operated hand held FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
26.	<p><u>BRONCHOSCOPE</u></p> <p>Complete Set of flexible and rigid Bronchoscope with Camera/Motor (Paediatric) Broncho-Fiberscope, for children, deflection up/down 180 °/100 °, direction of view 0 °, angle of view 90 °, working channel inner diameter 1.5 mm, distal tip outer diameter 3.7 mm, working length 54 cm</p> <p>Consisting of :</p> <p>Broncho-Fiberscope, for children Case Pressure Compensation Cap Leakage Tester Mouthpiece Cleaning Brush Biopsy Forceps Grasping Forceps Leaflet Valve, for single use, package of 20 Irrigation adaptor Suction Valve, for single use, package of 20 LED, endoscopic video unit for use with all one-chip camera heads and video endoscopes, incl. LED light source similar to Xenon technology, with integrated digital Image Processing Module, 15" LCD TFT monitor with LED backlight, USB/SD memory module, color systems PAL/NTSC, power supply 100 - 240 VAC, 50/60 Hz, Including: USB Silicone Keyboard, with touchpad, US character set USB Flash Drive, 32 GB SD-Card, 32 GB Mains Cord, length 300 cm One-Chip Camera Head, color system PAL, soakable, gas-sterilizable, with integrated Parfocal Zoom Lens, f = 25</p>	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>- 50 mm (2x), 2 freely programmable camera head buttons</p> <p>Fiber Optic Light Cable, with straight connector, diameter 3.5 mm, length 180 cm</p> <p>Equipment Cart (Locally Supply)</p> <p>DOESEL-HUZLY Bronchoscope, length 30 cm, size 6</p> <p>DOESEL-HUZLY Bronchoscope, size 4.5, outer diameter 7.3 mm, inner diameter 6.6 mm, length 30 cm</p> <p>DOESEL-HUZLY Bronchoscope, size 3.5, outer diameter 5.7 mm, inner diameter 5 mm, length 30 cm</p> <p>Prismatic Light Deflector autoclavable, with connection to fiber optic light cable</p> <p>Glass Window Plug</p> <p>Rubber Telescope Guide for use with telescopes or optical forceps</p> <p>FLUVOG Adaptor with sliding glass window plug, sealing cap, notched lens and keyhole opening, moveable.</p> <p>Adjustable Magnifier, swing-away type, with ring adaptation, autoclavable</p> <p>Adaptor, for respirator</p> <p>Injection Cannula, for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm, for use with Bronchoscope Models</p> <p>Straight Forward Telescope 0°, diameter 2.9 mm, length 36 cm, autoclavable, fiber optic light transmission incorporated, color code: green</p> <p>Optical Coin Forceps for Pediatric Broncho-Esophagoscopes, 2 x 2 teeth, for use with telescope forced controlled handle for removal of coins and flat foreign bodies</p> <p>Optical Alligator Forceps for Pediatric Broncho-Esophagoscopes, for use with telescope forced controlled handle for removal of hard foreign bodies</p> <p>Optical Forceps, with spring-action handle for controlled removal of peanuts and soft foreign bodies, for</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>use with Telescope Forceps alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 35 cm Forceps, for peanuts and soft foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 35 cm Rigid Suction Tube, outer diameter 3 mm, working length 35 cm Cotton Carrier, working length 35 cm Sponge Holder, working length 35 cm Foreign Body Basket with ring handle, working length 35 cm FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
27.	<p>BISPECTRAL INDEX (BIS) MONITOR Graphical User Interface (GUI) Advanced digital processing algorithm Index and display update : qCON 0-99, 1s Total index update time : 10 s EEG : $\pm 475 \mu\text{V}$ BSR (Burst Suppression) : Curve, index of 0-100% EMG : Curve, index of 0-100 SQI (Signal Quality Index) : Curve, index of 0-100 Index trend : 15 minutes Lead off detection : 12 s Visual and audio alarms Test system of impedance at the electrodes Data logging : qCON, EMG, EEG, BSR, SQI, impedances and comments posted by the user EEG Sampling frequency : 1024 Hz, 16 bits CMRR : >100 dB Data transfer : USB FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>	2			
28.	<p>BLOOD GAS ANALYZER Measured Parameters: pCO₂ , pO₂ , K⁺ , Na⁺ , Li⁺ , Cl⁻ , Ca⁺⁺, pH, Glu, Lac, tHb, barometric pressure</p>	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Calculated Parameters: HCO₃ -A, HCO₃ -S, BE, BE_{ecf} (SBE), TCO₂ , BB, O₂ sat, O₂ CT, P50, AaDO₂ , Hct, H⁺ , AGAP, SHUNT, Acid-Base Status</p> <p>Throughput: Up to 80 tests/hour depending on configuration</p> <p>Sampling Method: Aspiration system adapted for both capillary and syringes, cleaned with Rinse Solution automatically</p> <p>Sample Volume: 50-200 µl depending on measured parameters</p> <p>Sample Types: Whole Blood, Arterial Blood, Urine, Serum, Plasma, Respiration Gas</p> <p>Calibration: 2-Point calibration in standard and economy modes suited to your working hours.</p> <p>Measurement Temperature of Electrodes and Sensors: Electrodes and Sensor temperature automatically adjusted to 37.0°C ± 0.2 during measurements.</p> <p>Data Capacity: 2 GB SD Card, 32000 measurements and QC data sets</p> <p>Display: 5.4" LCD-display, illuminated, 15-lines, 30 characters</p> <p>FDA/CE/JIS Marked</p> <p>OR Equivalent</p> <p>USA/UK/EEC/Japan</p>				
29.	<p><u>SPIROMETERY SYSTEM</u></p> <p>Turbine type transducer. FVC, VC, MW tests in PRE and POST Broncho dilatation mode. Graphics superposition. Check-up programme. Graphic incentive for children. Configuration programme. Internal data base for more than 150 tests with graphics. 112 mm. (4 in.) internal printer. Data transfer via INTERNET with PC of: Patients tests . Device check-up data. Software update. Tests exportation to other management systems. Calibration programme for quality control or test, according to standards</p> <p>FDA/CE/JIS Marked</p> <p>OR Equivalent</p> <p>USA/UK/EEC/Japan</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
30.	<p>VIDEO LARYNGOSCOPE / GLIDE SCOPE Video Laryngoscope/glide scope Video laryngoscope with LCD display and camera. Anti-Fog Lens. 3" or more LCD display Resolution: 640 x480RGB LED illumination Full view Camera with high resolution monitor. Resolution 2.0M Pixels Field Angle 66° . illuminance ≥800LUX Connectable to external monitor for data storage and training purpose. Rechargeable battery with 3 hours back up. Complete with pediatric and adult reusable blades , carrying case , USB and charger. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>	1			
31.	<p>SPLIT AIR CONDITIONER 1.5TON WITH STABILIZER AND INSTALLATION Split Air Conditioner 18000 BTU (1.5 Ton) with Stabilizer (10000 watt) Complete Installation with wire, circuit breaker, copper pipe and drain pipe etc. (Dawlance/Haier/Mitsubishi / Orient) or Equivalent</p>	20			
32.	<p>CEILING MOUNTED/FLOOR MOUNTED AIR CONDITIONER 4TON WITH INSTALLATION SPLIT AIR CONDITIONER Split Air Conditioner 18000 BTU (1.5 Ton) with Stabilizer (10000 watt) Complete Installation with wire, circuit breaker, copper pipe and drain pipe etc. (Dawlance/Haier/Mitsubishi / Orient) or Equivalent</p>	5			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
33.	REFRIGERATOR 12 FEET	7			
34.	INTERCOM SYSTEM 20 LINES	1			
35.	MOBILE SCREEN	16			
36.	<u>WEIGHT SCALE</u> Baby weight scale Digital Weight Scale for Children, Infants and Neonates. Collapsible folding tray. 9V Alkaline Battery, Date Time digital option and storage of previous weight on LCD screen. Weight capacity: upto 20-Kgs (10-grams). FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	8			
37.	<u>AUTOCLAVE</u> Capacity: 34L. Microprocessor Control system. Temp control: PID. Digital Temp setting . Digital Temp readout. Air convection: Forced convection by fan. Temp uniformity $\pm 2.0^{\circ}\text{C}$ at 55°C . Temp stability $\pm 0.5^{\circ}\text{C}$ at 37°C . Over-temp alarm & shutout : Yes, 4°C to the set point. Timer : Digital, 99 hr. 59min. + HOLD. Temperature range : Digital, 99 hr. 59min. HOLD Standard accessory : 2 S/S mesh shelves, adjustable FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	1			
38.	<u>COMPUTER P-IV WITH HPLASER PRINTER AND SCANNER</u> with all accessories - Core 5i - 4.5 Ghz optical super combo - 500 GB HDD - 4 GB DDR 3 RAM - 17" LCD Monitor - Key Board & Mouse - Laser Printer	5			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
39.	MULTIMEDIA PROJECTOR WITH LAPTOP	1			
40.	<p><u>DIALYSIS MACHINE</u> Complete safety alarm with 30min battery backup The machine dialysis data alarm and display Life Records automatically and necessary data can be shown on screen. Dialysis Machine Capable of Acetate Dialysis, Bicarbonate Dialysis and sequential/Isolated Ultra-filtration Easy to see TFT/LCD Touch Panel and easy to handle control panel Dialysis treatment parameters such as UF Goal, UF Rate, Blood Flow and Syringe Flow are easily settable on the control panel. Profile UF Rate and Dialysis conductivity are selectable. Selectable Concentrate Safety Design Double Chamber System to Precise UF Volumetric Control Supply Water Flow 500 ml/min or more. Supply Water Temperature 10-25 C Setting range Dialysis Flow 300-800 ml/min UF rate 0.0.10 – 5.00 L/h. Dialystate type Bicarbonate/acetate Dialysis Conductivity 130-160 mEq/L(12ms/cm-18ms/cm) Blood Pump segment Tube Diameter 8.0mm Tube Diameter 6.35mm Heparin infusion rate Detector Air bubble Detector Ultrasonic sensor detection system Blood leak detector Monitor section Dialysate temperature 32 to 41C Dialysate flow 300-800 ml/min Arterial pressure indicator Venous pressure indicator Transmembrane pressure indicator UF volume indicator 0.00-40.0L</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Dialysate pressure indicator Heparin pump flow indicator Disinfection and Rinsing Chemical and heat disinfection FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan				
41.	<u>RO PLANT</u> 600 Liters/hour capacity Online R.O. complete with High Rejection TFC membrane S.S. membrane housing Permeate recovery higher than 50% All pipes and fittings should be of high quality stainless steel Conductivity, TDS, Flow, Temperature and pressures display panel or Equivalent USA/UK/EEC/Japan <u>Pre-Treatment</u> Sand Filter – 1 no. Activated Carbon Filter – 1no. Dual Softener with auto-changeover system - 2 nos. Booster pumps – 2 nos. FDA/CE/JIS Marked OR Equivalent	1			
PART-B					
1.	<u>MULTIPARAMETER MONITOR (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)</u> Colored touch display monitor up to 15" or more. Adult, Neonatal & pediatric modes of operation, detection and alarms for all parameters Waveform display 8 or more. Wave form trace speed : 25 and 50mm/sec <u>ECG</u> Leads selection: I, II, III, aVR, aVF, aVL, V, V1-V6, TEST Selectable neonatal & pediatric operation Ability to detect neonatal & pediatric heart rate range, qrs widths and	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>amplitudes. Numeric heart rate Real time wave form Variable gain: 0.5,1,2&4 Heart beat indication <u>NIBP</u> Pressure , oscillometric principal. Systolic , diastolic and mean pressure Rising cuff/continuous pressure display <u>Temperature:</u> Numeric temperature selectable Temperature with probe (external and rectal) Ability to measure neonate and pediatric temperature range <u>Pulse Oximeter</u> Number oxygen saturation measurement Range: 0-100% Sensor for neonate/infant and pediatrics Respiration impedance method using ECG leads for sensing. Breathing rate range, sweep speed Selectable apnea alarm IBP 2 channel IBP Measurement Range: -50 ~ 300mmHg Impedance Range: 300 ~ 3000Ω Alarm: -10 ~ 300mmHg Pressure Transducer: sensitivity, 5μV/V/mmHg Built-in battery with charger for at least 2 hours or more The system must be complete with all sensors, probes and cables and accessories. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
2.	<p><u>X-RAY MACHINE 300MA</u> 20KHz Micorprocessor controlled high frequency X-ray Generator. X-Ray out put power: 30 kW or more, i.e. 200mA at 150kV, 300mA at 100kV. 500 or more Anatomical program for different patient size i.e. peadiatric and adult for small, medium and large body.</p>	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>AEC facility must be quoted as optional.</p> <p>Radiographic kV: 40-150kV in one kV step.</p> <p>Radiographic time: 1ms-8 sec or more.</p> <p>mAs : 0.3 -475mAs or more.</p> <p>Radiographic mA: 10-320mA or more.</p> <p>X-ray Tube:</p> <p>Rotating anode x-ray tube.</p> <p>Large focus 2mm and small focus 1 mm.</p> <p>Heat storage capacity : 140KHU or more.</p> <p>Manual beam collimator with LED light indicator for allignment with bucky.</p> <p>Four way floating top table bucky with fixed height.</p> <p>Longitudnal and lateral travel movement for table bucky.</p> <p>Longitudnal movement both the size, left and right up to 90cm or more</p> <p>Lateral movement , back and forth: 22cm or more.</p> <p>Foot switch must be supplied along with table to control electro megnatic break.</p> <p>Cassette holder to hold cassette size up to 35 x 43 cm.</p> <p>Moving bucky grid ratio 10:1 .</p> <p>Chest bucky stand, consiting of two major parts: colum assembly and image receptor.</p> <p>Column stand must be fixed to the floor and wall having counter weight for counter balance for soft verical movment.</p> <p>Vertical movement of the column assmebly must be around 1490mm, manual travel</p> <p>Mechanical lock for vertical movement and positioning as per patient requirement.</p> <p>Handle to lock should be at any size of carrage.</p> <p>x-ray cassetee tray for cassette size up to 35 x 43 cm.</p> <p>Moving grid 10:1 or better.</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Floor column tube stand with longitudinal rail with 2000mm length or more, column tube holder and x-ray tube assembly with control console.</p> <p>The column tube holder must be rotated on vertical axis +/-90° or more.</p> <p>The vertical manual movement should be 1500mm or more.</p> <p>Maximum focal spot of the floor distance 1900mm or better.</p> <p>Telescopic manual travel of x-ray tube assembly 300mm or more.</p> <p>FDA/CE/JIS Marked</p> <p>Or equivalent</p> <p>USA/UK/EEC/Japan</p>				
3.	<p><u>ULTRASOUND MACHINE</u></p> <p>Digital Color Doppler</p> <p>Ultrasound with Digital Former and Multi Frequency Probe</p> <p>15-inch high definition LCD monitors.</p> <p>Two or more active transducer sockets.</p> <p>Full patient database and image management solutions.</p> <p>Built-in battery supports 1.5 hour scanning capability</p> <p>Complete DICOM 3.0 compatibility.</p> <p>Frequency compound Imaging.</p> <p>Tissue Harmonic Imaging.</p> <p>Panoramic Imaging.</p> <p>Trapezoid Imaging.</p> <p>Modes: B Mode, Multi-B Mode, M Mode, Color Mode, DPI Mode, PW Mode, THI Mode etc</p> <p>Applications: Abdomen, Vascular, Cardiology, Gynecological/Obstetrical, Urology, Musculoskeletal, Interventional ultrasound, Small parts, Anesthesiology, Nerves, Pediatrics and Emergency etc. 800 or more frames/sec.</p> <p>256 levels Gray Scale</p> <p>128 elements Probe</p> <p>15 or more B Mode Focus</p> <p>20dB to 320dB Dynamic Range</p> <p>Magnification 1.0 to 15.0 times.</p>	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	300GB Image Storage frame cine Review Complete with: Convex Probe: Frequency: 2.0 – 6.0 MHz. Gel Bottle. 1 kVA Stabilizer. B/W Thermal Printer. High Grade and Quality Local Trolley. FDA 510(k) approved CE Marked Or equivalent Preferably: UK/USA/Japan/EEC Besides equipment having FDA (510)K and CE Approval from other countries can be considered.				
4.	ULTRASOUND MACHINE (PORTABLE) Digital Portable Color Doppler Ultrasound with Digital Former and Multi Frequency Probe 15-inch high definition LCD monitor. Two or more active transducer sockets. Full patient database and image management solutions. Built-in battery supports 1.5 hour scanning capability Complete DICOM 3.0 compatibility. Frequency compound Imaging. Tissue Harmonic Imaging. Panoramic Imaging. Trapezoid Imaging. Modes: B Mode, Multi-B Mode, M Mode, Color Mode, DPI Mode, PW Mode, THI Mode etc Applications: Abdomen, Vascular, Cardiology, Gynecological/Obstetrical, Urology, Musculoskeletal, Interventional ultrasound, Small parts, Anesthesiology, Nerves, Pediatrics and Emergency etc. 800 or more frames/sec. 256 levels Gray Scale 128 elements Probe 15 or more B Mode Focus 20dB to 320dB Dynamic Range Magnification 1.0 to 15.0 times.	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	300GB Image Storage frame cine Review <u>Complete with:</u> Convex Probe: Frequency: 2.0 – 6.0 MHz. Gel Bottle. 1 kVA Stabilizer. B/W Thermal Printer. High Grade and Quality Local FDA 510(k) approved CE Marked Or equivalent Preferably: UK/USA/Japan/EEC Besides equipment having FDA (510) K and CE Approval from other countries can be considered.				
5.	<p>CENTRAL OXYGEN COMPRESSED AIR AND SUCTION (10 BEDED) CENTRAL OXYGEN COMPRESSED AIR SUCTION (10 BEDED)</p> <p>Control Panel should handle at least two sources i.e. Two sided cylinders. The Manifold should be of high quality and automatic for switch over. System should be able to maintain continuous supply in case of power failure. Capacity for 20 beded ward.</p> <p><u>WALL OUTLET.</u> Outlet should have double lock quick connect and gas specific. The latch / locking release mechanism should be incorporated on the gas outlet with geometrical key indexing and should have a parking facility so that in the event of release of probe by pressing the spring loaded center, the probe / flowmeter does not fall down.</p> <p>Gas outlets wall mounted, Complete in Box/casing gas Specific, Self sealing valve, indexed to eliminate interchangeability/erroneous tapping of gas and cover plate.</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Oxygen Qty.20 Nos. Suction/Compressed Air Qty.2 Nos.</p> <p><u>Air Venturi System with Gauge</u></p> <p>The injector should be connected to wall source of pressure gas using direct probe or rail mounting system. Max. Vacuum 650 to 700 mbar. System should be supplied with 02liter Un Breakable &Sterilizable collection jar.</p> <p>System should be for monitoring of gauge for the gases.</p> <p><u>OXYGEN FLOW METER WITH HUMIDIFIER & PROBES 20 nos.:</u></p> <p>With autoclave able and unbreakable humidifier bottle and probe.</p> <p><u>COPPER PIPING (High quality material):</u> Supply and installation of copper pipe, deoxidized and for use in piped medical gas systems, therefore it should be guaranteed that the tubes are leak-tight, free of pores, blisters etc, Tube should be drawn according to medical supply standard. Material :- Copper tubes, including fixing clips for walls, sleeves, reducers etc Complete for 20 beded ward.</p> <p>Bidder are advised to mention the measurement in meters in their bid.</p> <p><u>Oil Free Duplex Air Compressor System</u></p> <p>DUPLEX SYSTEM 100% oil free Medical Air Compressor with air dryer, filters, Bypass system, Electrical Panel</p> <p>Air Compressor with a minimum</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>house power 2-3HP. Piston Displacement Free Air Flow Tank :40-50 liters Complete with air dryers and filtration. Complete electrical work for compressed air and air dryer.</p> <p>Bidder are advised to visit the site before submitting their bid.</p> <p>Or equivalent UK/USA/EEC/Japan.</p>				
6.	<p><u>NEBULIZER HEAVY DUTY NEBULIZER</u> Compressor: Piston .Fuse: T1,6 A/250V. Operating Pressure:0.90 bar. Air flow: 141/min. Noise Level: 50db. Temporary Use: 30/30 min. ON/OFF. Class of Risk : IIa. Accessories: Adult face mask 01. Pediatriy Face Mask . Faster jet Bulb . Mouthpiece. Nasal prong. Connection tubing. FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>	5			
7.	<p><u>OT LIGHT TWO DOME</u> Over head operating light 160,000 LUX INTENSITY 3 Steps of color Temperature selectable 95Ra of Highest Level of CRI R9 90 of red color rendering ability Focal Size (Dia.20cm ~ Dia.30cm) Dilution Effect with 96 LED units (75% ~ 100%) 4 Smart Sensors for maximizing dilution effect Channel Illuminating Technology Intuitive control with one touch panel Dimming Range : 25% ~ 100 % Endo Mode at 8,000 Lux Detachable & Autoclavable Hand Grip 96 Number of LED Diameter of Head size :65cm or more</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Illumination Ec at 1m working dist 160,000 or better Ance: Min. 40,000 Dimming range : 5 ~ 100 % Endo mode: 8,000 CRI : 95 Color temperature: 3,800/4,300/4,800 FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan</p>				
8.	<p><u>O T TABLE WITH TRACTION SET.</u></p> <p>Multipurpose Electro Hydraulic Operation table with table top slid function. Remote control for electrical function Foot pump for hydraulic function. Fully workable on manual system. Weight capacity 250kg or more. Longitudinal slide of 12" or more. Built in x-ray cassettes channel. Radio translucent table . With safety side rail, emergency stop button , hand switch for patient positioning, up and down, left and right tilt, up and down back , up and down leg, sliding function. Lock/unlock, level, flex/reflex should be incorporated. Normal orientation slide to head end 52" ore more. Normal orientation slide to leg end 15" or more. Range of table movement Head: +/- 90° or better Back: +80°/-50° or better Leg: +30°/-90° or better Trendelungburg : +/-30° or better Lateral tilt : +/-20° or better Height from floor to 40" or better Flex : 25°, Reverse flex : 25°, Reflex : 100°, Revers reflex : 100° Orthopedic Traction unit Abductor and other crucial parts should be made of radiolucent carbon fiber for optimum C-Arm use. Top grade stainless steel or aluminum alloy material should be corrosion</p>	2			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>resistant and easy to clean and disinfect.</p> <p>Accessories for traction unit :</p> <p>Universal Pelvis rest with pad</p> <p>Traction unit</p> <p>Traction boot adult</p> <p>Straight traction extension</p> <p>Patient transfer board</p> <p>Perinial post with pad</p> <p>Tibia and lateral counter action support</p> <p>Abductor bar</p> <p>Supporting stand</p> <p>Necessary Mounting bracket, rails, sockets etc</p> <p>FDA/CE/JIS Marked</p> <p>OR Equivalent</p> <p>USA/UK/EEC/Japan</p>				
9.	<p><u>ECG MACHINE</u></p> <p>6 Chanel ECG Machine with alphanumeric key board, LCD display of 5.5" or more. Pace maker detection.</p> <p>Indicators for loose leads</p> <p>Auto and manual modes.</p> <p>Printer Paper speed (cm/s) : 1, 2.5, 5.</p> <p>Sensitivity (cm/mV): 0.25,0.5,1.2</p> <p>Diagnostic analysis and interpretation as standard</p> <p>Memory : 100 or more records, 10 sec long strip</p> <p>Paper type: roll/A-4</p> <p>Battery backup for 75 minutes for monitoring and 30 min for printing in both automatic and manual mode.</p> <p>Complete with: Set of electrodes, patient cable, power cord, gel, paper roll 58mm / 25m and dust cover.</p> <p>FDA/CE/JIS Marked</p> <p>OR Equivalent</p> <p>USA/UK/EEC/Japan</p>	2			
10.	<p>REFRIGERATOR 12 CFT</p> <p>Dawlance /haier /orient/Pel</p>	2			
11.	<p><u>ELECTRIC WATER COOLER (100 LITER)</u></p> <p>Imported</p>	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
12.	CEILING MOUNTED / FLOOR MOUNTED AIR CONDITIONER (4 TONS) WITH INSTALLATION. Dawlance/haier/orient/Pel OR Equivalent	5			
PART-C					
1.	<u>MOBILE X-RAY 300MA</u> Should be user friendly and foldable designed to ensure a wide range of uses: Hospitals, Clinics, ICU's..... Should be compact & Mobile Should have High Frequency Generator of 20kW or more Radiographic Voltage should not be less than KVP 120 kVp, Radiographic mA should not be less than 300 mA, mAs should not be less than 300 mAs Should have Auto Diagnostic System with error code Should have high frequency generator of 25 KHz Should have handle brake to holds the unit Should have high Quality Wheels with brakes Should have Dual focal spot of 0.3 mm & 1.0 mm Heat storage should not be less than 140KHU Should be complete with Power supply cable of at least 6 -8 m X-Ray exposure switch Cable, 3-4 m FDA/CE/JIS Marked OR Equivalent USA/UK/EEC/Japan	1			
2.	<u>ULTRASOUND MACHINE</u> Ultrasound Machine (Portable) Digital Portable Color Doppler Ultrasound with Digital Former and Multi Frequency Probe 15-inch high definition LCD monitor. Two or more active transducer sockets. Full patient database and image management solutions. Built-in battery supports 1.5 hour scanning capability Complete DICOM 3.0 compatibility. Frequency compound Imaging. Tissue Harmonic Imaging. Panoramic Imaging.	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Panoramic Imaging. Trapezoid Imaging. Modes: B Mode, Multi-B Mode, M Mode, Color Mode, DPI Mode, PW Mode, THI Mode etc Applications: Abdomen, Vascular, Cardiology, Gynecological/Obstetrical, Urology, Musculoskeletal, Interventional ultrasound, Small parts, Anesthesiology, Nerves, Pediatrics and Emergency etc. 800 or more frames/sec. 256 levels Gray Scale 128 elements Probe 15 or more B Mode Focus 20dB to 320dB Dynamic Range Magnification 1.0 to 15.0 times. 300GB Image Storage frame cine Review Complete with: Convex Probe: Frequency: 2.0 – 6.0 MHz. Gel Bottle. 1 kVA Stabilizer. B/W Thermal Printer. High Grade and Quality Local Trolley. FDA 510(k) approved CE Marked Or equivalent Preferably: UK/USA/Japan/EEC Besides equipment having FDA (510) K and CE Approval from other countries can be considered.				
3.	<u>ELECTRIC WATER COOLER (100 LITER)</u>	1			

Sign & Stamp _____

Bidder Name _____

Contact Person _____

Contact No. _____

Supplier Questionnaire

Note: This document should be filled by the Bidder for each item (separately) offered in the Bid and should be signed by a person competent and having the power of attorney to bind the Bidder. It should be enclosed inside the Technical Proposal by the Bidder.

Equipment:		Manufacturer:	
Model:		Supplier:	

Are you Authorized Representative of Manufacturer: Yes No

Year of Introduction of the offered model: _____ Version: _____

Equipment life period (No. of Years) _____

Number of Equipment Installed:

International		Pakistan		Sindh	
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(Note: Please provide names of institution for Pakistan/ Karachi)

Equipment documents to be provided: User Manual Parts List
 Service Manual Electrical Drawing/Schematics

Spare Parts Availability

Guarantee (No. of years)	Local Source Lead Time (No. of days)	Overseas Source Lead Time (No. of days)

Do you hold specialized tools/test equipment required for: Maintenance Calibration

Annual Maintenance Contract Price: _____

Parts and Labour: _____ Labour without parts: _____

On call service charges; Minimum: _____ Per day: _____

For in-house maintenance by LUH engineers are you willing to provide following during post warranty period.

Back up engineer support whenever requested: Yes No

Prompt supply of spares/ consumables: Yes No

Number of factory trained engineer available locally on offered equipment: _____

Warranty period: _____ Details: _____

Uptime Guarantee: _____ %

Response Time to Service Call: _____ Hours

No. of PPM/Year: _____ Times/Year

Do you have any objection/ concerns to use similar specification spares of alternate/ other manufacturer during warranty of maintenance contract (if available) Yes No

Comprehensive LUH engineer training: Yes No

If yes state what included: Training Fees Free of Charge
 Airfare None
 Boarding/Lodging

Up-gradation possibility: Hardware Software

If above has any cost please provide the details of up-gradation with estimated price:

Please state safety standard conformance (e.g. IEC 601, FDA, AAMI etc):

Pre-Installation services requirements:

Power (kW)		Voltage (V/Hz)	
Gas (Cu. ft/ Hr)		Water (L/Hr)	
Air (psi)		Water (pis)	
Vacuum (mmHg)		pre-treated	
Other: Drain, Exhaust, Physical facility change etc			

Environmental Parameters Limits:

Temperature _____ to _____ C/ F Humidity _____ to _____ % RH

Any other specific requirement (e.g. UPS, Voltage Stabilizer, etc. provide details):

Briefly state facilities and benefits provided during warranty period:

Please give the rates of accessories, consumable, disposable items and parts required for proper functioning of equipment life period of each item (in days/months).

Sign & Stamp _____

Bidder Name _____

Contact Person _____

Contact No. _____

[SAMPLE FORM]**Bid**

Tender Enquiry No. _____

Date: _____

To

Medical Superintendent
Liaquat University Hospital
 Hyderabad / Jamshoro

Having examined the bidding documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver the goods specified in the said bidding documents for the sum of **[total bid amount in words and figures]** or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to 5% of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring agency.

We agree to abide by this Bid for a period of 90 days from the date fixed for Bid opening as Tender Notice, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this _____ day of _____ 20_____.

 [signature]

 [in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

Note: This document should be on the letterhead of the Bidder and should be signed by a person competent and having the power of attorney to bind the Bidder. It should be enclosed inside the Financial Proposal by the Bidder.

Price Schedule
Pak Rupee on DDP basis

PART-A

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
1	ICU Ventilator	18				
2	Multiparameter Monitor (NIBP, Temperature, Pulse Oximeter, HP/PR, ECG) with central monitor (4)	40				
3	Multiparameter Monitor (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)	10				
4	Capnography monitor	10				
5	Anesthesia machine	1				
6	Operation Theater Table with all accessories	1				
7	Operation Theater Light with all Accessories	1				
8	Chemistry Analyzer (Mini)	2				
9	Defibrillator	3				
10	Crash Cart Trolley with Equipment (Defibrillator & Monitor etc)	2				
11	Mobile X-ray Machine 300mA	2				
12	Ultrasound Machine	2				
13	ECG Machine	4				
14	Syringe Pump	15				
15	Infusion pump	15				
16	PCA pump (Patient Controlled Analgia pump)	8				
17	CPAP-BIPAP Equipment/Device	4				
18	Suction machine (heavy duty)	20				
19	Central oxygen compressed air suction (10 beded)	5				
20	Oxygen Concentrator	10				
21	Nebulizer Heavy duty	10				
22	Glucometer	8				
23	X-ray illuminator	8				
24	Mobile OT light	2				
25	Laryngoscope set	5				
26	Bronchoscope	1				

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
27	Bispectral Index (BIS) Monitor	2				
28	Blood Gas Analyzer	1				
29	Spirometry system	2				
30	Video Laryngoscope/glide scope	1				
31	Split Air conditioner 1.5ton with stabilizer and installation	20				
32	Ceiling mounted/floor mounted Air conditioner 4ton with installation	5				
33	Refrigerator 12 feet	7				
34	Intercom system 20 lines	1				
35	Mobile screen	16				
36	Weighing scale	8				
37	Autoclave	1				
38	Computer P-IV with HP laser printer and scanner with all accessories	5				
39	Multimedia projector with laptop	1				
40	Dialysis machine	2				
PART-B						
1	Multiparameter Monitor (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)	10				
2	X-ray machine 300ma	1				
3	Ultrasound Machine	1				
4	Ultrasound Machine (Portable)	1				
5	Central Oxygen Compressed Air and suction (10 beded)	2				
6	Nebulizer heavy duty	5				
7	OT Light two dome	2				
8	OT Table with traction set	2				
9	ECG Machine	2				
10	Refrigerator 12 cft	2				
11	Electric water cooler (100 liter)	1				
12	Ceiling mounted /floor mounted Air conditioner (4 tons) with installation.	5				

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
PART-C						
1	Mobile X-ray 300mA	1				
2	Ultrasound Machine	1				
3	Electric water cooler (100 liter)	1				

Note:

- Unit price to be mentioned in both figures and words.
- In case of discrepancy between unit price and total, the unit price shall prevail.

Sign & Stamp _____
Bidder Name _____
Contact Person _____
Contact No. _____

Price Schedule
Foreign Currency on C&F basis

PART-A

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
1	ICU Ventilator	18				
2	Multiparameter Monitor (NIBP, Temperature, Pulse Oximeter, HP/PR, ECG) with central monitor (4)	40				
3	Multiparameter Monitor (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)	10				
4	Capnography monitor	10				
5	Anesthesia machine	1				
6	Operation Theater Table with all accessories	1				
7	Operation Theater Light with all Accessories	1				
8	Chemistry Analyzer (Mini)	2				
9	Defibrillator	3				
10	Crash Cart Trolley with Equipment (Defibrillator & Monitor etc)	2				
11	Mobile X-ray Machine 300mA	2				
12	Ultrasound Machine	2				
13	ECG Machine	4				
14	Syringe Pump	15				
15	Infusion pump	15				
16	PCA pump (Patient Controlled Analgia pump)	8				
17	CPAP-BIPAP Equipment/Device	4				
18	Suction machine (heavy duty)	20				
19	Central oxygen compressed air suction (10 beded)	5				
20	Oxygen Concentrator	10				
21	Nebulizer Heavy duty	10				
22	Glucometer	8				
23	X-ray illuminator	8				
24	Mobile OT light	2				
25	Laryngoscope set	5				
26	Bronchoscope	1				

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
27	Bispectral Index (BIS) Monitor	2				
28	Blood Gas Analyzer	1				
29	Spirometry system	2				
30	Video Laryngoscope/glide scope	1				
31	Split Air conditioner 1.5ton with stabilizer and installation	20				
32	Ceiling mounted/floor mounted Air conditioner 4ton with installation	5				
33	Refrigerator 12 feet	7				
34	Intercom system 20 lines	1				
35	Mobile screen	16				
36	Weighing scale	8				
37	Autoclave	1				
38	Computer P-IV with HP laser printer and scanner with all accessories	5				
39	Multimedia projector with laptop	1				
40	Dialysis machine	2				
PART-B						
1	Multiparameter Monitor (NIBP, IBP, Temperature, Pulse Oximeter, HP/PR, ECG)	10				
2	X-ray machine 300ma	1				
3	Ultrasound Machine	1				
4	Ultrasound Machine (Portable)	1				
5	Central Oxygen Compressed Air and suction (10 beded)	2				
6	Nebulizer heavy duty	5				
7	OT Light two dome	2				
8	OT Table with traction set	2				
9	ECG Machine	2				
10	Refrigerator 12 cft	2				
11	Electric water cooler (100 liter)	1				
12	Ceiling mounted /floor mounted Air conditioner (4 tons) with installation.	5				

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
PART-C						
1	Mobile X-ray 300mA	1				
2	Ultrasound Machine	1				
3	Electric water cooler (100 liter)	1				

Note:

- Unit price to be mentioned in both figures and words.
- In case of discrepancy between unit price and total, the unit price shall prevail.

Sign & Stamp _____
Bidder Name _____
Contact Person _____
Contact No. _____