

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 following Machinery / Equipment under ADP scheme No.656 "Establishment of Cardiothoracic Surgery Department" at Liaquat University Hospital, Hyderabad/Jamshoro for the financial year 2017-18. The last date for submission of tender documents is 27.02.2018 up to 12.00 Noon and will be opened on same day at 12.30 P.M in the presence of participants.

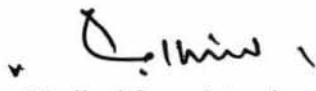
S. NO	Tender #	Description	Tender Fees (Non-Refundable)	SECURITY DEPOSIT
1	35/2017-18	PURCHASE OF MACHINERY /EQUIPMENT UNDER ADP SCHEME NO.656 FOR THE YEAR 2017-18 "ESTABLISHMENT OF CARDIOTHORACIC SURGERY DEPARTMENT"	Rs.2,000/-	2.5%

PROCEDURE & SCHEDULE

Bidding Procedure	Single Stage Two Envelope System
Bid Validity	90 days
Issuance of Tender Documents	08.02.2018 to 26.02.2018 @ LUH, Hyderabad.
Submission of Tender	27.02.2018 at 12:00 Noon @ LUH, Hyderabad.
Opening of Tender	27.02.2018 at 12:30 PM @ LUH, Hyderabad.

- 2) 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/-Each from the office of undersigned Liaquat University Hospital (LUH), Hyderabad.
- 3) 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.
- 4) Tender documents can be downloaded from SPPRA website.
- 5) Bid shall include all government taxes (If Applicable)
- 6) Deduction in the bills will be done as per government rules.
- 7) Bid Security @ 2.5% of the total bid value of quoted items by the bidder 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.
- 8) In case of discrepancies between the Tender Notice and the Tender Documents, the Tender Documents shall take precedence.
- 9) In case of announcement of public holiday or any unfavorable circumstance, the bids shall be submitted and opened as per given schedule on the next working day.
- 10) Queries can be addressed at the following numbers or in person during office hours @ LUH, Hyderabad.

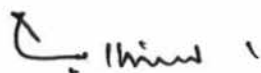
Ph: 022-9210207
Fax: 022-9210208


Medical Superintendent
Liaquat University Hospital
Hyderabad / Jamshoro

REVISED ANNUAL PROCUREMENT PLAN
LIAQUAT UNIVERSITY HOSPITAL, HYDERABAD / JAMSHORO
FINANCIAL YEAR 2017-18

S.No:	Description of Procurement.	Qty	Estimated Total cost	Funds Allocated	Source of funds (ADP / Non ADP)	Proposed Procurement method	Timing of Procurement				Remarks
							1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
1	Drugs / Medicines & Surgical Items (L.P / BULK)		87.750 M	87.750 M	Non ADP	Single Stage Two Envelope	In all quarters as per Requirement				
2	Dietary Items.		40.95 M	40.95 M	---do---	---do---	-----do-----				
3	Uniform & Liveries		3.33 M	3.33 M	---do---	---do---	-----do-----				
4	Misc / Petty / Electric Items.		4.389 M	4.389 M	---do---	---do---	-----do-----				
5	Medical Gases		29.23 M	29.23 M	---do---	---do---	-----do-----				
6	Janitorial Services & Items.		9.450 M	9.450 M	---do---	---do---	-----do-----				
7	Printing Articles.		1.016 M	1.016 M	---do---	---do---	-----do-----				
8	Stationary Articles		0.604 M	0.604 M	---do---	---do---	-----do-----				
9	Instruments		35.464 M	35.464 M	---do---	---do---	-----do-----				
10	Consumable Items / Pathology Kits & Chemicals.		12.183 M	12.183 M	---do---	---do---	-----do-----				
11	Deployment of Security Guards		13.20 M	13.20 M			-----do-----				
12	Repair of Machinery / Equipment		21.87 M	21.87 M	---do---	---do---	-----do-----				
13	Repair of Furniture / Fixture.		2.04 M	2.04 M	---do---	---do---	-----do-----				
14	Drugs / Medicines under Zakat Fund (Bulk)		42.0 M	42.0 M	---do---	---do---	Subject to Release of Funds				
15	Drugs / Medicines under Zakat Fund (LP)		28.0 M	28.0 M	---do---	---do---	Subject to Release of Funds				
16	Machinery Machinery / Equipment under SNE		275 M	275 M	---do---	---do---	Subject to Release of Funds				
17	Furniture / Fixture under SNE		8.925 M	8.925 M	---do---	---do---	Subject to Release of Funds				
18	Purchase of Machinery/Equipment under various ADP Schemes				ADP	---do---	Subject to Release of Funds				
19	Purchase of Furniture / Fixture under various ADP Schemes				ADP	---do---	Subject to Release of Funds				

List Enclosed


 Medical Superintendent
 Liaquat University Hospital
 Hyderabad / Jamshoro



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.

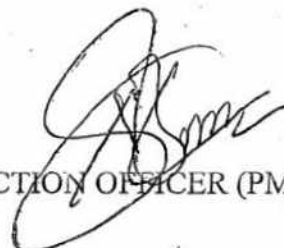
- To perform according to Rule 31 of SPPRA, 2010.
- To Perform any other function ancillary and incidental to the above.

- DR. FAZLULLAH PECHUHO -
SECRETARY TO GOVERNMENT OF Sindh

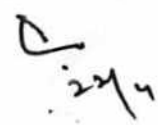
No.HD(P&E)3-2(427)/2014.

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:



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)

8/11/17

8/11/17

Gen. Sec.

TENDER FEE RS.2000/-
(NON REFUNDABLE)



**LIAQUAT UNIVERSITY HOSPITAL
HYDERABAD / JAMSHORO**

**PURCHASE OF MACHINERY /EQUIPMENT FOR THE YEAR
2017-18 FOR ADP SCHEME NO. 656
(ESTABLISHMENT OF CARDIOTHORACIC SUREGERY
DEPARTMENT AT LUH, HYDERABAD)**

TENDER INQUIRY NO.35/2017-18.

DUE ON 27.02.2018 AT 12.30 P.M

Single Stage - Two Envelope Bidding Procedure

IMPORTANT DATES

Issuance of Tender Documents	08.02.2018 to 26 .02.2018
Submission of Tender	27.02.2018 at 12.00 Noon
Opening of Tender	27.02 .2018 at 12:30 P.M

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 annul 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

Authorized Signature & Official Stamp

Procuring Agency Name

Address

Contact No.

Supplier

Authorized Signature & Official Stamp

Bidder Name

Address

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
1.	Head light with battery (Cardiac Loupes)	06				
2.	Micro instrument set	02				
3.	Coronary set	02				
4.	Open heart instrument set	03				
5.	Multi-Parameter Invasive BP Monitor	10				
6.	Multi-Parameter Non-Invasive BP Monitor	10				
7.	Telemetry Central Monitoring System	01				
8.	Adult Mechanical Ventilator	15				
9.	Pediatric Mechanical Ventilator	05				
10.	Anesthesia Pendant	10				
11.	Surgical Pendant	10				
12.	Digital Anesthesia Work-Station	03				
13.	Thoracoscopic / Laparoscopic Tower	01				
14.	Central Oxygen, Compressed air, Suction System	03				
15.	Heart Lung Machine with Accessories	02				
16.	Electrical Sternal Saw	02				
17.	Syringe Pumps	30				
18.	Infusion Pumps	10				
19.	Cell Saver	02				
20.	Defibrillator with Internal Pedals	23				
21.	Crash Cart with Defibrillator	24				
22.	OT Light LED (3 Dome with HD camera) with LED 42"	02				
23.	Autoclave 600 liters with Accessories	02				
24.	Flash Sterilizer	02				
25.	Diathermy Bipolar	03				
26.	Blood Gas Analyzer	02				
27.	Cardiac OT Table Hydraulic Motorized	02				

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

Technical Specifications

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
1.	<p>HEAD LIGHT WITH BATTERY (CARDIAC LOUPES)</p> <p>LED Head Light Light Source: LED reflective technology Lamp Illumination: adjustable from 60,000 lux to 200,000+ lux at 14" Color Temperature: 6100° Kelvin Illumination Spot Size: 2.5 at 14" Supports loupe magnification: from 2X to 5.5X Headlight Construction: all aluminum Headlight Weight: 9 oz/255gm Headband Construction: rigid plastic with double removable foam pads LED Warranty: 5 years Battery: rechargeable lithium-ion (charger included) Battery Life: 8 to 24 hours with the B4X (4-cell) battery Battery Pack Dimensions: B4X is 3.75 X 3.5X 1" Battery Pack Weight: B4X is 9 oz/255gm Battery Warranty: 1 year Binocular Loupes 3.5 x 420mm, with loupe mount Headband with multiple adjustment points and soft padding for comfort and stability S-GUARD S-Frame >3 years warranty Service Instrument pack Cleaning agent: MediClean / Anti-Fog Solution isopropyl alcohol Disinfectant agent: quaternary ammonia compounds Polarization filter P2</p> <p>Iclude</p> <p>Head Band mountable Digital Video Camera Systems for high-resolution images, projected on 32" LED Wall mounted Monitor. Easy carry bag FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>	06			
2.	<p>Micro Instrument set</p> <p>De'bakey forceps str.230/365mm 1 De'bakey fcps str.wide 230/370 1 Resano forceps 230/370mm 1 De'bakey fcps str.mall.230/365 1 Tc needleholder str.225/365mm 1</p>	02			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Tc needleldr cvd.3x8 225/365 1				
	Tc needleldr cvd.1.5x6 220/360 1				
	Tc ryder needleldr str.225/365 1				
	Tc needleldr cvd.2x8 225/365 1				
	Mis scissors 1				
	Potts scissors 45°ang.215/355mm 1				
	Potts scissors 45°ang.265/405mm 1				
	Potts scissors 125°ang.205/345 1				
	Potts scissors 125°ang.255/395 1				
	Atr.de'bakey clmp.del.60/290mm 1				
	Nerve hook probe ended 385mm 1				
	Nerve hook 9mm we 385mm 1				
	Nerve hook fine 5mm we 385mm 1				
	Rongeur 3mm wide jaw 290mm 1				
	Rongeur 3mm wide 30°upw.ang.jaw 1				
	Knot pusher 45°ang.280/420mm 1				
	Endo scalpel round 5mm 1				
	Tissue stabilizer 1				
	Tissue stabilizer clamp 1				
	Tissue stabilizer adapter 1				
	Atractor atr.retraction syst.basis set 1				
	Atrium lift retr.blade 30x35mm 1				
	Atrium lift retr.blade 40x35mm 1				
	Atrium lift retr.blade 50x35mm 1				
	Atrium lift retr.blade 50x45mm 1				
	Atrium lift retr.blade 60x45mm 1				
	Atrium lift retr.blade 75x45mm 1				
	Lateral retraction system set 1				
	Atrium lift retraction rod 2				
	Pneumatic holding arm 2				
	Co2 cartridge adapter 1				
	Co2 cartridge 1				
	Sealing plug 1				
	Optional				
	1. Heart Positioner				
	2. MIS Clip applier				
	3.				
	FDA/CE/JIS Marked				
	OR Equivalent				
	USA/UK/Europe /Japan/Germany				
3.	Coronary set	02			
	Low refraction microfcps.plateau str.210mm 1				
	Diadust micro fcps with ring 2				
	Low refraction mic.fcps.de'bakey str.185mm 1				
	Low refraction mic.fcps.de'bakey str.210mm 1				
	Low refraction mic.needleholder 185mm 5/0 1				
	Low refraction mic.needleholder 210mm 5/0 1				
	Low refraction mic.needleholder 230mm 5/0 1				
	Diadust glasser micro needleholder 180mm 1				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Barraquer needle hldrw/catchstr120mm	1			
	Tc ryder needle holderx-delserr210mm	1			
	Tc ryder needle holderx-delserr175mm	1			
	Tc hegar-mayo ndl holderhvserr 235mm	1			
	Durogrip ryder needle holder delic.230mm	1			
	Low refraction iris scissors str.s/s 110mm	1			
	Low refraction scissors cvd.s/s 110mm	1			
	Low refraction wvct scissors cvd.s/s 110mm	1			
	Low refraction mayo wvct scissors cvd.170mm	1			
	Low refraction lexe scissors cvd 165mm	1			
	Low refraction lexe wvct scissors cvd 165mm	1			
	Low refraction mayo-lexe wvct sciss cvd 165mm	1			
	Low refraction dissecting wvct scissors cvd 115mm	1			
	Low refraction metzenbaum scissors del cvd 180mm	1			
	Low refraction metzenbaum scissors cvd 200mm	1			
	Low refraction nelson-metz scissors cvd.230mm	1			
	Low refraction metzenbaum wvct scissors cvd 180mm	1			
	Low refraction metzenbaum wvct scis del cvd 180mm	1			
	Low refraction metzenbaum wvct scis del cvd 200mm	1			
	Low refraction metzenbaum wvct scis del cvd 200mm	1			
	Low refraction metzenbaum wvct scissors cvd.230mm	1			
	Tc toennis-adson sciss del cvd 175mm	1			
	Low refraction baby-metz wvct scissors cvd 145mm	1			
	Low refraction nelson-metz wvct scissors cvd.230mm	1			
	Low refraction nelson-metz wvct scissors cvd.260mm	1			
	Low refraction nelson-metz wvct scissors cvd 285mm	1			
	Dietrich vessel scissors 90dg 170mm	1			
	Dietrich vessel scissors 120dg 170mm	1			
	De'bakey arteriotomy scissors cvd 175mm	1			
	Micro atr.bulldogclamp ang.14/50mm	1			
	Micro atr.bulldogclamp ang.14/50mm	1			
	Micro atr.bulldogclamp ang.20/55mm	1			
	De'bakey dilator mall 0.5mm 190mm	1			
	De'bakey dilator mall 1.0mm 190mm	1			
	De'bakey dilator mall 1.5mm 190mm	1			
	De'bakey dilator mall 2.0mm 190mm	1			
	De'bakey dilator mall 2.5mm 190mm	1			
	De'bakey dilator mall 3.0mm 190mm	1			
	Caspar scalpel handle rnd 180mm	1			
	Gerald forceps del str 175mm	1			
	Microscissor with round handle delicate blade, with one probe pointed end	1			
	Microscissor with round handle delicate blade, with one probe pointed end	1			
	Microscissor with round handle delicate blade, with one probe pointed end	1			
	Halle elevator blunt 3.3mm 180mm	1			
	Bottom for 1/2 container height:135mm	5			
	1/2 size perf basket lid 247x257mm	5			
	1/2 size perf basket 243x253x56mm	5			
	Fixation pin for storage devices	5			
	Silicone cushioning pad 248x237mm	5			
	Instrument rack type 4 240x40mm	5			
	Primeline pro 1/2 lid red	5			
	Bipolar sealer shaft	1			
	Bipolar sealer shaft	1			
	Bipolar sealer shaft	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Rf generator with main cable and wire paddle FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany	1			
4.	OPEN HEART INSTRUMENT SET Titan microfcps de'bakey 1mm str.185mm 1 Titan microfcps de'bakey 1mm str.210mm 1 Titan microfcps.de'bakey 1mm str.230mm 1 Titan diad.microfcps.plateau str.185mm 1 Titan diad.microfcps.plateau str.210mm 1 Titan diad.microfcps.plateau str.230mm 2 Titan microfcps de'bakey 1mm str.185mm 1 Titan microfcps de'bakey 1mm str.210mm 1 Titan microfcps.de'bakey 1mm str.230mm 1 Titanium de'bakey atr.forceps 1.5/145mm 1 Titanium de'bakey atr.forceps 1.5/195mm 1 Titanium de'bakey atr.forceps 1.5/240mm 1 Titanium de'bakey atr.forceps 2.5/145mm 1 Titanium de'bakey atr.forceps 2.5/195mm 1 Titanium de'bakey atr.forceps 2.5/240mm 2 Titanium micro-adson forceps serr.120mm 1 Titanium micro-adson forceps 1x2t.120mm 1 Titanium adson forceps 1x2t.120mm 1 Titanium gerald forceps del.str.170mm 1 Titanium gerald forceps str.1x2t.170mm 1 Titanium resano dissecting forceps 230mm 1 Titanium lambert-kay atr.clamp 195mm 1 Low refraction microfcps.plateau str.185mm 1 Low refraction microfcps.plateau str.210mm 1 Low refraction mic.fcps.de'bakey str.185mm 1 Low refraction mic.fcps.de'bakey str.210mm 1 Caspar rongeurstrserr 3x12mm160mm 1 Yasargil rongeur str d:2.2/195mm 1 Oldberg rongeur str 7mm-cup180mm 1 Cushing rongeur str 2x10mm180mm 1 Durogrip suture forceps 200mm 1 Titan diad.micro needlehold.rd hdl 185mm 1 Titan diad.micro needlehold.rd hdl 210mm 1 Titan diad.micro needlehold.rd hdl 230mm 1 Titan diad.micro needlehold.rd hdl 185mm 1 Titan diad.micro needlehold.rd hdl 210mm 1 Titan diad.micro needlehold.rd hdl 230mm 1 Low refraction mic.needleholder 185mm 7/0 1 Low refraction mic.needleholder 210mm 7/0 1 Low refraction mic.needleholder 230mm 7/0 1 Tc ryder needle holderx-delserr210mm 1 Tc ryder needle holderx-delserr175mm 1	03			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Barraquer ndl hldr/w/o catch cvd120mm	1			
	Durogrip castroviejo ndl hldr smth 145mm	1			
	Diethrich potts sciss.ver.del.60°180mm	1			
	Diethr.potts scissors ver.del.125°180mm	1			
	Diethr.potts scissors del.45°ang.180mm	1			
	Diethrich potts scissor 125 deg ang180mm	1			
	Tc iris scissors str s/s 110mm	1			
	Tc iris scissors cvd s/s 110mm	1			
	Low refraction iris wvct scissors cvd.s/s 110mm	1			
	Low refraction mayo wvct scissors cvd.170mm	1			
	Low refraction mayo-lexer wvct sciss cvd 165mm	1			
	Low refraction lexer wvct scissors cvd 165mm	1			
	Low refraction dissecting wvct scissors cvd 115mm	1			
	Low refraction metzenbaum wvct scissors cvd 45mm	1			
	Low refraction metzenbaum wvct scissors cvd 180mm	1			
	Low refraction metzenbaum wvct scis del cvd 180mm	1			
	Low refraction metzenbaum wvct scis del cvd 200mm	1			
	Low refraction metzenbaum wvct scis del cvd 200mm	1			
	Low refraction metzenbaum wvct scissors cvd.230mm	1			
	Low refraction toennis-adson wvct sciss.cvd.175mm	1			
	Low refraction baby-metz wvct scissors cvd 145mm	1			
	Low refraction nelson-metz wvct scissors cvd.230mm	1			
	Low refraction nelson-metz wvct scissors cvd.260mm	1			
	Low refraction nelson-metz wvct scissors cvd 285mm	1			
	Derra pediatric forceps 16mm165mm	1			
	Derra pediatric forceps 20mm170mm	1			
	Derra pediatric forceps 26mm175mm	1			
	Cooley pediatric clamp 17mm 170mm	1			
	Cooley pediatric clamp 20mm175mm	1			
	Cooley pediatric clamp 74mm 185mm	1			
	Cooley pediatric clamp 86mm 195mm	1			
	Cooley pediatric clamp 108mm 260mm	1			
	Leitz atr.clamp43mm jaw 190mm	1			
	Glover atr.clamp cvd 215mm	1			
	Glover atr.clamp 195mm	1			
	Glover atr.clamp cvd 220mm	1			
	Glover atr.clamp spoon cvd.245mm	1			
	Left-weber aorta clamp cvd260mm	1			
	Right-weber aorta clamp cvd260mm	1			
	Leland-jones peripheral clmp15dg190mm	1			
	Leland-jones peripheral clmpstr 195mm	1			
	Halsted-mosquito forceps del cvd125mm	6			
	Cooley hook 25x46mm le.	1			
	Cooley atrium retr serr 45x30mm265mm	1			
	Cooley atrium retr serr 45x35mm265mm	1			
	Aortic valve retractor 17x21mm 270mm	1			
	Aortic valve retractor 16x23mm 270mm	1			
	Aortic valve retractor 20x25mm 270mm	1			
	Aortic valve retractor 24x27mm 270mm	1			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Aortic valve retractor 28x20mm 270mm 1 Morse sternotomy retractor ped 12x20mm 1 Morse sternotomy retractor adult 29x19mm 1 Ima sternum retractor complet 1 De'bakey rib spreader complete 200x225mm 1 Kocher retractor 36x20mm 1 Volkman retr6-prngblnt8.5x29mm225mm 1 Zenker retractor 75x12mm270mm 1 Us-army retrac.26x15/43x15-23x15/40x15 1 Ribbon retractor mall 330x40mm 1 Cushing vein retractor 10x13mm 205mm 1 Aortic punch 4mm 140mm 1 Aortic punch 5mm 140mm 1 Babcock atr.forceps215mm 1 Fergusson suct.cann d:2.5mm work.l.130mm 1 Yankauer suction cannula 2.0mm 285mm 1 De'bakey suction cannula d:3.0mm 275mm 1 Clip applier forc.small 200mm 25° 1 Clip applier forc.medium 280mm 25° 1 Atr.ovum forcepsstrlrg 270mm 1 Davidson scapula retr 90x80mm195mm 1 Eicken cannula blunt 3.0mm dia 130mm 1 Foerster sponge fcps serr str 245mm 1 Tubing clamp serrated 200mm 1 Scalpel handle #3 125mm 1 Scalpel handel #3l 1 Scalpel handle #4 135mm 1 Wire cutting plierf/soft-3mm&hrd-2.2mm 1 Kidney tray stainless steel 250mm 1 Laboratory dish 0.16 l 1 Bottom for 1/1 container height:135mm 5 Primeline pro 1/1 lid gold 5 1/1 size perf basket 540x253x56mm 5 Silicone cushioning pad 1/1 size 5 FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany				
5.	Multi-Parameter Invasive BP Monitor <ul style="list-style-type: none"> • Bedside monitor for display of vital sign monitoring of adult, neonate and paed. • Mounted on original wall mounting from same manufacturer. • Screen size: >12.1" TFT colour display and single knob control. • Wi-Fi Card Bedside monitor for display of vital sign monitoring of Adult, Neonate, Paeds. Mounted on Original wall Mounting from same manufacturer	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Equipment must have FDA approved certificate with 510 K, 12.1" Or More TFT Touch Screen Display and Single Knob Control Built in Printer /Recorder.</p> <ul style="list-style-type: none"> • Parameters • ECG /NIBP /SPO2 /Resp/ Temperature And 2xIBP: • Numeric: heart rate. • Waveform : Seven Wave forms minimum, real time and freeze ECG trace • NON-INVASIVE BLOOD PRESSURE (NIBP): • Method: Oscillometric principle • Numeric: systolic, diastolic and mean pressure • Selectable auto inflate interval settings • Rising cuff/continuous pressure display. • TEMPERATURE: • Numeric: temperature selectable in °C/°F. • PULSE OXIMETRY: • Numeric: 0-100% oxygen saturation measuring range. • Waveform-plethysmograph pulse with pulse strength indication. • ARRHYTHMIA ANALYSIS: • Arrhythmia analysis and st analysis. • RESPIRATION: • Breath rate display and settable apnea alarms. • Sweep speed: 6.25, 12.5 mm/sec. • OTHER FEATURES: • Trend data 120 hours: graphical and tabular • ALARMS: • High & low (settable) on all parameters • Visual and audible indication of alarms. • Dual IBP (2-IBP) • Dynamical pressure measuring range - 50 to 300 mmHg • 01 X set Transducer Kit will be supplied with each unit as start up • ETCO2 Monitoring with Accessories • Cardiac Output with accessories • Measurement method : Thermo dilution Technique <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
6.	<p>Multi-Parameter Non-Invasive BP Monitor</p> <ul style="list-style-type: none"> • Bedside monitor for display of vital sign monitoring of adult, neonate and paed. • Mounted on original wall mounting from same manufacturer. • Screen size: >12.1" TFT colour display and single knob control. • Wi-Fi Card <p>Bedside monitor for display of vital sign monitoring of Adult, Neonate, Paeds. Mounted on Original wall Mounting</p>	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>from same manufacturer Equipment must have FDA approved certificate with 510 K. 12.1" Or More TFT Touch Screen Display and Single Knob Control Built in Printer /Recorder.</p> <ul style="list-style-type: none"> • Parameters • ECG /NIBP /SPO2 /Resp/ Temperature And 2xIBP: • Numeric: heart rate. • Waveform : Seven Wave forms minimum. real time and freeze ECG • NON-INVASIVE BLOOD PRESSURE (NIBP): • Method: Oscillometric principle • Numeric: systolic, diastolic and mean pressure • Selectable auto inflate interval settings • Rising cuff/continuous pressure display. • TEMPERATURE: • Numeric: temperature selectable in °C/°F. <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
7.	<p>TELEMETRY CENTRAL MONITORING SYSTEM: Viewing comprehensive real-time and retrospective clinical data supports in making the most effective care decisions for patients.</p> <p>Central Station may bring hemodynamic vital signs together with values from interfaced ventilators, anesthesia devices and laboratory systems.</p> <p>Display real-time waveform, parameter and alarm status from as many as 64 bedside and patient-worn monitors. 32 across two screen and 32 more on surveillance mode.</p> <p>Central Station for use in intensive and coronary care units Unit shall be capable of monitoring of upto 64 beds Capability. The unit shall use wireless networking. Shall provide a minimum of five 72 hour trends per monitor. Shall allow instant alarm bed viewing. The bed status shall always be displayed. Bed to Bed Communication The user shall be able to easily configure the display. Shall be capable of producing a shift report.</p>	01			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	Drug and Haemodynamic Calculations Shall be supplied with the following: Installation Kit Laser Printer FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany				
8.	<p>Adult Mechanical Ventilator</p> <p>Feature:</p> <ul style="list-style-type: none"> • Microprocessor controlled ICU ventilator with positive pressure ventilation • Display size 15" TFT color Wave form (Inspiration, Expiration and Spontaneous Breath) • Automatic patient detection facility preferable. • Reusable Inspiratory and Expiratory Filters are steam autoclaving at temperature 120°C. • Expiratory filter is capable of filtering viruses such as SARS. Filter minimizes particles and bacteria in patient's exhaled gas, protecting the ventilator's exhalation and spirometry • Built-in Flow sensors • Color Waveforms of Inspiratory , Expiratory and Spontaneous efforts • Patient Range - 0.3 kg to 150 kg. • Neonatal, Infant, Pediatric and Adult • Pressure control volume control and pressure control with set volume breathe <ol style="list-style-type: none"> 1. Assisted and Controlled Mandatory Ventilation-A/C 2. Synchronized Instrument Mandatory Ventilation- SIMV 3. Spontaneous Ventilation – SPONT. 4. Non Invasive Ventilation NIV 5. Bi-level / APRV 6. Supports patient 7. Auto Leak Compensation 8. Neonatal N-CPAP <ul style="list-style-type: none"> • Feedback Control Ventilation which supports patient in spontaneous breath by setting only % support and calculating Flow and Volume every 5 milliseconds and calculates Resistance and compliance every 4 to 10 breaths • Pressure Support and pressure support with set volume with flexible flow cycling • Breathing Circuit Compliance Compensation test (Resistance & circuit leak) • Tidal Volume 2ml – 2500 ml • Respiratory Frequency 1-150bpm • Inspiratory Pressure 5-90 cm H2O • I: E ratio: 1:299 – 4:00:1 • Rise time: 1 to 100 % • Expiratory Sensitivity: 1 to 80 % • Disconnect Sensitivity: 20 to 95 % • Insp.Pause. calculate value compliance and resistance are displayed. 	15			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> • Exp.Pause, measured intrinsic and total Peep are displayed. • Pressure and flow triggered sensitivity • At least two wave forms display • Pressure - Time curve, flow – Time curve, Volume – Time curve, or • Pressure - volume Loop • All wave forms can be frozen. • FiO2 – should be able to operate on single air gas source at 21% oxygen • Inspiratory Time 0.2 – 0.8 sec • PEEP 0 – 45 cmH2O • Pressure support • Backup Apnea ventilator for all modes • Apnea Interval: 10 to 60 seconds • 100% Oxygen for 2 minutes • Peak Inspiratory Flow • Plateau Pressure • Oxygen Concentration 100% FiO2 • Expiratory Tidal Volume • Peak Expiratory Flow • IE Ratio • Peak spontaneous Pressure • Mean circuit Pressure • Expiratory Minute Volume • Screen lock safety key • Trolley with Lockable wheels • Alarm volume key. • Alarm reset key. • Alarm: <ol style="list-style-type: none"> 1. AC power failure Alarm 2. High circuit pressure 3. High Exhaled minute volume 4. High exhaled tidal volume 5. Low exhaled minute volume 6. Low inspiratory pressure 7. Gas supply source failure 8. Low battery alarm 9. Alarm violation display 10. Event history log most recent events • AC power 220 VAC, 50 Hz, 2.2 A • Battery Backup one hour -03 hour • Operating pressure range Central Air & Oxygen supply 35 – 100 psi. • Ventilator operate on a single gas source. • RS 323 port (printing & data transfer) • Nurse call outlet <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
9.	<p><u>Paediatric Mechanical Ventilator</u></p> <p><u>Feature:</u></p> <ul style="list-style-type: none"> • Microprocessor controlled ICU ventilator with positive pressure ventilation • Display size 15" TFT color Wave form (Inspiration, Expiration and Spontaneous Breath) • Automatic patient detection facility preferable. • Reusable Inspiratory and Expiratory Filters are steam autoclaving at temperature 120°C. • Expiratory filter is capable of filtering viruses such as SARS. Filter minimizes particles and bacteria in patient's exhaled gas, protecting the ventilator's exhalation and spirometry • Built-in Flow sensors • Color Waveforms of Inspiratory, Expiratory and Spontaneous efforts • Patient Range - 0.3 kg to 150 kg. • Neonatal, Infant, Pediatric and Adult • Pressure control volume control and pressure control with set volume breathe <p>9. Assisted and Controlled Mandatory Ventilation-A/C</p> <p>10. Synchronized Instrument Mandatory Ventilation- SIMV</p> <p>11. Spontaneous Ventilation – SPONT.</p> <p>12. Non Invasive Ventilation NIV</p> <p>13. Bi-level / APRV</p> <p>14. Supports patient</p> <p>15. Auto Leak Compensation</p> <p>16. Neonatal N-CPAP</p> <ul style="list-style-type: none"> • Feedback Control Ventilation which supports patient in spontaneous breath by setting only % support and calculating Flow and Volume every 5 milliseconds and calculates Resistance and compliance every 4 to 10 breaths • Pressure Support and pressure support with set volume with flexible flow cycling • Breathing Circuit Compliance Compensation test (Resistance & circuit leak) • Tidal Volume 2ml – 2500 ml • Respiratory Frequency 1-150bpm • Inspiratory Pressure 5-90 cm H2O • I: E ratio: 1:299 – 4:00:1 • Rise time: 1 to 100 % • Expiratory Sensitivity: 1 to 80 % • Disconnect Sensitivity: 20 to 95 % • Insp.Pause, calculate value compliance and resistance are displayed. • Exp.Pause, measured intrinsic and total Peep are displayed. • Pressure and flow triggered sensitivity • At least two wave forms display • Pressure - Time curve, flow – Time curve, Volume – Time curve, or 	05			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> • Pressure - volume Loop • All wave forms can be frozen. • FiO₂ – should be able to operate on single air gas source at 21% oxygen • Inspiratory Time 0.2 – 0.8 sec • PEEP 0 – 45 cmH₂O • Pressure support • Backup Apnea ventilator for all modes • Apnea Interval: 10 to 60 seconds • 100% Oxygen for 2 minutes • Peak Inspiratory Flow • Plateau Pressure • Oxygen Concentration 100% FiO₂ • Expiratory Tidal Volume • Peak Expiratory Flow • IE Ratio • Peak spontaneous Pressure • Mean circuit Pressure • Expiratory Minute Volume • Screen lock safety key • Trolley with Lockable wheels • Alarm volume key. • Alarm reset key. • Alarm; 11. AC power failure Alarm 12. High circuit pressure 13. High Exhaled minute volume 14. High exhaled tidal volume 15. Low exhaled minute volume 16. Low inspiratory pressure 17. Gas supply source failure 18. Low battery alarm 19. Alarm violation display 20. Event history log most recent events • AC power 220 VAC, 50 Hz, 2.2 A • Battery Backup one hour -03 hour • Operating pressure range Central Air & Oxygen supply 35 – 100 psi. • Ventilator operate on a single gas source. • RS 323 port (printing & data transfer) • Nurse call outlet <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
10.	<p>ANESTHESIA PENDENT ADJUSTABLE AS PER BUILDING CONFIGURATION THREE ARMS SLIDING SYSTEM WITH ROTATION</p> <ul style="list-style-type: none"> • Configured with pneumatic brake. • Cables and hoses are hidden inside the complete system. • The left load column is retractable. • Pre-shipment assembly and testing. 	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> Separate dry and wet parts. Length of bridge 3000mm Sliding distance 600mm Loading capacity >200kgs Loading capacity of each tray ≥ 60 Kgs Dry part and wet part are separate <p><u>Dry part</u></p> <ul style="list-style-type: none"> 3 Trays and 1 Drawer contains O2, Air and Vac sockets (2 each) CPS type outlet 10 power sockets in each Network interface Phone Interface 4 LV Pole <p><u>Wet Part</u></p> <ul style="list-style-type: none"> 3 Trays and 1 Drawer 4 LV Pole Bed-side LED minor surgery Light <p><u>Accessories</u></p> <ul style="list-style-type: none"> Pressure gauges Installation Rails & Holders <p>Cable management system</p> <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
11.	<p>Surgical Pendant Adjustable as per building configuration Three Arms Sliding System with rotation</p> <ul style="list-style-type: none"> Configured with pneumatic brake. Cables and hoses are hidden inside the complete system. The left load column is retractable. Pre-shipment assembly and testing. Separate dry and wet parts. Length of bridge 3000mm Sliding distance 600mm Loading capacity >200kgs Loading capacity of each tray ≥ 60 Kgs Dry part and wet part are separate <p style="text-align: center;"><u>Dry part</u></p> <ul style="list-style-type: none"> 3 Trays and 1 Drawer contains O2, Air and Vac sockets (2 each) CPS type outlet 10 power sockets in each Network interface 	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> • Phone Interface • 4 LV Pole <p>Wet Part</p> <ul style="list-style-type: none"> • 3 Trays and 1 Drawer • 4 LV Pole • Bed-side LED minor surgery Light <p>Accessories</p> <ul style="list-style-type: none"> • Pressure gauges • Installation • Rails & Holders • Cable management system <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
12.	<p><u>Digital Anaesthesia Work-Station</u></p> <ul style="list-style-type: none"> • Latest Model • Anaesthesia Machine with Built in Ventilator • Suitable for low and minimal flow inhalation anaesthesia. • Suitable for adult, pediatric and neonate patients. <p>Anesthesia work station machine to administer anesthetic agents in precise control and flow manner.</p> <ul style="list-style-type: none"> □ The machine should be equipped to monitor the anesthetic agents during operation. □ It should stay on the theatre □ 3-gases O₂/N₂O/AIR. □ Provision of VGA output <p>Unit shall comprise of the following components:</p> <ul style="list-style-type: none"> □ Electronically control, mixing and monitor in gaseous anesthetic gases (O₂, AIR, and N₂O) both by digits as well as virtual tubes. □ Three gas electronic virtual flow tubes for precise control and monitoring of gases. □ Non-inter changeable pipe line inlets □ Onscreen Pipeline Pressure Display & cylinder gauges for O₂, N₂O. □ Central gas/electronically driven unit. □ Pin index cylinder yokes for Oxygen & N₂O (One each), as backup. □ Pin index type cylinders will be provided with the unit (1x O₂ and 1x N₂O) □ Gas outlet and O₂ flush control □ 1 auxiliary O₂ outlet □ Two Lockable castors □ Stain less steel/fiber work surface □ Absorber bag support arm □ Integrated heated breathing system. □ Drawer unit 5-6" high. □ Power outlet with 4 socket outlets to connect the auxiliary equipment. □ CO₂ absorber 1000 – 2000 gm with changeable during the 	03			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>surgery.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete with valve for bag/ventilator,0.5, 1.0, 1.5,2&3L.breathingbags. <input type="checkbox"/> Breathing tube (adult and paed), <input type="checkbox"/> Mounts and Y-piece. <input type="checkbox"/> Scavenging system passive /active type. <input type="checkbox"/> Suction system. ▪ Two precalibrated Vaporizers of Isoflurane & Sevoflurane vaporizer (orbychoice), temperature and flow compensated. <p>ANESTHESIA VENTILATOR:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anesthesia Ventilator withminimum15"or moreLCD/TFT Screen. <input type="checkbox"/> The ventilator shall becap able of ventilating Neonates/pediatric patients/Adult Patients) The ventilator shall have following features as a minimum requirement: <ul style="list-style-type: none"> <input type="checkbox"/> Volume Preset Time Cycled Ventilator (IPPVMode) <input type="checkbox"/> Manual, spontaneous; Volume Mode (IPPV) / CMV <input type="checkbox"/> NIPPV <input type="checkbox"/> Pressure Mode(PCV) ▪ Cardiac bypass mode /HLM ▪ Spontaneous <input type="checkbox"/> Synchronized volume controlled ventilation (SIMV) with PS <input type="checkbox"/> Breathing Mode Selection(Standby / Volume/Spontaneous and Pressure) <input type="checkbox"/> Built in Oxygen & CO₂Monitor (Paramagnetic) <input type="checkbox"/> Inverse I: Eratio Capability <input type="checkbox"/> Gas Specific Input Connectors) <input type="checkbox"/> TidalVolumefrom5ml to1600ml. <input type="checkbox"/> Rate or Frequency 4to 80 bpm <input type="checkbox"/> PEEP 0to 20cmof H₂O. <input type="checkbox"/> Inspiratory Pressure Limit <input type="checkbox"/> Pressure and Volume Loops &Curve. <input type="checkbox"/> Oxygen / Electronic ally Driven <input type="checkbox"/> Power Supply220 VAC, 50 Hz <input type="checkbox"/> Battery Backup(90Minutesormore) <input type="checkbox"/> Low/High FiO₂ Alarm <input type="checkbox"/> Mains Failure alarm <input type="checkbox"/> Low battery alarm. <input type="checkbox"/> Oxygen Senor: Paramagnetic <input type="checkbox"/> Hypoxic Device. <input type="checkbox"/> the ventilator shall be supplied with complete drive hose and power cable. <input type="checkbox"/> Anesthetic Agent monitoring (with in the anesthesia machine) <ul style="list-style-type: none"> <input type="checkbox"/> Two precalibrated Vaporizers of Isoflurane& Sevoflurane vaporizer (orbychoice), temperature and flow compensated. <ul style="list-style-type: none"> • Bedside monitor for display of vital sign monitoring of adult, neonate and paed. • Mounted on original wall mounting from same manufacturer. • Screen size: >12.1" TFT colour display and single knob control. • Wi-Fi Card <p>Bedside monitor for display of vital sign monitoring of</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Adult, Neonate, Paeds. Mounted on Original wall Mounting from same manufacturer Equipment must have FDA approved certificate with 510 K. 12.1" Or More TFT Touch Screen Display and Single Knob Control Built in Printer /Recorder.</p> <ul style="list-style-type: none"> • Parameters • ECG /NIBP /SPO2 /Resp/ Temperature And 2xIBP: • Numeric: heart rate. • Waveform : Seven Wave forms minimum, real time and freeze ECG trace • NON-INVASIVE BLOOD PRESSURE (NIBP): • Method: Oscillometric principle • Numeric: systolic, diastolic and mean pressure • Selectable auto inflate interval settings • Rising cuff/continuous pressure display. • TEMPERATURE: • Numeric: temperature selectable in °C/°F. • PULSE OXIMETRY: • Numeric: 0-100% oxygen saturation measuring range. • Waveform-plethysmograph pulse with pulse strength indication. • ARRHYTHMIA ANALYSIS: • Arrhythmia analysis and st analysis. • RESPIRATION: • Breath rate display and settable apnea alarms. • Sweep speed: 6.25, 12.5 mm/sec. • OTHER FEATURES: • Trend data 120 hours: graphical and tabular • ALARMS: • High & low (settable) on all parameters • Visual and audible indication of alarms. • Dual IBP (2-IBP) • Dynamical pressure measuring range - 50 to 300 mmHg • 01 X set Transducer Kit will be supplied with each unit as start up • ETCO2 Monitoring with Accessories • Cardiac Output with accessories • Measurement method : Thermo dilution Technique <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany.</p>				
13.	<p><u>Thoracoscopic / Laparoscopic Tower</u> HDD model LAPAROSCOPE 10MM 30DEG 330MM 1 LAPAROSCOPE 10MM 0DEG 330MM 1 HF High frequency cable 3 Electronic insufflator 40 Liter with integrated gas preheating device and max flow upto 40 litre/minute 1 HIGH PRESSURE TUBE 1M US/ISO 1 SILICONE TUBE WITH GAS PREHEAT. 1 CO2-FILTER STER 25 UNITS 1 Full HD camera system with latest sensor technology for brilliant image display with user preset configurations 1 Power Supply: 100-240 VAC, 50/60 Hz Full HD image quality: (1920x1080p) Colour System : PAL/NTSC</p>	01			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Aspect Ratio : 16:09</p> <p><u>SPECIAL FEATURES:</u></p> <p>Predefine display setting according to the surgical specialty and also Easy operation of camera functions via integrated control buttons in the camera head</p> <p>Video Output:</p> <ul style="list-style-type: none"> • DVI-D Signal (2) • S-Video signal to 4-pin Mini DIN socket (2x) • RGB signal to D-sub socket • HD-SDI signal to BNC socket <p>Certified to :Protection class I/CF</p> <p>Control:Controllable button on camera head for light source and other valuable function.</p> <p>Full HD camera with zoom coupler 1</p> <ul style="list-style-type: none"> • HD camera head, HD Camera Head max. resolution • 1920 x 1080 pixel Progressive Scan, 50/60 Hz, with 2 freely programable • Camera Head buttons, with integrated Parfocal-Zoom focal • length $f = 13 - 32\text{mm}$ For use with color system PAL and NTSC <p>(HD Recorder with USB and builtin Hard Disk) FOC</p> <p>LED light source, with integrated measurement system for light cable transmission measurement, push to stand by and rotation knob 1</p> <p>Power Supply: 100-240VAC</p> <p>HD Fiber Optic Light Cable, size 4.8 mm, length 250 cm, heat-resistant 2</p> <p>32" HD LED Flat Screen Monitor (wall Mounted), Desktop Consisting of 32" HD LED Flat Screen & Power Supply 1</p> <ul style="list-style-type: none"> • Color System: PAL/NTSC • Aspect ratio: 16:09 • Resolution max: 1920 x 1200, Progressive Scan • Composite: S-Video RGB, DVI and VGA Input • Brightness: 300cd/m² • Contrast: 700:01 • Max Vewing Angle: 178° Vertical • Screen Size: 26" or more • Video input: - Composite signal to BNC socket - S-video signal to 4-pin Mini DIN socket - RGB signal TO 5 x BNC sockets - SDI signal to BNC socket - HD-SDI signal to BNC socket <p>DVI signal to DVI-D socket</p> <p>32" HD Flat LED Screen Monitor (on Pendent support) 1</p> <p>Bipolar Diathermy system (optional but recommended)</p> <ul style="list-style-type: none"> • EES Generator (GEN11) 1 • Enseal Connector1 • Foot switch & Cable1 • Output Verification Key 1 • Adapters 1 • FOCUS+ Long Shears with Adaptive Tissue Technology 1 <ul style="list-style-type: none"> • Enseal G2 Articulating tissue sealer, 5mm Diameter, 35cm length 1 • ACE Shears with Curved blades, 5mm Diameter, 36cm length 1 • ACE 5mm open sleeve 1 • Hand Piece cleaning tool 1 				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> Sterilization Tray 1 Generator Cart 1 <u>Instruments Set</u> Trocar, size 10 mm, color code: green, Consisting of: Pyramidal Obturator. Length 110mm 2 Special trocar SLEEVE 2 Trocar shaft threaded 2 Trocar, size 5.5 mm, color code: Red, Consisting of: Pyramidal Obturator. Length 110mm 2 Special trocar SLEEVE 2 Trocar shaft threaded 2 Trocar, size 13 mm, color code: Yellow, Consisting of: Pyramidal Obturator. Length 110mm 2 Special trocar BODY 2 Trocar shaft threaded 2 Flexible Trocar, size 7 mm, color code: Red, Consisting of: Thoracoscopy Trocar complete 75 mm length 2 Trocar shaft 3 pcs/pack 10 Flexible Trocar, size 13 mm, color code: Yellow Consisting of: Thoracoscopy Trocar complete 75 mm length 2 Trocar shaft 3 pcs/pack 10 Trocar with trumpet valve Trocar with trumpet valve, 110 mm length, diam. 15 mm 2 Conical obturator, diam. 15 mm 2 Recovery trocar complete Trocar with trumpet valve, 110 mm length, diam. 20 mm 2 Conical obturator, diam. 20 mm 2 diam. 5.5 - 7.0 mm à 20 pcs. 5 diam. 10.0 - 12.5 mm à 20 pcs. 5 diam. 13.0 mm à 20 pcs. 5 ENDO RETRACTORS Fan Retractor diameter 10mm, length 400mm 1 Y Retractor diameter 10mm, 370mm 1 Retraction instrument for fine sutures, dia 5mm length 400mm 1 Retraction instrument for fine sutures, dia 10mm length 400mm 1 Laparoscopy L -hook electrode with modular shaft Diameter 5mm length 340mm, Consists Handle for Electrode 2 L- Hook Electrodes 2 CURVE L- Hook Electrodes 2 Spatula Electrode 2 HF High frequency cable 2 Suction & Irrigation tubes 5mm/310mm 1 Suction & Irrigation tubes with trampet Valve 10mm/310mm 1 Straight peritoneal scissor, rotating , with connector pin for unipolar coagulation, size 5 mm, length 35cm, Single action jaws, Consisting of: 1 <ul style="list-style-type: none"> Forecep insert Outer Tube, insulated Plastic Handle, Without Ratchet Hook Scissor 5mm diameter and 330mm length, connector pin for unipolar coagulation, size 5 mm, length 35cm, Single action jaws, Consisting of: 1 <ul style="list-style-type: none"> Forecep insert Outer Tube, insulated Plastic Handle, Without Ratchet Micro-dissecting scissors, tips curved to the left connector pin for unipolar coagulation, size 5 mm, length 35cm, Single action jaws,				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, Without Ratchet <p>Mini Metzenbaum Scissor connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, Without Ratchet <p>Maryland Dissecting and grasping forceps connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, Without Ratchet <p>OVERHOLT Dissecting clamp, 60° connector pin for unipolar coagulation, size 5 mm, length 35cm, double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, without ratchet <p>CRILE Fixation and dissecting forceps, curved connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, without ratchet <p>Grasping Forceps . Fenestrated, Fine serration, rotating, with connector pin for unipolar coagulation, size 5 mm, length 35cm, Single action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, universal <p>Grasping Forceps . Bowel, rotating, with connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, universal <p>Babcock dissecting & grasping forcep connector pin for unipolar coagulation, size 5 mm, length 35cm, Single action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, universal <p>Babcock dissecting & grasping forcep connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, without ratchet <p>Endolung Grasping forceps connector pin for unipolar coagulation, size 5 mm, length 35cm, double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, without ratchet <p>Atraumatic universal and lung forceps connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws,</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, without ratchet <p>Atraumatic endo parenchyma fixation forceps connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, without ratchet <p>PENNINGTON 10 mm / 370 mm 1</p> <ul style="list-style-type: none"> • Tissue-grasping forceps • Outer Tube, insulated • Plastic Handle, without ratchet <p>Tissue grasping and manipulation forceps, jaw length 90 mm connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws 1</p> <p>Adtec fixation & Dissecting Forceps 2x4 teeth, rotating, with connector pin for unipolar coagulation, size 5 mm, length 35cm, Single action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, universal <p>DE BAKEY Atraumatic clamp 5 mm / 310 mm connector pin for unipolar coagulation, size 5 mm, length 35cm, Double action jaws, Consisting of: 1</p> <ul style="list-style-type: none"> • Forcep insert • Outer Tube, insulated • Plastic Handle, universal <p>SATINSKY Atraumatic clamp 5 mm / 310 mm 1</p> <p>ALLIS 5 mm / 310 mm 2</p> <p>Atraumatic tissue grasping forceps 2</p> <p>Large Biopsy Forceps, 10mm,310mm 2</p> <p>NEEDLE HOLDER FORCEPS</p> <p>Durogrip curve Left needle holder 5mm length 370mm 1</p> <p>Durogrip curve right needle holder 5mm length 370mm 1</p> <p>Durogrip straight needle holder 5mm length 370mm 1</p> <p>KNOT GUIDE INSTRUMENTS 5MM / 310MM 1</p> <p>Gall bladder extractor with 3 blades (blade length: 55 mm) for use with a 10 mm trocar 1</p> <p>Reduction Sleeve (10/5mm) length 165mm 1</p> <p>Dilation sets from 5.5mm to 10.mm 1</p> <p>Dilation sets from 10mm to 20mm 1</p> <p>Dilation sets from 10mm to 15mm 1</p> <p>VERESS INSUFFLATION NEEDLE 150MM 1</p> <p>VERESS INSUFFLATION NEEDLE 100MM 1</p> <p>VERESS INSUFFLATION NEEDLE 120MM 1</p> <p>Exploratory probe with retention function and scaling 5mm/400mm 1</p> <p>Bipolar Maryland grasping forcep, 5mm 310-360 mm 2</p> <p>Trocar, size 3.5 mm, color code: green, Consisting of:</p> <p>TROCAR BODY 3.5MM/60MM 1</p> <p>OBTURATOR 3.5MM/60MM 1</p> <p>TROCAR SLEEVES 1</p> <p>Sample Excision forceps dia 3.5mm , length 280mm 1</p> <p>Hook electrode for use with electrode handle2</p> <p>Electrode handle with hand activation for use with GK398R... 2</p> <p>SUCTION IRRIGATION TUBE DIA 3.5MM/290MM 2</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<u>Accessories</u> Tray, standard for Endoscopy Instruments 2 Endo Cart Trolley 1 The system complete with all sensors, probes, cables or any other accessories required for measuring all the above selected parameters. FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany				
14.	<u>Central Oxygen, Compressed air, Suction System</u> The scope of work shall cover all distribution, piping and terminal units for oxygen, compressed air and vacuum in order to provide standard flow rate and pressure at the proposed outlet point 16x2 fully automated changeover oxygenation manifold (bulk cylinder of D type) having top frame comprising of high pressure copper pipe of size 5/8" ID x 7/8" OD with high pressure brass fitting made of high tensile brass, NRV and high pressure copper tailpiece made of high pressure copper size 3/16" x 3/8" OD. The system shall have source shut-off valve for easy changing and positioning, without closing the bank. The cylinder should be place with the help of cylinder brackets and fixing chains which should be zinc plated appropriate. A filter having pore size of no greater than 100µm shall be provided between the cylinder(s) and the first pressure regulator. Air Compressor: The air compressor will have Air-cooled, oil free, at least three-air compressor source for continuous duty application. Air compressors should be critical maintenance free (CMF) and seizure free technology, which ensures that the compressors can with, stands continuous use under high temperature and posses high resistance to extreme environments. Type of compressor: oil scroll technology Capacity: 1500-2000 liters per minute and maximum pressure 121 psi. <i>Following should be provided with compressors:</i> Inlet filter Check valve delivery pipe Two Conditioning systems Two compressed air receiver One dew point alarm sensor shall be fitted to the pipeline system down stream of all conditioning system. One dryer with shut-off valve and automatic drains. An adsorber, a catalyst and filter as required removing contaminants. Supply system of medical grade air with compressor should comply with the following: Oxygen $\geq 20.4\%$ and $\leq 21.4\%$ Total oil concentration $V/V \leq 0.1\text{mg}/\text{m}^3$ measured at ambient pressure Carbon monoxide conc. $\leq 5\text{ml}/\text{m}^3$ Carbon dioxide conc. $\leq 500\text{ml}/\text{m}^3$ Water vapour content $\leq 67\text{ml}/\text{m}^3$	03			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Sulfur dioxide $\leq 1\text{ml/m}^3$ NO+NO₂ $\leq 2\text{ml/m}^3$</p> <p>Material (Pipe) : The piped distribution system shall use copper pipes manufactured from phosphorous de-oxidized non-arsenical copper, seamless, half hard, tempered to comply with ASTM-B 819.00; 2002 standards. Pipes are to be degreased suitable for oxygen use. The pipe sizes to be used are from among as under: Fittings shall be end feed type, manufactured from the same grade of copper as the pipes and be in accordance with the requirements of BS EN 1254-1:1998</p> <p>Part 1. Fittings shall be degreased suitable for oxygen use and supplied sealed in protective polythene bags. Copper to copper joints shall be made on site using a silver-copper-phosphorous brazing alloy to BS 1845 using an oxygen free nitrogen inert gas shield and no flux. Copper to brass or gunmetal joints shall not be made on site. Except for mechanical joints used for components, all metallic pipeline joints shall be brazed or welded. The method used for brazing or welding shall permit the joint to maintain their mechanical characteristics up to 600 deg C. Filler metal for brazing shall nominally be cadmium free (less than 0.025% mass fraction). Medical gas pipeline shall be bonded to an earth terminal as near as possible to the point at which the pipeline enters the building. All pipelines for medical gases shall be routed in such way that they are not exposed to a temperature less than 50 C above the dew point of the gas distribution pressure. Pipeline placed underground shall be placed in duct or tunnels. The duct and tunnels shall be provided with adequate drainage to prevent water accumulation. Pipeline shall be supported at interval to prevent sagging or distortion.</p> <p>Test : After erection, all the new pipes cleaned or purged with the help of dry nitrogen gas. And complete existing and new system will be tested with dry nitrogen @ 1.5 times of working pressure for 24 hrs. System should be tested for integrity, leakage, obstruction flow, particulate contamination, pressure relief valve, monitoring and alarm system. The pipes should be accompanied with manufacturers test certificate for the physical properties & chemical composition. Further the pipe should be got tested by a reputed third party and certificate to this effect should also be provided. Imported copper fitting shall be made of copper and suitable for steam working Pressure of 17 bar and especially made for brazed socket type connections. All area of pipeline should be isolated by putting shut-off valve at various levels and lockable line valve to match with HTM 2022, EN737.</p> <p>Marking and color coding: Pipeline shall be marked with the name and/or symbol adjacent to shut-off valves, at the junctions and the changes of direction, before and after walls and partitions, etc. at the intervals of no more than 10 mand adjacent to terminal units. Marking shall include arrows denoting direction of flow and letters used for marking not less than 6mm high. All existing main pipes and proposed exposed pipes /should be painted with two coats of synthetic enamel paint & color codification to</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>comply with ISO 5359. All concealed pipes to have gas identification bands / labels at appropriate distance. Similarly all pipes which need embedding in the wall will be tested/painted / labeled and properly insulated in accordance with ISO 5359.</p> <p>Monitoring and alarm system Monitoring system systems will have four types of alarm, operating alarm, emergency operating alarm, emergency clinical alarm and information signals. All parameters should be displayed in digital form. Signals should be auditory, visual and indicate color. Auditory signals can be silenced by operator but silencing period should not exceed 15 min. Auditory and visual signal requirements should comply with IEC 60601-1-8 The alarm system will be of modular construction and digital type, should provide visual indication of normal status and location of indicator panel should allow continuous observation. Indicator panel displaying all operating alarm signals shall be installed in at least one location allowing continuous observation. Signal should indicate: 1. Changeover from primary to secondary cylinder supply. 2. Any primary, secondary and reserve cylinder below minimum pressure or content. 3. Malfunctioning of compressors, vacuum pumps. Emergency clinical alarm signal shall be installed in the critical area and an additional panel will be installed near the area shut-off valve and shall indicate area monitored. Alarm system shall be design so that an alarm is initiated if there is electrical power failure between the sensor and the indicator. Monitor and alarm system shall be connected to the normal and emergency electrical power supply. The default set point shall be $\pm 20\%$ variation from normal condition. Set point shall be adjustable on the board. In addition "Push to Test" & "Alarm silence" button shall be easily accessible to operator and test the unit. Each specific service shall be provided with LED digital readout comprising of 0-250 psig and 0-30 inch Hg for vacuum.</p> <p>Terminal Outlets (To be installed on Wall Recessed (Concealed) / Console; on Ceiling Pendant in ICU) All outlets should be double lock quick connect and gas specific for the services indicated (viz. O₂, AGSS & Vacuum) and to accept only compatible quick connect Geometric Index type st. steel adapters. The outlet shall be meet EN 737, BS 6834, HTM2022 . BS 5682:1984 standards. The rough in assembly shall be of modular design and include a gas specific 16 swg steel mounting plate design to permit onsite ganging of multiple outlets, in any order, on 5" center line spacing. A machine brass outlet block shall be permanently attached to the mounting plate in such a manner so as to permit the 18" long, 3/8" OD inlet copper tube to be swiveled 360 degrees for the attachment to the piping system. Gas service identification shall be affixed to the inlet tube and face of the mounting plate. A secondary valve shall be installed in the outlet block assembly for pressure testing and to prevent gas flow when the latch valve assembly is removed for service. A 1/2" high metal flange around the outlet block seal opening shall provide a plaster barrier. A temporary, transparent cover shall be provided to keep debris out of the outlet during installation while permitting labels to be viewed for outlet service identity. The rough in assembly shall contain a double seal to prevent gas leakage between the rough</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>and the latch valve after the wall sare finished. A single "O" ring seal shall not be acceptable.</p> <p>The latch valve assembly shall include an "O" ring seal primary valve and be gas specific for the labeled service and accept only corresponding compatible hose and apparatus adaptors. The latch valve assembly shall be indexed to the corresponding rough in assembly to avoid accidental cross fitting and shall telescope upto 3/4" to allow for variation in finished wall thickness from 1/2" to 1-1/4". A metal trim plate with permanent, color coded marking of service identification shall be included as part of the latch valve assembly.</p> <p>For each recessed outlets-a die cast. epoxy powder coated cover plate shall be provided to trim each outlet and to fill the space between adjacent outlet. Cover plate design shall allow latch valves individually removed for servicing.</p> <p>The latch / locking release mechanism should be incorporated on to the gas outlet with geometrical key indexing on specific adapter (probe) and should also have a parking facility so that in the event of release of probe by pressing the spring loaded center ,the probe /flow meter does not fall down.</p> <p>Venture bottle placement at each air socket</p> <p>Medication nebulizer Inhalette S, with toggle switch valve, O2/AIR, DIN</p> <p>Main alarm panel / area alarm panels</p> <p>FDA/CE/JIS Marked</p> <p>OR Equivalent</p> <p>USA/UK/Europe /Japan/Germany</p>				
15.	<p><u>Heart Lung Machine with Accessories</u></p> <p>Pump Console customizable solution stainless steel Space-Frame five wheel stability system with reduced footprint and internal cabling and flexible pump mounting system roller pumps (direct drive with non-contacting brushless motors and field orientation control)</p> <ol style="list-style-type: none"> 1) 4" pumps (2 in number) 2) 6" pumps (2 in number) 3) 8" pumps (2 in number) <p>venous smart occlude centrifugal drive system arterial smart occlude</p> <p>Management System Includes workstation, ventilation system and pump control module.</p> <p>Workstation (primary user interface) including</p> <ol style="list-style-type: none"> 1) 15" with integrated software applications 2) Blood Flow Management, the Delivery of Cardioplegia and Patient Weaning 3) Patient Ventilation, Gas Blending and Vacuum Management 4) Vitals Management and Diagnostic Alarm Settings 5) Data Management and System Settings <p>Ventilation system for the measurement of delivered Anesthetic gases during extracorporeal circulation, having both atmospheric and hypobaric ventilation mode</p> <p>System M Technology</p>	02			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Battery backup</p> <p>Accessories</p> <ul style="list-style-type: none"> A dedicated two channel medication delivery system for the safe delivery of Cardioplegia. An integrated closed-loop venous tube clamping system designed specifically for the complex process of patient weaning at the end of CV Surgery. <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
16.	<p><u>Electrial Sternal Saw</u></p> <ol style="list-style-type: none"> Autoclave able Full-sealed electric motor Excellent quality, portable design and adjustable speed control. Sheath protection function capable of protecting parenchyma from damage Replace the guide, can be used as reciprocating saw. Battery without memory environment Titanium housing Non-Sterile Rechargeable batteries Provides 250 watts of consistent power Automatic Battery check <p>Accessories</p> <p>Charger /charging bay Rechargeable batteries Reciprocating saw Oscillating saw Protection guide for saw Power Systems Oil Spray Lid Sterile Funnel Battery Removal Device Box Set for 2 machines</p> <ul style="list-style-type: none"> The system complete with all sensors, probes, cables or any other accessories required for measuring all the above selected parameters. <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>	02			
17.	<p><u>Syringe Pumps</u></p> <ul style="list-style-type: none"> FDA Approved Post-occlusion bolus reduction software Weighing ≤ 3 pounds Allows for flexibility and easy transport within all care settings (OR/Anesthesia, NICU and PICU, Oncology, ICU, CCU, and Emergency Departments). Independent Modularity Easily Stackable Non-numeric keypad with simple Intuitive Universal User Interface Extensive Drug Library with customizable hard and soft limits and clinical advisories Integrated piston brake 	30			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> Automatic drive technology Horizontal and vertical syringe pump mounting options <u>Accessories</u> <ul style="list-style-type: none"> Infusion Management Software system with 50" Color LED Monitor (1) <u>Docking Station (6 Pieces total)</u> FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany				
18.	<u>Infusion Pumps</u> <ul style="list-style-type: none"> FDA Approved Type of unit: Volumetric infusion pump Dimensions :214 x 68 x 124 mm (WxHxD) Weight Approx. 1.4 kg Moisture protection IP 22, drip protected for horizontal usage Display Backlit graphic display, ~40° read angle from all sides Keypad Backlit keys , cell phone like cursor navigation Accuracy of set delivery rate &lt;&lt; ±0.5 % mechanical accuracy ± 5 % according to IEC/EN 60601-2-24 Flow Rates 0.1-1200 ml/h Online Rate modification without delivery interruption Automatic bolus reduction triggered by occlusion alarm 9 Occlusion pressure levels selectable. Upstream Pressure Detection Datalock: Datalock on 3 safety levels, Datalock 3 also with drug specific hints Keep veins open mode: Default settings: user-defined configuration or deactivation of KVO rates possible. Standby mode: 1 min to 24 hrs, drug name also visible in standby mode Drug library: Integrated in the start-up procedure or via special functions PCA profile: Via drug library, all parameters can be pre-configured TCI profile: Via drug library, all parameters can be pre-configured Piggyback: Also supported by drug library Ramp/Taper profile: Ramp/Taper profile Air Sensor sensitivity 10µl ... 300µl air bubbles - No air entrapment between tube and sensor thanks to the smart sensor-tube coupling - Geometry of the sensor makes bypass of the sensor by a water droplet impossible - Acoustic lens technology minimizes signal divergence loss - Factory calibration reduces maintenance costs - Robust in terms of line geometry, no false alarms Dose rate calculation: Full-automatic via drug library or manually, integrated in start-up operation History of last 1000 events can be stored in real time memory. 	10			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<ul style="list-style-type: none"> Free flow Protection Drug Library of upto 1500 drugs accuracy $\pm 5\%$ according to IEC/EN 60601-2- 24 Operating Temperature $+10^{\circ}\text{C} \dots + 40^{\circ}\text{C}, +50^{\circ}\text{F} \dots +105^{\circ}\text{F}$ Battery operating time Minimal power consumption of the devices and new battery technology ensure long operating times, e.g. 9.4 hrs. @ 80 ml/h, 8.5 hrs. @ 100 ml/h <p style="text-align: center;"><u>Accessories</u></p> <ul style="list-style-type: none"> Infusion Management Software system with 50" Color LED Monitor (1) Docking Station (3 pieces Total) <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
19.	<p>Cell Saver</p> <ul style="list-style-type: none"> Smaller footprint, lightweight, and portable Durable casters with easy on/off locks. Components fold away for easy transport. Top deck visibility to ensure proper set-up. Cell salvage and sequestration sets are color-coded for ease of use. Multiple bowl volume options and packaging configurations. Easy to navigate touch screen with color-coded messaging and corresponding status beacon that can be seen throughout the OR. One touch operation with flexibility to customize and save settings for your unique needs. Preset procedure record information for ease of entry. Fast start-up time with suction options available in seconds On-screen help is always available. Ability to password protect settings groups. Flexibility to define settings group for system start-up. Custom alarm tones and volume controls. <p>1) Device only Height: 16.5 in (41.9 cm); Width: 11.75 in (29.8 cm); Depth: 21.5 in (54.6 cm)</p> <p>2) Device with cart Height: 72 in (182.9 cm) poles extended; 48 in (121.9 cm) poles down; Width: 21 in (53.3 cm); Depth: 26.5 in (67.3 cm)</p> <p>3) Weight of device < 56 lbs (25 kg)</p> <p>4) Weight of cart < 40 lbs (18 kg)</p> <p>5) Voltage 100–240 VAC $\pm 10\%$</p> <p>6) Pump speed 0–1000 mL/min (adjustable)</p> <p>7) Centrifuge speed Latham bowl: 5650 rpm;</p> <p>8) Blow-molded bowl: 7500 rpm; .</p> <p>9) Sequestration: 2050-5650 rpm (adjustable)</p> <p>10) Fuse rating 100–240V; T3.15A250V</p>	02			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	11) Operating frequency 47–63 Hz 12) Laser classification Class 3R laser product 13) Power cord length 16 ft (4.9 m) <u>Accessories with each system</u> <ul style="list-style-type: none"> • Cart • Processing Set (225 mL) (10 sets) • Fast Pack (225 mL, 205, 208, HAR-A-1000) (10 Sets) • Sequestration Kit (10 Sets) • Collection Reservoir w/150 µ filter, 3 L (10 Sets) • Aspiration & Anticoagulation Line (10 sets) • RBC Bag, 1000 mL (10 Sets) • 70 mL Bowl Chuck Adapter (10 sets) • 40 µm Microaggregate Blood Transfusion Filter (10 sets) • 1000 mL Transfer Bag with 2 Transfer Spikes (Y-set) (5 Sets) • Waste Bag, 10 L (10 Sets) User Manual FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany				
20.	<u>Defibrillator with Internal Pedals</u> <ol style="list-style-type: none"> 1. Ease of use 2. Soft keys 3. Monitors IBP, Capnography, ECG, Pulse Oximetry, Vital Signs 4. Delivers effective synchronized cardio version and noninvasive pacing. 5. Intuitive design with therapy controls and connections on the right side and monitoring on the left 6. Automated self-tests run hourly, daily, and weekly 7. Active ready-for-use visual indicator 8. Automated External Defibrillator (AED) mode (Shock delivery in less than 10 sec) 9. Color-coded monitoring ports 10. Integrated strip chart recorder 11. Large color display showing 4 waveforms and numeric 12. Lets view all 12 leads at once with the 12-lead cardiograph option. 13. Task-specific views (CodeView, MonitorView, PacerView, and 12-LeadView) 14. Clinical networking capability 15. Scalable platform 16. Standardized alarms, cables, and interchangeable accessories 	23			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>17. Q-CPR measurement and feedback tool</p> <p><u>Accessories</u></p> <ul style="list-style-type: none"> • Skin paddles (100 pairs) / Multifunction defibrillator pads in adult, pediatric choice (with Paddle Contact Indicators) . • Same Company Internal defibrillation paddles in Paeds and Adult sizes (with Switches on paddle handle) • Q-CPR Instrument (one piece) • Fast response kit (for each defib set) • Tool / system kit • Tutorial Brochure / Video DVD <ul style="list-style-type: none"> • The system complete with all sensors, probes, cables or any other accessories required for measuring all the above selected parameters. <p>• FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
21.	<p><u>Crash Cart with Defibrillator</u> <u>6-Drawer Cart</u> Description: White Frame Loaded Cart with (5) Red 3"/3"/6"/6"/9" Drawers with EMG Lock</p> <p>Included Accessories:</p> <ul style="list-style-type: none"> • IV poles on each side • defibrillator shell • cardiac board. • large oxygen tank holder • two sharps container holders • two accessory rails <p>Defibrillator with Internal Pedals</p> <ol style="list-style-type: none"> 1. Ease of use 2. Soft keys 3. Monitors IBP, Capnography, ECG, Pulse Oximetry, Vital Signs 4. Delivers effective synchronized cardioversion and noninvasive pacing. 5. Intuitive design with therapy controls and connections on the right side and monitoring on the left 6. Automated self-tests run hourly, daily, and weekly 7. Active ready-for-use visual indicator 8. Automated External Defibrillator (AED) mode (Shock delivery in less than 10 sec) 9. Color-coded monitoring ports 10. Integrated strip chart recorder 11. Large color display showing 4 waveforms and numeric 12. Allows view all 12 leads at once with the 12-lead cardiograph option. 13. 14. Task-specific views (CodeView, MonitorView, PacerView, and 12-LeadView) 	24			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>15. Clinical networking capability 16. Scalable platform 17. Standardized alarms, cables, and interchangeable accessories 18. Q-CPR measurement and feedback tool</p> <p><u>Accessories</u></p> <ul style="list-style-type: none"> • Skin paddles (100 pairs) / Multifunction defibrillator pads in adult, pediatric choice (with Paddle Contact Indicators) Same Company Internal defibrillation paddles in Paeds and Adult sizes (with Switches on paddle handle) • Q-CPR Instrument (one piece) • Tool / system kit • Tutorial Brochure / Video DVD <p>The system complete with all sensors, probes, cables or any other accessories required for measuring all the above selected parameters.</p> <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
22.	<p>OT Light LED (3 Dome with HD camera) with LED 42"</p> <ul style="list-style-type: none"> • Main Light head output: Adjustable 20,000 to 160,000 12.5 – 100 % (2 % ambient light, 3,000 lux)Lux at 1 meter distance. • second Light head output: Adjustable 20,000 to 160,000 12.5 – 100 % (2 % ambient light, 3,000 lux)Lux at 1 meter distance. • Third Light head output: Adjustable 20,000 to 160,000 12.5 – 100 % (2 % ambient light, 3,000 lux)Lux at 1 meter distance. <p>Sterile Touch Control (STC) with sterile handle should be able to control light intensity and light field size. Should have synchronization switch which can synchronize both dome</p> <p>Illumination depth L1 + L2 + L3 (20 %) 1,300 mm Illumination depth L1 + L2 + L3 (60 %) 700 mm Colour rendering index Ra 95 Colour rendering index R9 94 Colour rendering index R13 93</p> <p>Number of LED modules 18 (92 LED per demo)</p> <p>Service life of the LED bulbs 50,000 hours Ergonomically shaped sterilisable handle included Light head diameter 620 mm Single LED replace in case of LED is not working & individual lamp focusing function. Light with shadow management system. 360-degree rotation at each joint. User Friendly design copula for support in Laminar air flow delivery.</p> <p>FULL HD CAMERA SYSTEM</p>	02			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Wire less Quality Video imaging control of zoom, Focus and brightness Resolution: Full HD: 1920 x 1080 pixels Zoom: 120x (12x digital) (10 x Optical) Focus: Auto / Manual Image sensor: ½.8" CMOS White balance: Automatic adjustment to the color Temperature of the Polaris 600 light Freeze frame: Yes Auto Brightness control Auto Flicker avoidance Facility of Video Networking with integrated system to capture display store and manipulate.</p> <p>Medical Grade HD LED 50" installed on wall/Pendent Connection (wired 7 Wireless) at Conference room Pendent for docking of LED monitorsOT Light LED (3 Dome with HD camera) with LED 42"</p> <ul style="list-style-type: none"> • Main Light head output: Adjustable 20,000 to 160,000 12.5 – 100 % (2 % ambient light, 3,000 lux)Lux at 1 meter distance. • second Light head output: Adjustable 20,000 to 160,000 12.5 – 100 % (2 % ambient light, 3,000 lux)Lux at 1 meter distance. • Third Light head output: Adjustable 20,000 to 160,000 12.5 – 100 % (2 % ambient light, 3,000 lux)Lux at 1 meter distance. <p>Sterile Touch Control (STC) with sterile handle should be able to control light intensity and light field size. Should have synchronization switch which can synchronize both dome Illumination depth L1 + L2 + L3 (20 %) 1,300 mm Illumination depth L1 + L2 + L3 (60 %) 700 mm Colour rendering index Ra 95 Colour rendering index R9 94 Colour rendering index R13 93</p> <p>Number of LED modules 18 (92 LED per demo)</p> <p>Service life of the LED bulbs 50,000 hours Ergonomically shaped sterilisable handle included Light head diameter 620 mm Single LED replace in case of LED is not working & individual lamp focusing function. Light with shadow management system. 360-degree rotation at each joint. User Friendly design copula for support in Laminar air flow delivery.</p> <p>FULL HD CAMERA SYSTEM</p> <p>Wire less Quality Video imaging control of zoom, Focus and brightness Resolution: Full HD: 1920 x 1080 pixels Zoom: 120x (12x digital) (10 x Optical) Focus: Auto / Manual Image sensor: ½.8" CMOS White balance: Automatic adjustment to the color temperature of the Polaris 600 light</p>				

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>Freeze frame: Yes Auto Brightness control Auto Flicker avoidance Facility of Video Networking with integrated system to capture display store and manipulate.</p> <p>Medical Grade HD LED 50" installed on wall/Pendent Connection (wired 7 Wireless) at Conference room Pendent for docking of LED monitors FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
23.	<p><u>Autoclave 600 liters with Accessories</u></p> <p>High pressure Steam Sterilizer (double door pass through type) each with external steam supply as primary source & external steam connection as backup. Fully automatic, programmable, microprocessor type. 8-10" Touch screen display on loading Side of machine and control panel on unloading side. Automatic motorized/pneumatic two doors pass through system. Time cycled, working pressure 32 psi. Safety interlock. Temperature & Pressure recorder. Chamber pressure indicator. Cycle indicator to determine the phase of sterilization cycle. Program/Cycle selection & built in thermal printer. The control panel should have simulation of cycle progress The unit should have highly efficient, low noise two stage water ring vacuum pump. Chamber capacity 08 STU or better, rectangular shape. Chamber & door should be made of high quality stainless steel AISI 316 L or better. The jacket & steam Generator should be made of AISI 316 Ti or better The system complete with built-in water saving system, automatic heat exchanger and condensate cooling device. Accessories for 2 Units: Loading / Unloading trollyes Loading carts compatible with system UPS of suitable capacity for both units with 15 minutes for controller display for monitoring and controlling of parameters during power shedding provided/ installed by the manufacturer. The Unit must be according to the standard of CE/FDA in compliance with particular MDD.</p> <p>Accessories Dedicated RO Plant for Sterilizer. Installment and C&W</p> <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>	02			
24.	<p><u>Flash Sterilizer</u></p> <p>Microprocessor Controlled, Fully automatic vertically standing/Floor unit. Single door autoclave with fractionated pre vacuum. Built in double jacketed, Automatic flushing electric steam</p>	02			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference										
	<p>Generator. Should has Multi point steam injection and should have a very short cycle time. Double Jacketed Chamber (Internal and external) chamber made of high quality stainless steel and the door should also be made of same material (AISI 316 L or better). High Quality Water Ring Vacuum pump for deep drying. Twin Chamber for efficient heat management with booster effect. Capacity: 100 Liter or more. Colored touch display 5 - 7" enables an intuitive operation as well as information & malfunctions. Should have at least 5 Standard Sterilization programs of 121 C & 134 C & 3 Test programmers. Measurement of Pressure & temperature highly précised sensors& pressure gauge. Automatic Motorized door lock. Automatic Water Quality Monitoring Sensor before each cycle. Must has built in or external water treatment system. (Imported) Visual or acoustic information on machine in case of any malfunction. Independent Documentation system. Should be able to store at least last 100 cycle data. Communication interface, LAN for connecting printer/computer system & built in CF Card for data log. Should Fully compliance according to DIN EN 285: 2009; EN 17665 and 93/42 EEC European Directive for Medical Devices.</p> <p>System Should include Standard Accessories :</p> <p>2 x Aluminum/SS Trays Trays 1 x SS Basket Power supply: 3x380-416 V, 50/60 Hz Dedicated RO Plant for Sterilizer. Installment and C&W</p> <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>														
25.	<p><u>Diathermy Bipolar</u> Latest Model Feature:</p> <ul style="list-style-type: none"> - High end electro surgery with glass touch display -The wide scope permanent power, the surgery locates precisely - - 300W high efficiency output, continuously adjustable - Seven kinds of working model (pure cutting, blend 1, blend 2, coagulation, spray, bipolar cut, bipolar coagulation) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">RF power for Monopolar cutting</td> <td style="text-align: right;">400 Watts</td> </tr> <tr> <td>Monopolar coagulation</td> <td style="text-align: right;">120 Watt</td> </tr> <tr> <td colspan="2">3 blend modes</td> </tr> <tr> <td>Bipolar coagulation</td> <td style="text-align: right;">120 Watt</td> </tr> <tr> <td>Spray coagulation</td> <td style="text-align: right;">120 Watt</td> </tr> </table> <p>Cut mode: standard, dry, cardiac, Gastrocut, loop, and knife, MetraLOOP, laparoscopy Coagulating mode: moderate, forced, spray, cardiac</p>	RF power for Monopolar cutting	400 Watts	Monopolar coagulation	120 Watt	3 blend modes		Bipolar coagulation	120 Watt	Spray coagulation	120 Watt	03			
RF power for Monopolar cutting	400 Watts														
Monopolar coagulation	120 Watt														
3 blend modes															
Bipolar coagulation	120 Watt														
Spray coagulation	120 Watt														

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
	<p>- When turn on the Generator, it can check the system by itself</p> <p>- When the neutral electrode detect that the impendence is between 20Ω and 140Ω, the alarm will be activated and the ESU will be shut down</p> <p>- Kinds of sound to show the 4 different working modes as the following: Error Warning, Cutting & Coagulation, Bipolar</p> <p>- Line Voltage: 220V/110V 50/60Hz,</p> <p>- Power consumption: 600VA(max.)</p> <ul style="list-style-type: none"> • All electrosurgical units confirm to IEC -601-1 standard • Automatic self-test <p><u>Accessories</u></p> <ul style="list-style-type: none"> • Foot switch • Reusable patient plate • Monopolar handle with cord • Electrode container / Electrode holster with lid, rack • Accessory set (2.4mm) <p>Reusable Fingerswitch (10) with diathermy blade electrode</p> <p>12 standard electrodes (knife, ball loop and needle)</p> <ul style="list-style-type: none"> • Short Electrodes • Disposable electrodes (10 pcs) <p>shaft 4 mm.</p> <p>Non-Stick Forceps flat grip (2)</p> <p>Bizzer Bipolar Scissors (2)</p> <ul style="list-style-type: none"> • Main cables • ARC 100 combination cable • Equipotential bonding cable • USB stick <p>Operating instructions FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>				
26.	<p>Blood Gas Analyzer</p> <ul style="list-style-type: none"> • Analyzes blood gas, electrolytes, metabolites and co-oximetry – from a syringe, capillary tube or vacutainer. • Better if Analyze and provide Data about pH, pCO₂, pO₂, sO₂, ctHb, FO₂Hb, FCOHb, FMetHb, FHHb, FhbF, cK⁺, cNa⁺, cCa₂⁺, cCl⁻, cGlu, eLac, cCrea, cUrea, ctBill <p>Utilizes blood sample of only 65 µL.</p> <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>	02			

S. No.	Item Description	Qty	Model & Brand	Yes / No	Difference
27.	<p>Cardiac OT Table Hydraulic Motorized</p> <p>Max. patient weight 450 kg (992 lbs) Operating table dead weight 312 kg (688 lbs) Complies with Medical Device Directive 93/42/EEC</p> <p>1133 back plates with joint adapter +90°/-45° Standard head rest +45°/-45°</p> <p>Height without padding 594 - 1056 mm (23 - 42") Trendelenburg +30°/-30° Lateral tilt 20° Lower back plate +80°/-40° Leg plates 1133.12 (adjustable individually or synchronously)+10°/-90° Leg plates 1133.22 (adjustable individually or synchronously)+80°/-90°</p> <p>Longitudinal shift 1133.12, 230 mm (9") Longitudinal shift 1133.22, 460 mm (18")</p> <p>Flex / Reflex / Beach Chair 0-position (horizontal position of operating table top) Foot locking ("Lock"/"Unlock")</p> <p>FDA/CE/JIS Marked OR Equivalent USA/UK/Europe /Japan/Germany</p>	02			

Sign & Stamp _____

Bidder Name _____

Contact Person _____

Contact No. _____

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

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
1.	Head light with battery (Cardiac Loupes)	06				
2.	Micro instrument set	02				
3.	Coronary set	02				
4.	Open heart instrument set	03				
5.	Multi-Parameter Invasive BP Monitor	10				
6.	Multi-Parameter Non-Invasive BP Monitor	10				
7.	Telemetry Central Monitoring System	01				
8.	Adult Mechanical Ventilator	15				
9.	Pediatric Mechanical Ventilator	05				
10.	Anesthesia Pendent	10				
11.	Surgical Pendent	10				
12.	Digital Anesthesia Work-Station	03				
13.	Thoracoscopic / Laparoscopic Tower	01				
14.	Central Oxygen, Compressed air, Suction System	03				
15.	Heart Lung Machine with Accessories	02				
16.	Electrical Sternal Saw	02				
17.	Syringe Pumps	30				
18.	Infusion Pumps	10				
19.	Cell Saver	02				
20.	Defibrillator with Internal Pedals	23				
21.	Crash Cart with Defibrillator	24				
22.	OT Light LED (3 Dome with HD camera) with LED 42"	02				
23.	Autoclave 600 liters with Accessories	02				
24.	Flash Sterilizer	02				
25.	Diathermy Bipolar	03				
26.	Blood Gas Analyzer	02				
27.	Cardiac OT Table Hydraulic Motorized	02				

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

S. No.	Item Description	Qty	Brand	Model	Unit Price DDP	Total Price DDP
1.	Head light with battery (Cardiac Loupes)	06				
2.	Micro instrument set	02				
3.	Coronary set	02				
4.	Open heart instrument set	03				
5.	Multi-Parameter Invasive BP Monitor	10				
6.	Multi-Parameter Non-Invasive BP Monitor	10				
7.	Telemetry Central Monitoring System	01				
8.	Adult Mechanical Ventilator	15				
9.	Pediatric Mechanical Ventilator	05				
10.	Anesthesia Pendent	10				
11.	Surgical Pendent	10				
12.	Digital Anesthesia Work-Station	03				
13.	Thoracoscopic / Laparoscopic Tower	01				
14.	Central Oxygen, Compressed air, Suction System	03				
15.	Heart Lung Machine with Accessories	02				
16.	Electrical Sternal Saw	02				
17.	Syringe Pumps	30				
18.	Infusion Pumps	10				
19.	Cell Saver	02				
20.	Defibrillator with Internal Pedals	23				
21.	Crash Cart with Defibrillator	24				
22.	OT Light LED (3 Dome with HD camera) with LED 42"	02				
23.	Autoclave 600 liters with Accessories	02				
24.	Flash Sterilizer	02				
25.	Diathermy Bipolar	03				
26.	Blood Gas Analyzer	02				
27.	Cardiac OT Table Hydraulic Motorized	02				

Note:

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

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