

On Line Tender Notice No.36 of 2014-15

Administration of Dadra & Nagar Haveli, U.T.,
Office of the Medical Superintendent,
Shri Vinoba Bhawe Civil Hospital

No. MS/VBCH/KHANVEL/M&E/2014-15/144/431

Silvassa.

Date:07/06/2014

e-Tender Notice

Tender for Purchase of Medical Equipments for 100 bedded Sub-District Hospital, Khanvel, Dadra & Nagar Haveli, Silvassa.

The Medical Superintendent, Shri Vinoba Bhawe Civil Hospital, Dadra & Nagar Haveli, Silvassa on behalf of President of India, invites on line tender on <https://dnh.nprocure.com> from the Manufactures/Authorized Dealers/Suppliers for supply of below mentioned equipment.

Sr. No.	Particulars	Estimated Amount	EMD	Tender Fees (Non-Refundable)	e-Tender ID No.
1	Purchase of Medical Equipments				
A	CSSD Equipments	₹.61,60,000/-	₹.1,54,000/-	₹.4,000/-	147662
B	General Equipments	₹.45,73,800/-	₹.1,14,500/-	₹.3,000/-	
C	OT Equipments	₹.81,80,000/-	₹.2,04,500/-	₹.4,000/-	
D	NICU Equipments	₹.1,59,74,000/-	₹.3,99,500/-	₹.5,000/-	
E	Obstetrics & Gynecology Equipments	₹.4,05,000/-	₹.10,500/-	₹.1,000/-	
F	ICU Equipments	₹.1,30,20,000/-	₹.3,25,500/-	₹.5,000/-	
G	Radiology Equipments	₹.1,11,00,000/-	₹.2,77,500/-	₹.5,000/-	
H	Laboratory Equipments	₹.41,25,000/-	₹.1,03,500/-	₹.3,000/-	
I	Ophthalmology Equipments	₹.24,40,000/-	₹.61,000/-	₹.2,000/-	
J	Dental Equipments	₹.27,30,000/-	₹.68,500/-	₹.2,000/-	
K	Physiotherapy Equipments	₹.3,79,000/-	₹.9,500/-	₹.1,000/-	
L	Mortuary Equipments	₹.6,85,500/-	₹.17,500/-	₹.1,000/-	
M	Instruments	₹.45,00,000/-	₹.1,12,500/-	₹.3,000/-	
N	Fast Track Curtains for ICU and Casualty	₹.5,00,000/-	₹.12,500/-	₹.1,000/-	

Bid document downloading Start Date : **10.06.2014**
Pre-Bid meeting a. Date & Time : **16.06.2014, 15.30 Hrs.**
b. Venue : **In the chamber of
Medical Superintendent
VBCH, Silvassa.**
Bid document downloading End Date : **30.06.2014, 18.00 Hrs.**
Last Date & Time for receipt of Bid : **01.07.2014, 14.00 Hrs.**
Preliminary Stage Bid Opening Date : **01.07.2014, 15.00 Hrs.**
Technical Stage Bid Opening Date : **01.07.2014, 15.30 Hrs.**
Commercial Stage Bid Opening Date : **05.07.2014, 11.00 Hrs.**

Bidders have to submit price bid in Electronic format only on <https://dnh.nprocure.com> website till the last date and time for submission. Technical bid and Price Bid in Physical format shall not be accepted in any case.

Bid submission should be done along with tender Fees and EMD in original by R.P.A.D./Speed Post or to be deposited in the tender box kept in the office of the undersigned. However, Tender Inviting Authority shall not be responsible for any postal delay.

1. The Tender Fees and EMD should not be forwarded by cash.
2. The Tender fees will be accepted only in form of DD/A/c payee Cheque of any Nationalized or Scheduled Bank of India payable in Silvassa.
3. The EMD will be accepted in form of FDR /A/c Payee Demand Draft / Bankers Cheque or Bank Guarantee from any commercial banks in an acceptable form payable at Silvassa in favor of undersigned.

The tender inviting authority reserves the right to accept or reject any or all the tender to be received without assigning any reasons thereof. Tender can be downloaded from www.nprocure.com, www.dnh.nic.in and www.vbch.dnh.nic.in.

In case bidder needs any clarification of if training required for participating in online tender, they can contact the following office. “(n) Code Solution –A Division, GNFC Ltd.” 403, GNFC info Tower, Bodakdev, Ahmedabad – 380 054, Gujarat (India) **E-mail** : nprocure@gnfc, **Net Fax** :+97 7926857321, **Website** : www.nprocure.com.

Sd/-
Medical Superintendent
Shri Vinoba Bhavé Civil Hospital
Dadra & Nagar Haveli
Silvassa.

Copy to :-

- 1) PS to Hon'ble Administrator, Dadra & Nagar Haveli, Silvassa for information.
- 2) P/A to Secretary (Health), Dadra & Nagar Haveli, Silvassa for information
- 3) All Heads of Office, Dadra & Nagar Haveli, Silvassa for information & n.a.
- 4) CPO, Dadra & Nagar Haveli, Silvassa for wide publicity in Newspaper.
- 5) Director General, Indian Trade Journal, Kolkata for publication on Newspaper.
- 6) IT Department, Dadra & Nagar Haveli, Silvassa with a request to upload in Website.
- 7) Website In-charge, Shri VBCH, Silvassa to upload on VBCH, website.
- 8) Accounts Section, Shri VBCH, Silvassa for information
- 9) Central Medical Store, Shri VBCH, Silvassa for Information.

U.T. ADMINISTRATION OF DADRA & NAGAR HAVELI,
OFFICE OF THE MEDICAL SUPERINTENDENT,
SHRI VINOBA BHAVE CIVIL HOSPITAL,
SILVASSA

Terms and Conditions for the **“Purchase of Medical Equipments for year 2014-15”** for 100 bedded Sub-District Hospital, Khanvel, Dadra & Nagar Haveli, Silvassa.

❖ **Instructions to Bidders :**

- 1) All Tender Documents can be downloaded free from the website <https://dnh.nprocure.com>
- 2) All bids should be submitted online on the website <https://dnh.nprocure.com>
- 3) All bids should be digitally signed for details regarding digital signature certificate and related training involved the below mentioned address should be contacted
(n) Code Solutions
A Division of GNFC
301, GNFC Infotower, Bodakdev,
Ahmedabad- 380 054
Tel: +91 79 26857316/17/18
Fax: +91 79 26857321
www.ncodesolutions.com
- 4) The user can get a copy of instructions to online participation from the website <https://dnh.nprocure.com>
- 5) The suppliers should register on the website through the “New Supplier” link provided at the home page, the registration on the site should not be taken as registration or empanelment or any other form of registration with the tendering authority.
- 6) The application for training and issue of digital signature certificates should be made at least 72 hours in advance to the due date and time of tender submission.
- 7) For all queries regarding issue of digital signature certificate and any other technical query should be addressed to personnel in M/s (n) Code Solutions
- 8) For all queries regarding tender specifications and any other clauses included in the tender document should be addressed to personnel in tendering office address provided below:

**Medical Superintendent
Shri Vinoba Bhawe Civil Hospital
Dadra & Nagar Haveli
Silvassa-396 230
Tel: 0260-2642940
Fax: 0260-2642961**

- 9) All documents scanned/attached should be legible/readable. The department will not scrutiny the technical bid and will be out rightly rejected.
- 10) The Bidder has to give compliance for each quoted product for any false/misleading statement in compliance found any time during the procurement process, the bid shall be outrightly rejected & EMD shall be forfeited.

Keydates:

Bid document downloading Start Date	:	10.06.2014
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The Tenders shall be submitted in two-bid system, wherein the Technical bid and Commercial Bid is to be filled online on <https://dnh.nprocure.com> and the EMD and Tender Fee along with technical bid has to be submitted in Tender Box along with a covering letter. The envelope should be super scribing as **“Sealed Cover of Bid-Purchase of Medical Equipments for 100 bedded Sub-District Hospital, Khanvel” with Tender No and Field of Specialty for which the bidder is participating. The EMD and Tender Fees should be enclosed with BID only.**

Earnest Money Deposit: (EMD)

- a. All tenders must be accompanied by EMD as specified in schedule otherwise tender will be rejected.

- b. The manufacturing units who are placed in Silvassa are exempted for Earnest Money Deposit. For getting exemption, tenderers have to furnish valid and certified documents along with the tender, otherwise tender will be rejected.
- c. Any firm desires to consider exemption from payment of Earnest Money Deposit, valid and certified copies of its Registration with D.G.S. & D. should be attached to their tenders.
- d. EMD can be paid in either of the form of following:
 - i. A/c Payee Demand Draft
 - ii. Fixed Deposit ReceiptsIn favor of Medical Superintendent, Shri Vinoba Bhawe Civil Hospital, Silvassa from any Nationalized / Scheduled Bank.
- e. EMD should be valid upto **12 (TWELVE) months** from the date of its issuance.
- f. EMD in any other forms will not be accepted.
- g. EMD/Security Deposit shall be liable to be forfeited in following circumstances:
 - i. Tender is rejected due to failure of supply the requisite documents in proper format or giving any misleading statement or submission of false affidavit or fabricated documents.
 - ii. In case, the supplier does not execute the supply order placed with him within stipulated time, the EMD of the supplier will be forfeited to the Government and the contract for the supply shall terminated with no further liabilities on either party to the contract.
 - iii. Tenderer fails to replace the goods declared to be not of standard quality or not conforming to acceptable standards or found to be decayed/spoilt.
- h. The amount of Earnest Money paid by the tenderer(s) whose tenders are not accepted will be refunded to them by cheque or Demand Draft drawn on any Nationalized/Scheduled Bank. Where this mode of payment is not possible the amount will be refunded at the cost of the tenderer.
- i. Only on satisfactory completion of the supply order for and on payment of all bills of the supplier, as to be admitted for payment, the amount of Security Deposit/Earnest Money will be refunded after expiry of guarantee/warranty period, if any, or any such date/period as may be mutually agreed upon.
- j. In case of failure to supply the equipment. ordered for, as per conditions and within the stipulated time, the name equipment will be obtained from the tenderer who offered next higher rates or from any other sources, as may be decided by the tender inviting

Officer and the loss to the Government on account of such purchases(s) shall be recovered from the former suppliers Security Deposit/Earnest Money or bills payable. The suppliers shall have no right to dispute with such procedure.

- k. The Earnest Money(s) paid by the tender(s) earlier against any tender(s) or supply order(s) is not adjustable with Earnest Money required by these conditions.

Security Deposit: (SD)

- a. The successful tenderer will have to pay within 15 days from the date of demand, an amount equal to 10% of the total value of articles, which may be ordered, as the amount of security deposit.
- b. Non receipt of Security Deposit within stipulated time will result in automatic cancellation of the order for supply without any intimation.
- c. However in case if any articles are received for which the Security Deposit may not have been deposited, the full Security Deposit as may be due from the supplier will be recovered from the bill(s) for such articles.
- d. In case of failure to replace the accepted and rejected articles from the supplies made, as mentioned in the conditions the loss undergone by the Government will be recovered from the suppliers Security Deposit or payment due of any bill(s) to the extend required.
- e. The Security Deposit(s) paid by the tender(s) earlier against any tender(s) or supply order(s) is not adjustable with Security Deposit required by these conditions.
- f. The tender inviting officer will consider extension of time for remitting the Security Deposit as demanded. However, in case of denial to consider such extension the supplier is bound to abide by the limit given and liable to make good for the loss made to the Government on account of his failure to abide by the time limit.

❖ **Conditions of Contract :**

1. ACCEPTANCE OF TENDER:

- a. The tender is liable for rejection due to any of the reasons mentioned below:
 - i. Non-Submission of tender within stipulated time online
 - ii. Submission of tender physically in the Office but not submitted online on <https://dnh.nprocure.com>
 - iii. Tender is unsigned or not initialed on each page or with unauthenticated corrections.
 - iv. Non-payment of Earnest Money Deposit (if not exempted)
 - v. Non-Submission of required documents as mentioned in schedule
 - vi. Conditional/vague offers
 - vii. Unsatisfactory past performance of the tenderer.
 - viii. Items with major changes/deviations in specifications/standard/grade/packing/quality offered
 - ix. Offering an accessory optional even though required to operate the instrument
 - x. Submission of misleading/contradictory/false statement or information and fabricated/ invalid documents.
 - xi. Tenders not filled up properly
 - xii. Non submission of notarized authority letter in prescribed format for imported items.
 - xiii. Non submission of IEC certificate for imported items
 - xiv. Non submission of C.A Certificate in case of Indian manufacturer.
 - xv. Non- submission of CMC rates in prescribed format
 - xvi. Non-submission of Turnover Certificate
- b. Any discount which the bidder wants to give has to be considered and total final bid amount has to be mentioned clearly in the price bid form on <https://dnh.nprocure.com>
- c. Discount offered after price bid opening will not be considered.
- d. The consolidated rates entered in the online website will be taken in to account for preparing price statements. However the tender which is found technically acceptable as well as lowest in terms of evaluated rates only be considered for placing the order.

- e. The Medical Superintendent may seek any clarifications/explanation/documentary evidence related to offer at any stage from tenderers if required.
- f. The rate should be quoted in the prescribed form given by the department; **the rate should be valid upto One Year from the date of tenderization.**
- g. All/Taxes/Duties/Royalties Charges payable on the sales/transport etc. within and/or outside the state shall be payable by the supplier.
- h. The decision of the Tender Inviting Officer for acceptance/rejection of any articles supplied including the decision for equivalent specifications, standard and quality etc. of articles shall be final.
- i. The right to accept or reject without assigning any reasons or all tenders in part or whole is reserved with the Tender Inviting Officer and his decision(s) on all matters relating to acceptance or rejection of the tenders as a whole or in part will be final and binding to all.
- j. No separate agreement will be required to be signed by the successful tender(s) for the purpose of this contract for supply. Rates tendered/offered in response to the concerned Tender Notice shall be considered as acceptance of all above terms and conditions for supply for all legal purpose.
- k. The rate(s) quoted should be strictly for free delivery at FOR 100 bedded Sub-District Hospital, Khanvel and will be valid and operative for supply orders issued within one year from the date of invitation of tenders.
- l. The department shall not take any responsibility of unloading the goods; the successful bidder has to make arrangements for unloading at the site.
- m. Blacklisted Manufacturers/Suppliers/dealers by Central /State Government or any other Govt Body will not be eligible to participate in the tender.

2. EVALUATION METHODOLOGY

- a. Preliminary Evaluation: Tender fee and EMD submission
- b. Technical Evaluation:
 - Scrutiny of technical specifications asked by the department within the quoted specification
 - Scrutiny of Compliance Statement given by the bidder
 - Technical Demonstration if required.
- c. Financial Evaluation: Lowest quoted offered by Technically Qualified bidders.

3. TERMS OF SUPPLY:

- a. The packing and labels of all the items to be supplied under the order shall be marked with the words 'FOR UT OF DADRA & NAGAR HAVELI- NOT FOR SALE' if the items are packed in packets which are then placed or repacked within a box/carton/bottle/foil, these words will be printed/marked on both the internal/external packs and labels. The retail price must not be printed or shown anywhere either on external or internal packs/box/carton/foil.
- b. In event of breakage or loss of stores during transit against requisition order the said quantity has to be replaced by the tenderer. The department will not pay separately for transit insurance and supplier will be responsible for stores.
- c. Railway Receipt or other transport document should be drawn in the favor of Officer Inviting tender.
- d. Railway Receipt or other transport document should not be send by VPP or through any Bank as this being a Government Office it is not possible to clear cash demands of Post Office/Bank for delivery of RR or other transport documents unless we have agreed to it as special arrangement.
- e. The equipment of inferior quality standard or of different specifications, brand, manufacturer etc other than that ordered specified and/or incomplete or broken parts will not be accepted. The supplier has to replace the same at his own cost and risk. Intimation of non-acceptance of any materials etc will be sent to the supplier within 10 days from the date of receipt of the stores and the same will be returned to the supplier at his own cost and risk, if he so desires and intimates accordingly within 15 days from the date of dispatch of intimation of the non-acceptance. However, if no communication is received within 15 days from the date of communication the tender Inviting Officer will not be responsible for any damages, loss etc. of such rejected articles.
- f. Extension of time limit for supplies shall be considered by the Tender Inviting Officer. The extension so granted may be with levy of compensation as mentioned in the liquidated damages at the discretion of the authority competent to grant extension of time limit provided such request is made well in

time, depending upon the circumstances and such decision in the matter will be final.

- g. Demurrage charges paid by the Tender Inviting Officer on account of delayed receipt of dispatch documents intimation will be recovered from the bills payable to the supplier.
- h. If at any time after the order for supply of materials the Tender Inviting Officer shall for any reason whatsoever not require the whole or part of the quantity thereof as specified in the order the Tender Inviting Officer shall give notice in writing of the fact to the supplier(s) who shall have to claim to any payment of compensation what so ever on account of any profit or advantage which the supplier(s) might have derived from the supply of articles in full, but which did not derive in consequence of the full quantity of articles not having been purchased, nor shall have any claim for compensation by reasons of any alterations having been made in the original instructions which shall invoice any curtailment of the supply originally contemplated.
- i. The items as mentioned in the list are the approximate estimates invited and actual purchase may more. Accordingly the successful tenderer has no right for any loss/damages with reference to approximate requirement shown in tender and actual requirement.
- j. Inspection will be carried out in the premises of Shri VBCH or 100 bedded Sub-District Hospital, Khanvel as per the convenience of the Medical Superintendent, Shri VBCH. If goods to be inspected in factory premises all expenditure to be borne by the Tenderer.
- k. Delivery Period: Maximum delivery period will be EIGHT WEEKS from the date of receipt of P.O.
- l. Installation of equipment to be completed within 15 days of delivery.

4. PAYMENT TERMS

- a. 100% of the invoice amount will be paid only after successful installation, training and submission of Security deposit.
- b. Price escalation clause will not be entertained under any circumstances.
- c. All bills should be in **TRIPLICATE** and should invariably mention the number and date of supply order.

- d. All bills for amount above ₹.5000/- should be pre-receipted on a Revenue Stamp of proper value. Bills for amount exceeding ₹.5000/- not pre-receipted on Revenue Stamp of proper value will not be accepted for payment.
- e. Each bill in which Sales Tax is charged must contain the following certificates on the body of the bill: “CERTIFIED” that the goods on which Sales Tax has been charged have not been exempted under the Central Sale Tax Act or the Rules made there under and the amount charged on account of Sales Tax on these goods is not more than what is payable under the provisions of relevant Act or Rules made there under”.
- f. No extra charge for packing, forwarding and insurance etc. will be paid on the rates quoted.
- g. The rates should be quoted only for the items specified in the list of requirement.
- h. Rates quoted for items other than the required specification/make/manufacture will not be considered.

5. WARRANTY & TRAINING

- a. The successful tenderer must give warranty not less than 12 months from the date of installation.
- b. During Warranty Period, four free services have to be provided. In addition, supplier has to attend the complaint if any for any defects within 48 hours including replacement of any defective part failing which liquidated damages as decided shall be recovered and similarly period of breakdown shall be excluded from warranty period.
- c. Training of Staff will be under Supplier’s Scope
- d. Availability of spares: 7 Years Minimum The department may ask for cost of spares anytime during the tender to evaluate after sales cost.
- e. Date of manufacture of the equipment and original data sheet of the equipment Quoted should be furnished at the time of supply of unit.
- f. Remanufactured, Refabricated, Refurbished unit should not be quoted.
- g. At the time of supplying the unit, each unit should be provided with date of manufacturing certificate for giving by the authorized and authorized third party reputed inspection agency

6. Liquidated Damages:

For delay:

- a. If the supplier fails to deliver any or all the goods or perform the services within the time period(s) specified in the contract. The Purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damages, a penalty of 0.5% of the total value of order per week will be imposed subject to a maximum of 10% of the total value of the order. Once the maximum is reached, the purchaser may consider termination of the contract.
- b. Supply in damaged condition shall not be accepted. In case of damage in the packing, the supply will be accepted only after levying penalty or replacement of damaged supply on the total value of supply to that particular / other designated place.
- c. Supply must be in toto i.e. not in fraction.

For Non-Supply:

Security Deposit of the firm shall be forfeited and the firm shall be blacklisted.

7. Termination for Default:

Contract may be terminated by the Authority if:

- a. If the supplier fails to execute the supply within the stipulated time, the Purchaser is at liberty to make alternative purchase, in the event of making ALTERNATIVE PURCHASE, the supplier will be imposed penalty apart from the forfeiture of Performance Guarantee. The excess expenditure over and above contracted prices incurred by the Purchaser in making such purchases from any other sources or in the open market or from any other supplier who has quoted higher rates and other losses sustained in the process, shall be recovered from the Performance Security or from any other money due and become due to the Supplier and in the event of such amount being insufficient, the balance will be recovered personally from the Supplier. The penalty would be as mentioned in the Liquidated Damages clause.
- b. The order may be cancelled after expiry of delivery period as mentioned in the supply order and the supplier shall also suffer forfeiture of the Performance Security and shall invite other penal action like blacklisting / disqualification from participating in present and future tenders.

- c. Authority will be at liberty to terminate by assigning justifiable reason thereof the contract either wholly or in part on one month notice. The Supplier will not be entitled for any compensation whatsoever in respect of such termination.
- d. If the Supplier, in the judgment of the Authority has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

For the purpose of this Clause.

“Corrupt practice” means offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“Fraudulent practice” means a mis-presentation / hiding of facts in order to influence a procurement process or the execution of a contract to the detriment of the other bidders, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial noncompetitive levels and to deprive the other bidders of the benefits of free and open competition.

- e. For infringement of the stipulations of the contract or for other justifiable reasons, the contract may be terminated by the Authority, and the supplier shall be liable for all losses sustained by the Authority, in consequence of the termination which may be recovered personally from the supplier or from his properties, as per rules.
- f. Non performance of any of the contract provisions will disqualify a firm to participate in the tender for the next five years.
- g. In all the above conditions, the decision of the Authority shall be final and binding.

Sd/-

Medical Superintendent

Shri Vinoba Bhawe Civil Hospital
Dadra & Nagar Haveli
Silvassa.

The above terms and conditions are accepted and are binding to me/us.

Place:

Signature of tenderer

Dated:

Name of tenderer with seal of the firm

❖ Schedule of Specifications and Allied Technical Details:

Scope of Work: The bidders have to supply, install and commissioned the CCTV Surveillance & PA System and Attendance System in Sub-District Hospital.

S.N	Department	Equipment	Qty	Make & Model	Compliance on page no.
1	CSSD	Horizontal Autoclave	2		
		Ultrasonic Cleaner	1		
		Drying Cabinets	1		
		Gauze Cutting Machine	1		
		Rotary Sealing Machine	1		
		Plasma Sterilization Machine	1		
		Vertical Autoclave	1		
		Flash Autoclave	1		
2	General	12 Channel ECG Machine	8		
		Nebulizer	18		
		Weight Machine	14		
		Electronic Baby Weighing Machine	3		
		Syringe Needle Destroyer Manual	30		
		Mercury Free BP Apparatus	35		
		Stethoscope	41		
		Laryngoscope Set	10		
		Procedure Spot Light	6		
		Suction Machine	2		
		Pediatric Suction Machine	2		
		Examination Headlight	8		
		Glucometer	8		
		LED 2 Plate Xray View Box	24		
		Electric Sterilizer	14		
		Refrigerator 350 ltrs	15		
		Pulse Oximeter	12		
		Fogging Machine	10		
3	OT	Single Dome LED OT Light	1		
		OT Table	1		
		OT Table with all ortho,neuro and gynec attachments	2		
		Boyle's Apparatus	3		
		Anesthesia Ventilator	3		
		5 Para Monitor	2		
		Double Dome LED OT Light Ceiling Mounted	2		

S.N	Department	Equipment	Qty	Make & Model	Compliance on page no.
		Scrub Station Sink 2 bay	2		
		Electro Cautery Machine	2		
		Patient Warming System	1		
		Drill Machine	1		
4	NICU	Radiant Heat Warmer	13		
		Radiant Heat Warmer with over surface phototherapy	4		
		Transport Incubator	1		
		Optimum Flow Generator for Newborns	1		
		Bubble CPAP	2		
		Neonatal Ventilators	4		
		3 Para Monitor	18		
		Syringe Pump	16		
		O2 Hood- large	4		
		O2 Hood- Medium	4		
		O2 Hood- Small	4		
5	Obstetric & Gynecology	Fetal Doppler	7		
		NST Machine with toco	2		
6	ICU	ABG Machine	1		
		Ventilators	6		
		5 Para Monitor (6 nos)with Central Nursing Station	1		
		Biphasic Defibrillator	2		
		Monophasic Defibrillator	1		
		Stack for Syringe Pump (10 nos)	1		
		Transport Ventilator	2		
7	Radiology	Portable Xray Machine	2		
		Computed Radiography System with Dry Laser Printer	1		
		USG Machine	1		
		USG Machine for Gynec purpose	1		
		Portable X-Ray Machine-10 Kw	1		
8	Laboratory	Cell Counter	1		
		Electrolyte Analyzer	1		
		Biochemistry Analyzer	1		
		Binocular Microscope	2		
		Centrifuge	1		
		Incubator	2		
		Hot plate	1		
		Shaker	1		

S.N	Department	Equipment	Qty	Make & Model	Compliance on page no.
		Test Tube Stand	10		
		Test Tube Holder	10		
		Test Tube 75mm x12mm	1000		
		Colorimeter with 8 filter digital	1		
		Mono-balance	1		
9	Ophthalmology	Chair Unit	1		
		Slit Lamp	1		
		Ophthalmoscope	1		
		Auto Refractometer	1		
		Phaco Emulsification	1		
		Distant & near Vision Chart	1		
		Trial Lens Set with trial frame adult & children	1		
		Rotating Visual Acuity Drum	1		
10	Dental	Dental Chair Unit	2		
		Dental Xray Machine	2		
		RVG Machine	2		
		Glass bead Sterilizer	1		
11	Physiotherapy	Short Wave Diathermy	1		
		IFT	1		
		TENS	1		
		Lumbar and Cervical Traction	1		
		Ultrasound	1		
		Paraffin Wax Bath	1		
		Weight Cuff(set of 1/2 kg, 1 kg, 2 kg, 3 kg)	1		
		Spring for grip exercise	1		
		Shoulder pulley	1		
		Cold air cryotherapy system	1		
		Vestibular Ball	1		
		Bolsters set of small, medium large	1		
		Exercise Mat	1		
		Peg Board	1		
12	Mortuary	2 Body Storage	1		
		Autopsy Table	1		
13	Instruments	Refer Annexure- II			
14	Fast Track Curtains for ICU and Casualty	Refer Annexure-III	14		

Technical Specification & Deviation Statement:

A. CSSD

S.N	Specification	Compliance Any (Yes/No)	If
1	Horizontal Autoclave 1) High pressure autoclave - Temperature range: +40 to +180 degree or above Pressure: 5psi to 20 psi 2.) Inner chamber stainless steel 316 grade. 3. Outer Chamber stainless steel 304 grade. 4.) Jacket of best quality steel. 5.) Chamber diameter min 400mm. 6.) Chamber depth min 600mm. 7.) Steam trap. 8.) Steam generator feed water pump. 9.) Self locking safety door. 10.) Tight sealing door gasket (Gasket of heat resistant material silicon /EPDM). 11.) Drain temp. gauge. 12.) Vacuum breakers. 13.) Safety valve for jacket. 14.) Pressure switches, pressure gauge. 15. Low water protection system (Automatic). 16.) Digital temp. indicator. 17.) Micro processor based automatic system. 18.) Should carry ISI / BIS mark (IS 3829). 19.) Provision for vacuum drying. 20.) Power requirement 440 volts (Three phase). 21.) Should be mounted on a stand which is resistant to corrosion. 22.) Should have a report of hydraulic testing. 23. Working principle-Downward displacement of air. 24. PLC Panel to connect atleast 4 autoclaves (at present 2 horizontal and 1 vertical) and automatic barcode printing.		
2	Ultrasonic Cleaner High-performance 37 kHz sandwich transducer systems Cleaning tank made of cavitation-resistant stainless steel User-friendly and clear operating panel, splash water proof LED-Display showing set and remaining time of cleaning period Turning knob for setting continued and short-period operation from 1 to 30 min with visual		

S.N	Specification	Compliance Any (Yes/No)	If
	<p>indicator</p> <p>Temperature-controlled ultrasonic operation (applies only for units with heating)</p> <p>Independent Sweep function for an optimized sound field distribution in the cleaning liquid by frequency modulation</p> <p>Independent Degas function for the efficient degassing of the cleaning liquid and for laboratory purposes</p> <p>Auto degas function for automatic degassing cycles, i.e. with fresh cleaning liquids</p> <p>Dry-run protected heating</p> <p>Turning knob temperature. Temperature range variable in 5°C steps from 30° up to 80°C</p> <p>LED-Display for pre-set and actual temperature (applies only for units with heating)</p> <p>Plug-in mains supply</p> <p>Plastic carrying handles, heat conducting</p> <p>Turning knob for tank drainage at side of unit for simple get effective draining of tank</p> <p>With Fast Heating Element</p> <p>Technical data</p> <p>Mains voltage (Vac) - 100-120 V/220-240 V</p> <p>Ultrasonic frequency - 37 kHz</p> <p>Power consumption 1500-1800 W</p> <p>Ultrasonic power effective - 300W</p> <p>Ultrasonic peak performance max. - 1200W</p> <p>Heating power (units w. heating) - 1200W</p> <p>Unit outer dimensions W / D / H - 550-570 / 320-350 / 300-330 mm</p> <p>Tank internal dimensions W / D / H - 500-510 / 290-300 / 200-220 mm</p> <p>Basket internal dimensions W / D / H - 440-470 / 240-260 / 100-120 mm</p> <p>Max. filling volume tank - 28 Ltr</p> <p>Weight (kg) - 10-15kg</p> <p>Material tank - stainless steel</p> <p>Material casing - stainless steel</p> <p>Drain - 3/8"</p> <p>Carrying handles (plastic)</p> <p>CE-compliant</p> <p>Protection class - IP 20</p>		
3	Drying Cabinets		

S.N	Specification	Compliance Any (Yes/No)	If
	Physical characteristics 1. Manufactured in stainless steel AISI 304 2. Temperature control password protected 3. Temperature setting from 1 up to 99 min, or continuous 4. 16 luer lock air connection for laparoscopic instruments, 5. 8 shelves capacity 6. Glass door 7. Lockable door 8. Doors can be configured right or left opening 9. Single and double door (pass-through) versions 10. Indirect UV air treatment during the whole cycle Optional Drying characteristics and control 1. One drying circuits double speed for cabinet 2. Flashing air flow visual alarm indicators if either drying circuit fails 3. Air flow alarm with re-settable audible alarm, (flashing alarm indication remains until the air flow is restored) 4. HEPA filtration on drying circuit 5. Pressure sensors for monitoring HEPA filter replacement 6. Indicator on panel advising when HEPA filter replacement is required 7. Drying temperature settable from ambient to 90°C (password protected) 8. Temperature alarms is disabled when door is open, and for time required to re-equilibrate temperatures in cabinet after door is closed. 9. Visual indicator to indicate when door is open. Standard 1. 16 luer lock air connections 2. UV air treatment 3. Shelves extension for keeping wider hose and instruments TECHNICAL INFORMATION DIMENSIONS - Width..... 700 to 800 mm - Depth800 to 850 mm - Height 1900 to 1950 mm		

S.N	Specification	Compliance Any (Yes/No)	If
	<div>- Net weight..... 150-200 kg</div> <div>CONNECTIONS</div> <div>- Electric connection..... 230V/50Hz</div> <div>Power..... 2000-2500 W</div>		
4	Gauze Cutting Machine <ul style="list-style-type: none"> - Electrically operated - Multilayer Compactable - Must have guide support - Must be very fast operative - Should have long cord. 		
5	Rotary Sealing Machine <ul style="list-style-type: none"> • Sealing Speed: At least 10M / Min • Temperature control should be Microprocessor controlled. • Sealing Temperature: 80 to 220° • Temperature Tolerance: < ± 1% • Sealing Edge: 5 to 35mm • Sealing Stream should be at least 12mm • Printing Unit: Single Line • Printing start from edge: in mm • Housing should be of metal/chrome steel • Power: 500 VA • Mains Connection: 230V/50 Hz • Size should approx. 630 x 280 x 160mm • Digitally controlled • Should have CE, ISO, TUV • Accessories: • Delivery Table / Roller Table • Roll Holder with Cutter with roll diameter max. 200 mm and cutting length max. 400 mm 		
6	Plasma Sterilization Machine <ul style="list-style-type: none"> • The Sterilizer should use Low Temperature H2O2 Gas Plasma for sterilization with plasma energy generated inside the sterilization chamber. • Should have chamber temperature of less than 55 degree C at all the time during the cycle • Should have rectangular chamber with chamber volume of 40-55 liters • Complete cycle time should be in the range of 25-40 mins • The quoted model should be approved by USFDA and CE • The sterilizer should be recommended by the 		

S.N	Specification	Compliance Any (Yes/No) If
	<p>IFUs of reputed device manufacturers of endoscopes, fiberoscopes, telescopes and other surgical instruments</p> <ul style="list-style-type: none"> • Lumen sterilization claims should be validated and endorsed by USFDA or CE only. • Should have pre programmed cycles without any room for human error due to manual programming • The by-products should be non toxic and eco-friendly • Sterilant should be in a cassette with leak proof indicators • Should have consumable like cassettes prefilled with H2O2 (Hydrogen Peroxide) with leak proof indicator, Chemical Indicator, Biological Indicators, Polypropylene and Tyvek wrappers for wrapping instrument trays and medical devices. • Should have minimum 10 installations of the quoted model in India. • Consumables: for 30 cycles Cassette: Prefilled H2O2 with leak proof indicator- 25 nos Tyvek Wrappers of medical grade Chemical Indicator- 5 box Biological Indicator- 5 box Trays – 1 – large, 2 medium 	
7	<p>Vertical Autoclave</p> <ul style="list-style-type: none"> • Electrically operated (220 V- 240 V) • Vertical type • Should be double walled • Inner wall made up of S.S. • Outer wall made up of M.S / S.S. • Size depth 550 – 580 mm x 350 -380 mm (approx) • Lid should be made up of stainless steel & provided with tightening device • Should have pressure gauge, water level indicator, steam release valve & safety valve & drain for emptying the Autoclave • Joint less Gasket • Working pressure 10psi to 20psi • To be supplied with cord, plug & stainless steel basket • Should have pedal lifting arrangement to lift 	

S.N	Specification	Compliance Any (Yes/No)	If
	the lid or handle to lift the lid		
8	<p>Flash Autoclave</p> <ul style="list-style-type: none"> • Should be a table top autoclave • Two automatic programmes approx. at 2.2 bar at 134 degrees C and 1.1 bar at 121 degree C. • The equipment should have automatic pressure control switch / automatic water control device to ensure that the equipment does not run dry. • Should have flash cycle for rapid sterilization and should have an option for liquid cycle. • Should have Air Pump for closed door drying. • Should have rapid warm up facility. Built in reservoir to store water required to produce steam, and used water separately, for easy decantation. • The system should be equipped with required safety features. The door should have double locking safety feature and should open only with atmospheric pressure in the chamber. • Should have automatic cut-off to prevent overheating and cut-off for insufficient water, the machine should not start without sufficient water. • Should have a minimum chamber capacity of 20 litres or above. • Should have pressure display and temperature display. • Unit should function with 200-240Vac, 50/60 Hz input power supply. • The system should comply with National quality certification or International standards for sterilization safety. • Following accessories should be supplied along with the equipment. <ul style="list-style-type: none"> • 1 set of 3 removable shelves – stainless steel. • 1 instrument basket – stainless steel. • 1 set of 2 Drum for sterilization – stainless steel. • 1 Roll of sterilization indicator. • 1 box paper sheet 100 nos crepe for sterilization packs. • 2 spare silicone gaskets. • 1 sets of spare fuses. • Equipment should be provided with a line cord (power cord) of acceptable durability, quality, length and current carrying capacity and should 		

S.N	Specification	Compliance If Any (Yes/No)
	<p>be compatible with Indian standard power socket.</p> <ul style="list-style-type: none"> Controls should be visible and clearly defined. Labels and markings should be clear and visible. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid. Should have air filters. 	

B. General Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	<p>12 Channel ECG Machine</p> <ul style="list-style-type: none"> Computerized ECG Machine with A4 size Paper Simultaneous 12 channel ECG recording with 12 Lead Simultaneous Acquisition High Resolution 5.7 inch Foldable Screen Full QWERTY Alphanumeric Key Pad Build in ECG Parameters measurements and Interpretation Print Mode: Pre Sample/ Real Time Sample/ Arrhythmia Triggered Sample. Data Trasfer to PC using Data management Software. Minimum 200 ECG in internal Memory Supports External Archiving like USB Drive. Built in Rechargeable Lithium Ion Battery Should have work on Mains and Battery both Pacemaker Detection <p>Standard Scope of Supply:</p> <ol style="list-style-type: none"> Main Unit 12 Lead ECG Cable- 1 no Chest Leads Power cable A4 Size ECG Grid Paper – 1 box 	

S.N	Specification	Compliance If Any (Yes/No)
	6. Instruction manual 7. Any other which is included in the standard scope of supply by manufacturer 8. Data Management Software	
2	Nebulizer <ul style="list-style-type: none"> • Particle Size range - 0.5 to 5u (Micron) • Piston based. • Chamber size- 8-10ml. • Operation of Nebuligator pressure- 8-10 PSI. • Compressor- Liter flow (Air flow) around 8-10 liter/min. • Rate of Nebulization- 0.25 to 0.48ml / min. • Minimum Noise Label for hospital setting. 	
3	Weight Machine <ol style="list-style-type: none"> 1. Should have an accuracy of 500 gms. 2. Should be dial type having a magnifying lens to see the measurement. 3. Should measure a maximum weight of 150kgs. 4. Should have zero adjustment. 5. Should bear Certification for each machine by department of legal metrology/ Weight & Measurement department of India. The tenderer shall submit copy of model approval issued by Govt. of India, Legal Metrology department along with technical bid. <ol style="list-style-type: none"> 6. Should be Round shape of diameter 300mm (minor variations will be accepted) 7. Shall be made of Metal, epoxy powder coated with rust proof parts. 	
4	Electronic Baby Weighing Machine Capacity 10 Kg Variation : 5 g Baby Tray : Made from durable 8mm Acrylic. Dimensions: approx 22 x 11 inches <ol style="list-style-type: none"> 1) This scale should use proprietary damping system to compensate for baby's movements. This eliminates guessing and displays the accurate weight of the baby. 2) Baby can be weighed in Kilograms and Pounds. Easy conversion at a touch of a button. 3) User Calibration Facility. 4) High Bright LED Display for stress free reading even in daylight. 	
5	Syringe Needle Destroyer Manual	

S.N	Specification	Compliance If Any (Yes/No)																
6	Mercury Free BP Apparatus <ul style="list-style-type: none"> * Functioning similar to Mercurial Instrument * Rising spot LED shows Pressure value * Should be Provided with adjacent LCD panel for easy pressure readout * Dual Power Operation (Battery cum USB adaptor) * Low Power Consumption * Pulse Rate Display * Auto Power Off 																	
7	Stethoscope Adult The head is should be machined from an extremely crack resistant modern plastic. The head, tubing and binaural assembly should filter external noises while amplifying heart/lung sounds. The component specifications are as follows: Head- Single-sided pressure sensitive head made from shatter and crack resistant acrylic. <table> <tr> <th>Size</th> <th>Height</th> <th>Diameter</th> <th>Listening Surface Diameter</th> </tr> <tr> <td>Adult</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Length</td> <td>7/8"</td> <td>2"</td> <td>1-5/8"</td> </tr> <tr> <td>30"</td> <td></td> <td></td> <td></td> </tr> </table> Retaining Ring – Chrome plated, threaded retaining ring that screws on base of acrylic head Diaphragm – Translucent, flexible diaphragm Tubing- Made from Polyvinyl Chloride (PVC) and completely Latex Free Binaurals – Stainless steel Cardiology style with internal spring Eartips – Polyvinyl Chloride (PVC) outer casing, Stainless Steel inner piece	Size	Height	Diameter	Listening Surface Diameter	Adult				Length	7/8"	2"	1-5/8"	30"				
Size	Height	Diameter	Listening Surface Diameter															
Adult																		
Length	7/8"	2"	1-5/8"															
30"																		
8	Laryngoscope Set with pouch <ul style="list-style-type: none"> • Reusable standard laryngoscope blade with light bulb • large replacement bulb Blade Type MacIntosh Instrument German Grade Stainless Steel Grade Latex Free Mandatory Size Infant Size 0, Newborn Size 1, Child Size 2, Adult Size 3, Adult Large Size 4																	

S.N	Specification	Compliance If Any (Yes/No)
9	<p>Procedure Spot Light</p> <ul style="list-style-type: none"> • More Light and less Het • Should Work on AC Volts • Less Light Pollution • Reduce Strain on Air Conditions • Lamp Type: LED Spot Light • Light Source (Power Consumption) : 50,000 hours Service Life • Housing: Polycarbonate Moulding • Colour Lamp : 5,500 K • Input Voltage 180~220 V AC • Working Frequency : 50 ~ 60 HZ • Intensity Control Knob • Material: Stainless Steel / Mobile Stand with Castor Wheels and Flexible Goose Neck for Convenient Positioning and Distance Adjustment • Facula Lux: 60,000 • Brightness Control : Adjustable 	
10	<p>Lypo Suction Machine</p> <p>Rotary High-Vac are double stage pumps of larger capacities, which are known as Lipo for fats extraction and full in cosmetics surgery, the main assembly of the pump consist of a stator with a rotor mounted eccentrically in it. The rotor is fitted with two spring loaded diametrically opposed vanes, which move in and out of their slots pressing against the inner surface of the stator these are oil sealed self lubricated, silent running, it is designed to achieve maximum vacuum in a very short time, it reduce the wear and tear of its components and makes it suitable for noiseless and trouble free performance for years and thus helps in reduction of repair bills, these are very compact but so simple in design that all minor repairs in case of need can be carried out easily, it run continuously for many hours at a time. The entire pump and motor are placed in an attractive solid STAINLESS STEEL cabinet having steel top, which is giving extra protection, reduces heat noise and vibration to the minimum the suction mechanism is oil immersed. The unit is mounted on smooth moving ball bearing heavy-duty castors, and noiseless. It crates</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<p>vacuum of 700 to 760mm of Hg (28" to 30") the suction system is accurately controlled and precisely regulated by knob this unit is fitted with filter and automatic cut off by float mechanism, vacuum gauge, pilot light and protection fuse, this unit is fitted with 1/2HP ball bearing double shaft motor working on 220-250V single phase 50cycle Suction Capacity: 25Lts /p minutes Max Vacuum: 700mm to 760mm of Hg Consumption: . HP Voltage: 220 V 50 Cycles Castors: 5cm Antistatic Weight: Approx 43kg Dimensions: 38cmx38cmx85cm with castor Sound: almost whispers Finish: SS cabinet Suction Jar: 2nos 2500ml with over flow safety device</p>	
11	<p>Pediatric Suction Machine</p> <ul style="list-style-type: none"> • Voltage: AC 220± 10%, 50Hz± 2% • Power: 90VA • Max negative pressure :> 0.075Mpa • Noise :< 65 DB (A) • Pumping Rate :> 15L/min • Jars capacity: 1000ml • Oil-free lubrication pump 	
12	<p>Examination Headlight Solid State Portable Headlights Provide illumination precisely where it's needed with cool, bright light that ensures comfort for both doctor and patient. Weighing approximately four ounces. Fits inside a shirt pocket and allows complete freedom of movement Supplies bright, white, shadow-free light for true tissue color Solid state lamp with 10,000-hour life expectancy with minimal degradation of light output.</p>	
13	<p>Glucometer</p> <ol style="list-style-type: none"> 1. Should be a hand held meter 2. Should require no routine maintenance 3. Should have reading range/linearity from 20 to 600 mg/dl 4. Should have a maximum reading time of less than 10 seconds 5. Should use electrochemical technology 6. Should use a minimum blood sample less than 1.5µl 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>7. Should have a LCD display</p> <p>8. Should have measuring unit in mg/dl.</p> <p>9. Should have wide operating temperature</p> <p>10. Should have a minimum memory of 50</p> <p>11. Should have life time replacement offer</p> <p>12. Should have easy code entry technique</p> <p>13. Battery should be replaceable without using any tools.</p> <p>14. Should have facility to ensure accuracy of measurements.</p> <p>15. Should be supplied with three types of control solutions of each at least 20 ml</p> <p>16. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test</p> <p>GLUCOSE STRIPS</p> <p>1. Should be able to use capillary blood samples.</p> <p>2. Should have a minimum 4 months shelf life after opening the strip vial.</p> <p>3. All strips should have at least one year expiry date from the date of supply.</p> <p>4. 50 strips should be supplied along with the equipment.</p> <p>5. Strips should be available in the local market.</p>	
14	<p>LED 2 Plate Xray View Box</p> <p>LED light source</p> <p>long life span over 10.000 hours</p> <p>Ultrathin design,</p> <p>approx 45mm thickness</p> <p>10.000lux luminosity,</p> <p>90% uniformity</p> <p>The average luminance of viewing screen should be up to 5000cd/m2.</p> <p>The uniformity of Medical X ray view box should be over 90%, much higher than the average level and provide more diagnostic information for doctors.</p>	
15	<p>Electric Sterilizer</p> <p>Seamless shell as well as lever operated lid that provides for fail proof mechanism. The sterilizer should have provision of controlling excessive steam escape and as well as in restricting condensate within shell.</p> <p>Construction Materials: Steel Sheets</p> <p>Size (L x W x H) : 510 – 550 x 200-250 x 150-</p>	

S.N	Specification	Compliance If Any (Yes/No)
	200 mm Power : 2.00- 3.00 kw	
16	Refrigerator 350 ltrs <ul style="list-style-type: none"> • CAPACITY-350 liters • Star Rating-4 • Cooling Technology- green ion door technology • Temperature Control- internal micom • Stabilizer Free- yes EXTERIOR <ul style="list-style-type: none"> • Handle Type- y type • Door Finish – high gloss finish • Lockable • Color- Black/Brown REFRIGERATOR COMPARTMENT <ul style="list-style-type: none"> • Temperature Control- Internal Micom • Humidity Controller- Yes • Shelf Type - Toughened Glass • Deodorizer- Catechin Deoderizer • Moist balance crisper- Yes DIMENSIONS <ul style="list-style-type: none"> • Height (mm)- approx 1680-1880 • Width (mm)- approx 640-680 • Depth (mm)- approx 720-740 	
17	Pulse Oximeter <ul style="list-style-type: none"> • 5.7” Display Screen With Color LCD Backlight. • With Plethysmograph • With Alarms for PR and SPO2 • With 24 hours storage Facility • Portable and light weight. • Built in Rechargeable Battery 	
18	Fogging Machine Specifications: <ul style="list-style-type: none"> • Tank Capacity: 7.5 ltrs (HDPE – Engg. Plastic grade non corrosive). • Tank with graduated marking and liquid level visibility from outside. Range from 1 litre ~ 7.5 litres in step of 0.5 litres. • With Attached “Electronic Timer Device” to run for 60 mins. in absence of attender. • Aluminium Power Head Housing corrosion resistant & SS304 fittings. • Nozzle Assembly: Non rotating, Non clogging & Vortex design. 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> Liquid line connectors/Strainers & Wire mesh SS 304. Air-Filter with attached rubber ring & SS clamp. Area coverage: Upto 10,000 cu. fts. Liquid discharge rate: 0 ~ 300 ml/min. (Adjustable with “Flow Control Mechanism”). Volume of Airflow: 3.00 ~ 4.00 cubic mtr/min. Pressure Clamp and leak proof fittings. Reach: > 10 mtrs distance & > 5 mtrs height. Particle Size: 1 ~ 40 microns (Adjustable with “Flow Control Mechanism”). Rotating Knob: Available in SS 304 & Plastic Make. 230 volts / 50 Hz. AC current. Motor speed: 20,000 RPM. Motor Type: High Thrust Double Stage/Impellor motor with Class B insulation, inbuilt circuit for thermal overload protection. Motor CFM: 105 Cubic Fts/min. Motor Rating: 120 minutes. 7 Kgs. Light weight and portable. All fitting components SS304 only. Spares: Extra Air Filter. 	

C. OT Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	<p>Single Dome LED OT Light</p> <p>The operating light must be designed for the use in high demanding surgical procedures. State-of-the-art LED bulbs should be used to ensure a low energy consumption and a long service life.</p> <p>Outer handles at the light head should be provided to allow for non-sterile positioning.</p> <p>Light head must be designed with smooth transitions and surfaces, without slots, gaps or exposed screwing to ensure fast and effective cleaning.</p> <p>The light head with streamlined shape is favourable within laminar flow. The light head must be resistant to</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<p>disinfectant.</p> <p>For sterile positioning an ergonomic, exchangeable and centrally positioned sterile handle within the light head should be provided.</p> <p>All main joints of surgical light must be provided with unlimited rotation (360°). Light head and suspension must be sealed dustproof.</p> <p>Color temperature should be homogeneous at every illumination intensity.</p> <p>In built battery back up (Not external UPS) of 3 hrs.</p> <p>The surgical light should be complete with all components for ceiling mount type and electrical feed-in, incl. finalised installation.</p> <p>Technical data for Dome:</p> <ol style="list-style-type: none"> 1. Central illumination intensity Ec- 160.000 lux 2. Light field diameter at a distance of 1 m - 200 mm 3. Depth of illumination L1+L2-1300 mm 4. Average Color rendering index Ra- 95 5. Color rendering index R9 (red)-93 6. Color temperature more than 5000K 7. Central illumination at 1m distance with: <ol style="list-style-type: none"> a. Tube- 100% b. one mask: 40% c. tube and one mask:40% d. two masks: 48% e. tube and two masks: 48% 8. Central irradiance Ee - 580 W/ m² ± 50 W/ m² 9. Ee/Ec ratio - 3.5 W/m² x Lux 10. Adjusting the illumination intensity - 40000 to 160000 Lux 11. Number of LED- approx 66 units 12. Number of LED stripes-approx 11 units 13. Service life LED bulbs- approx. 30000 hours 14. Replacement of LED bulbs possible 15. Ambient light mode (Endolight)- 300 Lux 16. Diameter of light head- approx 620 mm 	
2	<p>OT Table</p> <ul style="list-style-type: none"> ➤ Electro hydraulic, Eight Function remote control table. <ul style="list-style-type: none"> • Up & Down (Min-30", Max-42") without cushion • Trendelenbreg & Reverse Trendelenbreg (30° either side). • Right Lateral & Left Lateral (20° either side). • Back rest- Motorized (+60° to -40°). 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> ➤ Power supply is 220 v, 5 amps and three pin Domestic Plug. ➤ Weight Bearing Capacity is 130 Kg maximum. ➤ Table has 100mm central lock castors for longitudinal and lateral movements, the castors are made of polyurethane and moulded to prevent water and rust entering inside. ➤ Braking is very effective and has a dead lock when braked; it is on the head end side of the table, to facilitate the anesthetist, and one brake on the tail end for better stability. ➤ Leg beds have two pieces right and left and are detachable and abductable and also can be moved up & down. ➤ Table top has five sections; it is breakable into inverted v-shape from the head side. ➤ Trendelenbreg and lateral mechanism are concealed with bellows; column is straight without any projection on right or left. ➤ Entirely off centered table top provides unrestricted 'C' arm imaging for entire body. ➤ The up & down movements are jerk free & high precision ball bearings totally avoids wig-wag movement in the column. ➤ Table column size is very sleek for 95° 'C'-arm access. ➤ Table has a provision to view spine AP and lateral with 'C'-arm. ➤ Polyurethane detachable cushion top is provided on the table top. ➤ Base is covered with impact, shock resistant, fire resistant and disinfectant free non-metallic material. ➤ The column casing, table top frame, traction bars and all accessories are made of non-corrosive steel. ➤ Inbuilt battery backup provided. ➤ The table top is reversible, the headrest attachments can be fixed to the tail side and the tail side attachment can be fixed to the head side. ➤ Head rest is detachable. ➤ The backrest can also be operated electrically through remote control. ➤ The table has a provision to fix top leg traction attachment. ➤ Unique top leg attachment with off centered traction bar provides unrestricted 'C'-arm imaging both AP and lateral for lower limbs. 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> ➤ Shoulder arthroscopy sitting position can be achieved. ➤ The table has provision to fix drainage tray with hose. ➤ The table is designed to do PCNL without any floor support from the top. ➤ The entire vertebral column can be viewed without any hindrance. ➤ Patient sitting position, with Trendelenburg maximum possible. ➤ 'C' arm compatible pelvic surgeries can be performed. ➤ Gynecology, Urology, gastroenterology and all surgeries can be performed. ➤ Inbuilt Kidney Bridge also possible. ➤ Over ride panel is provided on the column, In case of remote failure, the table can be operated through the over ride panel. ➤ In case of electrical components failure, the table should be operated manually by mechanical pedaling for all positions. ➤ Ultra low height table (Minimum 26", Maximum 36") possible for laparoscopic <p><u>Standard Accessories</u></p> <p>arm rest - 02 nos simple clamp – 03 nos setting clamp – 02 nos lithotomy – 02 nos side support – 02 nos anaesthesia screen rod – 01 no extension bar – 02 nos shoulder support – 02 nos built in battery back up – 01 no incorporated kidney bridge</p>	
3	<p>OT Table with all ortho, neuro and gynec attachments</p> <ul style="list-style-type: none"> ➤ Electro Hydraulic operated, Eight Function remote control table. <ul style="list-style-type: none"> • Up & Down (Min-27", Max-43") without cushion • Trendelenburg & Reverse Trendelenburg (30° either side). • Right Lateral & Left Lateral (20° either side). • Back rest (+90° to -85°). ➤ Power supply is 220 v, 5 amps and three pin Domestic Plug. ➤ Weight Bearing Capacity is 350 Kg maximum. ➤ Table has 100mm central lock castors for 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>longitudinal and lateral movements, the castors are made of polyurethane and moulded to prevent water and rust entering inside.</p> <ul style="list-style-type: none"> ➤ Braking is very effective and has a dead lock when braked; it is on the head end side of the table, to facilitate the anesthetist, and one brake on the tail end for better stability. ➤ Leg beds have two pieces right and left and are detachable and abductable and also can be moved up & down. ➤ Table top has five sections; it is breakable into inverted v-shape from the head side. ➤ Trendelenberg and lateral mechanism are concealed with bellows; column is straight without any projection on right or left. ➤ Entirely off centered table top provides unrestricted 'C' arm imaging for entire body. ➤ The up & down movements are jerk free & high precision ball bearings totally avoids wig-wag movement in the column. ➤ Table column size is very sleek for 95% 'C'-arm access. ➤ Table has a provision to view spine AP and lateral with 'C'-arm. ➤ Polyurethane detachable cushion top is provided on the table top. ➤ Base is covered with impact, shock resistant, fire resistant and disinfectant free non-metallic material. ➤ The column casing, table top frame, traction bars and all accessories are made of non-corrosive steel. ➤ Inbuilt battery back up provided, capable of withstanding for a week. ➤ The table top is reversible, the headrest attachments can be fixed to the tail side and the tail side attachment can be fixed to the head side. ➤ The table has a provision to fix top leg traction attachment. ➤ Unique top leg attachment with off centered traction bar provides unrestricted 'C'-arm imaging both AP and lateral for lower limbs. ➤ Shoulder arthroscopy sitting position can be achieved. ➤ The table has provision to fix drainage tray with hose. ➤ The table is designed to do PCNL without any floor support from the top. 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> ➤ The table has manual pre sector for all positions. ➤ In case of electrical components failure, the table should be operated manually by mechanical pedaling for all positions. ➤ The table is capable of taking off centered load for screening from neck to toe with C-Arm without any disturbance. ➤ The entire vertebral column can be viewed without any hindrance. ➤ Patient sitting position, with Trendelenburg maximum possible. ➤ Minimum height 27" can be achieved. ➤ Can adapt Mayfield sugitha and Lyela retractor. ➤ 'C' arm compatible pelvic surgeries can be performed. ➤ Gynecology, Cardiothoracic, Vascular, Neuro, Orthopaedic, Urology, Gastroentriology and all surgeries can be performed. ➤ Can take Heavy Weights ➤ <u>Standard Accessories</u> <ul style="list-style-type: none"> • arm rest- 02 no • simple clamp- 03 no • setting clamp - 02 nos • rail extension bar -02 no • anaesthesia screen rod- 01 no • lithotomy- 02 no • side support- 02 no • shoulder support- 02 no • urology bed - 01 no • orthopaedic fracture attachment (detachable)- 01 set • dhs cum femur perinial post -01 set • traction l-pipe (r/l) - 01 each • ball mechanism - 02 no • tibia traction t-pipe – 01 no • floor support - 02 no • endoprosthesis support – 03 nos • foot plates with traction boot -01 pair • steinmann pin holder- 01 no • hand surgery bed- 01 no • humerus bed- 01 no • horse shoe type head ring for neuro & cervical attachments- 01 set • bolsters 6"- 02 nos • battery backup- 01 no 	
4	Boyles Apparatus 1. Should be made of corrosion free materials and	

S.N	Specification	Compliance If Any (Yes/No)
	<p>have stainless steel work surface.</p> <ol style="list-style-type: none"> 2. Should have precisely calibrated double tube cascade flow meters for oxygen, N₂O and air. 3. Should have inbuilt facility to test the system leak without connecting to patient. 4. Should have gas specific (pin indexed, high pressure gas blocks with non interchangeable gas supply inlet. Should have internal gas outlets diameter indexed and thread indexed for interchangeability. 5. Should have primary step down regulator fitted with metal diaphragm and have no perishable rubber parts. 6. Should have separate gauges for pipeline and cylinder supply for each individual gas. Should provide oxygen basal flow (minimal 200ml). 7. Should have hypoxia guard and ensure minimum of 25% oxygen concentrating at any time. 8. Should have automatic N₂O shut off on oxygen failure. 9. Should have oxygen failure warning device. 10. Should have pressure relief valve, with auto reset feature, non return valves & oxygen flush. 11. Should have two Selecta Tec type accurate vaporizers with inter locking facility and agent specific key filling. Should be flow, pressure & temperature compensated. 12. Should be supplied with Halothane and Isoflurane vaporizers. 13. Should have single system control switch for convenience. 14. Accessories <ul style="list-style-type: none"> • Rigid top tray for monitors. • Two built-in oxygen outlets (4.22 kg/cm²) for driving ventilators, etc. • Space for ventilator. • Extended rear platform for two 10 litre water capacity cylinders. • Magill Circuit Complete • Bain Circuit Complete (Adult & Paed.) • Trolley should have one drawer • Key spanner for A type cylinder-2 nos • 1, 1.5 & 2 lit antistatic rebreathing bag-1 each • Face mask for Adult & Paediatric <p><u>Circle Absorber</u></p> <ol style="list-style-type: none"> 1. Should have double chamber 2. Should include APL valve. 	

S.N	Specification	Compliance If Any (Yes/No)
	3. Should have breathing bag, patient circuit and other related accessories. 2 sets should be provided.	
5	<u>Anesthesia Ventilator</u> 1. Should be electronic, microprocessor controlled anesthesia ventilator 2. Should be easy to operate and sterilisable. 3. Should have ability to safely deliver low flows to save on inhalation anesthetics and related cost. 4. Should have integrated tidal volume, flow and compliance compensation system. 5. Should accommodate wide range of patients, from children to adults with precise control over the parameters through control knobs. 6. Should preferably have battery backup for backup ventilation. 7. Should have audiovisual failure alarms.	
6	5 Para Monitor Monitor should be of a modular design with user configurable modules Monitor should have dedicated Adult, pediatric, neonatal modes with software settings Monitor should have flat panel integrated 10.4" display Monitor should also have conventional buttons for parallel operation mode Display type should be SVGA very high resolution TFT display (resolution 800x600) 4 channel monitor with at least 12 parameters display at a time Monitor should have following parameters <u>ECG</u> 5L ECG monitoring with 12L simultaneously ECG view 12 lead ST segment analysis with graphical representation of past ST changed Advanced full Arrhythmia detection facility QT / QTc measurement with alarms HR range 30-350 bpm HR accuracy +/- 1 bpm ECG should meet AAMI standards and should complies with IEC <u>Respiration</u> Impedance Pneumography principle Measurement thru ECG cable Aponea delay selection facility Range: 0 to 170 rpm Accuracy: +/- 1 for adult and +/- 2 for neonates <u>Non-Invasive Blood Pressure</u> Blood pressure range 10 to 270 mmHg Accuracy: +/- 5mmHg for mean error	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Monitor should offer list of at least 5 nos. NBP readings in the monitoring screen</p> <p><u>Pulse Oximetry</u></p> <p>Measurement range: 0 to 100%</p> <p>Pulse range: 30 to 300 bpm</p> <p>Accuracy: +/- 2%</p> <p>Should be supplied with reusable flexible rubber adult finger sensor</p> <p>Should have facility for dual SpO2 measurement for measuring differential saturation in peripheral limbs</p> <p><u>General</u></p> <p>Monitor should have built in slots for attaching various modules</p> <p>Monitor should have minimum 24 hr trends for all parameters, should available in graphical and tabular format with facility to view the patients condition in most interactive method</p> <p>Monitor should have multi levels of alarm monitoring</p> <p>Monitor should have Hemodynamic, Ventilation and Oxygenation packages for calculation</p> <p>Monitor should have LAN output for sending data to central station</p> <p>There should not be electrosurgical interference.</p> <p><i>Parameter Upgrade facility for</i></p> <ul style="list-style-type: none"> • Mainstream / Microstream CO2 monitoring – application based • Invasive Blood pressure • Cardiac Output • BIS (Bispectral index monitoring) 	
6	<p>Double Dome LED OT Light Ceiling</p> <ul style="list-style-type: none"> • The double dome operating light must be designed for the use in high demanding surgical procedures. State-of-the-art LED bulbs should be used to ensure a low energy consumption and a long service life. • Outer handles at the light head should be provided to allow for non-sterile positioning. • Light head must be designed with smooth transitions and surfaces, without slots, gaps or exposed screwing to ensure fast and effective cleaning. • The light head with streamlined shape is favourable within laminar flow. The light head must be resistant to disinfectant. • For sterile positioning an ergonomic, exchangeable and centrally positioned sterile handle within the light head should be provided. 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> All main joints of surgical light must be provided with unlimited rotation (360°). Light head and suspension must be sealed dustproof. Color temperature should be homogeneous at every illumination intensity. The surgical light should be complete with all components for ceiling mount and electrical feed-in, incl. finalised installation. <p><u>Technical data for main dome: - 1nos.</u></p> <ol style="list-style-type: none"> Central illumination intensity Ec- 160.000 lux Light field diameter at a distance of 1 m - 200 mm Depth of illumination L1+L2-1300 mm Average Color rendering index Ra- 95 Color rendering index R9 (red)-93 Color temperature more than 5000K Central illumination at 1m distance with: <ol style="list-style-type: none"> Tube- 100% one mask: 40% tube and one mask:40% two masks: 48% tube and two masks: 48% Central irradiance Ee - 580 W/ m² ± 50 W/ m² Ee/Ec ratio - 3.5 W/m² x Lux Adjusting the illumination intensity - 40000 to 160000 Lux Number of LED- approx 66 units Number of LED stripes-approx 11 units Service life LED bulbs- approx. 30000 hours Replacement of LED bulbs possible Ambient light mode (Endolight)- 300 Lux Diameter of light head- approx 620 mm <p><u>Technical data for satellite dome - 1nos.</u></p> <ol style="list-style-type: none"> Central illumination intensity Ec- 120.000 lu Light field diameter- 200mm Depth of illumination L1+L2 -1300 mm Average Color rendering index Ra-95 Color rendering index R9 (red)- 93 Color temperature - 5000K Central illumination at 1m distance with: <ol style="list-style-type: none"> Tube-100% one mask:41% tube and one mask:41% two masks:49% tube and two masks: 49% Central irradiance Ee-430 W/m² ± 50 W/m² Ee/Ec ratio- 3.5 W/m² x Lux 	

S.N	Specification	Compliance If Any (Yes/No)
	10. Adjusting the illumination intensity-40000 to 120000 Lux 11. Number of LED- approx 48 units 12. Number of LED stripes- approx 8 units 13. Replacement of LED bulbs- possible 14. Service life LED bulbs-approx. 30000 hours 15. Ambient light mode (Endolight) -300 Lux 16. Diameter of light head- approx 620 mm	
7	Scrub station Sink 2 bay A: Hands- free: Easy to use knee panel makes water control quick and convenient. Foot pump soap dispenser accessory releases 2 cc of soap with each push. B. Optimum water Temperature: It should have built-in thermostatically controlled mixing valve that should provide water temperature up to 115 degree F (46 degrees celcius) C. Two faucet heads options: It should have standard "rose" spray head that should produces a shower head like stream of water without any aeration. It should have laminar flow faucet head that deliver a consistent stream of water with a non-splash characteristic. D. Measurement: standard dimensions E. Laminar Flow Faucet Head: Yes F. Infra Red water control: Yes G. Digital Timer: Yes H. Temperature safety more than 115 degrees F. I. Sensor Operated: Yes	
8	Electrocautery Machine 1) Unit should have microprocessor controlled tissue feedback technology. 2) It should adjust power level automatically depending on tissue type. 3) It should complete self testing during power on. 4) Unit should have error code function for fault conditions. 5) It should accept dual area and single area patient return electrode. Should give Green Indication if dual area patient plate applied to patient & Red indication with alarm tone if the patient plate is not applied with 'Err PP' Indication. 6) It should have randomized spray coagulation for larger area coverage. 7) It should be upgradeable for Argon delivery module. 8) It should have at least TEN USER SETTABLE	

S.N	Specification	Compliance If Any (Yes/No)
	<p>programs for different surgical procedures and TWENTY Preset program.</p> <p>9) Unit should be useful for underwater procedures.</p> <p>10) It should have Alarm facility after completion of bipolar coagulation.</p> <p>11) Unit should have touch key pad for power and mode selection.</p> <p>12) Power Should change 1to 40 by step of 1W, 40 to 100 by step of 5W & 100 to max power by step of 10 W for fast setting of generator.</p> <p>13) It should have digital display which should indicate true power for selected mode.</p> <p>14) The unit should natural cooling with heat Sink exposed on rear side for better natural cooling.</p> <p>15) Unit should operate from 180 V to 260 V without using external stabilizer.</p> <p>16) It should have auto switching between monopolar and bipolar functions.</p> <p>17) It should have separate and isolated sockets for Monopolar and Bipolar.</p> <p>18) Product should be CE marked & 93/42/EEC Medical devices directive certified.</p> <p>19) It should have THREE different modes for Cutting:</p> <p>PURE CUT : 300Watt at 300 Ohms, CF-1.5</p> <p>BLEND CUT: 200Watt at 300 Ohms, CF-2.5</p> <p>SP. CUT: 300Watt at 300 Ohms, CF-1.5, with Pulse Cut.</p> <p>20) It should have THREE different modes for Coagulation:</p> <p>SOFT : 120Watt at 500 Ohms, CF-4.0</p> <p>FULGURATE : 120Watt at 500 Ohms, CF-6.5</p> <p>RANDOMISED SPRAY: 120Watt at 500 Ohms, CF-8.0</p> <p>21) It should have TWO different modes for Bipolar Coagulation:</p> <p>MICRO : 70 Watt at 100 Ohms, CF-1.5</p> <p>MACRO : 70 Watt at 100 Ohms, CF-1.5</p> <p>22) Unit should have inbuilt feature of tissue feedback, pulsed interval controlled ENDO CUT function.</p> <p>23) It should be supplied with following accessories:-</p> <ol style="list-style-type: none"> Patient return electrode - 1 No. Cable for return electrode - 1 No. Hand switching pencil - 1No. Foot switching pencil - 1No. Bipolar forceps - 1 No. Cable for bipolar forceps - 1No. Monopolar Foot switch --1 No. Bipolar foot switch -1 No. 	

S.N	Specification	Compliance If Any (Yes/No)				
	<p>i) Universal adaptor - 1 No.</p> <p>All accessories should be reusable and autoclavable.</p>					
9	<p>Patient Warming System</p> <ul style="list-style-type: none">• Should be suitable for intra – operative applications.• Should consist of active warming arm – cum – shoulder section, pair of leg segments and 1 double segments to cover the entire body.• Size - approx<ul style="list-style-type: none">▪ Double segment (60-62) cm x (80-85) cm.▪ Arm & Shoulder section (35-40) cm x (175-180) cm.▪ Leg Segment (80-85) cm.• Each double segment & arm cum shoulder segment should have two temperature sensors each for precise temperature control.• Double segment & arm cum shoulder segment should be divided in two sections capable of being switched ON or OFF independently depending upon the nature of surgery and condition of patient• Should have a control unit to regulate warmth to every area precisely by use of carbon fibers.• Control unit should be capable of warming at least three segments at a time.• Should offer precise digital temperature control with selectable temperature range of 30 to 42 degree C in steps of 0.5 degree C.• Control panel should display intended and actual temperature• Should have safety features such as Automatic check. Precise temperature control between warming system and patient. Autostop on detecting any problem.• Should have non latex anti- bacterially coated blood and fluid Resistant covers.• Covers should be washable and replaceable.• The control unit should be light weight not more than 2.5 kg small in size (200 x 120 x230 mm approx) and easily attachable to IV rod / OT table with fixing claw.• Should have low energy consumption and noiseless operation.					
10	<table><tr><td colspan="2">Drill Machine</td></tr><tr><td>Driving Unit (Motor (High Speed 200W),Stand,Foot Control, Tool Kit, Oil Bottle& Special Container.</td><td>1</td></tr></table>	Drill Machine		Driving Unit (Motor (High Speed 200W),Stand,Foot Control, Tool Kit, Oil Bottle& Special Container.	1	
Drill Machine						
Driving Unit (Motor (High Speed 200W),Stand,Foot Control, Tool Kit, Oil Bottle& Special Container.	1					

S.N	Specification	Compliance If Any (Yes/No)
	Cannulated Drill Handpiece with max. Speed 1200PRM & with Fixed S.S. Chuck	1
	Reaming Handpice with max.Speed 400 RPM Cannulated &AO Type quik coupling.	1
	Drill Chuck Adaptor S.S.	1
	Sagital Saw Handpice (Set of five blades)	1
	Sagital Saw Handpice with Pistol Grip(Set of five blades)	1
	Flexible Shaft	2

D. NICU Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	<p>Radiant Heat Warmer</p> <ul style="list-style-type: none"> Should be a modular design and fully integrated unit consisting of warmer unit, bassinet, storage units, trolley Body should be fire resistant. General Specifications: <ul style="list-style-type: none"> Trolley mounted unit with fixed height Operating Environment: 20-30°C, 0-95% humidity Power Requirements: 220 - 240V, 50 Hz, maximum 750 W Heater: > 550W, silica quartz rod heating element. Unit must be CE and FDA approved. Warmer Unit <ul style="list-style-type: none"> Should prewarm automatically on startup as below <ul style="list-style-type: none"> 100% power for 3 minutes 60% power for the next 12 minutes 30% power after 12 minutes Heater output should be adjustable manually at any given time Heater: > 550W, silica quartz rod heating element. Integrated 50W examination/procedure lighting, >0.15 lumens/cm². The warmer should swivel +/- 90° for x ray, examination of patient, etc. Parabolic reflector to deliver uniform heat Controller Unit 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> ○ Should have self test when switched on and should display errors if any ○ Should have Manual adjustment of heater power, from 0-100% in 10% increments, with LED heater output indicator ○ Servo-control of skin temperature. <ul style="list-style-type: none"> ▪ Skin temperature probe display and set-point 0.1°C resolution. ▪ Digital LED display of skin temperature range from 34 – 38 degree Cent with accuracy $\pm 0.2^{\circ}\text{C}$. ○ Should have On-demand temperature circuit calibration check. and on-demand skin temperature LED display test. ○ Integrated APGAR timer ○ Visual timer upto 1 hour • Basinet: <ul style="list-style-type: none"> ○ Large mattress area, >20" x 25". ○ Radio transparent mattress for x-ray procedures. ○ Dedicated provision for x-ray cassette below the level of the mattress. ○ Four independently hinged and removable transparent side-walls for easy access and cleaning. ○ Correlation between mattress/side-wall and x-ray provision markings for accurate x-ray cassette placement. ○ Basinet can be tilted and fixed into 5° and 10° Trendelenburg/Reverse Trendelenburg position ○ X Ray Tray to be provided • Alarms: <ul style="list-style-type: none"> ○ Audible tones and visual indicators for power interruption and periodic reminder, alarm within 10 minutes, when operating under manual control. ○ Audible and visual alarm if skin temperature deviates from set temperature by more than $\pm 1.0^{\circ}\text{C}$. ○ Audible and visual alarms if skin temperature probe is unplugged, or fails, while unit is operating in servo-control mode. ○ Audible and visual alarm and automatic heater shut-off if skin temperature exceeds $38.5 \pm 0.5^{\circ}\text{C}$. ○ Alarm Silence facility 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> ○ Illuminated Mode indicator. ○ Audible and visual alarm if power supply is interrupted. • Standard scope of supply to include <ul style="list-style-type: none"> ○ Main unit with variable height trolley ○ Integrated controller unit ○ Integrated warmer head ○ Sliding storage cabinet which can be opened from both sides ○ Reusable Temp. Probe – 5 No.s ○ X ray tray should be offered as standard 	
2	<p>Radiant Heat Warmer with oversurface phototherapy</p> <ul style="list-style-type: none"> • Should be a microprocessor controlled system with future expandability/ upgrade for additional functions and small footprint • Should have warmer integrated on trolley and control panel for settings and messages • Body should be fire resistant. • Should have an integrated radiant warmer with Smart Swivel to keep heat always focused on the baby , even when radiant heater is moved to side for procedures. Warmer specifications should be as below: <ul style="list-style-type: none"> ❖ Radiant power at a distance of 80 cm should not be more than 10 – 30 mw/cm² ❖ 2 infrared ceramic radiating elements ❖ Should have an integrated procedure light (20 – 25 W) and an observation lamp (7 – 10 W) ❖ Minimum Clearance between top edge of warmer and ceiling should be ≥ 50 cm ❖ Integrated X Ray Tray ❖ Tilting should be smooth and should be from +20 Degrees to – 15 Degrees • Control Panel should have built in self test when switched on. It should have : <ul style="list-style-type: none"> ❖ Manual Temperature control to set temperature regardless of core temperature ❖ Servo / Baby mode – warmer output automatically adjusted according to temperature difference between skin temperature and desired value ❖ Alarms for deviations in temperature of $\pm 0.5^{\circ}$ Cent. ❖ Central Large alarm with audio for deviations in temperature ❖ Measurement of central and peripheral temperature ❖ Continuous measurement with Large easy to 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>read display</p> <ul style="list-style-type: none"> • Integrated Phototherapy unit in same unit as warmer with halogen lamp for phototherapy • Standard scope of supply must include <ol style="list-style-type: none"> 1) Warming Unit 2) Skin servo mode 3) Alarm facility with thermo monitoring 4) In Built scale which should be easily integrated 5) Bed tilt facility 6) Integrated X Ray Tray 7) Integrated RS232C output 8) Temperature probes – reusable or disposable. 	
3	<p>Transport Incubator The System to have -</p> <ul style="list-style-type: none"> • Incubator with Double Wall Canopy, Front and Head End Access Doors with Access portholes and Tubing Access Ports. (2 access doors, 2 disposable infant restraint straps, 1 Iris port, 2 Quiet Touch™ port doors. 6 tubing ports) • Digital Displays of Air and Baby Skin Temperatures, set range 22.0° C - 38° C (71° F - 100° F) • Indicators for Mains and Battery Modes of Operation : • Indicator for Battery Power Capacity : Battery condition status 4 LED indication of battery charge and heater power condition 25-100% • Examination Light. • Power mode Illuminates AC, DC, or external DC, AC and 12VDC Connectors. • Front mounted gas content display • Comprehensive Alarm System : Alarm indicators for High temp, Power fail, Sensor fault, Heater temp, Air flow, Low DC • 2D or 2E size tank mounts The tank mount permits mounting gas cylinders with a diameter of up to 4.5 in (11.6 cm) and up to 34 in (85 cm) in length • Should have O2 concentration range 21% to 58% minimum • Should have Noise level <60 dBA • Humidity pad Holds 400 ml.(14 oz) sterile distilled water with no significant spillage for up to 45° tilt in either direction with relative humidity 50 to 70% for 10-12 hours using humidity pad • Air filter Removes >99% of airborne particles greater than 0.5 micron diameter • Controller Displays : On/standby Illuminates when 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>“On”</p> <ul style="list-style-type: none"> Storage temperature -40° C to 70° C ambient Operating range Sea level to 3 km (10,000 ft.) non-pressurized environment. Sea level to 12 km (40,000 ft.)-pressurized environment Should have Features like Accessory shelf, IV pole, High Hood, Pressure Regulator and Flowmeter 	
4	<p>Optimum Flow Generator for Newborns</p> <ul style="list-style-type: none"> The system should have an inbuilt heated humidifier with advanced algorithms for delivery of optimal humidity. It should have Inspiratory tubing with inbuilt spiral heater wire for superior condensate control in varying environments. The tubing should be light weight and flexible and be able to deliver flows from 2 to 25liters & 10 to 60 liters. It should have auto –fill humidification chamber with a dual float mechanism System. The system should have inbuilt Fio2 monitoring device to deliver the Fio2 from 21% to 95% The System should be able to deliver Flow from 2-25 liters in junior mode & 10 – 60 liters in Adult mode. The system should have High & Low alarms for Oxygen. The system should have nasal cannula available in2 different sizes for Infant, Pediatric applications made of Thermoplastic Elastomer, Hydrocolloid ABS Stainless Steel. The system should have inbuilt disinfection mode to disinfection the internal blower of the machine to prevent cross infection. It should have integrated Air Compressor. It should be able to operate with the central Medical Air of the hospital All Items should comply with the international safety regulation and certification – US FDA. Scope of supply: All standard accessories as per manufacturers list 	

S.N	Specification	Compliance If Any (Yes/No)
	Air Hose -1 no to connect with the hospital medical air system.	
5	<p>Bubble CPAP</p> <ul style="list-style-type: none"> • Easy to Maintain • Maintains constant CPAP • Closed system ensures safety by minimizing the risk of contamination. <p>SINGLE HEATED CIRCUIT</p> <ul style="list-style-type: none"> • Provides even heat distribution across the tube reducing heat loss and condensate build up. • Delivers optimal humidity to the neonate keeping a patent airway and allowing ease to suctioning. <p>PRESSURE MANIFOLD</p> <ul style="list-style-type: none"> • Ensures patients safety by limiting the pressure delivered in an event of of an occlusion. • Allows connection to a pressure monitoring device or an air/oxygen analyzer. <p>CPAP GENERATOR</p> <ul style="list-style-type: none"> • CPAP Probe allows ease of pressure setting from 3 to 10cm H₂O. • Auto-Level Mechanism ensures constant mean CPAP pressure. • Detachable overflow container allows continuous CPAP while removing excess water from condensate. • Easy mounting using an F&P humidifier bracket. <p>NASAL TUBING</p> <ul style="list-style-type: none"> • Low resistance to flow resulting in low work of breathing (WOB) • Patented glider technology ensures proper fit preventing undue pressure-causing necrosis. • Supports various caring positions like prone, supine, lateral, etc. • Collapsible extension tubing allows ease to circuit positioning and provides various length options to manage condensate. • With tear-off foam strip for adjustable height. • Should supply all three sizes <ul style="list-style-type: none"> 50mm < 1Kg- 2 nos 70mm > 1Kg- 2 nos 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>100mm > 2Kg- 2 nos</p> <p>NASAL PRONGS</p> <ul style="list-style-type: none"> • Soft, Pliable and gentle on the baby's nares. • Anatomically curved for a comfortable fit. • Available in 9 sizes based on prong diameter and width of septum. • Has the largest bore possible to reduce resistance to flow and work of breathing (WOB) • Septum cut-away helps prevent septum necrosis. <p>INFANT BONNET</p> <ul style="list-style-type: none"> • Holds the nasal tubing in place for ease of set up. • Can open bonnet top to allow clinical procedures like ultrasound. • Should supply each of 4 Sizes that are designated by the head circumference. • Sizes are sewn on the bonnet for easy identification. <p>HEAD GEAR</p> <ul style="list-style-type: none"> • An alternative to the infant bonnet, the head gear is designed to suit larger infants of up to 45 cm head circumference. • With 3-point fixation for a stable setup. • Soft, elastic material adapts to head contour. • Should supply each of three sizes. <p><u>CHIN STRAP</u></p> <ul style="list-style-type: none"> • Help Optimize the effect of CPCP by preventing mouth leaks. • Soft, Pliable Material. • Split top design for better fixation. • Should supply each of 4 Sizes. <p><u>Overall Infant Delivery System Specification</u></p> <p>Delivery System Maximum Input Flow: 15L/min</p> <p>Maximum Mean CPAP : 15cm H2O</p> <p><u>Humidification Chamber</u></p> <p>Inlet Port : 22mm Male</p> <p>Outlet Port : 22mm Male</p> <p>Compressible Volume : 280ml</p> <p>Compliance : 0.4ml/cm H2O</p> <p>Maximum Operating Pressure: 80cm H2O</p> <p>Maximum Peak Flow : 180L/min</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<p><u>Pressure Manifold</u></p> <p>Maximum Pressure Limit : 17cm H₂O @8L/min</p> <p>Inlet Connector : O₂ Inlet Adaptor</p> <p>Out let Connector : 22mm female or 15mm Female</p> <p>Luer Port : Female Luer</p> <p>Oxygen Analyzer Port : 22mm Female or 15mm Female</p> <p><u>Single Heated Breathing Circuit</u></p> <p>Circuit Length - Expiratory: 1.1m - Inspiratory: 1.2m</p> <p>Compressible Volume</p> <p>Inspiratory Limb : 149ml</p> <p>Expiratory Limb : 101ml</p> <p>Compliance</p> <p>Inspiratory Limb : 0.19ml/cm H₂O</p> <p>Expiratory Limb : 0.13ml/cm H₂O</p> <p>Resistance to flow : 0.6cm H₂O @ 6L/min</p> <p><u>CPAP Generator</u></p> <p>Inlet Port : 15mm Female</p> <p>Exit port : 22mm Male</p> <p>CPAP Pressure (mean) : 3 – 10cm H₂O</p> <p>Bubbler water container volume : Approx 500mls</p> <p><u>Nasal Tubing</u></p> <p>Dead Space : Nil</p> <p>Length of Nasal Tubing</p> <p>With collapsible extension</p> <p>50mm (expanded) : 224mm (collapsed) : 163mm</p> <p>70mm (expanded) : 244mm (collapsed) : 183mm</p> <p>100mm(expanded) : 274mm (collapsed) : 213mm</p> <p>Resistance To Flow</p> <p>F&P patient interface with both inspiratory And expiratory collapsible extensions</p> <p>50mm nasal tubing : 0.49cm H₂O @ 6L/min</p> <p>70mm nasal tubing : 0.53cm H₂O @ 6L/min</p> <p>100mm nasal tubing : 0.55cm H₂O @ 6L/min</p> <p><u>Nasal Pongs</u></p> <p>Material : Silicone (latex Free)</p> <p>Hardness : 80 shore A</p> <p>Resistance to flow</p> <p>Measured at the pressure port of the nasal tubing</p> <p>2.4cm H₂O @ 6L/min</p>	

S.N	Specification	Compliance If Any (Yes/No)
	Dead Space: max 0.5 ml <u>Infant Bonnet</u> Bonnet tube material : Cotton Nylon Blend (Latex Free) <u>Headgear</u> Headgear Material : Nylon/neoprene laminate (Latex Free) <u>Chinstrap</u> Chinstrap Material : Nylon/polyurethane laminate (latex free)	
6	Neonatal Ventilator <ul style="list-style-type: none"> Advanced microprocessor based continuous flow, pressure limited, time cycled ventilator for very low body weight infants (premature, newborns) upto maximum 20 kg. Should be an upgradeable design with software/hardware upgradeability for new/ future functions with inbuilt graphic screen The ventilator should have ventilation modes as below: <ul style="list-style-type: none"> IPPV / IMV Assist Control SIMV CPAP HFOV – optional – should be integrated in same machine PSV/VG – optional – should be integrated in same machine Should have settings for : Peak Inspiratory Pressure 10 - 80 cmH ₂ O Flow independent 0 – 15 cmH ₂ O PEEP Inspiratory Time 0.1 – 2 sec Expiratory Time 0.2 – 30 sec Maximum Rate (based on Insp. Time and exp. Time) 200 bpm Inspiratory flow 1 – 30 lpm Base flow (VIVE) 1 – 30 lpm Slope control 0 - 2 sec. FiO ₂ 21 - 100% Should have real time monitoring at Y-piece of: <ul style="list-style-type: none"> Pressure - Peak, Plateau, Mean, CPAP/PEEP Expired Tidal Volume (Monitored), Expired Minute Volume, leakage in % 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> Frequency/ Rate - Set (Inspiratory), Spontaneous MV in %, total , I:E ratio FiO2 Lung Mechanics - Resistance, Compliance , C20/C, Time constant Tc, RVR <p>Should have automatic alarm settings for all alarms. MV alarm can be manually adjusted along with alarms for :</p> <ol style="list-style-type: none"> 1. Disconnection 2. Tube blocked 3. Ventilation hose kinked 4. High/low Pressure 5. High/low Minute Volume 6. High Rate 7. High Tidal Volume 8. Apnoea / apnoea alarm time 9. High/low O2 % (automatic settings) 10. Oxygen line failure 11. Compressed air failure 12. Total electronic failure (with error code) <p>Scope of supply should include</p> <ul style="list-style-type: none"> Basic Unit (220 - 240 V) Modular corrosion free Trolley Silicon heated Hose set for neonates – 2 set Servo controlled humidifier with reusable chamber Flow sensor O2 cell Nebuliser Oxygen connecting Hose Air connecting Hose Hinged arm for rail (Support for patient circuit) Neonatal test lung Instruction Manual <p><u>Nasal CPAP ventilation</u> The nasal CPAP unit should be self contained with head strap, hood, nasal prongs, fixing unit.</p> <p><u>HFOV- should be upgradeable</u> It should be possible to combine HFOV as below : IPPV + HFOV CPAP + HFOV. The HFOV function should be integrated in same machine and NOT external facility.</p> <p><u>Pressure Support/ Volume Guarantee (Standard)</u> It should be possible to give leakage adapted pressure support to spontaneously breathing patients with a set volume guarantee.</p>	

S.N	Specification	Compliance If Any (Yes/No)
	Volume guarantee should be regulated with lowest possible airway pressure within a set PIP.	
7	<p>3 Para Monitor</p> <p>Should be suitable for adult, pediatric & neonatal patients monitoring.</p> <p>Should have minimum 8 channels of waveforms with approx 8" TFT-LCD colour integrated touch screen display (resolution min 1024*768). Should display 11 waveforms with all ECG waveforms.</p> <p>Should monitor ECG, Respiration, NIBP, SpO2, Temperature, & Recorder as standard</p> <p>Should have ST analysis, Arrhythmia detection</p> <p>Should have Drug Dose Calculation and OxyCRG</p> <p>Should have pacer spike detection</p> <p>Defib and ESU protection should be present</p> <p>Should have monitoring, surgery and diagnostic mode of monitoring</p> <p>Arrhythmia monitoring for Asystole, Vfib/Vtac, VT>2, Couplet, Bigeminy, Trigeminy, R on T, PVC, Tachy, Brady, Missed Beats, IRR, PNC, Vbrady.</p> <p>Monitor access should be with Touch screen and rotary knob.</p> <p>Fast access key should be provided for quick function.</p> <p>Approx 120 hrs of trend and 60 events with waveform as standard in all monitors</p> <p>Color or position of waveforms or parameters should be able to be adjusted based on users preferences. Big font on screen format should be present.</p> <p>Nurse call, Analog output, VGA output port should be standard</p> <p>Anti theft lock facility should be possible for better hospital asset management</p> <p>Option to upgrade inbuilt three channel recorder</p> <p>Should have approx 120 hrs (typically) of battery backup typically</p> <p>Should have following parameters</p> <p>ECG</p> <ul style="list-style-type: none"> – Monitor should have capability for display upto 7Lead . – ST Analysis – Waveform Freeze option with review of 120 sec <p>RESPIRATION</p> <ul style="list-style-type: none"> – Through impedance pneumography method or EtCO2 <p>SpO2</p> <ul style="list-style-type: none"> – Should display digital value and Plethysmograph – Should have MASIMO Technology <p>NIBP</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<ol style="list-style-type: none"> 1. By oscillometric principle of measurement. 2. Should display Systolic, diastolic, mean pressure in large easy to read display <p>Scope of supply must include:</p> <ul style="list-style-type: none"> – Basic unit with ECG, Resp, SpO2, NIBP, inbuilt battery – 3 lead dedicated ECG Cable – for neonates-1 no each per monitor – Y-type SpO2 finger sensor (XS,S,M size) and extension cable – 1 no per monitor – Dedicated NIBP Hose with Neonatal cuff – 1 no each per monitor – Instruction for Use per monitor – Manual per monitor 	
8	<p>Syringe Pump Bottom Loading Syringe Infusion Pump Syringes Capacities : 5ml, 10ml, 20ml, 50ml & 60ml of any make can be used Delivery Range 0.1 ml/hr to 200 ml/hr programmable up to 1200 ml/hr 0.1 ml/hr increments Delivery Volume Pre selection 0.1 to 999.9 ml Flow rate Accuracy +/- 2% Volume / Time infusion Mode Volume to Infuse : 0.1 to 99.9 ml Time : 0h 01min to 96 h 00min BOLUS FUNCTION On line Bolus with one key press Bolus rate adjustment from 50ml/hr to 1200ml/hr KVO rate flow – when selected volume is delivered Display of Drug name with customized drug library of about 50 drug names Display of Infusion line Pressure in mmHg with graphics in real time during the infusion Selectable Occlusion pressure trigger levels from 100 ~ 900 mmHg in at least 12 steps Automatic bolus reduction after Occlusion release Key pad locking facility for security purpose Manual pusher with Protection to protect the syringe from any shock or from accidental bolus PAUSE FUNCTION - Pumps can retain data when disconnected from patient. Time : 1 minute to 24 hours Power supply should be in built in the pump Rechargeable Battery Type NiMH Battery operating time Min.10 hrs @ 5 ml/ hr Indication of residual battery life in Hr. & min</p>	

S.N	Specification	Compliance If Any (Yes/No)
	Vertically stackable up to 3 pumps for easy transportation with rotating stand clamp ALARM SYSTEMS: Alarm in text format for better understanding Infusion line disconnection alarm Occlusion limit exceed Alarm End of Infusion pre-alarm & alarm Volume limit pre-alarm & alarm KVO rate flow Low battery pre-alarm & alarm AC power failure alarm Increase & Decrease in pressure alarm Syringe incorrectly place Volume infused alarm Drive disengaged alarm Light in weight	
9	O2 Hood- Large <ul style="list-style-type: none"> • It should made up of polycarbonate material. • It must be autoclavable • It should be single piece, round shape and unbreakable. • It should have trauma –free silicone neck adjustable flap • It should have bilateral oxygen nozzle that prevents direct flow of cold oxygen to patients head. 	
10	O2 Hood- Medium <ul style="list-style-type: none"> • It should made up of polycarbonate material. • It must be autoclavable • It should be single piece, round shape and unbreakable. • It should have trauma –free silicone neck adjustable flap • It should have bilateral oxygen nozzle that prevents direct flow of cold oxygen to patients head. 	
11	O2 Hood- Small <ul style="list-style-type: none"> • It should made up of polycarbonate material. • It must be autoclavable • It should be single piece, round shape and unbreakable. • It should have trauma –free silicone neck adjustable flap • It should have bilateral oxygen nozzle that prevents direct flow of cold oxygen to patients head. 	

E. Obstetric & Gynecology Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	<p>Fetal Doppler</p> <ul style="list-style-type: none"> • Rate Display with interchangeable Probe <p>Interchangeable Probe 2MHz for general obstetric use 3MHz ideally suited for detecting the fetal heart in early gestations</p> <ul style="list-style-type: none"> • Probe connector for interchangeable probe options • Unique fetal heart rate processing modes for optimum performance in the widest range of signal conditions. • Real time fetal heart rate data output. <p>Scope of Supply: Standard as per manufacturers list</p>	
2	<p>NST Machine with TOCO</p> <p>AC supply voltage and fuse values</p> <ol style="list-style-type: none"> 1. Rated AC supply voltage: 240V, 50Hz/60Hz, maximum rating 30VA <p>Printer</p> <p>The printer should print Fetal Heart Rate Analysis to help to limit the problems of visual interpretation of the CTG & for consistent decision support and reassurance. System should measure fetal heart rate parameters and performs a test against criteria of stored records for a normal record. The analysis should be initiated after ten minutes monitoring, and every two minutes thereafter. At each analysis the user should be advised whether the CTG meets the criteria for a normal record. At the end of the monitoring session, an analysis report should be come in printed form and if any abnormalities should be highlighted.</p> <p>High-resolution 5” chart printer with automatic annotation, signal loss, date, time and chart speed. Dot matrix thermal, 1024 elements. Print width 128mm.</p> <ol style="list-style-type: none"> 1. Paper type: Heat-sensitive z-fold plain coated paper 2. Paper length: 45m per pack, representing 75 hours at 13 cm/min 3. Chart speeds: 1, 2, 3 cm/min and fast feed 4. FHR scale (user selectable): 30-240 bpm (30 bpm/cm) <p>Display</p> <p>5.2” Transmissive LCD with CCT backlight, displaying monitored parameters, interactive messaging and menus.</p> <ol style="list-style-type: none"> 1. Resolution: 240 x 64 pixels 2. Display modes: Alphanumeric or Scrolling Trace 3. Displayed parameters: Singleton and Twin FHR (Ultrasound), TOCO 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Ultrasound Transducer Type wide-angle multi-crystal monitoring transducer, watertight, with clip for attaching patient belt. Pulsed Doppler system with directional facility.</p> <ol style="list-style-type: none"> 1. Protection category: B 2. Operating frequencies: 1.5 MHz (yellow), 2MHz (Blue) 3. Sampling rate: ± 5 ms 4. Heart rate: Calculated to ± 0.25 bpm 5. Accuracy: ± 1 bpm over the range 100-180 bpm 6. Protection against water: IPX7 <p>Ultrasound Transducer Acoustic Output</p> <ol style="list-style-type: none"> 1. Peak negative pressure: < 1 Mpa 2. Output beam intensity: < 20 mW/cm² 3. Spatial-peak temporal-average intensity: < 100 mW/cm² <p>Contractions (external Toco)</p> <p>guard-ring tocodynamometer with clip for attaching patient belt. Auto-zero and Manual zero.</p> <ol style="list-style-type: none"> 1. Protection Category: B 2. Nominal Sensitivity: 150g full-scale <p>Fetal Movements</p> <p>Recorded either by patient operating event marker or, automatically using the Actogram feature. This records fetal limb and trunk movements via the ultrasound transducer.</p> <p>CTG Analysis</p> <p>Equipment should have inbuilt Intelligent Fetal Analysis (IFA) software for care antepartum CTG analysis</p> <p>Memory</p> <p>Minimum 5 hour Memory of traces with fast printing facility.</p> <p>FHR Alarm</p> <p>Audible and visual alarms are user selectable for High (Tachycardic) FHR, Low (Bradycardic) FHR& Signal Loss (LOC)</p> <p>Trace Annotation</p> <p>This facility provides a quick and accurate method of annotating the CTG. A clinical note is printed on the CTG by simply selecting the required note from lists on the display. Annotation of patient name, gestation period, reference number, hospital name facility should be there.</p> <p>Interfaces</p> <p>An RS232 interface provides connection to computerized Central Review and Archiving systems, with the auxiliary socket providing connection to radio telemetry for wireless fetal monitoring.</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Safety Equipment should be designed to meet the medical electrical safety standards, IEC 601-1:1998 and EN 60601-1-2: 1993.</p> <p>Regulatory Equipment should be CE marked meeting the requirements of the Medical Devices Directive (93/42/EEC), and has FDA 510(k) approval.</p>	

F. ICU Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	<p>ABG Machine</p> <ol style="list-style-type: none"> 1. It should measure Blood Gas (full parameters) in its addition to measure Electrolytes like Na+, K+, Cl- , pH, pO₂,pCO₂. and Haematocrit . 2. Calculated parameters: TCO₂, HCO₃, Base Excess A-aDO₂, Buffer Base etc. 3. Should display all results in print out. 4. Should have input parameters of patient Temperature, Hemoglobin FIO₂, patient ID Etc. 5. Should have a sample temperature control of 37 degree centigrade. 6. It should have inbuilt printer. 7. Analysis time should not be more than 90 seconds. 8. System should be based on liquid / gas calibration technology. 9. System should not be a cartridge based system i.e. electrodes should not be in the cartridge system. 10. Should work on whole blood and should have syringe and capillary sampling. 11. Should be with numeric keypad, graphic / LCD display, and inbuilt printer and RS 232 port. 12. Analyzer with memory of storing patient data/result minimum 250 or more. 13. System should be supplied complete with all standard accessories, electrodes 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>& start up kits.</p> <p>14. Onboard life of reagents should not be less than one month.</p> <p>15. Power input: 220 VAC + 10%, 50 Hz and a suitable one hr. back up UPS should be supplied along with analyzer. There should be storage facility of data in case of power failure.</p> <p>16. Maintenance free electrode and the unit should be upgradeability for auto quality control.</p> <p>17. System should be ISI /CE marked or US FDA approved.</p> <p>18. Should submit certificate of relevant of IEC safety standards.</p> <p>Scope of supply: As in standard scope of supply by the principal manufacturer. Consumables for doing 50 test.</p>	
2	<p>Adult Ventilator</p> <p>a. General Features</p> <ol style="list-style-type: none"> Should be suitable for ventilation of pediatric & infant patients in all critical areas with aspiratory & expiratory limbs Should be mobile and have trolley with antistatic wheels Should be operable on mains & battery (backup to 7 to 8 hrs) Should have integrated blower/turbine for independent operation with a high mean time Machine should not have any patented patient circuit and can be used with any standard double limb disposable circuit Should have integrated color display with two waveform of display pressure vs flow vs time & alarm messages Should have volume compensated synchronized nebulization facility Should have inspiratory hold facility Should have compliance & leakage compensation Should have facility for both pressure & flow trigger Should have humidifier with easily autoclavable tubing, humidifier chamber, water traps & expiratory 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>valve, temperature sensor.</p> <p>12. Easy access to vital settings like tidal volume, respiratory rate & air pressure.</p> <p>13. Should have electronic non consumable oxygen cell. If oxygen cell is consumable than the bidder has to provide the oxygen cell free of cost considering life span of ventilator as minimum ten years.</p> <p>b. Ventilatory Modes</p> <ol style="list-style-type: none"> 1. CMV/IPPV 2. SIMV with Ps 3. CPAP with Ps 4. Pressure Control ventilation BIPAP (PCV) 5. BIPAP (PCV) with PS 6. Configurable Apnea backup ventilation 7. Should have advance ventilation modes such as Autoflow/PRVC means automatic adoptions of inspiratory flow in volume oriented modes. 8. Should be possible for patients to breath spontaneously throughout the breathing cycle in all volume controlled modes. <p>c. PEEP & CPAP Facility</p> <ol style="list-style-type: none"> 1. Should have NIV ventilation in all the modes <p>d. Settings</p> <ol style="list-style-type: none"> 1. Tidal Volume: 50-1500mL 2. Inspiratory time: 0.2-10 sec 3. CMV Rate: 5-80 bpm 4. Peak Inspiratory Pressure: 0-99 cm H2O 5. Inspiratory Flow : 0-180 lpm 6. PEEP & CPAP: 0-35 cm H2O 7. Pressure Support: 0-35 cm H2O 8. FiO2: 21-100 % 9. Trigger Flow: 0-15 lpm or pressure to 3cm H2O 10. Pause time: 0.25% breath <p>e. Monitoring</p> <ol style="list-style-type: none"> 1. Should have real time/measured volume display for following volume <ol style="list-style-type: none"> a. Inspiratory & expiratory tidal volume b. Inspiratory & expiratory minute volume 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> c. Spontaneous minute volume d. Minute volume leak e. Peak pressure f. Mean pressure g. Total frequency h. Spontaneous frequency i. FiO2 j. I:E Ratio k. CPAP & PEEP l. Breathing gas temperature m. Static lung resistance n. Static lung compliance o. Peak flow <p>f. Alarm</p> <ol style="list-style-type: none"> 1. Should have alarm messages for all the following: <ul style="list-style-type: none"> a. High/low airway pressure b. High/low minute volume c. High/low tidal volume d. High/low FiO2 e. High/Low Respiratory rate f. Apnea setting error g. Power failure h. Oxygen failure i. Pressure leakage j. Patient disconnection g. Scope of Supply <ol style="list-style-type: none"> 1. Basic Unit with inbuilt battery 2. Corrosion free Trolley with antistatic wheels 3. Humidifier-servo controlled heated with adult & pediatric hoses, heating control and temperature measurement 4. Adult & Pediatric reusable hose set and autoclavable expiratory valve 5. O2 Connecting hose 6. Reusable Flow Sensor(heated wire type) (min 10 pcs), expiratory valve (2 nos.) temperature sensor and non consumable electronic oxygen sensor/ consumable oxygen cell (free of cost for life span of min 10 years) 7. Reusable Breathing circuit and tubings - autoclavable at 121 C to 125C – 2set 8. Face Masks with gel cushion for face, adjustable cushion pad for nasal bridge and magnetic connectors for quick fastening. 	

S.N	Specification	Compliance If Any (Yes/No)
	9. Operational manual 10. Hinged Support for mounting tubings -1 no. 11. Power cord – 1no. 12. Integrated RS232C Interface 13. Test Lung-1 no. All items asked in scope of supply should be supplied from the ventilator manufacturer only along with packing list submitted by the manufacturer only. Quality Standards: 1. CE certificate 2. FDA certificate Relevant IEC certification	
3	5 para Monitor (6 nos) with Central Nursing Station <ul style="list-style-type: none"> • Patient Monitor should be of Integrated design • It should be a Slim design with a thickness of about 7 cms & Light Weight (< 2.5 Kgs inclusive of battery and charger) • Monitored Parameters – 3 and 5 Lead ECG, SpO2, NIBP, Resp, Temp (2 Ports), IBP (2 Ports) and EtCO2 (Microstream Applications) • Display – approx 10-12 inch, Wide Screen, Color thin film transitive (TFT) liquid crystal display (LCD) with resistive touch screen • Waveforms – Upto Five • Capability to change Waveform Color. • Capability to view bigger Font of the displayed parameters • 120 hours of Graphical & Tabular Trends of the monitored parameters • Battery back of upto 5 hours • Monitor should be able to viewed and readable from a wide angle and from an appropriate distance • Monitor should have capability for network connectivity to its Central • Monitor should avoid using an “Internal Fan” and should have good mechanism to dissipate heat with ease in maintenance • Monitor should have capability for a 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>easy software upgrade preferably using an USB Memory Stick</p> <ul style="list-style-type: none"> • Monitor should simplify user interaction by offering Single Level Menu applications • Monitor should have capability to offer Integrated demo mode • Monitor should not have an external charger outside and should offer charging capability by using a standard 3 – pin power cord • Standard Accessories: 5 Lead ECG Cable, Adult Cuff, Adult SPO2 Probe, Skin Temp Probe & Table Mount with bed hook • Should be able to offer the monitor base in either White or Black color • Should be able to operate in AC mains range of 100 V – 240 V • Monitor should be able to operate with lesser power consumption (about 30 W internal power supply) • Monitor should be capable to be mounted on a Wall Mount / Table Mount / Roll Stand with or without a Bed Hook • Monitor should be able to display multiple ECG leads waveforms simultaneously with both 3 and 5 Lead ECG Cable • Monitor should be USFDA & CE approved <p>Central Station:</p> <ul style="list-style-type: none"> • Central should be capable to monitor 32 bedside monitor connections • Should be able to store 14 days of trend samples • Should be able to run on a PC based work station with Windows as its operating system and appropriate hardware should be supplied to view all the 32 beds on the display • Central should have facility for assessment of 32 real time patients through continuous surveillance monitoring, with concurrent detailed display of 2 patients at a time 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> It should have the capability to “Zoom In” on the graphical trend It should have capability to enter “Trend Notes” for any selected patient and also have the facility for “Printing Trend Reports” It should have facility for “Alarm Log Review” wherein its function in the Central allows users to review patients’ alarm history events and print the stored ECG strips It should have facility for “Quick Admission” such as in emergency case, where patient may not have full ID information, the Central allows a quick admission of patient with “Auto-ID”. Users can change the patient data when the actual patient information becomes available. Central should be USFDA & CE approved Should be supplied with a desktop of minimum configuration- i3 processor, 1GB RAM, 500GB HDD, Windows 7/8 OS, 15” LCD screen, USB Keyboard & USB Mouse 	
4	<p>Biphasic Defibrillator</p> <ul style="list-style-type: none"> Current Controlled Biphasic Wave Form Technology Up to 300 J Capacity 100 Charge/Discharge of 300 J in a single charge Charge Time<10 sec. 24 event recording Storage Recall and print of Events Record ECG before and after shock AED with voice and Visual Text prompt Guided CPR Selectable Energy Protocol Manual Mode Energy Range 2- 300 J Synchronized and asynchronized mode. Built in cautery filter. <p>Printing Annotations: Time, Date, Heart Rate, HR Limits, Event Marker, ECG Parameters, Selected and delivered energy, Patient Impedance & Hospital Name.</p>	
5	Monophasic Defibrillator	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Power Supply : (AC input) 100 to 230 V AC; + 15%; 50 /60 Hz</p> <p>Power Consumption : 100VA</p> <p>Battery type : Rechargeable SMF Lead Acid</p> <p>Battery Capacity : 12 V, 4.5 AH 7 hrs only monitoring; 100 discharges of 360 joules</p> <p>Dimensions : 260 (W) x 280 9 (D) x 250 (H) mm</p> <p>Weight : 10.5kgs (with Printer, Battery & Paddle)</p> <p>Environment : Operating temperature : 0* to 40° C;</p> <p>Relative humidity : 10 to 90% RH</p> <p>Waveform : 5 msec Monophasic pulse (Lown) Energy Select</p> <p>-External: 0 to 360 J in steps 2, 3, 5, 7, 10, 20, 30, 50, 70, 100, 150, 200, 300, 360.</p> <p>-Internal : 0 to 50 J in steps 2, 3, 5, 7, 10, 20, 30 50</p> <p>Charge Time : < 5 secs to 360 J with battery (fully charged new battery)</p> <p>< 15 secs to 360 J without battery 9AC mains only)</p> <p>Charge Indicator : Charge ready Lamp on the Front Panel & audible tone Charge ready Lamp on Apex Paddle</p> <p>Available & Delivered energy : Displayed on the screen</p> <p>Synchronisation : Defibrillation synchronized to the R wave Marker indication on ECG waveform</p> <p>Sync Message display : Message on monitor screen and lamp on front panel</p> <p>Energy ; HR display : Displayed on the Screen</p> <p>Paddles : Standard Adult Anterior Electrodes (84.5cm²) Slide off to Expose Paediatric Electrodes (20cm²) Retractable Cable Length : Coiled – 600 mm, Streched – 3000 mm</p> <p>Monitor Section</p> <p>Display : Monochrome LCD 5” diagonal (120mmx90mm) with CCFL backlight</p> <p>Display Resolution : 320 x 240 pixels</p> <p>ECG Modes : Paddle ECG and Patient Cable ECG (I, II & III Standard Leads)</p> <p>Leads off Message : On screen Message with alert tone</p> <p>CMRR : > 90 db @ 50 Hz; Input impedance: > 2.5mΩ</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Frequency Response : 0.5 to 35 Hz with filter Sweep Speed : 25mm /sec. Display time : 4 Secs HR display & Accuracy : 30 to 250 BPM; \pm 2 BPM (or) whichever is higher HR Alarm : Audio Visual User Selectable alarm limits; 30 to 300 BPM insteps of 5 BPM 1Mv Cal Signal : Vertical line (variable amplitude w.r.t. Gain) ECG out : 1V/ 1mV (depends on gain setting) Patient Cable length : 3 mts. Electrical isolation and shielding : Input protected against high voltage DF pulses and radio frequency interference Cautery filter : Built-in Printer Section Recording Type : Thermal Array recording Paper size : 50 mm x20 mts; Print width: 40mm Paper Speed : 25 mm / sec Print Delay : 6 Secs. (Selectable in Auto mode) Event Recording : Stores and Prints 3 sec. Pre and 7 secs. Post critical event data upto 24 events. Print Annotations : Time, Date, Heart rate, HR limits, Event marker, ECG Parameters, Defibrillator mode, Selected & Delivered Energy, Patient Impedance, Peak current & Hospital Name. Accessories : Defibrillator-Paddles (Adult & Paediatric) : 1 No. (each) Disposable Electrodes : 30 Nos. Patient Cable (3 lead) : 1 No. Mains Cable (Power Cord) : 1 No. Internal Paddles : 1 No. Cardijelly : 5 bottle Earth Cable : 1 No. Accessory Bag : 1 No. User Manual : 1 No. Recording Paper : 2 roll – 20 mtrs.</p>	
6	<p>Stacker for Syringe Pump [Capable for handling 10nos of Syringe pump]</p> <ul style="list-style-type: none"> 20'' Length X 15'' Width X 5'' broad base with castor for moving the stacker from 1 place to another. Mains switch connect at the back side 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>of base.</p> <ul style="list-style-type: none"> • 5 feet pole mounted on base. • 2 nos. of 5 machines stacker fitted above the mains switch. • 4'' span on Top & Bottom side for fitting clip with pole rod. • Both the stacker is fitted to the pole with 4 clips (1 at Top, 2 in Centre and 1 at Bottom) near base. • There are total 10 connections of 10''mains wire. • All wires are internally connected to the mains switch on the base • 3 pin 3 meter mains wire. • I.V. Rod for hanging IV bottle. • Stacker made of 1 mm M.S. Sheet with powder coating done to prevent rusting. • Base made from 2 mm M.S. Sheet with powder coating. 	
7	<p>Transport Ventilator</p> <ol style="list-style-type: none"> 1. Must be Microprocessor controlled modern Ventilator with integrated graphics & easy to use, suitable for better ventilation from pediatric to adult. 2. Should work on all electrical sources: External AC and internal battery(backup upto 3 hours) 3. Should be lightweight, compact design and easy transportable & should be FDA approved. 4. should have inbuilt turbine source to generate air for the patient (high performance ultra quiet turbine technology) 5. Should have facility to connect to central oxygen pipeline/cylinder. 6. Must have a integrated color screen showing all the set and patient parameters, graphs, loops, mechanics etc. 7. Must have in-built O2 blender with sensor. 8. Should provide oxygen enrichment on both low (0.5 psi) and high pressure (40 to 60 psi) oxygen supply source. 9. Should start ventilation by selecting patient weight or by sensing patient connection. 10. Should have following modes: <ol style="list-style-type: none"> 1. Volume control Mode: CMV, SIMV, SIMV + Pressure support 2. Pressure control Mode: CMV, SIMV, 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>SIMV +Pressure support</p> <p>3. Spontaneous mode with CPAP + pressure support</p> <p>4. Non Invasive Ventilation NIV mode-independent</p> <p>5. NIV ventilation with smart triggering</p> <p>6. BIPAP mode</p> <p>7. APRV mode</p> <p>11. Should have following functions:</p> <ol style="list-style-type: none"> apnea backup sigh standby manual breath 100% O2 Inbuilt nebulizer Flow Trigger Inspiratory Hold Leak Compensation Screen Lock <p>12. Should have following range of parameters:</p> <ol style="list-style-type: none"> Tidal volume: 50 to 2000 ml Respiratory rate : 1 to 80 BPM. CMV Frequency: 4 to 80 breaths/min SIMV frequency: 1 – 80 breaths/min FiO2: 21 to 100% Inspiratory Time: 0.1 to 9.9 sec PEEP/CPAP: 0 to 35cm H2O <p>13. Must display real time pressure and flow waveforms with waveform history browse facility.</p> <p>14. Should display pressure, flow and volume loops.</p> <p>15. Must provide 72 Hours trending and browsing of monitored parameters.</p> <p>16. Must monitor and display airway pressure, total breath rate, I:E ratio, Exhaled tidal volume, exhaled minute volume, peak flow, inspiratory time, electrical power source (internal/external), battery level.</p> <p>17. Must provide for user adjustable alarms for respiratory rate (high / low), minute volume (high / low), Pressure (high / low), FiO2 (high / low), Low Vt, Apnea, Leak.</p> <p>18. Must also have alarms for Inverse I:E ratio, Low O2 pressure, Patient disconnect, Check Sensor, Service Notice, Over temperature, Low</p>	

S.N	Specification	Compliance If Any (Yes/No)
	battery, AC disconnect. 19. Should be MRI compatible. 20. Scope of Supply: a. Main Unit b. Adult Breathing circuit- reusable -2 no. c. Flow sensors(adult/ped): 3 nos d. O2 Sensor -1 no e. Air & Oxygen Hose -1 no. f. Hinged support arm for mounting tube – 1 no g. Operating Manual – 1no. h. Power cord: 1 no i. Mobile trolley with antistatic castors – 1 no. j. Humidifier (servo controlled heated) with adult & pediatric hoses, heating control and temperature measurement – 1 no. Quality Standards: 1. CE certificate 2. FDA certificate Relevant IEC certification	

G. Radiology Equipments

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			42-50kV 0.32 - 125mAs at 52 - 63kV 0.32 - 100 mAs at 66 - 77kV 0.32 - 80 mAs at 81 - 9100kV	
13	mAs Accuracy		$\leq 10 \% + 0.2$ mAs for mAs \leq 20 mAs $\leq 5 \% + 0.2$ mAs for mAs > 20 mAs	
14	Exposure Time		20mSec-5Sec in 24 steps	
15	X - ray Tube		Stationery Anode Nominal Speed 3000 r.p.m.,50 Hz	
16	Focal Spot – nominal value		1.4 -1.5 IEC-336	
17	Anode angle		14°/19°	
18	Inherent Tube Filtration		0.5 mm / 0.9 mm Al	
19	Application		Radiographic operation, according to exposure table	
20	Mode of Operation		Continuous operation with intermittent Loading	
21	Collimator		Manually adjustable, Double Slot	
22	Light localizer		Halogen light Bulb12V, 100 W; 100 Lux at 1m SID .	
23	SID range		Min: 520 mm (+/- 20mm) Max:1960 mm (+/- 20 mm)	
24	Max. cassette size at 1m SID		17 X 17	
25	X-ray coverage at 1m SID		17 X 17	
26	Total Filtration		2.8/3 mm Al	

S.N	Specification			Compliance If Any (Yes/No)
		of the X-ray source assembly with collimator		
	27	Exposure Switch	2 Step, 5m cable	
	28	Exposure Rate	Pulse-to-pause ratio 1:30; corresponds to a cool down period of 3 minutes at maximum output.	
	29	Power Input : Momentary input Long-time input	3.0 KVA ($\pm 10\%$) 0.5 KVA ($\pm 10\%$)	
	30	Mains Isolation	Power cord shall be plugged in where both poles (L&N) are isolated simultaneously using ON/OFF switch with protective earth	
	31	Cassette Compartment	Maximum space	
	32	Max. floor incline for transport	5°	
	33	Type and degree of protection against electrical shock	Class – I , Type B Equipment.	
2	Computed Radiography System with Dry Laser Printer <ol style="list-style-type: none"> 1. System should have the ability to process more than 90 cassettes per hour for the largest size 2. The system should be able to get the first image on the monitor within 50 seconds or less to save time 3. The system should be capable of storing at least 2000 images locally, without recourse to a workstation; to allow quick review and quality check. 4. For ease of operation, system should have a graphical user interface, preferably with a touch screen to allow 			

S.N	Specification	Compliance (Yes/No)	If	Any
	<p>easy use and minimal operator training.</p> <p>5. Separate presets should be provided for various anatomies for easy selection.</p> <p>6. Should have the ability to route the images scanned to multiple destinations like camera, workstation with one touch.</p> <p>7. System should allow multiple users to enter patient data and access review data at different locations in the department to help work flow, without use of dedicated workstations.</p> <p>8. System should allow technicians from different X-ray Rooms to get their scanned cassettes identified in advance before reaching the CR reader room to allow quick processing.</p> <p>9. Workstations supplied should be capable of have all post processing facilities like rotate, zoom, crop, annotations etc</p> <p>10. System should be upgradeable to offer higher level facilities like complete spine imaging using simultaneous exposure and not using post-exposure software like stitching</p> <p>11. System should provide the ability to provide prints without any magnification or minification in order to take direct measurements for orthopedic work</p> <p>12. System should have sophisticated processing facilities to be able to do a analysis of failures based on technician operating the unit</p> <p>13. System should have software security features like user names and password to prevent unauthorized operation</p> <p>14. System should have security screensaver when left unattended to prevent unauthorized viewing and protecting the privacy of patients</p>			

S.N	Specification	Compliance (Yes/No)	If Any
	<p>15. System should have the capability to enter patient details at the reception using an ordinary PC and this data should be automatically transferred to the CR system to avoid delays in patient examinations.</p> <p>16. System should allow free text to be applied to the image whether in single or in multiple formats without interfering with the image for easy documentation.</p> <p>17. The camera supplies should be laser based for sharp images and should avoid use of chemicals and processing</p> <p>18. Camera should have in-built quality control features like densitometer to ensure consistency in printing</p> <p>19. The camera should have the ability to print at least four of the most commonly used sizes of films viz., 8x10, 10x12, 11x14, 14x14 and 14x17 (all in inches)</p> <p>20. The camera should have the facility to be loaded with at least 300 films or more at a time, preferable with a self sealing system to ensure quick changes of film size according to user needs</p> <p>21. All systems supplied should have inbuilt UPS to take care of power failures</p> <p>22. All systems should include the latest diagnostic software</p> <p>23. Camera should have minimum 500dpi printing.</p> <p>24. System should be DICOM enabled to interface with PACS.</p> <p>Scope of Supply: CR Unit- 1 no Laser Camera Unit- 1 no Standard Accessories- 1 no 8x10 Cassette – 2 no 11 x 14 Cassette – 2 no 14 x 17 cassette – 2 no</p>		

S.N	Specification	Compliance If Any (Yes/No)
	Laser Film Cartridges 8x10 film cartridge- 4 box 11x14 cartridge – 4 box 14 x 17 cartridge – 2 box	
3	USG Machine System should be offered with following Broad width Transducers: (i) Convex Array Transducer (frequency range of 2 to 5 MHz) for Vascular & small parts Application. (ii) Linear Array Transducer (frequency range of 7 to 12 MHz) for Vascular & Small parts Application. (iii) Intracavitary Trasducer (frequency range between 4 to 8 MHz) for Transvaginal applications. 3. Grey scale – 256 or more 4. Broad Band width Beam former technology transducer for high resolution 2D Imaging. 5. The system should have 3D and including dynamic 3D facility. The system should be upgradeable to 4D 6. Should have a minimum 3 active ports with direct switching from console 7. System should have Image Management facility with facility for direct storage of Images and loops in the hard Disk Drive. 8. Image Storage Should have inbuilt hard disk for image storage, 40 GB or more. 9 Image Archival: Inbuilt CD and DVD writer with the facility to transfer images 10. Monitor:- TFT (non interlaced scanning) monitor size – 15” or more 11.DICOM connectivity: Advanced Dicom ready facility, capable of Networking and communicating images through DICOM. 12.System should have direct connectivity to color laser printer for printing images through DICOM. 13 System should have extensive Calculation software package for General Imaging, Ob/Gyn & Vascular Imaging. 14. Accessories: 1. B/W Thermal Printer to latest model	

S.N	Specification	Compliance If Any (Yes/No)
	<p>(with CE or FDA mark)</p> <p>2. Color Laser Printer for direct printing of Images from the system (with CE or FDA mark (min dpi of 1200)</p> <p>3. Latest generation Processor PC with Frame grabber</p> <p>4. Biopsy attachment for the Convex, Linear and the TV/TR probes</p> <p>5. On line sine wave UPS of appropriate rating with 30 minutes back up.</p> <p>15 Free software upgrades (s) during</p> <p>16.Warranty – 3 years including probes</p>	
4	<p>USG Machine for Gynec purpose</p> <p>19'' or more high resolution color LCD monitor / TFT monitor with 1280x 1024 or more. Machine monitor is with articulating freely mobile arm for up/down side to side movement.</p> <p>Touch keypad or similar 10''± 2 color touch screen –LCD /LED for different function for user friendly control.</p> <p>NO. of processing channels 50000 and above.</p> <p>Frame rate 900/sec and above in 2 D and more than 300/sec in color mode.</p> <p>Dynamic range 200/dB or more.</p> <p>Minimum 3 active probe ports and extra parking slot is preferable with interchangeability of probe connectivity</p> <p>Imaging modes 1 B, 2B, M mode, PWD, PDI</p> <ol style="list-style-type: none"> 1 Cine loop review frame by frame and cine loop up to 2 min / 800 frames or more 2 One button on control panel for Speckle reduction imaging for soft and smooth image quality with variable values / steps. 3 One button on control panel for optimization of image quality 4 One button on control panel for optimization of color Doppler <p>Contrast imaging & contrast harmonic imaging</p> <p>Dual live color and B mode</p> <p>Simultaneous triplex mode – B mode color mode and Doppler tracing</p> <p>Minimum detectable flow velocity up to 0.9 mm / sec.</p> <p>System should be offered with following</p>	

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			$\leq 5 \% + 0.2 \text{ mAs}$ for $\text{mAs} > 20 \text{ mAs}$	
14	Exposure Time		4mSec –2.5 Sec	
15	X - ray Tube		Rotating Anode Nominal Speed 3000 r.p.m.,50 Hz	
16	Focal Spot – nominal value		0.8 mm IEC- 336/1982	
17	Anode angle		17.5° / 15°	
18	Inherent Tube Filtration		0.5 mm / 0.7 mm Al	
19	Application		Radiographic operation, according to exposure table	
20	Mode of Operation		Continuous operation with intermittent Loading	
21	Collimator		Manually adjustable, Double Slot	
22	Light localizer		Halogen light Bulb12V, 100 W; 140 Lux at 1m SID .	
23	SID range		Min: 510 mm Max:1950 mm	
24	Max. cassette size at 1m SID		17 X 17	
25	X-ray coverage at 1m SID		17 X 17	
26	Total Filtration of the X-ray source assembly with collimator		4 mm Al	
27	Exposure Switch		2 Step, 5m cable	
28	Exposure Rate		Pulse-to-pause ratio 1:30; corresponds to a cool down period of 3 minutes at maximum output.	
29	Power Input : Momentary input		1.0 KVA ($\pm 10\%$)	

S.N	Specification			Compliance (Yes/No)	If	Any
		Long-time input	90 VA ($\pm 10\%$)			
	30	Mains Isolation	Power cord shall be plugged in where both poles (L&N) are isolated simultaneously using ON/OFF switch with protective earth			
	31	Cassette Compartment	Maximum space			
	32	Max. floor incline for transport	5°			
	33	Type and degree of protection against electrical shock	Class – I , Type B Equipment.			

H. Laboratory Equipments

S.N	Specification	Compliance (Yes/No)	If	Any
1	<p>Cell Counter</p> <p>Principles: WBC, RBC and PLT : electrical Resistance detection</p> <p>HGB: SLS Hemoglobin</p> <p>HCT: Cumulative Pulse Height Detection</p> <p>Parameters: 18 Parameters</p> <p>WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, LYM%, MXD%, NEUT%, LYM#, MXD#, NEUT#, RDW-SD, PDW MPV, P-LCR</p> <p>Throughput: Approx. 60 Samples / Hour</p> <p>Sample Volume: Whole Blood mode - 50μl</p> <p>Precision: Parameter Whole Blood Mode</p> <p>WBC 3.5%or lower</p> <p>RBC 2.0%or lower</p> <p>HGB 1.5%or lower</p> <p>HCT 2.0%or lower</p> <p>PLT 6.0%or lower</p> <p>Linearity:</p> <p>WBC -1.0-99.99x10³/μl (within ± 0.3x10³/μl or $\pm 3\%$)</p> <p>RBC -0.30-7.00x10⁶/μl (within ± 0.3x10⁶/μl or $\pm 3\%$)</p> <p>HGB -0.1-25.0g/dl (within ± 0.2 g/dl or $\pm 2\%$)</p> <p>HCT-10.00-60.0% HCT% (within ± 1.0 HCT% or $\pm 3\%$)</p> <p>PLT-10-999x10³/μl (within ± 10x10³/μl or $\pm 5\%$)</p> <p>(When RBC < 7.00x10⁶/μl)</p>			

S.N	Specification	Compliance If Any (Yes/No)
	Data Storage: 240 patient results Interfaces: serial port for host computer (optional) Built-in thermal Printer: 5x7 dots, 21 characters per line (128 dots/line) Power Consumption: 230 VA or less	
2	Electrolyte Analyzer It should be based on principle of ISE which guarantees highly precise and accurate results. Sample Type : Measures serum, plasma, whole blood and urine. Analysis Time : 80 seconds in blood and 100 seconds in urine. Sample volume : Only 100ul for whole blood, serum or plasma. 400ul for pre-diluted urine sample. Automatic Probe wiper provides to eliminate risk of contact with potentially bio-hazardous samples. Simple 'Yes' / 'No' buttons for operation with on screen messages for guidance through each step of analysis. Automatic Calibration facility and stand by mode available. Data Storage: Storage facility atleast 100 patient results. Reproducibility: Blood, Serum, Plasma Na+ : CV< 1% (80 – 200mmol / L) K+ : CV< 2% (1.0 – 10.0mmol / L) Cl- : CV< 2% (80.0 – 200.0mmol / L) Measuring Range: Na+ : 20 – 200mmol / L K+ : 0.2 – 40.0mmol / L Cl- : 25 – 200 mmol / L Easy to use, easy to operate and easy to maintain. Upgradeable to walk away work station. Quality Control: Available normal QC, Abnormal low QC and Abnormal high QC	
3	Biochemistry Analyzer The System: Random and continuous access, sample selective analyzer Integration of 4 measuring principles 36 tests on-board Absorbance Photometry: Enzymes and Substrates Turbidimetry: Specific Proteins, Drugs of Abuse Fluorescence Polarimetry: Therapeutic Drugs, Thyroid Tests Ion-Selective Electrode Potentiometry: Na+, K+, Cl- and Li+ Test Throughput: Up to 400 tests/hr (including ISE) Sample Types: Serum, Plasma, Urine, CSF,	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Hemolysate and Whole Blood (HbA1c)</p> <p>Sample Handling: 90 primary or secondary tubes on-board</p> <p>Up to 6 x RD15 racks on-board. Cooled rack position for controls and calibrators</p> <p>Automatic sample dilution and concentration.</p> <p>Barcode reading via laser scanner, with immediate STAT recognition</p> <p>Sample Container Types: Primary tubes: 5 to 10ml; 16x100, 16x75, 13x100, 13x75mm micro cup, 500µl; Standard cup, 1.5ml; cup, 650µl; Eppendorf cup, 1.5ml; Cup on tube definable.</p> <p>Sample Volume: Typically 2 to 10µl per test, ISE indirect 20µl, ISE direct 97µl.</p> <p>Reagents</p> <p>On-board reagent capacity: 32 cassettes, 50-800 tests per cassette.</p> <p>Up to 8 racks of 4 cassettes on-board. Automatic cassette reconstitution when required</p> <p>Reagent compartment cooled to 10-15°C. On-board stability up to 3 months, calibration typically each lot</p> <p>Reaction Cells: Holds 1000 disposable cuvettes with 5mm path length and 120-240µl reaction volume.</p> <p>Control unit: HP workstation running Windows XP. Intel core 2 duo with 1 GD RAM Dual 40 GB hard drives, CD ROM, floppy drive and inbuilt modem.</p> <p>System Interfaces: RS 232 serial interface, bi-directional, modem for Remote Diagnostics access.</p> <p>Technical Specs</p> <p>Electrical Requirements: 100-125 / 200-240 Volts AC, 50 or 60Hz, Consumption 1200VA.</p> <p>Physical Dimensions: Width: 135cm (53.1in); Depth: 66cm (25.9in); Height: 75cm (28.5in). Weight: 230kgs (506lbs).</p> <p>Water Requirements: Up to 2 liters per hour in operating mode, Type 1 NCCLS</p> <p>Certification: CE, UL, C-UL</p> <p>Standard Scope of Supply:</p> <p>Reagent Kit: all the reagents mentioned in annexure I will be as standard scope of supply</p> <p><i>Annexure-I to be filled by the bidder</i></p>	
4	<p>Binocular Microscope</p> <p>Standard set complete with built-in 6V20W halogen light illuminator, quadruple ball bearing nosepiece, focusing by Co-axil coarse and fine focusing controls, high resolution long barrel achromatic objectives 4x, 10x, 40x (Spring) and 100x (Spring, Oil Imm.), with an inclined binocular observation tube rotatable through 360 degree fitted with fungus resistant, anti-reflection coated prism,</p>	

S.N	Specification	Compliance If Any (Yes/No)								
	compensating widefield eyepiece WF10x (F.N. 18) and with righthand co-axil low drive mechanical stage, substage Abbe condenser 1.25 N.A. with iris diaphragm focusable with rack & pinion (Complete set in thermocole packing).									
5	Centrifuge <ul style="list-style-type: none">- Digital Speed Indicator- Steplless Speed regulator- 0-60 minutes digital countdown timer- Safety lid interlock to prevent cover opening during centrifugation- Max Speed- 16000 rpm- Max RCF 16600 g- Max Capacity-40 ml									
6	Incubator <ul style="list-style-type: none">• Double walled construction outer S.S304 dull Finish Inner S.S316 Mirror polished• PUF insulation between two walled• Full acrylic door permit inspection of specimen's with out disturbing the temp• Temp Controlled by PID Controller with auto tuning facility with accuracy of ±0.5 C .temp Range 5 C to 60 C accuracy ±0.5 C• Illumination light are provided for viewing• CFC free hermetically sealed compressor provide temp for below ambient condition• Air circulation fan for marinating temp uniformity through out the chamber• The chamber is provided with modular removable shelves made of S. S. for complete flexibility in use.• To work on 230 volts 50 H2 Validation Protocols : IQ OQ & PQ Documentation with calibration & Tradability certificate of controller Safety Care : Built in temp deviation audio visual alarm. Safety thermostat for over shoot temp. Cut off system HRC fuses for compressor heater & main, time delay circuit for safety of compressor. <table><tr><td>Size in CU.FT</td><td>Inner dimension W X D X H in cms</td><td>Capacity In LTR</td><td>No. of Shelves</td></tr><tr><td>12</td><td>60 x 60 x 90 Cm</td><td>340</td><td>3</td></tr></table>	Size in CU.FT	Inner dimension W X D X H in cms	Capacity In LTR	No. of Shelves	12	60 x 60 x 90 Cm	340	3	
Size in CU.FT	Inner dimension W X D X H in cms	Capacity In LTR	No. of Shelves							
12	60 x 60 x 90 Cm	340	3							
7	Hot Plate									
8	Shaker									
9	Test Tube Stand									
10	Test Tube Holder									
11	Test Tube 75mm x 12mm									
12	Colorimeter with 8 filter digital									
13	Mono-balance									

I. Ophthalmology Equipments

S.N	Specification	Compliance (Yes/No)	If Any
1	<p>Chair Unit</p> <p>Should be ergonomic and elegant with closed drawer for trial lens set.</p> <p>Trial set drawers should be fully covered with console which protects the lenses from dust and other damages.</p> <p>Chair unit should be covered with easily cleanable, high quality leather cushions.</p> <p>The stands of chair unit should have provision for placing two equipment on the table top.</p> <p>Patient chairs can rotate up to 180° and should come with manually adjusting front and back.</p> <p>Aluminum-cast foot rest to give better stability to the patient.</p> <p>D.C. motor to ensure smooth, stable, jerk free and controlled height adjustments with even the more corpulent patient on board.</p> <p>The arm rests on both sides of chairs can also be folded back to facilitate patients to sit on the chair and doctors to examine patients comfortably.</p> <p>Chair units should be smooth and easy to operate and practically maintenance-free.</p> <p>chair units should be abrasion and corrosion resistant.</p> <p>Features</p> <ul style="list-style-type: none"> • Trial Set Drawer • Ophthalmoscope Tray • Table Top Size: 16" x 32" • Two Instruments on Table Top • Table Top Sliding • Foot Rest • UP-Down Operations By Panel and Foot Switch • Membrane Switch Panel Board • Manual Front/ Back Movement • Head Rest • Chair Rotation (180°) • Slit Lamp Connection • Four Auxiliary Function <p>Technical Specifications</p> <ul style="list-style-type: none"> • Required Space Size for Unit Installation: W 56" x L 64" • Power Consumption: 100W • Power Supply AC: 230V, 50Hz • Power Fuse: 6A • Seat Height: Down/Up:21"/29" 		

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> Traveling: 200 mm Weight Carrying Capacity: 200 Kgs Total Weight: 250 Kgs 	
2	<p>Slit Lamp Microscope Type: Binocular Magnification changer: Two steps Eyepieces: 10x and 16x Slit lamp: Slit projection Slit width-continuous 0 to 8 mm at least. Slit length- continuous 1-8 mm at least. Filters for redfree and blue light examination. Lamp= Tungsten or halogen. Base Vertical and horizontal movements should be of reasonable range. Chin rest: vertical movement should be of reasonable range. Fixation lamp. Suitable motorized stand</p>	
3	<p>Ophthalmoscope Halogen lamp provides light for true tissue color and long-lasting performance Coaxial optics produce a shadow-free spot, easier entry into undilated pupils, and a larger field of view versus standard ophthalmoscopes Detect corneal abrasions with cobalt blue filter Polarizing filter virtually eliminates corneal reflection Sealed optics keep out dust and dirt 18 unique aperture/filter combinations for greater versatility Red-free filter may be used with any aperture 28 focusing lenses with a range of -25 to +40 diopters</p>	
4	<p>Auto Refractometer</p> <ul style="list-style-type: none"> Approx 8 inch Touchscreen LCD Panel Easy to use <p>Objective Refractometer Mode: Sphere Range: -25D to +22D (0.12D/0.25D steps) Cylinder Range: 0D to +10D (0.12D/0.25D steps) Axis Range: 0° to 180° (in 1° or 5° steps) Minimum measurable pupil diameter: ϕ 2.0 mm Corneal Curvature Mode:</p>	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Corneal Curvature Radius: 5.00 to 10.00 mm (0.01mm step)</p> <p>Corneal Refraction: 67.50D to 33.75D (0.12D/0.25D steps)</p> <p>Refraction Index: 1.3375</p> <p>Corneal Astigmatism: 0D to +10D (0.12D/0.25D steps)</p> <p>Corneal Astigmatism axial angle: 0° to 180° (1°/5° steps)</p> <p>Others</p> <p>PD Measurement Range: 20 mm to 85 mm (0.5mm step)</p> <p>Input/Output: USB (input)/Rs232C (output)/LAN (output)</p> <p>Power Supply: 100-240 V AC, 50-60 Hz, 30-70VA</p>	
5	<p>Phaco Emulsification</p> <ul style="list-style-type: none"> • Should be a phaco system within built vitrectomy and diathermy units. • Should have a peristaltic, low pulsation aspiration pump / Venturi system with appropriately rated compressor. • Should have a gravity fed irrigation system. • Should have aspiration flow rate from 1cc/min to 40 cc/min. • Should have a vacuum range from 5 to 500 mmHg. • The reflux should be continuous flow from irrigation source. • Should have fluid and air vents. • Should use linear and non-linear ultrasound power with 40Khz power band width. • The ultrasound hand piece should be of 4 crystal, light weight piezo electric all titanium type. • Should have continuous, pulse, micro pulse, and burst ultrasound modes (COLD PHACO). • The Irrigation/Aspiration should have linear flow rate and vacuum control. • Should have pneumatic /electric driven guillotine vitrectomy cutter with cutrate 1 to 1000 cuts/minute or better. • Should use Bi-polar wet field for coagulation. 	

S.N	Specification	Compliance (Yes/No)	If	Any
	<ul style="list-style-type: none"> Should have at least 4 programmable user presets. Should have a linear foot switch to control phacopower and vacuum Should have LCD display. Should operate from 200 to 240Vac, 50 Hz input supply. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid. 			
6	Distant & Near Vision Chart			
7	Trial Lens Set with trial frame adult & children			
8	Rotating Visual Acuity Drum			

J. Dental Equipments

S.N	Specification	Compliance (Yes/No)	If	Any
1	<p>Dental Chair Unit</p> <p>Specifications:</p> <p>Consisting of:- 3 way syringe (Sterilizable)</p> <ul style="list-style-type: none"> - 3 way assistant syringe - 2 high speed terminals without H/P-1 air motor terminal without H/P - LED Light cure unit - Infection control system with non retraction valves (BIO-System) & - Removable and autoclavable holders protecting the handpieces. - Latest Foot Operated Light of 20,000 and 25,000 Lux - medium vacuum suction & cannula only for high vacuum - Water system ratable dental chair with independent up & down movement - The synchronized movement between the seat and backrest with the trendelenburg position. - head rest with seesaw movement suitable for pediatric patients - Auto return to zero position - Two programmable working positions 			

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> - Spitting and last position. - Lock the movements - Emergency stop control - X-ray viewer with light generated by LED - Arm rest options of fixed, lateral 90°swivel available - Multifunctional foot control (base fixed or mobile) - Doctor's stool (with) adjustable backrest tilt includes an adjustable ring. - Operating Voltage 105V to 250V - Max height 90cm- minimum height 45 cm <p>Including:</p> <ol style="list-style-type: none"> 1. Fiber Optic Probe Hand Piece, Codent-2 Nos. 2. Air Rotor Push Button H/P with quick disconnect Coupling 3. Air Rotor (Straight & contra Handpiece)- 2 each 4. Piezon Ultrasonic Scaler with 7 Tips & digital display. The handpiece should be autoclavable. It should have 5 wrenches. 5. Motorized Suction ½ HP, can operate two dental sets, waster separator filter, auto drain. 6. Air compressor: Oil free type with 1.0 HP head, durable metallic body, and low noise. 38 liter tank capacity with auto cutoff switch. Pressure indicator, safety valve. Dust and oil filter pressure regulator with outlet pressure gauge 7. Air rotor contra angle hand piece with oil spray- 2 each 8. Reduction Hand piece with oil spray for micro motor- 2 each 9. L.E.D. light cure with 5 W LED 10. Light cure hybrid standard composite kit 7 × 4.5 gm syringes 3 ml light cure bonding resin 7.5 ml etching liquid 11. LED fiber optic probe-2 each 12. Cartridges for Fiber Optic (NSK)-4 Nos. 13. Cartridges for Straight Air Rotor handpiece-6 Nos. <p>Terms: 1. Installation and delivery free of cost 2. Training to all the doctors 3. 4 free services.</p>	
2	Dental Xray Machine	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> • Should be stand model with fiber wheels and locking system • Should have a X-ray tube current of minimum 7/8/10 mA and 60/65/70 KV adjustable preferably. • Should have a constant potential minimum 20 Khz high frequency X-ray generator. • Should have an exposure timer of minimum 0.02 to 2 seconds • Focal spot size should not exceed 0.8x0.8mm. • Should be compatible for digital radiograph. • X-ray tube head should have swing angulations of at least 290° in the vertical plane and 360 ° continuous rotations in the horizontal plane. • X-ray tube head should have angle indication • Should have a counter balanced arm mechanism. • Should be supplied with cones. • Should be supplied with one light weight lead apron of 0.5mm lead equivalent. • Should work on 200-240Vac/50Hz. • The quoted model and tube should be AERB type approved and relevant copies of the certificate should be attached with the bid. • Should have safety certificate from a competent authority CE / FDA (US) / STQC • CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid. 	
3	RVG Machine <ul style="list-style-type: none"> • CCD / SUPER CMOS Technology. • Sensor size: 28.0mm X 38.2mm X 6.3mm 1 no. [Universal] active area 31.5mm X 23.0mm. • Maximum Gray level 3333 • No. of Pixels 20 IP/mm. [true resolution] • Pixel size is 18.5 X 18.5 micron • Exposure life should be minimum 4 lakhs • Should provide TWAIN compatible 	

S.N	Specification	Compliance If Any (Yes/No)
	software such as IOC, Scanner, Digital camera. • Sensor cable length should be 3 meters and reinforced for durability & reliability. [Fiber optic & scintillator tech.]	
4	Glass Bead Sterilizer	

K. Physiotherapy Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	Short Wave Diathermy Dimension (L*H*D) 476mm, 880mm, 357mm approx Weight 40 kg. approx. Operating Voltage 220V AC, 50hz Absorption 800-watts max Fuses 6 amp. Room temperature 10° to 40° c Moisture 10% to 80% Output 500 w (continuous) Frequency RF 27.12 MHZ Wave length 11 meter Display Filament voltage v ac, output intensity ma Timer Digital timer 1 ~ 99 minutes programmable Patient safety Should be Available	
2	IFT <ul style="list-style-type: none"> Computerized IFT unit which should have following Current mode of operation <ol style="list-style-type: none"> 4 pole 2 pole Russian Vector 100 Vector 40 All the parameters should be displayed on a 	

S.N	Specification	Compliance If Any (Yes/No)
	<p>Graphic LCD screen.</p> <ul style="list-style-type: none"> • Beat low , Beat High should be adjustable in the step of 1 Hz . • Should have inbuilt Clinical library , which should set the parameters including Beat Lo and Beat High frequency automatically 	
3	<p>TENS</p> <ul style="list-style-type: none"> • Should have Micro controller based platform for optimum accuracy • Should have Back Light LCD Display for clear viewing. • Should have Various Modes like Continuous, Burst, Pulse Width & Frequency Modulation. • Should have 4 channel to cover more patient at a time with different Intensity control. • ABS Shock Proof cabinet. • Portable & Light Weight. <p>Specification:-</p> <ul style="list-style-type: none"> • Output Channels : 4 • MODE: <ul style="list-style-type: none"> a) Continuous : Variable Frequency from 4 to 150 Hz b) Burst – Variable from 0.5 to 4 Sec c) FM – It automatically generates impulses from 4 to 150 Hz d) PWM – It automatically generates impulses of variable pulse width from 30 to 250 micro second • INTENSITY: Adjustable from Zero to 120 volts for each channel. • DISPLAY: Back Light LCD Display. • WAVE SHAPE : Biphasic • MAINS SUPPLY: 230 V A.C. 	
4	<p>Lumbar & Cervical Traction</p> <ul style="list-style-type: none"> • Digital Treatment Timer • Separate Traction force for CERVICAL & Lumbar. • Traction force CERVICAL 4Kg's to 15 Kg's (1kg steps) • For Lumber 20 Kg's to 45 kg's (2 kg's steps) with Doublers up to 90 kg's 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> • LED Indicator for HOLD & REST Time • Patient safety switch • Hold time 10,20,40,60 and 80 sec • REST Time 1, 5, 10, 15, 20 sec. <p>Accessories:-</p> <ol style="list-style-type: none"> 1 Patient safety switch – 1 no 2 Lumbar Belt – 1 no 3 Chest belt – 1 no 4 Spreader Bar- 1 no 5 Head Holder – 1 no 6 "L" Clamp – 2 no 7 Bolt:- <ol style="list-style-type: none"> i) small – 4 no ii) Big- 2 no 8 Washer – 4 no 9 Manual – 1 no 10 Mains Cable 	
5	<p>Ultrasound</p> <ul style="list-style-type: none"> • Dual Frequency 1 & 3 Mhz Ultrasound Therapy unit. • Should have pulse and continues therapy operation (10%, 20%, 50% and 100%) • Should have pulse mode with 16, 48 and 100 HZ of pulses. • Should also have selection of duty cycles. 16Hz, 48Hz and 100Hz • Should have inbuilt Clinical Library, so that all parameters related to selected treatment are set automatically. • Should have facility of User defined library, so user create your own library. • It should have shock proof plastic body • Auto detection of Ultrasound Applicator • Output Power : Up to 2.5 Watts/ Cm² 	
6	Paraffin Wax Bath	
7	Weight Cuff (Set of ½ kg, 1 kg, 2 kg, 3 kg)	
8	Spring for grip exercise	
9	Shoulder Pulley	
10	<p>Cold Air Cryotherapy System</p> <ul style="list-style-type: none"> • System should have -32° C Cold air for pain and inflammatory treatment. 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> • It should utilize room air to cool down - 32°C. • It should not require any consumable such as any type of gas for cooling for day to day operation. • It should have air capacity varied up to 1800 l/min for instant and constant cooling of treatment area • System should supply with one tube, one slotted nozzle and 5mm,10mm and 15 mm size nozzle attachments. • Safety class 1 Type B • It should have Power consumption not more than 2000VA • It should have Current consumption not more than 7A <p>Accessories supply with cold air cryotherapy unit</p> <ul style="list-style-type: none"> • Tube • Slotted Nozzle • Bracket • Adapter for Nozzle Attachments • Nozzle attachment 5 mm • Nozzle Attachment 10mm • Nozzle Attachment 15mm 	
11	Vestibular Ball	
12	Bolsters set of small, medium and large	
13	Exercise Mat	
14	Peg Board	

L. Mortuary Equipments

S.N	Specification	Compliance If Any (Yes/No)
1	<p>Mortuary Cold Storage Chamber for keeping dead bodies (Size: Two body)</p> <p>Dimensions</p> <ol style="list-style-type: none"> 1. Width (mm) 1150 2. Depth (mm) 2420 3. Height (mm) 1785 4. Height with Cooling Unit and PCC Platform (mm) 2200 5. Interior finish Stainless Steel 6. Exterior finish Stainless Steel 	

S.N	Specification	Compliance (Yes/No)	If	Any
	<p>7. Foamed Panels</p> <p>8. Insulation thickness (mm) 80</p> <p>9. Insulation material Rigid Polyurethane foam (CFC free),</p> <p>10. Density 40 kg/m³</p> <p>11. Locking mechanism</p> <p>12. Cam-Locks embedded in foam</p> <p>13. Refrigerating System (Roof Top Mounting Unitary)</p> <p>14. Capacity (BTU/H) 6,000</p> <p>15. Power Supply 230 V / 1 HP / 50 HZ</p> <p>16. Compressor Power (kW) 1.25</p> <p>17. Total Unit Power Consumptions kW) 1.75</p> <p>18. Operating conditions 4 to 6 deg c Room Temperature @ 35 C Ambient</p> <p>19. Refrigerant R-22, 1.25 kg</p> <p>Features:</p> <ol style="list-style-type: none"> 1. Polyurethane (CFC free), should be “Foamed-in-Place” between pre-painted galvanized steel sheets. 2. Metal bonding of polyurethane sections during injection moulding ensuring rigidity and dimensional stability for years. 3. Tongue and groove design of modular panel sections and Cam operated locks for flexibility in assembly. 4. Separate carriages for storage of cadaver. Each compartment should be provided with individual hinged door and locking arrangement. 5. Compact and neat 6. Specially engineered roof top cooler unit that can be mounted at the top of the cabinet through a cut-out in the ceiling panel. 7. Embedded drainage system for cleaning of cabinet. 8. Unitary design self contained refrigerating system. <p>Standard Accessories:-</p> <ol style="list-style-type: none"> 1. Lighting - A vapor proof incandescent lamp to be mounted on the inside of the front panel. 2. Thermometer – to be provided with display –Digital type thermometer. 3. Mortuary Carriage Assembly - The carriage should be a three-piece assembly which should include a stationery frame, a 			

S.N	Specification	Compliance If Any (Yes/No)
	<p>lower carriage and an upper carriage. The lower and upper carriage assembly should ride on wheels and tracks that allow easy telescopic action. The complete assembly should automatically lock when returned to the closed position.</p> <p>4. Mortuary Tray - A one-piece stainless steel tray with tubular edge and handles</p> <p>Scope of work: Includes supply, installation, testing and commissioning of the walk-in- room. Unloading, Shifting and safe storage of cooling units & equipment etc at site.</p>	
2	<p>Autopsy Table</p> <ol style="list-style-type: none"> 1. Overall Dimension: - 2400 mm L X 800 mm W X 850 mm H (Approx.) 2. It should be made up of SS 304 grade 3. Inbuilt sink with drainer connection 4. Wrist operated wide taper on sink side by 30mm 5. Control Valves tap for Hot & Cold Water 6. Separate hand Shower 7. Two Number's Instrument Tray above the body. 8. Three Body supports & One Head Support 9. 5" dia Heavy Duty Castor with Locking Facility 10. Measurement Scale on one side for easy measurement of cadaver <p>Easy to clean.</p> <p>Post Mortem Instrument 17 pin Set (Standard Kit) :</p> <p>Post Mortem Instruments Set (Set of 17 Instruments) including</p> <ul style="list-style-type: none"> •Standard Operating Scissors 14cm, BL/SH STR. SS •Collin amputating Knife Solid handle blade 19cm, SS •Amputating and resection saw Charriere 35cm, 14" SS •Operating knife solid handle, 17cm/2", SS. •Operating knife Solid handle, 17cm/1", SS •Esmarch Bandage Scissors, 20cm heavy duty, SS. 	

S.N	Specification	Compliance If Any (Yes/No)
	<ul style="list-style-type: none"> •Dressing forceps 18cm Cross serrated, SS. •Dressing forceps 20cm STR serrated SS. •Probe Grooved directors 14cm, SS. •Partsch mallets 18cm, 22mm dia, SS. •Probe 14 cm •Lucas Chisel 16cm, 4mm •Wooden Case •Spare blade for Saw. 	

ANNEXURE A

VERIFICATION, UNDERTAKING , CHECKLIST & DOCUMENTS

From: M/s.....

No.....

.....
.....

To
Medical Superintendent
Shri Vinoba Bhawe Civil Hospital
Dadra & Nagar Haveli
Silvassa

Sub: Supply of Medical Equipments section.....

Ref: Tender Enq #.....

Sir,

I/We enclose the necessary documents duly signed, as shown in Annexure 'B' (in order in which they are mentioned). I/We have carefully read and understood the terms and conditions stated in the tenders from and I/We shall abide by all these conditions. I/We further endorse that in particular, the terms and conditions of Delivery Period, Payment Terms, Place of Delivery etc are acceptable to me/us and no representation will be made by me/us afterwards for altering the same.

I/We verify the copies of the certificates/documents enclosed herewith are authentic true copies of the original certificates/documents for verification on demand. I/We undertake to upload the attested copies of certificates/documents required on the website. I/We will be cautious to see that the uploaded scan documents are legible and i/we understand that if the documents are not legible, my/our tender will be rejected.

I/We verify that I/We are in possession of the requisite licenses/permits required for the manufacture /supply /sale /distribution of the items and further verify that the said licenses/permits have not been revoked/ cancelled by the issuing authorities and are valid as on date. I/We also verify that I/We have

not been declared defaulter, blacklisted or debarred by any State or Central Government or Constitutional authority or Financial Institution or Judicial Court or any Government undertakings.

I/We also take cognizance of the fact that providing misleading or questionable information or failure to furnish correct or true information to you or any other Officer or failure to comply with any contractual requirement laid down by you will be considered as a serious breach of the terms and conditions of the tender and will invite disqualification and other penal action as deemed fit by the UT Administration.

Thanking You,

Yours faithfully,

Sign & Stamp of Tenderer.

ANNEXURE- 'B': SCHEDULE OF DOCUMENTS ATTACHED

Sr. No.	Document/Certificate	Uploaded & Enclosed
A.	General Documents :	
01.	PAN No.	Yes/No
02.	Sale Tax Reg./VAT Reg.	Yes/No
03.	IEC Certificate	Yes/No
04.	Partnership Deed/Memorandum/Registration of Firm etc	Yes/No
05.	Turnover Certificate of Chartered Accountants for last two years	Yes/No
06.	Verification, Undertaking, Checklist and Documents as per Annexure-A	Yes/No
07.	Scan copy of Terms and Conditions documents duly Stamped and Signed	Yes/No
08.	Scan copy of Schedule of Documents (as Annexure-B) correctly filled with Stamped and Signed	Yes/No
B.	Under Technical :	
1.	Original Product Literature of each quoted product	Yes/No
2.	List of Installations/Users/Customers with Phone Numbers	Yes/No
3.	Letter of Authority for each quoted product	Yes/No
4.	ISO Certificate	Yes/No
5.	Other relevant Certificates i.e. CE/EN standards for each quoted product	Yes/No

It is verified that all the certificates/permissions/documents are valid and current as on date and have not been withdrawn/cancelled by the issuing authority. It is further verified that the certificates at Sr.No.A-6 & Sr.No.B-3 declaration part are as per the format prescribed by the Administration and it is clearly and distinctly understood by me/us that the tender is liable to be rejected if on scrutiny and of these certificates is found to be not as per the prescribed format of Administration.

I/We further undertake to produce on demand the original certificate/permission/document for verification at any stage during the processing of the tender.

Date:

Place:

Sign & Stamp of tenderer.

DECLARATION OF OWNERSHIP

1. I/We certify that the tenderer is sole proprietorship/partnership firm/private limited company/public limited company of which the registered office is located in _____ in the state of _____
2. The name, designation and address of the authorized signatory who is authorized to negotiate/sign/execute on behalf of the tenderer is as under:

Name: _____
Designation: _____
Address: _____

Email: _____ Telephone: (O) _____
(R) _____

Fax: _____ Mobile: _____

3. The name, address and telephone numbers of the sole proprietor/all the partners/ all the directors of the tenderer are as under:

S.N	Name	Address	Telephone O/R/M	Fax	email
1					
2					
3					
4					
5					

Date: _____

Sign & stamp of tenderer.

DECLARATION OF ISO MARKED GOODS

I/We _____ hereby
certify that:

1. The following items which form part of Tender Enquiry
#_____ are manufactured by us at
_____ plant/s which has been awarded
ISO_____ * certificate vide #_____
Dt_____

2. The following items which form part of Tender Enquiry
#_____ above are manufactured by us/licenses
at_____ plant/s which has not been awarded any ISO
Certificate:

Date:

* Mention the category of ISO certificate (i.e 9000/14000 etc)

Sign & Stamp of tenderer

❖ **Price Schedules:**

S.N	Dept.	Equipment	Make	Model	Qty	Rate/Unit	Total Amount
1	CSSD	Horizontal Autoclave			2		
		Ultrasonic Cleaner			1		
		Drying Cabinets			1		
		Gauze Cutting Machine			1		
		Rotary Sealing Machine			1		
		Plasma Sterilization Machine			1		
		Vertical Autoclave			1		
		Flash Autoclave			1		
2	General	12 Channel ECG Machine			8		
		Nebulizer			18		
		Weight Machine			14		
		Electronic Baby Weighing Machine			3		
		Syringe Needle Destroyer Manual			30		
		Mercury Free BP Apparatus			35		
		Stethoscope			41		
		Laryngoscope Set			10		
		Procedure Spot Light			6		
		Suction Machine			2		
		Pediatric Suction Machine			2		
		Examination Headlight			8		
		Glucometer			8		
		LED 2 Plate Xray View Box			24		
		Electric Sterilizer			14		
		Refrigerator 350 ltrs			15		
		Pulse Oximeter			12		
		Fogging Machine			10		
3	OT	Single Dome LED OT Light			1		
		OT Table			1		

S.N	Dept.	Equipment	Make	Model	Qty	Rate/Unit	Total Amount
		OT Table with all ortho,neuro and gynec attachments			2		
		Boyle's Apparatus			3		
		Anesthesia Ventilator			3		
		5 Para Monitor			2		
		Double Dome LED OT Light Ceiling Mounted			2		
		Scrub Station Sink 2 bay			2		
		Electro Cautery Machine			2		
		Patient Warming System			1		
		Drill Machine			1		
4	NICU	Radiant Heat Warmer			13		
		Radiant Heat Warmer with over surface phototherapy			4		
		Transport Incubator			1		
		Optimum Flow Generator for Newborns			1		
		Bubble CPAP			2		
		Neonatal Ventilators			4		
		3 Para Monitor			18		
		Syringe Pump			16		
		O2 Hood- large			4		
		O2 Hood- Medium			4		
		O2 Hood- Small			4		
5	Obstetric & Gynecology	Fetal Doppler			7		
		NST Machine with toco			2		
6	ICU	ABG Machine			1		
		Ventilators			6		
		5 Para Monitor (6 nos)with Central Nursing Station			1		
		Biphasic Defibrillator			2		

S.N	Dept.	Equipment	Make	Model	Qty	Rate/Unit	Total Amount
		Monophasic Defibrillator			1		
		Stack for Syringe Pump (10 nos)			1		
		Transport Ventilator			2		
7	Radiology	Portable Xray Machine			2		
		Computed Radiography System with Dry Laser Printer			1		
		USG Machine			1		
		USG Machine for Gynec purpose			1		
		Portable X-Ray Machine-10 Kw			1		
8	Laboratory	Cell Counter			1		
		Electrolyte Analyzer			1		
		Biochemistry Analyzer			1		
		Binocular Microscope			2		
		Centrifuge			1		
		Incubator			2		
		Hot plate			1		
		Shaker			1		
		Test Tube Stand			10		
		Test Tube Holder			10		
		Test Tube 75mm x12mm			1000		
		Colorimeter with 8 filter digital			1		
		Mono-balance			1		
9	Ophthalmology	Chair Unit			1		
		Slit Lamp			1		
		Ophthalmoscope			1		
		Auto Refractometer			1		
		Phaco Emulsification			1		
		Distant & near Vision Chart			1		
		Trial Lens Set with trial frame adult &			1		

S.N	Dept.	Equipment	Make	Model	Qty	Rate/Unit	Total Amount
		children					
		Rotating Visual Acuity Drum			1		
10	Dental	Dental Chair Unit			2		
		Dental Xray Machine			2		
		RVG Machine			2		
		Glass bead Sterilizer			1		
11	Physiotherapy	Short Wave Diathermy			1		
		IFT			1		
		TENS			1		
		Lumbar and Cervical Traction			1		
		Ultrasound			1		
		Paraffin Wax Bath			1		
		Weight Cuff(set of 1/2 kg, 1 kg, 2 kg, 3 kg)			1		
		Spring for grip exercise			1		
		Shoulder pulley			1		
		Cold air cryotherapy system			1		
		Vestibular Ball			1		
		Bolsters set of small, medium large			1		
		Exercise Mat			1		
		Peg Board			1		
12	Mortuary	2 Body Storage			1		
		Autopsy Table			1		
13	Instruments				As per annexure -II		
14	Fast Track Curtains for ICU and Casualty				14		

Note :

1. The Rates quoted should be inclusive of all taxes, forwarding & packing, FOR delivery, successful installation & commissioning and training.
2. The Warranty/Guarantee for one year and free service clause to be clearly mentioned by the Manufacturer on their letter head. If the Authorized dealer is going to carry out the service then they have to furnish the authority letter given by the manufacturer to sale/service the specified product in this Territory.
3. Rates for ***Comprehensive Maintenance Contract of Medical Equipments (each medical equipment separately)*** for seven year should be mentioned separately in the Financial Bid which will be considered for price evaluation. It should be clearly mentioned whether AMC /CMC will be done through company itself or its service franchise/dealers. In that case Manufacturing Company must give authority letter to such franchise/dealers on their letter head clearly mentioning free service period and AMC/CMC for period of seven years.

Type of AMC	Comprehensive AMC Rate (including applicable taxes)	Executed by (manufacturers/authorized service dealers) Name and address to be specified here
1 st Year		
2 nd Year		
3 rd Year		
4 th year		
5 th Year		
6 th Year		
7 th year		
Total		In Words:_____

Note: Quoted CMC price not more than 10% cost of the system, otherwise offer will be outrightly rejected. The rates of CMC price should be quoted in Indian Rupees only.

**Signature of Suppliers/Dealers
With Rubber Stamp**

**Sd/-
Medical Superintendent
Shri Vinoba Bhawe Civil Hospital
Dadra & Nagar Haveli
Silvassa.**

ANNEXURE-I

List of Reagents to be supplied in Standard Scope.

S.no.	Parameter	Average test per six month	No. Of kit
Substrates			
1	ALBUMIN BCG	2500	
2	BIL-D	2500	
3	BIL-T	2500	
4	CALCIUM	500	
5	CHOLESTEROL HiCo	500	
6	CREATININE J	5000	
7	GLUCOSE HK	8000	
8	HDL-C	450	
9	LDL-C	400	
10	TG	600	
11	TOTAL PROTEIN	2500	
12	UREA	4000	
13	URIC ACID	400	
Enzymes			
1	ALP	2500	
2	ALTL / SGPT	2500	
3	AMYLASE	200	
4	AST / SGOT	2500	
5	CHOLINESTERASE	150	
6	CK	150	
7	CK-MB	150	
HIA's			
1	CRP HS	300	
2	IgA	300	
3	IgG	300	
4	IgM	300	
5	MYOGLOBIN	300	
6	RF II	300	

Accessory Consumables			
1	Cleaning Solution	For 6 months	
2	Cuvettes/Microcuvettes if any	For 6 months	
3	Hemolysing Reagent	For 6 months	
4	Deproteinizer	For 6 months	
5	Maintenance Kit	01	
6	Lamp	02	
7	Calibration Controls	For 6 months	

The department will furnish the exact amount of reagents at the time of Purchase order to the successful bidder and the balance amount will be asked on later basis

Declaration:

I hereby declare that the information submitted are true and if any discrepancy found in the information, the tender is liable to be rejected.

**Signature of Suppliers/Dealers
With Rubber Stamp**

ANNEXURE II

Please mention Offered Company for quoted items only as mentioned below and attach the scan copy of the same format is as under:

Sr No.	Description	Qty	Offered Company
1.	Speculum,usco.Side Screw.std.ss.small.26mm×65mm.	3	
2.	Speculum,usco.Side Screw.std.ss.large.30mm×85mm.	3	
3.	Speculum,Grave.Side Screw..ss.small.20mm×75mm.	3	
4.	Speculum,Sims.Duckbill.ss.small	3	
5.	Speculum,Sims.Duckbill.ss.large	3	
	VAGINAL RETRACTOR		
6.	Anterior Vaginal wall Retractor. Sims.D/E 18mm/20mm.26cm	3	
	SOUND & PROBES		
7.	Uterine Sound, sims.Ald. Malleable.32cm	3	
8.	Uterine sound,sims.cvd.Malleable.32cm/11"	3	
	CANNULA		
9.	cannula,rubin/Provis with Rubber cone.w/o stopcock.Luer	3	
	CURETTES- UTERINE/M.T.P		
10.	Curette,Uterine.S/E. 2mm.shp.30cm	3	
11.	Curette,Uterine.S/E. 3mm.shp.30cm	3	
12.	Curette,Uterine.S/E. 4mm.shp.30cm	3	
13.	Curette,Uterine.S/E. 8mm.shp.30cm	3	
14.	Curette,Uterine.S/E.12mm.shp.30cm	3	
15.	Curette,Uterine.D/E.7mm.B/S.27cm	3	
16.	Curette,Uterine.D/E.8mm.B/s.27cm	3	
17.	Curette,Uterine.D/E.9mm.B/s.27cm	3	
18.	Curette,Uterine.Flushing.small.cp	3	
19.	Curette,Uterine.Flushing.medium.cp	3	
20.	Curette,Endometrial Biopsy.3mm.Novak.24cm/9.5"	3	
21.	Curette,Endometrial Biopsy.4mm.Randall.24cm/9.5"	3	
22.	Cannula for M.T.P. Purandare.6mm	3	
23.	Cannula for M.T.P. Purandare.8mm	3	
24.	Cannula for M.T.P. Purandare.10mm	3	
25.	Cannula for M.T.P. Khandwala.4mm	3	
26.	Cannula for M.T.P. Khandwala.6mm	3	
27.	Fcps.Vulcellum/Tenaculum.1×1 Tth.,str.20cm/8"	3	
28.	Fcps.Ovum.8mm.Heywood smith.25cm/10".str	3	
29.	Fcps.,Cervical Biopsy. Crocodile. Leech-Wilknsn 20cm/8"	3	
30.	Fcps., Uterus Holding.Shirodkar.25cm/10"	3	
31.	Fcps., Hysterectomy.NDVH. Traumanil.2×3 serr.str. 20cm/8"	3	
32.	Screw,Myoma.Doyen.per Abdomen.15cm/6"	3	
33.	Clamp,Umbilical Cord.Plastic.	3	
	MANIPULATORS		
34.	Manipulator,Uterine.Vitton/Hulka	3	

Sr No.	Description	Qty	Offered Company
35.	Manipulators,Purandare. Vulsellum with sound. 23cm/9"	3	
	SCISSORS		
36.	Scissors, Fine, SS. Str. 8cm/3.25"..	3	
37.	Scissors, Fine, SS. Str. 9cm/3.5".	3	
38.	Scissors, Fine, SS. Str. 10.5cm/4.25".	3	
39.	Scissors, Fine, SS. Str. 11.5cm/4.5".	3	
40.	Scissors, Fine, SS. Str. 12cm/4.75".	3	
41.	Scissors, Fine, SS. Cvd. 8cm/3.25".	3	
42.	Scissors, Fine, SS. Cvd. 9cm/3.5".	3	
43.	Scissors, Fine, SS. Cvd. 10.5cm/4.25".	3	
44.	Scissors, Fine, SS. Cvd. 11.5cm/4.5".	3	
45.	Scissors, Fine, SS. Cvd. 12cm/4.75".	3	
46.	Surgical/Dressing Scissors, SS. Str. 12.5cm/5".	3	
47.	Surgical/Dressing Scissors, SS. Cvd. 12.5cm/5".	3	
48.	Surgical/Dressing Scissors, SS. Cvd. 15cm/6".	3	
49.	Surgical/Dressing Scissors, BS. Str. 12.5cm/5".	3	
50.	Surgical/Dressing Scissors, BS. Cvd. 12.5cm/5".	3	
51.	Surgical/Dressing Scissors, BS. Cvd. 15cm/6".	3	
52.	Surgical/Dressing Scissors, BB. Cvd. 12.5cm/5".	3	
53.	Mayo Scissors, Str. 14.5cm/5.5".	3	
54.	Mayo Scissors, Cvd. 14.5cm/5.5".	3	
55.	Mayo Scissors, Cvd. 16.5cm/6.5".	3	
56.	Mayo Scissors, Cvd. 19cm/7.5".	3	
57.	Mayo Scissors, Cvd. 21.5cm/8.5".	3	
58.	Mayo Scissors, Cvd. 24cm/9.5".	3	
59.	Mayo Scissors, AoF. 16.5cm/6.5".	3	
60.	Mayo Scissors, AoF. 19cm/7.5".	3	
61.	Mayo-Stille Scissors, Cvd. 16.5cm/6.5".	3	
62.	Mayo-Stille Scissors, Cvd. 19cm/7.5".	3	
63.	Mayo-Stille Scissors, Cvd. 21.5cm/8.5".	3	
64.	Mayo-Harrington Scissors, Cvd. 23cm/9".	3	
65.	Metzenbaum Scissors, Cvd. 10cm/4".	3	
66.	Metzenbaum Scissors, Cvd. 12.5cm/5".	3	
67.	Metzenbaum Scissors, Cvd. 15cm/6".	3	
68.	Metzenbaum Scissors, Cvd. 18cm/7".	3	
69.	Metzenbaum Scissors, Cvd. 20cm/8".	3	
70.	Metzenbaum-Nelson Scissors, Cvd. 23cm/9"	3	
71.	Metzenbaum-Nelson Scissors, Cvd. 25cm/10".	3	
72.	Metzenbaum-Nelson Scissors, Cvd. 28cm/11".	3	
73.	Metzenbaum-Fine Scissors, Cvd. 15cm/6".	3	
74.	Metzenbaum-Fine Scissors, Cvd. 18cm/7"	3	
75.	Metzenbaum-Fine Scissors, Cvd. 20cm/8".	3	
76.	Metzenbaum-Fine Scissors, DcF. 18cm/7".	3	

Sr No.	Description	Qty	Offered Company
77.	Scissors, Episiotomy. Barnes. AoS. 12.5cm/5".	3	
78.	Scissors, Umbilical cord. American pattern. 10.5cm/4.25".	3	
79.	Scissor, Suture cutting. Heath. DcS. 15cm/6".	3	
	FORCEPS		
80.	Fcps., Dsctg. 3mm. Serr. tips. Sup. 15cm/6".	3	
81.	Fcps., Dsctg. 3mm. Serr. tips. Sup. 18cm/7".	3	
82.	Fcps., Dsctg. 3mm. Serr. tips. Sup. 20cm/8".	3	
83.	Fcps., Dsctg. 3mm. Serr. tips. Sup. 23cm/9".	3	
84.	Fcps., Dsctg. Sup. 3mm. 1x2 Tth. 15cm/6".	3	
85.	Fcps., Dsctg. Sup. 3mm. 1x2 Tth. 18cm/7".	3	
86.	Fcps., Dsctg. Sup. 3mm. 1x2 Tth. 20cm/8".	3	
87.	Fcps., Artery. Mosquito. Str. 12.5cm/5".	3	
88.	Fcps., Artery. Mosquito. Str. 15cm/6"	3	
89.	Fcps., Artery. Mosquito. Cvd. 21cm/8.25"	3	
90.	Fcps., Artery. Sp-Wells. Cvd. 15cm/6".	3	
91.	Fcps., Artery. Sp-Wells. Cvd. 18cm/7".	3	
92.	Fcps., Artery. Sp-Wells. Cvd. 20cm/8".	3	
93.	Fcps., Kocher[Oschner]. Cvd. 18cm/7".	3	
94.	Fcps., Kocher[Oschner]. Cvd. 20cm/8".	3	
95.	Fcps., Allis. Tissue. 4x5Tth. 15cm/6"	3	
96.	Fcps., Allis. Tissue. 5x6Tth. 20cm/8"	3	
97.	Fcps., Babcock. 5mm Jaw. 15cm/6"	3	
98.	Fcps., Babcock. 20cm/8"	3	
99.	Clip, Towel. X-Action. 8cm/3.25".	3	
100.	Fcps., Towel. Mayo. 12.5cm/5".	3	
101.	Fcps., Sponge. Big loop. Foerster. Str.25cm/10".	3	
	RETRACTORS.		
102.	Retractor, Langenbeck. 8mmWx25mmD. 21cm/8.25".	3	
103.	Retractor, Langenbeck. 10mmWx30mmD. 21cm/8.25".	3	
104.	Retractor, Langenbeck. 10mmWx40mmD. 21cm/8.25".	3	
105.	Retractor, Langenbeck. 12mmWx35mmD. 21cm/8.25".	3	
106.	Retractor, Langenbeck. 12mmWx40mmD. 21cm/8.25".	3	
107.	Retractor. Langenbeck. 12mmWx55mmD. 21cm/8.25".	3	
108.	Retractor, Langenbeck. 15mmWx40mmD. 21cm/8.25".	3	
109.	Retractor, Langenbeck. 15mmWx80mmD. 21cm/8.25".	3	
110.	Retractor, Langenbeck. 25mmWx60mmD. 21cm/8.25".	3	
111.	Retractor, Landon. 60mmWx80mmD. Gvd.RtAld. 23cm/9".	3	
112.	Retractor, Doyen. 35mmWx35mmD. Gvd.Cvd 23cm/9.25".	3	
113.	Retractor, Doyen. 40mmWx35mmD. Gvd.Cvd 23cm/9.25".	3	
114.	Retractor, Doyen. 50mmWx45mmD. Gvd.Cvd 23cm/9.25".	3	
115.	Retractor, Doyen. 60mmWx45mmD. Gvd.Cvd 23cm/9.25".	3	
116.	Retractor, Doyen. 75mmWx55mmD. Gvd.Cvd 23cm/9.25".	3	
117.	Retractor, Doyen. 90mmWx60mmD. Gvd.Cvd 23cm/9.25".	3	

Sr No.	Description	Qty	Offered Company
118.	Retractor, Morris. 40mmWx50mmD.24cm/9.25".	3	
119.	Retractor, Morris. 50mmWx50mmD.24cm/9.25".	3	
120.	Retractor, Deaver. 10mmW-3/8" 20cm/8"	3	
121.	Retractor, Deaver. 15mmW-5/8" 20cm/8"	3	
122.	Retractor, Deaver. 20mmW-3/4" 30cm/12"	3	
123.	Retractor, Deaver. 25mmW-1" 30cm/12"	3	
124.	Retractor, Deaver. 40mmW-1.5" 30cm/12"	3	
125.	Retractor, Deaver. 50mmW-2" 30cm/12"	3	
126.	Retractor, Deaver. 75mmW-3" 30cm/12"	3	
127.	Retractor, Walton. Malleable. 15mm. 30cm/12".	3	
128.	Retractor, Walton. Malleable. 25mm. 30cm/12".	3	
129.	Retractor, Walton. Malleable. 40mm. 30cm/12".	3	
130.	Retractor, Walton. Malleable. 50mm. 30cm/12".	3	
131.	Retractor, Oval. 30cmX24cm. Kirschnerwith 2-Blades	3	
	18.W704.55 and 2-Blades18.W705.65.		
132.	Needle Holder. Derf/Wright. 12.5cm/5"	3	
133.	Needle Holder. Mayo-Hegar. 15cm/6"	3	
134.	Needle Holder, Mayo-Hegar. 18cm/7"	3	
135.	Needle Holder. Mayo-Hegar. 20cm/8"	3	
136.	Needle Holder. Mayo-Hegar. 25cm/10"	3	
137.	Needle Holder. Kilner. 14cm/5.5".	3	
138.	Needle Holder. Wertheim (Bozemann). 20cm/8".	3	
139.	Fcps., Sterilizing, Cheattle. 20cm/8".	3	
140.	Fcps., Sterilizing, Cheattle. 25cm/10"	3	
	ORTHOPEDIC INSTRUMENTS		
141.	Knife,Plaster. Esmarch	3	
142.	Plaster Saw.Engel.Small	1	
143.	Plaster Scissors.Spring.20cm/8"	1	
144.	Plaster Saw. Oscillating.Electric	1	
145.	Plaster Sperader.Henning.28cm/11"	1	
146.	Saw, Gigli.Tri-Wire.Indian 50cm	10	
147.	Handle for gigli Saw	3	
148.	Bone Cutting Forceps	3	
149.	Nibbler Rongeur , S/A Luer. 3mm-Jaw.Str.15cm/6"	2	
150.	Nibbler Rongeur , S/A 6mm-jaw.cvd.20cm/8"	2	
151.	Currete,3/0-3.0*4mm. Collier-morris/spratt/Brun.Hollow handle	1	
	16.5cm/6.5"		
152.	Currete,2/0-3.5*5mm. Collier-morris/spratt/Brun.Hollow handle	1	
	16.5cm/6.5"		
153.	Bulldog Clamp. Debakey-ATR.35mm str.jaw.8.5cm/3.5"	3	
154.	Bulldog clamp.Debakey-ATR.50mm str.jaw.10.5cm/4.25"	3	
155.	Bulldog clamp.Debakey-ATR.70mm str.jaw.12.5cm/5"	3	
156.	Bulldog clamp. Debakey-ATR. 50mm cvd.jaw.10cm/4"	3	

Sr No.	Description	Qty	Offered Company
157.	Clamp,Vena-Clava.Satinsky-Atr.40mm*9mm.24cm/9.5"	3	
158.	Retractor,Lung.Allison.6.5cmd/3.5cmw20cm/8"	3	
159.	Retractor,Lung.Allison.14cmd/4.5cmw27cm/10.5"	3	
160.	Fcps.,Artery/Dsctg.Heiss.str.20cm/8"	3	
161.	Fcps.,Artery/Dsctg.Heiss.1cv.20cm/8"	3	
162.	Fcps.,Artery/Dsctg.Roberts.str.22cm/8.75"	3	
163.	Fcps.,Artery/Dsctg.Roberts.cvd.22cm/8.75"	3	
164.	Fcps.,Dsctg.Russian.15cm/6"	3	
	JUMBO CUTTER		
165.	Wire Cutter,for wires max.ø 2.5 mm,L.225mm	1	
166.	Wire Cutter,for wires max.ø1.7 mm,L.165mm	1	
	GENERAL ORTHOPEDIC INSTRUMENTS		
167.	Osteotome with Fibre Handle,Curved- 5/10/15/20mm (2 set each)	2	
168.	Osteotome with Fibre Handle,straight- 5/10/15/20mm(2 set each)	2	
169.	Gouge with Fibre Handle,Straight 5/10/15/20mm(2 set each)	2	
170.	Gouge with Fibre Handle,curved 5/10/15/20mm(2 set each)	2	
171.	Chisel with Fibre Handle, straight 5/10/15/20mm(2 set each)	2	
172.	Chisel with Fibre Handle, curved 5/10/15/20mm(2 set each)	2	
173.	Retractor with Broad shank (for small fragment)	2	
174.	Retractor Extra long (for small Fragement)	2	
175.	Retractor short narrow Tip width 8mm	2	
176.	Retractor short narrow Tip width 18mm	2	
177.	Retractor Long narrow Tip (for hip surgery)width 18mm	2	
178.	Retractor narrow Tip width 43mm	2	
179.	Retractor narrow Tip width 70mm	2	
180.	Retractor Long shank angled width 43mm	2	
181.	Retractor wide Tip width 22mm	2	
182.	Retractor long wide Tip (for hip surgery) width 24mm	2	
	GYNAEC-OBST INSTRUMENT		
183.	Dilators, Uterine. Hegar. D/E.Set of 5. 1/2--9/10mm.ss.	3	
184.	Dilators, Uterine. Hegar. D/E.Set of 9. 1/1.5--9/9.5mm:0.5mm.Diff.ss	3	
185.	Dilators, Uterine. Hegar. D/E.Set of 13. 1/1.5--13/13.5mm:0.5mm.Diff.ss	3	
186.	Dilator, Uterine.pratt.D/E.Set of 10.5/7--41/43Fg.ss	3	
187.	Dilator,Uterine.Hegar.S/E.Set of 11.2mm--12mm	3	
188.	Dilators, Uterine. Purandare.S/E.Tapered.Set of 9.1/2/3/4--9/10/11/ 12mm.ss.	3	
189.	Dilators, Uterine. Tapered.S/E.Set of 12.1/2/3/--12/13/14mm.ss.	3	

ANNEXURE III
SPECIFICATION OF FAST TRACK CUBICLE SYSTEM

PARAMETER	MATERIAL DETAILS	Compliance if any (Yes/No)
Track Material	Providing and fixing of fast track hospital cubicle track system comprising of aluminum alloy (6063-T6), all corner of profile to have radius of 0.5 mm. tensile strength 195MPa, Shear Strength 150 MPa, Size tolerance ISO standard 733-1983, all material to have ROHS compliances, with corrosion resistance properties with 50-60 micron standard white powder coating (RAL selection) with seven stage processes, tracks to have drill guide on the top.	
Track Size	Gauge- 1.7 -1.9 mm, Height- 25-28 mm, Width- 20-23mm	
Runner Type	Wheel type roller runner	
Runner Material	TEFLON with SS 202 Hook	
Hooks	SS 202	
Bends	Tracks are bendable to a radius of 300mm at 90 degree to cover the whole bed	
Track Height	as per the site requirements	
Support Units		
Roof Suspenders	Made of aluminum pipe of 12.5 mm diameter. The upper circular plate made of aluminum with 50.4 mm diameter, these are with white powder coating (outer surface) finish and are of variable height fixed with the track with Ellen bolts only and fixing with ceiling is with anchors, bolts, screws etc.	
Wall Supports	Aluminum white powder coated	
Bridge Clamp	Aluminum white powder coated	
Curtain Removal Point	Made of SS for simple loading and unloading of curtains.	

SPECIFICATION FOR FAST TRACK CURTAINS

PARAMETER	MATERIAL DETAILS	Compliance if any (Yes/No)
Curtain Material	Polyester Blended	
Curtain Size	Height: 84-86” , Width: 46-48”	
Mesh (Net) Size	18-20” from top of the curtain made of Nylon	
Curtain type- Antimicrobial cubicle curtains	Should not allow bacteria to hold on it. Should be wrinkle free and shrink proof, anti odor and anti fungal. Should also be fire retardant.	
Color	At time of release of PO	

SPECIFICATION FOR FAST TRACK OVERHEAD IV TREE SYSTEM

PARAMETER	MATERIAL DETAILS	Compliance if any (Yes/No)
Track Material	Providing and fixing of fast track over head IV tree system comprising of aluminum alloy (6063-T6), all corner of profile to have radius of 0.5 mm. tensile strength 195MPa, Shear Strength 150 MPa, Size tolerance ISO standard 733-1983, all material to have ROHS compliances, with corrosion resistance properties with 50-60 micron standard white powder coating (RAL selection) with seven stage processes, tracks to have drill guide on the top.	
Track Size	Gauge- 1.7 -1.9 mm, Height- 20-22 mm, Width- 33-35mm	
Trolley Type	Wheel type roller trolley with automatic locking system once IV hanger is placed on trolley	

Trolley material	SS 304	
Hook	SS 304	
Track height	8ft	
Roof Suspenders	Made of aluminum pipe of 12.5 mm diameter. The upper circular plate made of aluminum with 50.4 mm diameter, these are with white powder coating (outer surface) finish and are of variable height fixed with the track with Ellen bolts only and fixing with ceiling is with anchors, bolts, screws etc.	
Accessories	MS Screws	
Compliances	ROHS (Restriction of Hazardous Substances)	
IV Hanger	Should be compatible of 5 hooks, where 4 hooks are foldable when not in use, the hooks are made of SS 304. The system has features of telescopic movement to increase and decrease the pressure level of IV with automatic locking system once the press button is released.	

QUANTITIES

DEPARTMENT	NO OF BED
ICU	10
CASUALTY	4

Curtains to be provided in 2 sets for each bed.

Annexure-C

(FORMAT OF AUTHORIZATION LETTER FOR AUTHORIZED DISTRIBUTOR)

I / We hereby declare that....

1. M/s.

_____ is our authorized distributor for our products in India from date and they are authorized to quote and follow up on our behalf and the said agreement is valid in force as on date;

2. I/We undertake to supply the drugs / items for which the quotations of following items are submitted by

M/s. _____ on our behalf in respect of Tender Enquiry # : _____

Sr.No.	Item No.	Name of Item
---------------	-----------------	---------------------

(1)

(2)

3. I / We have read all the terms and conditions of the tender enquiry and the same are irrevocably binding upon us till the expiry of the contract signed & executed on our behalf;

4. I/We shall notify the Medical Superintendent, Shri Vinoba Bhave Civil Hospital, Silvassa. immediately if there is any change in the agreement between M/s. _____ and me/us regarding authorized distributorship of our products and further undertake to supply the items quoted by the distributor on my / our behalf at the quoted in the tender enquiry in case of such a change of agreement.

5. This authority is applicable only for Tender Enquiry of 100 bedded Sub-District Hospital, Khanvel, Silvassa. Annual E Tender for Year 2014-15 due on _____.

Date:-

Signature of Authorized Signatory