DELHI CANTONMENT BOARD
DELHI CANTONMENT

BID DOCUMENT

INVITATION FOR BIDS FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING
OF
MEDICAL EQUIPMENT
AT
CANTONMENT GENERAL HOSPITAL
DELHI CANTONMENT-10

ON RATE CONTRACT BASIS

NATIONAL COMPETITIVE BIDDING

Tender Enquiry No. DCB/RC/MedEquip/2014

INDEX

SECTION I

CANTONMENT GENERAL HOSPITAL
DELHI CANTONMENT BOARD
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NOTICE INVITING TENDERS (NIT)

INVITATION FOR BIDS ON RATE CONTRACT BASIS FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF MEDICAL EQUIPMENT AT CANTONMENT GENERAL HOSPITAL, DELHI CANTONMENT ON RATE CONTRACT BASIS.

CEO, Delhi Cantonment Board (DCB), Delhi Cantonment invites sealed bids on Rate Contract Basis in Single Stage Two Bid System from the manufacturers or their authorized Indian Agents for supply, installation, testing & commissioning of Medical Equipment for Cantonment General Hospital, Delhi Cantonment.

Sche-dule No.	Name of Equipment	Tender Fee (Rs.) - Non-Refund-able	Estimated Cost of Equipment, excluding CMC (Rs.)	EMD (Rs.)	Amount of Solvency Certificate (Rs.)	Issue of tenders begin on*	Date of Receipt of Tenders*
1	Anaesthesia Machine (1no.)	2000/-	28,00,000/-	42,000/-	9,35,000/-		
2	Dental Unit & Acc. (1no.)	1000/-	8,00,000/-	16,000/-	2,70,000/-		
3	Diode Dental Laser (1no.)	500/-	5,00,000/-	10,000/-	1,70,000/-		
4	ICU Ventilator (7nos.)	2000/-	70,00,000/-	1,05,000/-	24,00,000/-		
5	ICU Monitors (8nos.)	1000/-	8,00,000/-	16,000/-	2,70,000/-		
6	Syringe Pumps (10nos.)	500/-	5,00,000/-	10,000/-	1,70,000/-		
7	Washer Disinfector (1no.)	1000/-	10,00,000/-	20,000/-	3,35,000/-		
8	Sealing Machine :Plain Sealer (1no.)	500/-	1,20,000/-	2400/-	40,000/-		
9	Defibrillator (6nos.)	2000/-	36,00,000/-	54,000/-	12,00,000/-		
10	Transport Ventilator (2nos.)	1000/-	10,00,000/-	20,000/-	3,35,000/-		
11	Patient Trolleys (2nos.)	500/-	2,00,000/-	4,000/-	70,000/-		
12	ICU Beds (8nos.)	2000/-	32,00,000/-	48,000/-	11,00,000/-		
13	Warming blankets (6nos.)	1000/-	6,00,000/-	12,000/-	2,00,000/-		
14	Multi-Para Monitors (2nos.)	500/-	3,00,000/-	6,000/-	1,00,000/-		

Equipment for Blood Storage Capacity:							
15.	Blood Bank Refrigerator (1no.)	1000/-	7,00,000/-	14,000/-	2,35,000/-		
16.	Deep Freezer (-80 Deg.) (1no.)	500/-	5,00,000/-	10,000/-	1,70,000/-		
17.	Microscope (1no.)	500/-	1,00,000/-	2,000/-	35,000/-		
18.	Centrifuge (1no.)	500/-	50,000/-	2,000/-	17,000/-		
19.	Blood Bag Transposition Box (1no.)	500/-	1,50,000/-	3,000/-	50,000/-		
20.	Pharmaceutical Freezer (1no.)	500/-	3,50,000/-	7000/-	1,20,000/-		
21.	Agitator & Incubator (1no.)	1000/-	6,00,000/-	12,000/-	2,00,000/-		
22.	Thawing System (1no.)	500/-	4,00,000/-	8,000/-	1,35,000/-		
23.	Computer with Printer (1set)	500/-	1,00,000/-	2,000/-	35,000/-		
24.	Tube Sealer (1no.)	500/-	1,00,000/-	2,000/-	35,000/-		
25.	Cross Matching Machine (1no.)	1000/-	10,00,000/-	20,000/-	3,35,000/-		
Other Items:							
26.	Surgical Operating Microscope (Ophthalmology, Major OT) (Retender-IInd Time)	2000/-	35,00,000/-	57,500/-	11,67,000/-		
27.	3D Colour Ultrasound Scanner with Color Doppler	2000/-	50,00,000/-	75,000/-	16,67,000/-		
28.	Paediatric Ventilator	2000/-	20,00,000/-	30,000/-	6,67,000/-		

(*dates as in the press advertisement)

The bidding documents with terms and conditions can be obtained either in person from the office of Chief Medical Officer, Cantonment General Hospital, Sadar Bazar, Delhi Cantt. – 110010 on submission of application for issue of tender documents and on payment of prescribed tender fee or tenders can be downloaded from any of these websites i.e. www.cbdelhi.in, www.hsccltd.co.in or www.eprocure.gov.in. In case the tenders are downloaded from the websites then the tender fee in the prescribed form should be submitted by the bidders along with the submission of tender bids. All tenders notified above are separate tenders and the bid for every item be submitted separately super

subscribing name of the equipment. A pre bid meeting will be held in the office of CMO, Cantt. General hospital, Delhi Cantt. on 27.08.2014 at 11.00 hrs and all interested bidders may attend pre bid meeting for any clarifications in the specification etc. The minutes of the pre bid meeting would be uploaded along with amendments, if any, on 3.09.2014 upto 5.00 PM on two web sites i.e. www.cbdelhi.in, www.hsccltd.co.in and interested bidders shall down load amendments clarifications issued by the office prior to submission of their bids. Any other amendment/clarification will also be uploaded on the web sites i.e. www.cbdelhi.in, www.hsccltd.co.in and the interested bidders are requested to visit these websites time to time for this purpose. The Cantonment Board reserves the rights to accept/reject any or all bids or annul tender process, if required, without assigning any reason thereof. This advertisement supersedes all previous advertisement issued for rate contracts included in this advertisement.

Chief Executive Officer,
Delhi Cantonment Board,
Delhi Cantt-10.

Tel.No. 25693772, 25695547
TE No.: DCB/RC/MEDIEQUIP/2014
OFFICE OF THE CANTONMENT BOARD
DELHI CANTONMENT-10

(1) The contents of the **Newspaper Advertisement** will form part of the terms and conditions of this tender document.

(2) **Tender No.: DCB/RC/MEDIEQIP/2014/Item Nos 1 to 28**

Sl. No.	Description	Schedule
i.	Place of sale of Tender Enquiry Documents	CMO Office, Cantonment General Hospital, Delhi Cantt.-110010.
ii.	Time and date of opening of Techno – Commercial tenders	As per advertisement
iii.	Venue of Opening of Techno Commercial Tender	CMO Office, Cantonment General Hospital, Delhi Cantt.-110010.

3. The bidding documents can be obtained by applying on the firm's letterhead, till one day before the date of opening of tenders (or the day before if it is a holiday), on payment of non-refundable fee as mentioned above per set in the form of **Cash** or account payee **Demand Draft** drawn on a scheduled Bank in India, in favour of **'Chief Executive Officer, Delhi Cantonment Board, Delhi Cantonment'** payable at Delhi**,** from the office of the CMO, Cantonment General Hospital, Delhi Cantonment – 110010.

4. The tenderers are required to deposit their tenders duly filled, in the tender box at the CMO's Office, Cantonment General Hospital, Delhi Cantt-110010 in proper sealed cover duly marked with name of work, date of opening of tenders, by the due date and time along with the requisite Tender Fees, Earnest Money, Solvency Certificate and documents etc., failing which the tenders will be treated as late and rejected.

5. Tenderer may also download the tender enquiry documents from the web site www.cbdelhi.in & http://eprocure.gov.in/cppp /Hospital Notice Board at CMO Office and submit its tender by utilizing the downloaded document, along with the required non-refundable fee as mentioned in Para 3 above.

6. All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated in the Para 2 above.

7. Tenders sent by the post must reach before the due date and time, in proper sealed cover duly marked with name of work, date of opening of tenders.

8. Separate tenders are required for each schedule.

9. Conditional tenders and incomplete tender in any form or blank forms will be summarily rejected.

10. Bidding through Joint Venture/in Consortium is not allowed.

11. Tenders will be opened on the last date of receipt of the concerned tender at 1130 hrs in the Conference Room, C G Hospital, Delhi Cantt-10 in presence of the intending bidders with proper authorization on letterhead.

12. In case the tender opening date falls on/is declared a holiday, the tenders will be received & opened on the next working day at the appointed time.

13. The number of items to be procured may increase or decrease without prior notice.

14. The authorities reserve their right to accept/reject any or all the bids and to postpone/ annul the tender process if required, without assigning any reason thereof.

15. Any subsequent amendments in respect of this notice will be put up only on the website www.cbdelhi.in / Hospital Notice board at CMO's office.

16. The Tender Enquiry Documents are not transferable.

17. Conditional tenders and incomplete tender in any form or blank forms will be summarily rejected.

18. Incase of any ambiguity in the language/typing of tender documents, the official version of the document as with the office of the Chief Medical Officer will prevail.

Chief Executive Officer (CEO),
Delhi Cantonment Board

SECTION - II

GENERAL INSTRUCTIONS TO TENDERERS (GIT) (CONTENTS)

GENERAL INSTRUCTIONS TO TENDERERS (GIT)

A. PREAMBLE

1. Definitions and Abbreviations

1.1 The following definitions and abbreviations, which have been used in these documents shall have the meanings as indicated below:

1.2. Definitions:

(i) "Contract" means the written agreement entered into between the purchaser and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
(ii) "Contract Price" means the sum stated in the Notification of Award (NOA), as payable to the supplier on the execution & completion of the goods & services and the remedying of any defects therein in accordance with the provision of the contract.
(iii) "Consignee" means the CMO, Cantonment General Hospital, Delhi Cantt.-110010,
(iv) "Day" means calendar day.
(v) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
(vi) "Goods" means medical equipment & instruments, allied accessories etc. as per the NIT which the supplier is required to supply to the purchaser under the contract.
(vii) "Inspection" means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement to determine conformity.
(viii) "Performance Security" means monetary or financial guarantee to be furnished by the successful tenderer in favour of the Purchaser for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
(ix) "Purchaser" means CEO, Delhi Cantonment Board (DCB), Delhi Cantt.110010.
(x) "Services" means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
(xi) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.
(xii) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.
(xiv) "Tender" means Bids/Tender received from a Firm/Tenderer/Bidder.
(xv) "Tenderer" means Manufacturer/Bidder/Authorized Indian Agent of Manufacturer/ the Individual or Firm submitting Bids/Tender.

1.3 Abbreviations:

(i) "TE Document" means Tender Enquiry Document
(ii) "NIT" means Notice Inviting Tenders.
(iii) "GIT" means General Instructions to Tenderers
(iv) "SIT" means Special Instructions to Tenderers
(v) "GCC" means General Conditions of Contract

(vi) "SCC" means Special Conditions of Contract
(vii) "DGS&D" means Directorate General of Supplies and Disposals
(viii) "NSIC" means National Small Industries Corporation
(ix) "PSU" means Public Sector Undertaking
(x) "CPSU" means Central Public Sector Undertaking
(xi) "LSI" means Large Scale Industry
(xii) "SSI" means Small Scale Industry
(xiii) "DP" means Delivery Period
(xiv) "BG" means Bank Guarantee
(xv) "ED" means Excise Duty
(xvi) "CD" means Custom Duty
(xvii) "VAT" means Value Added Tax
(xviii) "CENVAT" means Central Value Added Tax
(xix) "CST" means Central Sales Tax
(xx) "RR" means Railway Receipt
(xxi) "BL" means Bill of Lading
(xxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
(xxiii) "RT" means Re-Tender.
(xxiv) "OEM" means Original Equipment Manufacturer

2. Introduction

2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section – VI – "List of Requirements", which also indicates, *interalia*, the required delivery schedule, terms and place of delivery.

2.2 This section (Section II - "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders. It also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.

2.3 The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.

2.4 Before formulating the tender and submitting the same to the purchaser, the tenderer should read and examine all the terms, conditions, instructions, checklist etc. contained in the TE documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

3. Availability of Funds

3.1 Expenditure to be incurred for the proposed purchase will be met from the funds available with the purchaser/consignee.

4. Language of Tender

4.1 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in the English language, unless otherwise specified in the Tender Enquiry. However, the

language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail**.**

4.2 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for purpose of interpretation of the tender etc, the English translations shall prevail.

5. Eligible Tenderers

5.1 This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents.

6. Eligible Goods and Services

6.1 All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term "origin" used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

7. Tendering Expense

7.1 The tenderer shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. The purchaser will, in no case be responsible or liable for any such cost, expenditure etc regardless of the conduct or outcome of the tendering process.

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice inviting Tender" (NIT), the TE documents include:

- Section II – General Instructions to Tenderers (GIT)
- Section III – Special Instructions to Tenderers (SIT)
- Section IV – General Conditions of Contract (GCC)
- Section V – Special Conditions of Contract (SCC)
- Section VI – List of Requirements
- Section VII – Technical Specifications
- Section VIII – Qualification Criteria
- Section IX – Tender Form
- Section X – Price Schedules
- Section XI – Questionnaire
- Section XII – Bank Guarantee Form for EMD
- Section XIII – Manufacturer's Authorisation Form
- Section XIV – Bank Guarantee Form for Performance Security/CMC Security
- Section XV – Contract Forms A & B
- Section XVI – Proforma of Consignee Receipt Certificate
- Section XVII – Proforma of Final Acceptance Certificate by the consignee
- Section XVIII – Instructions from Ministry of Shipping/ Surface Transport (Annexure1& 2)
- Section XIX – Check List for the Tenderers
- Section XX – Consignee List

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and,

also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested tenderers are expected to examine all such details etc to proceed further.

9. Amendments to TE documents

9.1 At any time prior to the deadline for submission of tenders, the purchaser may, for any reason as deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it.

9.2 Such an amendment will be notified in writing by registered/speed post or by fax/telex/e-mail, followed by copy of the same by registered post to all prospective tenderers, which have received the TE documents and will be binding on them.

9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the same with the purchaser in writing before the date schedule for pre-bid meeting. The purchaser will respond in writing to such requests only.

C. PREPARATION OF TENDERS

11. Documents Comprising the Tender

11.1 The **Two Tender System**, i.e. "Techno – Commercial Tender" and "Price Tender" prepared by the tenderer shall comprise the following:

A) <u>Techno – Commercial Tender (Un priced Tender)</u>

i. Bid Document including amendments/corrigendum, if any, as purchased should be stamped & signed on all pages.

ii) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.

iii) Tender Form as per Section X (without indicating any prices).

iv) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.

v) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form.

vi) Power of Attorney in favour of signatory of TE documents.

vii) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.

viii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.

ix) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).

x) Certificate of Incorporation in the country of origin.

xi) Copy of PAN document

xii) Checklist as per Section XX.

B) <u>Price Tender:</u>

The information given at clause no. 11.1 A) ii) & viii) above should be reproduced with the prices indicated. **In case of tenderer quoting for more than 1 (one) item, the prices for the quoted items should be submitted in separate sealed covers.**

NOTE:

1. **All pages of the Tender/Bid should be page numbered, indexed, stamped & signed.**
2. **It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.**

11.2 The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender. Individuals signing the tender or other documents connected with a contract must specify whether he signs as:

i. A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.

ii. A partner of the firm, if it be a partnership, in which case he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney;

iii. Constituted attorney of the firm if it is a company supported by duly notorized General Power of Attorney.

NOTE:

1. In case of (ii) above, a copy of the partnership agreement or general power of attorney, in either, case, attested by a Notary Public should be furnished, or affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.

2. In case of the Partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.

3. A person signing the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.

11.3 A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.

11.4 Tender sent by fax/telex/cable/electronically shall be ignored.

12. Tender currencies

12.1 The tenderer supplying Indian or imported goods shall quote only in Indian Rupees and shall enclose **"BILL OF ENTRY** "Without this Bill of Entry payment cannot be made.

12.2 Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.

13 Tender Prices

13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified as "NA" by the tenderer.

13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.

13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated in the Price Schedules attached under Section XI.

13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:

13.4.1 (A)The Price bid for the **Schedule** to commensurate with scope of supply indicated against the **Schedule** and should indicate all inclusive lump sum price offered for each equipment/store comprising a **Schedule** including cost of the stores, freight, insurance, transit insurance, packing forwarding, Sales Tax, Excise duty, Basic Custom Duty upon production of CDEC, Inspection/Inspection certificate charges (ISO certified inspection agencies), road permit costs etc. and including charges whatsoever applicable, for equipment installation and commissioning with all the men and material required for the same and **including charges, for two years comprehensive warranty service with spares with downtime not more than 48 hours, regular maintenance plans & wherever applicable including charges for three years Annual Maintenance Contract (AMC) without spares included after completion of initial two years comprehensive warranty.** The all inclusive lump sum price should be on **F.O.R. Site (i.e. destination),** for the above and inclusive of all charges stated herein above **including charges of three years of Annual Maintenance Contract (AMC) The all inclusive lump sum price needs to be accompanied by a statement indicating a clear "break up" of all inclusive lump sum price of its various components constituting it along with values/amount indicating against each of such components adding to arrive at all inclusive lump sum price.** The prices are to be kept valid for acceptance up to 165 days from the date of the opening of bids. No other charges in addition will be payable on any account over and above the lump sum price quoted. The prices should be given both in figures and words. Offers with price variation clause will not be accepted, the rates quoted in ambiguous terms such as "freight on actual basis" or "taxes as applicable extra" or "packing forwarding extra" will render the bid liable for rejection. Sales Tax will be local Sales Tax, VAT or applicable CST (for inter state sales), whichever applicable will be incorporated in the above all inclusive lump sum price. Custom duty exemption certificate and octroi exemption certificate will be issued by consignee and price to be quoted accordingly.

Bidders in their own interest shall ascertain the eligibility of whatsoever concessions and exemptions eligible and applicable and shall advice the purchaser and quote accordingly. Bidders shall indicate the actual amount of octroi, excise duty, normal sales tax, basic custom duty, etc. which becomes otherwise payable in the extreme event of consignee not in a position to release certificates like CDEC, Octroi Exemption Certificate. **Form 'C' & 'D' will not be issued by the purchasers.**

(B) **Offer for Import Origin Goods**

Offers for Import origin goods shall clearly indicate firm, "All inclusive lump sum price" calculated in equivalent Indian Rupees and giving break up of as FOB (Free on Board), Marine Insurance, CIF (Cost Insurance Freight), Custom clearance charges, examination, stamp duty, local transportation and Insurance etc. and all other charges for services to be rendered as explained under offer for Indigenous goods. The all

inclusive lumpsum price shall take care of impact of foreign exchange rate fluctuations, etc. and accordingly arrive at the all inclusive lump sum price in equivalent Indian Rupees and this shall be the ceiling amount payable against the order irrespective of whatsoever higher fluctuations in exchange rate applicable at the time of L/c negotiation. All ordered conditions shall be adhered with the ceiling amount. Customs handling & clearance will be the responsibility of Indian agent at his cost.

(C) The payments to both indigenous supplies as well as import supply shall have a ceiling amount, which would be the All Inclusive lump sum price.

For domestic goods or goods of foreign origin, the prices in the corresponding price schedule shall be entered in the following manner:

a) the price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, CST VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;
b) charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;
c) the price of Incidental Services, as mentioned in List of Requirements and Price Schedule;
d) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
e) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

14. Firm Price

14.1 Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account.

15. Alternative Tenders

15.1 Alternative Tenders are not permitted.

15.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.

15.3 a). If a tenderer, either the Indian Agent on behalf of the Principal / OEM or Principal / OEM itself can bid but both cannot bid simultaneously for the same item/ product in the same tender

b). If an agent submits bid on behalf of the Principal / OEM, the same agent shall not submit a bid on behalf of another Principal / OEM in the same tender for the same item/product.

16 Documents Establishing Tenderer's Eligibility and Qualifications

16.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.

16.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:

a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
c) in case the tenderer is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

17. Documents establishing Good's Conformity to TE document.

17.1 The tenderer shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by the purchaser in the TE documents. For this purpose the tenderer shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the TE documents to establish technical responsiveness of the goods and services offered in its tender.

17.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the tenderer, the tenderer shall list out the same in a chart form without ambiguity and provide the same along with its tender.

17.3 If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

18. Earnest Money Deposit (EMD)

18.1 Pursuant to GIT clauses 8.1 and 11.1 the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.

18.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification" etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).

18.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:

i) Account Payee Demand Draft
ii) Banker's cheque

18.4 The demand draft or banker's cheque shall be drawn on any scheduled bank in India, in favour of 'Chief Executive Officer, Delhi Cantonment Board, Delhi Cantonment' payable at Delhi.

18.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno – Commercial Tender opening date.

18.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

18.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

19. Tender Validity

19.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 120 days (One hundred and twenty days) after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

19.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, however, may not agree to extend its tender validity without forfeiting its EMD.

19.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

20. Signing and Sealing of Tender

20.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.

20.2 Unless otherwise mentioned in the SIT, A tenderer shall submit 2 copies of its tender marking them as "Original" and "Duplicate". Duplicate tender may contain all pages including Technical Literature/Catalogues as per in Original tenders.

20.3 The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.

20.4 Both the copies of the tender shall be duly signed at the appropriate places as indicated in the TE documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.

20.5 The tenderer is to seal the original and each copy of the tender in separate envelopes, duly marking the same as "Original", "Duplicate", "Triplicate" and so on and writing the Address of the Purchaser and the Tender Reference Number on the envelopes. The sentence "NOT

TO BE OPENED" before _____ (The tenderer is to put the date & time of tender opening) are to be written on these envelopes. The inner envelopes are then to be put in a bigger outer envelope, which will also be duly sealed, marked etc. as above. If the outer envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.

20.6 TE document seeks quotation following **two Tender System**, in two parts. First part will be known as **'Techno - Commercial Tender'**, and the second part **'Price Tender'** as specified in clause 11 of GIT. Tenderer shall seal **'Techno - Commercial Tender'** and **'Price Tender'** separately and covers will be suitably super scribed. Both these sealed covers shall be put in a bigger cover and sealed and procedure prescribed in Paras 21.1 to 21.5 followed.

D. SUBMISSION OF TENDERS

21. Submission of Tenders

21.1 Unless otherwise specified, the tenderers are to deposit the tenders in the tender box kept for this purpose at **CMO, Cantonment General Hospital, Delhi Cantonment – 110010**. In case of bulky tender, which can not be put into tender box, the same shall be submitted by the tenderer by hand to **CMO** or his nominee at **Cantonment General Hospital, Delhi Cantonment – 110010**. The officer receiving the tender will give the tenderer an official receipt duly signed with date and time.

21.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for submission of tender falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be received up to the appointed time on the next working day.

22. Late Tender

22.1 A tender, which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

23. Alteration and Withdrawal of Tender

23.1 The tenderer, after submitting its tender, is permitted to alter/modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations/modifications to tenders received after the prescribed deadline will not be considered.

23.2 No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender.

E. TENDER OPENING

24. Opening of Tenders

24.1 The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT.

In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.

24.2 Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.

The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.

24.3 Two - Tender system as mentioned in Para 20.6 above will be as follows. The **Techno - Commercial Tenders** are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). The bidder may be required to demonstrate the equipment/item at any stage. Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno – Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF TENDERS

25. Basic Principle

25.1 Tenders will be evaluated on the basis of the terms & conditions already incorporated in the TE document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

26. Scrutiny of Tenders

26.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed stamped and whether the Tenders are generally in order.

26.2 The Purchaser's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.

26.3 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requiremens, conditions etc. As prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non – responsive and will be rejected.

26.4 **The following are some of the important aspects, for which a tender shall be declared non – responsive and will be summarily ignored;**

(i) Tender form as per Section X (Signed and stamped) not enclosed.
(ii) Tender is unsigned.
(iii) Tender validity is shorter than the required period.
(iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
(v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
(vi) Tenderer has not agreed to give the required performance security of required amont in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section – V – " Special Conditions of Contract", for due performance of the contract.
(vii) Goods offered are not meeting the tender enquiry specification.

(viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.

(ix) Poor/ unsatisfactory past performance.

(x) Tenderers who stand deregistered/banned/ de-recognized/ black listed by any State Govt./ union Territory / Govt. of India/ Govt. Organization / Govt. Health Institution/ Public Sector Undertaking (PSUs) for supply of Not of Standard Quality items/ non-supply deregistered/banned/blacklisted/debarred by any Govt. Authorities.

(xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.

(xii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.

(xiii) Tenderer has not agreed for the delivery terms & delivery schedule.

(xiv) Bid Document duly signed & stamped on each page, including Amendments/ Corrigendum, if any, not submitted with Techno-commercial Bid.

27. Minor Infirmity/Irregularity/Non-Conformity

27.1 If during the evaluation, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

28 Discrepancies in Prices

28.1 If, in the price structure quoted by a tenderer, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the purchaser feels that the tenderer has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.

28.2 If there is an error in a total price, which has been worked out through addition and/or subtraction of subtotals, the subtotals shall prevail and the total corrected; and

28.3 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 29.1 and 29.2 above.

28.4 If, as per the judgement of the purchaser, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered / speed post. If the tenderer does not agree to the observation of the purchaser, the tender is liable to be ignored.

29. Discrepancy between original and copies of Tender

29.1 In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, the purchaser will convey its observation suitably to the tenderer by register / speed post and, if the tenderer does not accept the purchaser's observation, that tender will be liable to be ignored.

30. Qualification Criteria

30.1 Tenders of the tenderers, who do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further.

31. Tender Currency

31.1 Price must be quoted in Indian currency, both in words and figures against each item as the payments will be made in Indian currencies only. The tenderer shall not quote the price/rate for any item other than the item specified in the list.

32. Schedule-wise Evaluation

32.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 13.2, the tenderers have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts wherever applicable will be taken into account to determine the lowest evaluated cost for the purchaser in deciding the successful tenderer for each schedule, subject to tenderer(s) being responsive.

33. Comparison of Tenders

33.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery at consignee site basis. The quoted turnkey prices and CMC prices will also be added for comparison/ranking purpose for evaluation. Net Present value (NPV) of the Comprehensive Annual Maintenance charges (CMC) quoted for 3 years after the warranty period shall be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum."

34. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders

34.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:

i) In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, Customs Duties, Service Tax, Works Contract Tax etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and

34.2 The purchaser's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.

34.3 i. In exercise of powers conferred in section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small enterprises effective from 1st April 2012. The policy mandates that 20% of procurement of annual requirement of goods and services by all Central Ministries/Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST entrepreneurs out of above said 20% quantity.

ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down their price to the L1 price, in a situation where L1 price is from someone other than on MSE. Such MSEs would be allowed to supply up to 20% of the total tendered value. In case there are more than one such eligible MSE, the 20% supply will be shared equally. Out of 20% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir board or national Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being on MSE, failing which their tender will be liable to be ignored.

35. Tenderer's capability to perform the contract

35.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

35.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

36. Contacting the Purchaser

36.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.

36.2 In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

37. Purchaser's Right to accept any tender and to reject any or all tenders

37.1 The purchaser reserves the right to accept in part or in full any tender or reject any or more tender(s) without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

38. Award Criteria

38.1 Subject to GIT clause 38 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by the purchaser in terms of GIT Clause 36.

39. Variation of Quantities at the Time of Award/Currency of Contract

39.1 The listed quantities are the estimated quantities however supplies of the ordered quantities shall be made from time to time. At the time of awarding the contract, the purchaser reserves the right to increase or decrease the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" without any change in the unit price and other terms & conditions quoted by the tenderer for a period of one year from the date of approval of the rate contract and on no account, any increase in the price at any stage will be entertained till the completion of the rate contract period.

39.2 The Currency of the Contract is Indian Rupees only.

40. Intimation to Successful Bidder

40.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing, by registered/speed post or by fax/telex/cable/email (to be confirmed by registered/speed post) that its tender for goods & services, which have been accepted by the purchaser on rate contract basis which shall remain valid for one year from this intimation. The purchaser has a right to place the Notification of Award for the said goods & services within one year from the said intimation.

41. Notification of Award on Rate Contract Basis

41.1 Purchaser has a right within one year from the date of intimation as stated in Clause 40 to issue Notification of Award on Rate Contract Basis to the successful tenderer. The successful tenderer must furnish to the purchaser the required performance security within thirty days from the date of dispatch of this notification, failing which the EMD will forfeited and the award will be cancelled. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.

41.2 The Notification of Award shall constitute the conclusion of the Contract.

42. Issue of Contract

42.1 Promptly after notification of award, the Supplier shall submit the contract form (as per Section XVI) duly completed and signed on non-judicial stamp paper of requisite value, in duplicate, to the Purchaser by registered/speed post/by hand.

42.2 Within twenty one days from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post.

43. Non-receipt of Performance Security and Contract by the Purchaser/Consignee

43.1 Failure of the successful tenderer in providing performance security and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC – Termination of default.

44. Return of E M D

44.1 The earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 19.6.

45. Corrupt or Fraudulent Practices

45.1 It is required by all concerned namely the Consignee/Tenderers/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition

(b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SECTION - III
SPECIAL INSTRUCTIONS TO TENDERERS
(SIT)

Sl. No.	GIT Clause No.	Topic	SIT Provision	Page No.
A	1 to 7	Preamble	No Change	26
B	8 to 10	TE documents	No Change	26
C	11 to 21	Preparation of Tenders	No Change	26
D	22 to24	Submission of Tenders	No Change	26
E	25	Tender Opening	No Change	26
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	26
G	38 to 45	Award of Contract	No Change	26

SPECIAL INSTRUCTIONS TO TENDERERS
(SIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

A Preamble

No Change

B TE documents

No Change

C Preparation of Tenders

No Change

D Submission of Tenders

No Change

E Tender Opening

No Change

F Scrutiny and Evaluation of Tenders

No Change

G Award of Contract

No Change

SECTION - IV
GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.

2. Use of contract documents and information

2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this TE document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.

2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

3.1 The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trade marks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

4. Country of Origin

4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

4.3 The country of origin may be specified in the Price Schedule

5. Performance Security

5.1 Within thirty (30) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 30 months from the date of Notification of Award.

5.2 The Performance security shall be denominated in Indian Rupees only or in the currency of the contract as detailed below:

a) It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) days beyond Warranty Period.

5.3 In the event of any failure /default of the supplier with or with out any quantifiable loss to the Purchaser including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.

5.4 In the event of any amendment issued to the contract, the supplier shall, within twenty-one (21) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.

5.5 The supplier shall enter into Annual Comprehensive Maintenance Contract as per the 'Contract Form – B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CMC will commence from the date of expiry of the Warranty Period.

5.6 Subject to GCC sub – clause 5.3 above, the Purchaser will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of the bank guarantee for CMC security in favour of the Purchaser as per the format in Section-XVII.

6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII of this document.

7. Packing and Marking

7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transhipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements under Sections VII and VIII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

a. contract number and date
b. brief description of goods including quantity
c. packing list reference number
d. country of origin of goods
e. consignee's name and full address and
f. supplier's name and address

8. Inspection, Testing and Quality Control

8.1 The supplier shall inform the Purchaser that the goods are ready for pre-dispatch inspection. The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, & if same is accepted by purchaser, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro Airfare, Local Conveyance, Boarding and Lodging of the inspection for the inspection period."

8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.

8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.

8.4 Purchaser and/or its authorized representatives reserve the right to do pre-dispatch inspection of the ordered goods. In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period. However, the ordered goods shall be inspected by the Purchaser and/or its authorized representatives at the consignee site(s).

8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.

8.6 The purchaser's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.

"On rejection, the supply shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser / consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser / consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."

8.7 Goods accepted by the purchaser at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.

8.8 Before dispatching goods to consignee, the supplier shall have the equipment inspected by recognised/ reputed agency like **SGS, Lloyd or equivalent (acceptable to the purchaser)** prior

to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

9. Terms of Delivery

9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery and as per the delivery period specified in the schedule of requirement. Please note that the time shall be the essence of the contract.

10. Transportation of Goods

10.1 The supplier shall not arrange part-shipments. The supplier is required under the contract to deliver the goods at Consignee site basis terms.

10.2 Instructions for transportation of domestic goods including goods imported by the supplier under its own arrangement:
In case no instruction is provided in this regard in the SCC, the supplier will arrange transportation of the ordered goods to the consignee as per its own procedure.

11. Insurance:

11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

i) in case of supply of Domestic Goods, including goods already imported by the supplier under its own arrangement on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will be got extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actual will be reimbursed.

12. Spare parts

12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and

b) In case the production of the spare parts is discontinued:

i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and

ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are used during warranty and CMC period.

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13. Incidental services

13.1 Subject to the stipulation, if any, in the SCC (Section – V), List of Requirements (Section – VI) and the Technical Specification (Section – VII), the supplier shall be required to perform the following services.

i) Installation & commissioning, Supervision and Demonstration of the goods
ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
iii) Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
iv) Supplying required number of operation & maintenance manual for the goods

14. Distribution of Dispatch Documents for Clearance/Receipt of Goods

For Domestic Goods as well as Goods Imported by the supplier under its own arrangement, the supplier shall submit the following documents to the Purchaser during pre-dispatch inspection as well as during goods inspection at consignee site:

(i) Two copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Two copies of packing list identifying contents of each equipment;
(iii) Inspection certificate issued by the nominated Inspection agency, like SGS, Lloyd or equivalent (acceptable to the purchaser).
(iv) Certificate of origin;
(v) Insurance Certificate as per GCC Clause 11.
(vi) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

15. Warranty

15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (*except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications*) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The **comprehensive warranty shall remain valid for 24 months** from the date of installation and commissioning of the goods at consignee and accepted by the purchaser/consignee in terms of the contract, unless specified otherwise in the SCC

a. No conditional warranty like mishandling, manufacturing defects etc. will be acceptable.
b. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work
c. Warranty as well as Comprehensive Maintenance Contract (CMC) will be inclusive of all accessories and Turnkey work and it will also cover the following, wherever applicable:

- X-Ray & CT Tubes and high tension cables
- Helium replacement
- Any kind of motor
- Plastic & glass parts
- All kinds of sensors including oxygen sensors
- All kinds of coils, probes & transducers including ECG cable, BP transducers, SpO2 probes, Ultrasound & Colour Doppler Transducers/Probes, BP cuffs, Defibrillator internal & external paddles, chart recorders, ventilator reusable patient circuits, servo humidifier with chamber, electrodes & probes for blood gas analyzers, MRI coils.
- All kinds of flat panel sensors and cassettes for DR & CR systems and patients handling trolleys etc.
- Printers and imagers including laser and thermal printers with all parts
- UPS including the replacement of batteries

- Air-conditioners

d. Replacement and repair will be under taken for the defective goods.
e. Proper marking has to be made for all spares for identification like printing of installation and repair dates.

15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.

15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non rectification will be applicable as per tender conditions

15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.

15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.

15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods

15.8 The Purchaser reserve the rights to enter into Annual Comprehensive Maintenance Contract between Purchaser and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.

15.9 The supplier shall ensure continued supply of the spare parts for the machines and equipments supplied by them to the purchaser for 10 years from the date of installation and handing over.

15.10 The Supplier shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments supplied to the Purchaser/Consignee.

16. Assignment

16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

17. Sub Contracts

17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

17.2 Sub contract shall be only for bought out items and sub-assemblies.

17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

18. Modification of contract

18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
b) Mode of packing,
c) Incidental services to be provided by the supplier
d) Mode of despatch,
e) Place of delivery, and
f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser, the supplier shall convey its views to the Purchaser within twenty-one days from the date of the supplier's receipt of the Purchaser's amendment/modification of the contract.

19. Prices

19.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its tender and incorporated in the contract except for any price adjustment authorised in the SCC.

20. Taxes and Duties

20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to the purchaser.

20.2 Further instruction, if any, shall be as provided in the SCC.

21. Terms and Mode of Payment

21.1 Payment Terms

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

Payment for Domestic Goods Or Foreign Origin Goods

Payment shall be made in Indian Rupees only as specified in the contract in the following manner:

a) On delivery:

80% payment of the contract price shall be paid on receipt of goods in good condition as certified by the authorized officer(s) of the Cantonment Board and upon the submission of the following documents:

(i) Two copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Two copies of packing list identifying contents of each equipment;
(iii) Inspection certificate issued by the nominated Inspection agency, like SGS, Lloyd or equivalent (acceptable to the purchaser).
(iv) Certificate of origin;
(v) Insurance Certificate as per GCC Clause 11.
(vi) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.
(vii) Bill of Entry/Bill of Lading (in case of foreign origin goods)

(b) On Acceptance:

Balance 20 % payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. In case where the installation & commissioning or final inspection and test at site is delayed for any reasons for which consignee is responsible, 20% of the contract price shall become payable, after the expiry of six months from the date of arrival of the last consignment at site subject to submission of a Bank Guarantee by the supplier for the said amount valid initially for the period of six months. The supplier shall get the validity of the Bank Guarantee extended for the further period as and when asked for the purchaser.

c). Payment of Turnkey, if any:

Turnkey payment will be made as indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

d) Payment for Annual Comprehensive Maintenance Contract Charges:

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the consignee on receipt of bank guarantee for an amount equivalent to 2.5 % of the cost of the equipment as per contract in the prescribed format given in Section XV valid till 2 months after expiry of entire CMC period.

21.2 The supplier shall not claim any interest on payments under the contract.

21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.

21.4 The payment shall be made in the currency / currencies authorised in the contract.

21.5 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.

21.6 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.

21.7 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.

21.8 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:

(a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
(b) Delay in supplies, if any, has been regularized.
(c) The contract price where it is subject to variation has been finalized.
(d) The supplier furnishes the following undertakings:

"I/We, _____ certify that I/We have not received back the Inspection Note duly receipted by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We _____ agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment.

22. Delivery

22.1 The supplier shall deliver of the goods and perform the services under the contract within the time schedule specified by the Purchaser/Consignee in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contarct.

22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:

(i) imposition of liquidated damages,
(ii) forfeiture of its performance security and
(iii) termination of the contract for default.

22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser/Consignee in writing about the same and its likely duration and make a request to the Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:

(a) The Purchaser/Consignee shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.

(b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or on account of any other tax or duty which may be levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.

(c) But nevertheless, the Purchaser/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.

22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser/Consignee for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

22.6 Passing of Property

22.6.1 The Property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.

22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.

22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

23.1 Subject to GCC clause 26, if the supplier fails to deliver any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or

performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.

During the above-mentioned delayed period of supply and/or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

24. Termination for default

24.1 The Purchaser/Consignee , without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.

24.3 Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated.

25. Termination for insolvency

25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser/Consignee.

26. Force Majeure

26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.

26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of , the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, acts of the Purchaser/Consignee either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, and freight embargoes.

26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.

26.5 In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

27. Termination for convenience

27.1 The Purchaser reserves the right to terminate the contract, in whole or in part for its (Purchaser's/) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.

27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser/Consignee may decide:

a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or

b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

28. Governing language

28.1 The contract shall be written in English language following the provision as contained in GIT clause 4. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

29. Notices

29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.

29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

30. Resolution of disputes

30.1 If dispute or difference of any kind shall arise between the Purchaser and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.

30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India. In the case of a dispute or difference arising between the Purchaser and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer, appointed to be the arbitrator by the Purchaser. The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award.

30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.

30.4 Jurisdiction of the court will be from the place where the tender enquiry document has been issued, i.e., New Delhi, India, to the exclusion of all other courts.

31. Applicable Law

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

32. Withholding and Lien in respect of sums claimed

Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contact made by the supplier with the purchaser, pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above, by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be, and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

33. General/ Miscellaneous Clauses

33.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.

33.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.

33.3 The Supplier shall notify the Purchaser of any material change would impact on performance of its obligations under this Contract.

33.4 Bidding through Joint Venture/in Consortium is not allowed.

33.5 Supplier shall be responsible for all obligations towards the Purchaser for performance of the contract/services under the Contract.

33.6 The Supplier shall at all times, indemnify and keep indemnified the Purchaser against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.

33.7 The Supplier shall, at all times, indemnify and keep indemnified the Purchaser against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.

33.8 All claims regarding indemnity shall survive the termination or expiry of the contract.

33.9 Site visit by the supplier to assess the site condition and requirements for installation & commissioning of the equipment.

33.10 The details of the medical equipments with specifications are mentioned in bid document. The firm/tenderer must clearly mention their model, make, specification, special features, upgraded version (if any), detail technical catalogue of the offered model in their tender.

33.11 Tenders should be typewritten or computerized and every correction in the tender should invariably be attested with signature by the tenderer with date before submission, failing which the tender will be ineligible for further consideration.

33.12 The purchaser shall be responsible only after delivery and due verification, installation, commissioning & acceptance of the equipment.

33.13 The rate per unit shall not vary with the quantum of order placed for destination point.

33.14 If there is difference between figures & words, words will be taken into consideration.

33.15 In the event of the date being declared as a holiday by the Govt., the due date of sale, submission of bids and opening of bids will be the following working day at the scheduled place & time.

33.16 The price quoted by the tenderers shall not in any case, exceed the controlled price, if any, fixed by the Central/State Government /DGS&D and the Maximum Retail Price (MRP). The purchaser, at his discretion, will in such case, exercise the right of revising the price at any stage so as to confirm to the controlled price or MRP as the case may be.

33.17 The price/rate quoted and accepted will be binding on the tenderer for a period of one year from the date of approval of the rate contract as mentioned in GIT Clause 40 and on no account, any increase in the price will be entertained till the completion of this tender period.

33.18 All the copies of the tender shall be duly signed at the appropriate places as indicated in the TE documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender. Conditions such as "**SUBJECT TO AVAILABILTY"/"SUPPLIES WILL BE MADE AS AND WHEN SUPPLIES ARE RECEIVED"** etc., will not be considered under any circumstance and the tenders of those who have given such conditions shall be treated as non-responsive and for that reason, shall be rejected.

33.19 If at any time during the period of rate contract, the price of tendered item is reduced or brought down by any law or act of the Purchaser or the tenderer, the tenderer shall be morally and statutorily bound to inform the purchaser immediately about such reduction in the contracted price. The purchaser is empowered to unilaterally effect such reduction in rate, in case the tenderer fails to notify or fails to agree for such reduction of rate.

33.20 Approved rate with terms, conditions & the quoted price of the tender shall remain valid for a period of 12 months from the date of approval of the rate contract as mentioned in GIT Clause 41.

33.21 Tenderer must submit its bid in English language only.

33.22 If any information or documents furnished by the tenderer with the tender papers are found to be misleading or incorrect at any stage the tender of the relevant items in the approved list shall be cancelled and steps will be taken to debar/blacklist/ban/deregister the said firm for three (3) years.

33.23 Price/Rate should be quoted in Indian currency only, both in words and figures against each item as the payments will be made in Indian currencies only (annexure-IX). The tenderer shall not quote the rate for any item other than the item specified in the list. (Schedule of Requirement).

33.24 The requirement of items may increase or decrease depending on the situation. Orders for the goods to be supplied shall be placed for the required quantities as and when supplies are required during the one year period of validity of the rate contract.

33.25 The Purchaser during the bid evaluation process, reserves the right to ask for a free demonstration of the quoted equipment at a pre-determined place acceptable to the purchaser for technical acceptability as per the tender specifications before opening of the Price Tender.

SECTION – V

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below.

These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

SECTION - VI
LIST OF REQUIREMENTS

Part-I

Schedule No.	Qty.	Name of Equipment	Tenderer to mention (√) for the Item(s) which is quoted.
1	1	Anaesthesia Machine	
2	1	Dental Unit & Acc.	
3	1	Diode Dental Laser	
4	7	ICU Ventilator	
5	8	ICU Monitors	
6	10	Syringe Pumps	
7	1	Washer Disinfector	
8	1	Sealing Machine :Plain Sealer	
9	6	Defibrillator	
10	2	Transport Ventilator	
11	2	Patient Trolleys	
12	8	ICU Beds	
13	6	Warming Blankets	
14	2	Multi-Para Monitors	
		Equipment for Blood Storage Capacity	
15	1	Blood Bank Refrigerator	
16	1	Deep Freezer (-80 Deg.)	
17	1	Microscope	
18	1	Centrifuge	
19	1	Blood Bag Transposition Box	
20	1	Pharmaceutical Freezer	
21	1	Agitator & Incubator	
22	1	Thawing System	
23	1 set	Computer with Printer	
24	1	Tube Sealer	
25	1	Cross Matching Machine	
26.	1	Surgical Operating Microscope (Ophthalmology, Major OT) (Retender-IInd Time)	
27.	1	3D Colour Ultrasound Scanner with Color Doppler	
28.	1	Paediatric Ventilator	

Part II: Required Delivery Schedule:

For Indigenous goods or for imported goods:

90 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site (Tenderers may quote earliest delivery period). For equipment like CT, MRI, LINAC, 800mA/ 1000 mA X ray (DR), Cath Lab**,** the delivery period will be 180 days, to delivery at consignee site.

Installation and commissioning shall be done within two weeks of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later. For equipment like CT, MRI, LINAC, 800mA/ 1000 mA X ray (DR), Cath Lab installation and turnkey work may be completed within 45 days from delivery at site or within 45 days of handing over the site for installation, whichever is later.

For delayed delivery and/ or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Part III: Scope of Incidental Services:

Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc. as specified in GCC Clause 13

Part IV:

Turnkey (if any) as per details in Technical Specification.

Part V:

Warranty period as per details in general technical specifications

Comprehensive Maintenance Contract (CMC) as per details in Technical Specification and also specified in part I above.

Part VI:

Required Terms of Delivery and Destination.

a) For Indigenous goods or for imported goods:

At Consignee Site(S)

Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery. Destination/Consignee details are given in Section XXII.

Section – VII
Technical Specifications

[Enclosed as Appendix-A]

SECTION-VII

TECHNICAL SPECIFICATIONS
GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

   a) **Two years Comprehensive Warranty** as per Conditions of Contract of the TE document for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey Work from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Purchaser/consignee.
   b) 98% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
   c) All software updates should be provided free of cost during Warranty period.

2. After Sales Service:

   After sales service centre should be available at the consignee site on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by supplier. Undertaking by the Principals/Manufacturer that the spares for the equipment shall be available for at least 10 years from the date of supply.

3. Training:

   On Site training to Doctors/Technicians/ staff is to be provided by the supplier (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the consignee.

4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey:

   a) The cost of Comprehensive Maintenance Contract **(CMC)** which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted **for next 3 years** on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period
   b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
   c) Cost of CMC will be added for Ranking/Evaluation purpose.
   d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
   e) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
   f) During CMC period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
   g) All software updates should be provided free of cost during CMC.

h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
i) The payment of CMC will be made as stipulated in GCC Clause 21.

Turnkey:

Turnkey is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with Purchaser. Turnkey details are given at the end of Technical Specification. The Turnkey costs shall be quoted in Indian Rupee will be added for Ranking Purpose.
The price will be taken inclusive of duties and taxes and no claim for the same will be entertained later.
The Turnkey Work should completely comply with AERB requirement, if any.

Note 1: Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1(c). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.

Note 2: General: Bidders are requested to make sure that they should attach the list of equipments for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer / Tester for Medical equipments to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipments. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipments checked for electrical safety compliance with Electronic Regional Test Labs / Electronics Test and Development Centres across the country on every preventive maintenance call.

Section – VIII
Qualification Criteria

1. The tendered must be Indian manufacturer or their authorized Indian Agents as per the proforma of Manufacturing Authorization Form given in the tender enquiry document.

2. In case of foreign goods, the tenderer must be authorized Indian Agent of foreign manufacturer as per the proforma of Manufacturing Authorization Form given in the tender enquiry document.

3. The tenderer should have supplied and installed in last **Five** years from the date of Tender Opening, atleast 50% of the quoted quantity of the similar equipment which is functoning satisfactorily any where **in India in Govt. Hospitals/Private Hospitals/PSU Hospitals/UN Agencies.**

4. In support of 3, the Tenderer shall **furnish Performance statement** in the enclosed Proforma 'A' **as well as the Satisfactory Performance Certificate/End-users certificate** of Govt. Hospitals/Private Hospitals/PSU Hospitals/UN Agencies in respect of above, duly translated in English and duly notarized in the country of origin, alongwith the tender.

5. a). Annual Turnover Statement for the last 3 years 2010-11, 2011-12 & 2012-13 duly certified by the chartered accountant bearing their membership no. as per Annexure-XVI.

   b). Tenderer shall submit audited balance sheets for the last 3 years 2010-11, 2011-12 & 2012-13

   c). There should not be loss more than one year out of the above mentioned 3 years.

6. The tenderer shall give an affidavit as under:

   "We hereby certify that if at any time, information furnished by us is proved to be false or incorrecr, we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money."

7. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer's capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.

Section-IX PROFORMA 'A'

PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No. : _____

Date of opening : _____

Time : _____

Name and address of the Tenderer : _____

Name and address of the manufacturer : _____

Order placed by (full address of Purchaser/ Consignee)	Order number and date	Description and quantity of ordered goods and services	Value of order (Rs.)	Date of completion of Contract		Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach documentary proof)**
				As per contract	Actual		
1	2	3	4	5	6	7	8

"We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money."

Signature and seal of the Tenderer

** The documentary proof will be a certificate from the consignee/end user with cross-reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished.

Section – X
TENDER FORM

Date_____

To

CEO, Delhi Cantonment Board,
Delhi Cant.-110010.

Ref. Your TE document No. _____dated _____

We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. _____, dated _____ (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver_____ *(Description of goods and services)* in conformity with your above referred document "for the sum as shown in the price schedules attached herewith and made part of this tender."If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract.
We agree to keep our tender valid for acceptance as required in the GIT clause 20, read with modification, if any in Section - III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.
We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.
We confirm that we fully agree to the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum if any

(Signature with date)

(Name and designation) Duly authorised to sign tender for and on behalf of

SECTION – XI PRICE SCHEDULE

A) PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN

1	2	3	4	5							6
Schedule	Description of Goods (Technical Specifications to be printed below)	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)							Total Price (at Consignee Site) basis (Rs.)
				Ex - factory/ Ex -warehouse /Ex-showroom /Off - the shelf (a)	Excise Duty (if any) [%age & value] (b)	Sales Tax/ VAT(if any) [%age & value] (c)	Packing and Forwarding charges (d)	Inland Transportation, Insurance for a period including 3 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site (e)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (f)	Unit Price (at Consignee Site) basis (g) =a+b+c+d+e+f	4 x 5(g)

Total Tender price in Rupees: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C

Name_____

Business Address_____

Place: _____ **Signature of Tenderer_____**

Date: _____ **Seal of the Tenderer_____**

C) PRICE SCHEDULE FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD

1	2	3	4			5	6
Schedule No.	BRIEF DESCRIPTION OF GOODS	QUANTITY. (Nos.)	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.			Total Annual Comprehensive Maintenance Contract Cost for each unit for 3 years (4a+4b+4c)	Annual Comprehensive Maintenance Contract Cost for 3 Years [3 x 5]
			a	b	c		
			1st	2nd	3rd		

NOTE:-

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for next 3 years on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra. Present rate of taxes to be indicated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
4. Cost of CMC will be added for Ranking/Evaluation purpose.
5. The payment of CMC will be made as per clause GCC clause 21.1 (D).
6. The uptime warranty will be 98 % on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the TE document.
7. All software updates should be provided free of cost during CMC period.
8. The stipulations in Technical Specification will supersede above provisions
9. The supplier shall keep sufficient stock of spares required during Annual Comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Name_____

Business Address_____

Place: _____ **Signature of Tenderer**_____

Date: _____ **Seal of the Tenderer**_____

SECTION – XI PRICE SCHEDULE
D) PRICE SCHEDULE FOR TURNKEY

Schedule No.	BRIEF TURNKEY DESCRIPTION OF GOODS	CONSIGNEE CODE	Turnkey price

Note: -

1. The cost of Turnkey as per Technical Specification (Section VII) may be quoted on lump sum along with taxes applicable on the date of Tender Opening. The price will be taken inclusive of taxes and no claim for the same will be entertained later.
2. Cost of Turnkey will be added for Ranking/Evaluation purpose.
3. The payment of Turnkey will be made as per clause GCC clause 21.1 (c).
4. The stipulations in Technical Specification will supersede above provisions

Name_____

Business Address_____

Place: _____ **Signature of Tenderer**_____

Date: _____ **Seal of the Tenderer**_____

SECTION – XII
QUESTIONNAIRE

Fill up the Section XIX – Check List for Tenderers and enclose with the Tender

1. The tenderer should furnish specific answers to all the questions/issues mentioned in the Checklist. In case a question/issue does not apply to a tenderer, the same should be answered with the remark “not applicable”.

2. Wherever necessary and applicable, the tenderer shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.

3. In case a tenderer furnishes a wrong or evasive answer against any of the question/issues mentioned in the Checklist, its tender will be liable to be ignored.

SECTION – XIII
MANUFACTURER'S AUTHORISATION FORM

To

CEO, Delhi Cantonment Board,
Delhi Cant.-110010.

Dear Sirs,

Ref. Your TE document No _____, dated _____

We, _____ who are proven and reputable manufacturers of_____(*name and description of the goods offered in the tender*) having factories at_____, hereby authorise Messrs_____(*name and address of the agent*) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

Yours faithfully,

[*Signature with date, name and designation*]
for and on behalf of Messrs_____

[*Name & address of the manufacturers*]

This letter of authorisation should be on the letter head of the manufacturing firm.

SECTION – XIV

(To be submitted in Cover A – technical Bid)

AFFIDIVIT FORM

(To be executed on non-judicial stamp paper of requisite value)

I/We…….having My/ our……..office at ……do declare that I / We have carefully read all the terms & conditions of tender of the Delhi Cantonment Board, Delhi Cantt. for the supply of medical equipments. The approved rate will remain valid for a period of one year from the date of approval. I will abide with **all the terms & conditions** set forth in the **Tender Reference No._____.**

I/We do hereby declare I/We have not been deregistered/banned/ de-recognized/ black listed by any State Govt./ union Territory / Govt. of India/ Govt. Organization / Govt. Health Institution/ Public Sector Undertaking (PSUs) for supply of Not of Standard Quality items/ non-supply.

I/We agree that the Tender Inviting Authority can forfeit the Earnest Money Deposit and or Performance Security Deposit and blacklist me / us for a period of 3 years if, any information furnished by us proved to be false at the time of inspection/ verification and not complying with the Tender terms & conditions.

I/We……do hereby declare that I /We will supply the _____as per the terms, conditions & specifications of the tender document. I/We further declare that I / We have a service centre / will establish a service centre within one month of installation of the equipment in Cantonment General Hospital, Delhi Cantt.

Signature of the bidder :

Seal

Date:

Name & Address of the Firm:

Affidavit before Executive Magistrate / Notary Public.

(To be submitted in **Cover A – Technical Bid)**

SECTION-XV

(**To be furnished in the letter head of the Chartered Account**)

ANNUAL TURN OVER STATEMENT

The Annual Turnover for the last three financial years of M/s._____ who is a manufacturer / Authorized Indian Agent of the manufacturer M/s. ……. (Pl. tick whichever is applicable) are given below and certified that the statement is true and correct.

S. No.	**Year**	**Turnover in (Rs.)**	**Net Profit / Loss (Rs.)**
1			
2			
3			
	Average Annual Turnover (for the above three years in **(Rs.)**		

Date:

Place:

Signature of the
Chartered Accountant
(Name in Capital)

Seal

Membership No:

Note: To be issued in the **letter head** of the Chartered Accountant with complete address & contact no.

SECTION – XVI

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

To

CEO, Delhi Cantonment Board,
Delhi Cant.-110010.

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no_____ dated _____ to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of. _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid up to 30 (thirty) months from the date of Notification of Award i.e. up to ---------- (indicate date)

…….
(Signature with date of the authorised officer of the Bank)
…….
Name and designation of the officer
…….
…….
Seal, name & address of the Bank and address of the Branch

SECTION – XVII
CONTRACT FORM - A

CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING OVER, TRIAL RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS ON RATE CONTRACT BASIS

(Address of the Purchaser's/Consignee's
office issuing the contract)

Contract No_____ dated_____

This is in continuation to this office's Notification of Award No_____ dated _____

1. Name & address of the Supplier: _____
2. Purchaser's TE document No_____ dated_____ and subsequent Amendment No_____, dated_____ (if any), issued by the purchaser
3. Supplier's Tender No_____ dated_____ and subsequent communication(s) No_____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:

   (i) General Conditions of Contract;
   (ii) Special Conditions of Contract;
   (iii) List of Requirements;
   (iv) Technical Specifications;
   (v) Tender Form furnished by the supplier;
   (vi) Price Schedule(s) furnished by the supplier in its tender;
   (vii) Manufacturers' Authorisation Form (if applicable for this tender);
   (viii) Purchaser's Notification of Award on Rate Contract Basis

   Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II – 'General Instructions to Tenderers' of the Purchaser's TE document shall also apply to this contract.
5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
   (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of goods/services	Accounting unit	Quantity to be supplied	Unit Price	Total price	Terms of delivery

Any other additional services (if applicable) and cost thereof: _____
Total value (in figure) _____ (In words) _____

2. Delivery schedule

(iii) Details of Performance Security

(iv) Quality Control

(a) Mode(s), stage(s) and place(s) of conducting inspections and tests.

(b) Designation and address of purchaser's inspecting officer

(v) Destination and despatch instructions

(vi) Consignee, including port consignee, if any

3. Warranty clause
4. Payment terms
5. Paying authority

_____

(Signature, name and address of the Purchaser

For and on behalf of_____

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)

For and on behalf of _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

SECTION – XVII
CONTRACT FORM – B
CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Contract No._____ dated_____
Between

(Address of Purchaser)
And

(Name & Address of the Supplier)

Ref: Contract No_____ dated_____ (Contract No. & date of Contract for supply, installation, commissioning, handing over, Trial run, Training of operators & warranty of goods)

In continuation to the above referred contract

6. The Contract of Annual Comprehensive Maintenance is hereby concluded as under: -

1	2	3	4			5
Schedule No.	**BRIEF DESCRIPTION OF GOODS**	**QUANTITY. (Nos.)**	**Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.**			**Total Annual Comprehensive Maintenance Contract Cost for 3 Years [3 x (4a+4b+4c)]**
			1st	**2nd**	**3rd**	
			a	**b**	**c**	

Total value (in figure) _____ (In words) _____

b) The CMC commence from the date of expiry of all obligations under Warranty i.e. from_____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CMC)

c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for next 3 years as contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, _____ & _____) and Turnkey (if any).

d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.

e) During CMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/ technical/ operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.

f) All software updates should be provided free of cost during CMC.

g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5 % of the cost of the equipment as per contract] shall be furnished in the prescribed format given in

Section XV of the TE document, along with the signed copy of Annual CMC within a period of 21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.

h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.

i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.

j) **Paying authority:** _____ (name of the consignee i.e. Hospital/ Institute /Medical College's authorised official)

_____

(Signature, name and address of Purchaser)

For and on behalf of_____

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)
For and on behalf of _____
(Name and address of the supplier)

(Seal of the supplier)
Date: _____
Place: _____

SECTION – XVIII
CONSIGNEE RECEIPT CERTIFICATE
(To be given by consignee's authorized representative)

The following store (s) has/have been received in good condition:

1)	Contract No. & date	:_____
2)	Supplier's Name	:_____
3)	Consignee's Name & Address with telephone No. & Fax No.	: _____
4)	Name of the item supplied	:_____
5)	Quantity Supplied	:_____
6)	Date of Receipt by the Consignee	:_____
7)	Name and designation of Authorized Representative of Consignee	:_____
8)	Signature of Authorized Representative of Consignee with date	:_____
9)	Seal of the Consignee	:_____

SECTION – XIX

Proforma of Final Acceptance Certificate by the Consignee

No_____

Date_____

To

M/s _____

_____

_____

Subject: Certificate of commissioning of equipment.

This is to certify that the equipment(s)/plant(s) as detailed below has/have been received in good conditions along with all the standard and special accessories and a set of spares (subject to remarks in Para no.02) in accordance with the contract/technical specifications. The same has been installed and commissioned.

(a) Contract No_____ dated_____

(b) Description of the equipment(s)/plants: _____

(c) Equipment(s)/ plant(s) nos.:_____

(d) Quantity: _____

(e) Bill of Loading/Air Way Bill/Railway Receipt/ Goods Consignment Note no_____ dated _____

(f) Name of the vessel/Transporters:_____

(g) Name of the Consignee:_____

(h) Date of commissioning and proving test:_____

Details of accessories/spares not yet supplied and recoveries to be made on that account.

Sl. No.	Description of Item	Quantity	Amount to be recovered No.

The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).

The supplier has fulfilled its contractual obligations satisfactorily ## or

The supplier has failed to fulfil its contractual obligations with regard to the following:

He has not adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specifications'.

He has not supervised the commissioning of the equipment(s)/plant(s)in time, i.e. within the period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).
The supplier as specified in the contract has not done training of personnel.

The extent of delay for each of the activities to be performed by the supplier in terms of the contract is
The amount of recovery on account of non-supply of accessories and spares is given under Para no.02.
The amount of recovery on account of failure of the supplier to meet his contractual obligations is_____ (here indicate the amount).

Signature
Name
Designation with stamp

Explanatory notes for filling up the certificate:

i) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.

ii) He has supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the time specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).

iii) Training of personnel has been done by the supplier as specified in the contract.

iv) In the event of documents/drawings having not been supplied or installation and commissioning of the equipment(s) having been delayed on account of the supplier, the extent of delay should always be mentioned in clear terms.

SECTION – XX
CHECKLIST

Name of Tenderer:
Name of Manufacturer:

Sl No.	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
1. a.	Have you enclosed **EMD** of required amount for the quoted schedules?			
b.	In case EMD is furnished in the form of **Bank Guarantee**, has it been furnished as per Section XIII?			
c.	In case Bank Guarantee is furnished, have you kept its **validity** of 165 days from Techno Commercial Tender Opening date as per clause 19 of GIT?			
2. a.	Have you enclosed duly filled **Tender Form** as per format in Section X?			
b.	Have you enclosed **Power of Attorney** in favour of the signatory?			
3.	Are you a SSI unit, if yes have you enclosed **certificate of registration** issued by Directorate of Industries/NSIC			
4. a.	Have you enclosed clause-by-clause **technical compliance statement** for the quoted goods vis-à-vis the Technical specifications?			
b.	In case of **Technical deviations in the compliance statement**, have you identified and marked the deviations?			

Sl No.	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
5. a.	Have you submitted **end user**'s **satisfactory performance certificate** as per the **Proforma for performance statement** in Sec. IX of TE document in respect of all orders?			
b.	Have you submitted **copy of the order(s) and satisfactory performance certificate/end-user certificates**?			
6.	Have you submitted **manufacturer's authorization** as per Section XIV?			
7.	Affidavit Form as per Section-XV			
8.	Annual Turnover Statement as per Section-XVI			
9.	Have you submitted **prices of goods, turnkey (if any), CMC et**c. in the Price Schedule as per Section XI?			
10.	Have you kept **validity of 120 days** from the Techno Commercial Tender Opening date as per the TE document?			
11.	Have you furnished **PAN Copy** as allotted by the Income Tax Department of Government of India?			
12.	Have you intimated the name an full **address of your Banker(s)** along with your Account Number			
13.	Have you fully accepted **payment terms** as per TE document?			
14.	Have you fully accepted **delivery period** as per TE document?			
15.	Have you submitted the **certificate of incorporation**?			

Sl No.	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
16.	Have you accepted the **warranty** as per TE document?			
17.	Have you **accepted terms and conditions** of TE document?			
18.	Have you furnished documents establishing your **eligibility & qualification criteria** as per TE documents?			
19.	Have you furnished Audited **Annual Report (Balance Sheet and Profit & Loss Account) for last three years** (2010-11, 2011-12 & 2012-13) prior to the date of Tender opening for financial assessment?			
20	Have you quoted all the items under the Schedule?			
21	Have you submitted Bid Document along with corrigendum/amendments, if any, duly signed & stamped on each page along with Techno-commercial Bid?			

N.B.

1. All pages of the Tender should be page numbered and indexed.
2. The Tenderer may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender and no column is left blank. If any column is not applicable, it may be filled up as NA.
3. It is the responsibility of tendered to go through the TE document to ensure furnishing all required documents in addition to above, if any.

(Signature with date)

(Full name, designation & address of the person duly authorised sign on behalf of the Tenderer)
For and on behalf of

(Name, address and stamp of the tendering firm)

Section – XXI
Consignee List

Consignee/Hospital	Contact Address.
Cantonment General Hospital, Delhi Cantt.-110010	CMO, Cantonment General Hospital, Delhi Cantt.-110010

Section XXII

COMPLIANCE FORM –I (COMMERCIAL)

Schedule Ref. (1)	Name of the Equipment with Tender Specifications (2)	Compliance of parameter/ specification (3)	Non-Compliance of parameter/ specification (4)	Remarks for Sr.No.(4) (5)
1	Tender Fee			
2	Bid Security			
3	Solvency Certificate			
4	Manufacturer Authorization			
5	Product Catalogue(s)			
6	Income Tax Certificate/Return			
7	Banker's Name and Address			
8	Bid Form accepting terms and conditions of contract/ warranty etc			
9	Compliance certificate			
10	Bid validity Period			
11	Balance Sheet Enclosed			
12	TIN No.			
13	Annual Turnover Statement for last 3 years			

The information given above is factual & based on the enclosures and details provided in the tender document.

Signature of the bidder & seal

COMPLIANCE FORM- II (TECHNICAL)

This information to be filled in as per the following format by all the bidders for each equipment bid by them and duly signed and to be submitted along with the techno-commercial bid:

Schedule Ref. **(1)**	**Name of the Equipment with Tender Specifications** **(2)**	**Compliance of parameter/ specification** **(3)**	**Non-Compliance of parameter/ specification** **(4)**	**Remarks for Sr.No.(4)** **(5)**

The information given above is factual & based on product specification details as per the latest catalogues/ product data sheets and technical literature enclosed.

Signature of the bidder & seal

APPENDIX-A

ITEM-WISE SPECIFICATIONS

1. Anaesthesia Work Station

Equipment Specifications for Anaesthesia Workstation

1. Anaesthesia Workstation is used for delivering anaesthesia agents to the patients during surgery. The complete unit also monitors the vital signs and ventilates the patient

2. a) Anaesthesia Workstation complete with Anaesthesia gas delivery system.;Circle absorber system.;Precision vaporiser for halothane,isoflurane and Sevoflurane ;Anaesthesia ventilator. Monitoring system to monitor Anaesthetic gases,ECG, EtCO2, Pulse Oximeter and airway pressure,NIBP, IBP (No as required) , rectal/&skin temperature.
b) Essential accessories to make the system complete
2.1 Demostration of the equipment is a must.

3. Technical Specifications
3.1 Flow management
1. Should be Compact, ergonomic & easy to use
2. Machine should provide electronic gas mixing.
3. Multi-color TFT display of at least 12‖ size, with virtual flow meters for O2, N2O or Air
4. Dual flow sensing capability at inhalation and exhalation ports.
5. Should have back-up O2 control which provides an independent fresh gas source and flow meter Control in case of electronic failure.
6. Gas regulators shall be of modular design/ graphic display
7. One no. yoke each for Oxygen & Nitrous Oxide. Separate Pipeline inlet for Oxygen , Nitrous Oxide and Air
8. Hypoxic Guard to ensure minimum 25% O2 across all O2-N2O mixtures and Oxygen Failure Warning
3.2 Breathing system
2. Latex free fully autoclavable.
3. Flow sensing capability at inhalation and exhalation ports, sensor connections shall be internal to help prevent disconnect.
4. Sensor should not require daily maintenance.
5. Bag to vent switch shall be bi-stable and automatically begins mechanical\ ventilation in the ventilator position.
6. Adjustable pressure limiting valve shall be flow and pressure compensated.
3.3 Vaporizers
1. New generation Vaporizer must be isolated from the gas flow in the off position and prevent the simultaneous activation of more than one vaporizer.
2. Vaporizer should mount to a Selectatec manifold of 2 vaporizers, which allows easy exchange between agents. Temperature, pressure and flow compensated vaporizers and Maintenance free - for Isoflurane,Halothane, and Sevoflurane
3.4 Ventilation
1. The workstation should have integrated Anesthesia Ventilator system.
2. Ventilator should have Volume Control and Pressure Controlled and SIMV modes.
3. Ventilator should have a tidal volume compensation capability to adjust for losses due to compression, compliance and leaks; and compensation for fresh gas flow.
4. The workstation should be capable of delivery of low flow anesthesia.

5. Ventilator should be capable of atleast 120-150 L/min peak flow to facilitate rapid movement through physiologic ―dead space‖ in the Pressure Control mode
3.5 1. Anesthesia Monitoring Specifications:
a. Monitoring of vital parameters:ECG,NIBP,SPO2 and two Invasive Blood Pressure.
b. Twin temperature measurement with skin and rectal probes- Two sets with each monitor
c. Automatic identification and measurement of anesthetic agents, EtCO2, O2 and N2O and MAC value. FiO2 measurement
d. Depth of Anesthesia Monitoring module - one per monitor with 50 sensors with each monitor
e. Neuromuscular Transmission Monitoring with all accessories. One set with each monitor
f. Cardiac Output measurement facility by thermo dilution technology with all accessories- one set for three monitors.
g. 24hrs of graphical and numerical trending
h. Should have Hemodynamic, Oxygenation and Ventilation calculation package
i. Should include inbuilt Anaesthesia record keeping software facility in all OT monitor to document anesthesia event using standardized menu based entries.
j. Facility to store snapshots during critical events for waveform review at a later stage
k. Audio visual and graded alarming system
2. Display of Ventilator:
a. Tidal volume (VT))
b. Inspiratory/expiratory ratio (I:E)
c. Inspiratory pressure (Pinspired)
d. Pressure limit (Plimit)
e. Positive End Expiratory Pressure (PEEP)
3.6 Centralised Monitoring and Networking:
1) Central Monitor with Ethernet Networking of all the OT Monitors withLaser Printer and with client computer in office of Doctor Incharge , for browsing real time waveforms, graphical & numerical trend upto 24 hrs, from each OT Monitor.
2) Web Browsing feature for browsing near real time waveforms and graphical & numerical trend upto 24hrs remotely through telephone dial in facility.
3.7 Automatic Recording System

4. System Configuration Accessories, spares and consumables
4.1 Anaesthesia Gas Delivery system -01
4.2 Circle absorber -01
4.3 Ventilator -01
4.4 Monitor -01
4.5 Vaporiser Halothane -01
4.6 Vaporiser Sevoflurane -01
4.7 Vaporiser Isoflurane -01
4.8 Adult and Paediatric autoclavable silicone breathing circuits -02 ea
4.9 Reusable IBP Transducer -04
4.10 Disposable domes-100
4.11 Temp probe Skin reusable- 02
4.12 Temp probe Rectal Reusable-02
4.13 Accessories Anesthetic gases-01 set
4.14 Depth of Anesthesia Sensors-50
4.15 Accessories for Cardiac Output module- 01 set
4.16 Accessories for neuromuscular transmission monitor- 01 set
4.17 Standard accessories to make all parameters working- 01 set

4.18 Disposable Adult & Paediatric circuits- 50 ea.
4.19 HME filters.- 50
4.20 Vital Parametrer Accessories-01 Set

5. Environmental factors
5.1 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
5.2 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
5.3 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
5.4 Safe disposal system of waste anaesthetic gases should be either in place or should be recommended along with the bid if not available. Supplier will be held responsible if this is not ensured at the time of installation.

6. Power Supply
6.1 Power input to be 220-240VAC, 50Hz,/440 V 3 Phase as appropriate fitted with Indian plug
6.2 Resettable over current breaker shall be fitted for protection
6.3 Suitable Servo controlled Stabilizer/CVT
6.4 UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system

7. Standards, Safety and Training
7.1 Should be FDA or CE approved product
7.2 Electrical safety conforms to standards for electrical safety IEC-60601 /IS-13450
7.3 Manufacturer should be ISO certified for quality standards.
7.4 Certified to be compliant with IEC 60601-2-13-Medical Electrical equipment part 213: Particular requirements for the safety of Anaesthesia Workstations
7.5 Should have local service facility .The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
7.6 All imported components like anaesthesia machine, monitor and ventilator should be from one manufacturer/principal.
7.7 Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.
7.8 Comprehensive warranty for 2 years and provision of CMC for next 5years.

8. Documentation
8.1 User Manual in English
8.2 Service manual in English
8.3 List of important spare parts and accessories with their part number and costing
8.4 Certificate of Calibration and inspection from the factory
8.5 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
8.6 List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.7 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/data sheet. Any point if not substantiated with authenticated catalogue/manual, will not be considered.
8.8 Must submit user list and performance report within last 5 years from major hospitals.

2. Dental Unit & Accessories:

Sr.No.	Description of items of work	Unit
1	**Dental Unit for Cantonment General Hospital, of the following specifications** **Technical Specifications** **Dental Unit** with Over Head continental delivery system consisting of: 1) 3 way syringe (sterilisable) 2) 3 way assistant syringe 3) 2 high speed terminals with one fiber optic air rotor 4)Titanium based air rotor H/P with quick disconnect coupling and one mini head air rotor H/P (400000 RPM) 5) 1 Air micro motor terminal with H/P with straight and contra angle hand piece. 6) LED light cure unit 7) Infection control system with Non retraction valves (Bio-system) & removable and autoclavable holders protecting hand pieces 8) Medium vacuum suction and canula only for high vacuum 9) Cool white LED Operating Light 10) Six programmable working positions 11) Spitting and last position 12) Emergency stop control 13) X-Ray viewer with light generated by LED 14) Arm rest option of fixed, lateral 90 degree swivel available 15) Multifunctional foot control (base fixed or mobile) 16) Two stools(doctor's & assistant's) with adjustable backrest tilt includes an adjustable for Indian condition) 17) Operating voltage 105V to 250 volts (specially designed for Indian condition) 18) Maximum height 90 cm-minimum height 45 cm 19) With gear/Hydraulic motors. 20) TFT Screen maunted on the unit arm	one
2	**Compressor** **-Oil free medical grade (Noise free) suitable for driving the dental unit (oil free 1.0 HP)**	One

Sr.No.	Description of items of work	Unit
3	**<u>Dental X-ray unit with the following Specifications:</u>** **<u>(Sattelec/Kodak/Carestream)</u>** 1) Mobile x-ray mounted on a very stable base with rounded lines, reinforced casters with a transversal brake stability and mobility with wall mounting/ movable stand. 2) Intra oral x-ray Unit 70KW/7 MA tube 3) Intra oral dental Radiography (Compatible with RVG) 4) Manufactured with International Safety standards 5) With Pantographic arm with vertical and horizontal smooth movements. Fully imported soft positioning arms for accurate tube positions.Great lightness and flexibility in the movements Head swivel head allows easy positioning of the head 6) Head tube and cone are internally lead Coated to avoid scattered radiation. 7) High voltage generator with high efficiency in the emission of the x-rays 8) Digital control equipped with an easy ready display indicating with precision the selected time. 9) Exclusive angular indicating system for precise head positioning in various radiography techniques.	One

4	Piezoelectric Scalar, Sattelec/EMS 1) Based on piezoelectric technology 2) High power turbo mode and low power perio mode 3) Having torque, tool for tightening of the tip 4) Having titanium tip adapter 5) Automatic smart power feedback control 6) Basic vibration frequency of 50 KHZ and 7) Four tips and one endodontic kit (complete with files)	One
5	Motorized suction Having direct drainage System	One
6	Digital Dental Imaging system (R.V.G) 1) Sensor thickness should be around 3 mm to 4mm in Thickness 2) Outer dimension not more than app 35mm x 25 mm. 3) 100 % active area 4) Appr. 2500000 pixels 5) CCD Technology protected optical fiber/CMOS technology 6) Reduction in Radiation as compared to x-ray films up to 90% 7) USB connectivity with computer 8) Compatible with PC 9) User friendly software 10) Protective sheaths are provided 1000. 11) Resolution around 20 LP/MM	One

3.Diode Dental Laser:

Specification of Diode Dental Laser for Cantonment General Hospital, Delhi Cantt.

Sr.No.	Description of items of work	Unit
1	**<u>Diode Dental Laser</u>** ➢ 800-1064 Nm, 5-12 watts diode lasers as class 4 laser ➢ Operator trg in at least Module-1 by Society of Laser Application (India). ➢ Customizable presets for different Dental Treatment modules. i. Number of customized presets to be mentioned. ii. Number of treatment presets to be mentioned. ➢ Continous and pulsed supply module. i. Pulse intervals to be mentioned ii. Pulse deviation to be mentioned. ➢ Hand piece to be autoclavable. ➢ AC input range. ➢ Wireless pedal. ➢ The Unit should be compliant with the following regulation: a) UL-60601-1 b) FCC parts 15 & 18 (47 CFR) c) IEC-60825-1 d) IEC-60601-2-22 e) 21CFR 1040.10 & 1040.11 f) IC-RSS 2101 ➢ Should have Bleaching hand piece. ➢ Should have Cutting Fiber hand piece. ➢ Permanent hand piece. ➢ Eye Wear protection goggies.	One

4. ICU Ventilator

1 Description of Function
1.1 ICU ventilators provide artificial respiratory support to the critical patients in the Intensive Care Units.

2. Operational Requirements
2.1 Microprocessor Controlled ventilator with integrated facility for Ventilation monitoring suitable for New born to adult ventilation.
2.2 Demonstration of the equipment is a must.

3. Technical Specifications
3.1 Standard hinged arm holder for holding the circuit
3.2 Colored TFT screen, 12 Inch or more
3.3 Facility to measure and display
a. End tidal CO2 with capnography.
b. 3 waves- Pressure and Time, Volume and Time and Flow and Time.
c. 3 loops- P-V, F-V, P-F with facility of saving of 3 Loops for reference.
d. Graphic display to have automatic scaling facility for waves
e. Status indicator for Ventilator mode, Battery life, patient data, alarm settings, clock etc
3.4 Trending facility for 72 hours with minimum 5 minutes resolution for recent 24 hours
3.5 Automatic compliance & Leakage compensation for circuit and ET tube
3.6 Following settings for all age groups.
a. Tidal Volume
b. Pressure (insp)
c. Pressure Ramp
d. Respiratory Rate
e. SIMV Respiratory Rate
f. CPAP/PEEP
g. Pressure support
h. FIO2
i. Pause Time
j. Pressure & Flow Trigger
3.7 Monitoring of the following parameters
a. Airway Pressure (Peak & Mean)
b. Tidal volume (Inspired & Expired)
c. Minute volume (Inspired and Expired)
d. Spontaneous Minute Volume
e. Total Frequency
f. FIO2 dynamic
g. Intrinsic PEEP and PEEPi Volume
h. Plateau Pressure
i. Resistance & Compliance
j. Use selector Alarms for all measured & monitored parameters
3.8 Modes of ventilation
a. Volume controlled
b. Pressure Controlled
c. Pressure Support

d. SIMV (Pressure Control and volume control) with pressure support
e. CPAP/PEEP
f. Inverse Ratio Ventilation
g. Advanced mode like pressure controlled volume guaranteed/dual modes/PRVC/Auto flow
h. Non Invasive ventilation
i. APRV
3.9 Apnea / backup ventilation
3.10 Expiratory block should be autoclavable and no routine calibration required
3.11 Should have the ability to calculate / Procedure
a. Intrinsic Peep & Intrinsic PEEP Volume
b. Occlusion Pressure
c. Spontaneous Breathing trial
d. Facility to calculate lower and upper inflection point (OPTIONAL)
3.12 Nebuliser with capability to deliver particle size of < 3 micron & to be used in both Off and On line
3.13 Automatic Patient Detection facilities preferable
3.14 Technical Specifications for reusable face mask & nasal mask. Reusable face & nasal mask with textured dual flap silicone cushion flap for easy fit. Removable forehead support and pad to match the angle of patient‘s forehead Stability Selector for easy fit and angle. Ball & Socket headgear attachments. Should be autoclavable.
3.15 Battery backup for minimum 1 hour
3.16 RS 323C interface for communications with networked devices.
3.17 Automatic patient detection facility preferable.

4. System Configuration Accessories, spares and consumables
4.1 ICU Ventilator - 01
4.2 Adult and Paediatric autoclavable silicone breathing circuits – 02 each
(a) Reusable Masks (Small, Medium, Large) with each machine. -02 sets each
4.3 (b) All Accessories for non-invasive ventilation – 2 sets
4.4 Medical Air Compressor. (Optional)

5. Environmental factors
5.1 The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%
5.2 Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
5.3 The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%

6. Power Supply
6.1 Power input to be 220-240VAC, 50Hz
6.2 Suitable Servo controlled Stabilizer/CVT
6.3 Resettable overcurrent breaker shall be fitted for protection
6.4 Suitable UPS with maintenance free batteries for minimum one hour back up should be supplied with the system.

7. Standards, Safety and Training
7.1 Certified to be compliant with ANS/IEC60601.2.12-01 Medical Electrical Equipment—Part 2-12; Particular Requirements for the Safety of Lung Ventilators—Critical Care Ventilators

7.2 Should be FDA or CE approved product
7.3 Certified to be compliant with ISO-7767 for Oxygen monitoring.
7.4 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
7.5 Demonstration of quoted equipment model is a must.
7.6 Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
7.7 Comprehensive warranty for 2 years and provision of CMC for next 5 years.
7.8 Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.

8. Documentation
8.1 Certificate of calibration and inspection from factory.
8.2 List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.3 User Manual in English Y-11016/158/2010-PC/ECC, Y-11016/158/2010-PC/ECC Page No. 73
8.4 Service manual in English
8.5 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company service engineer should be clearly spelt out.
8.6 List of important spare parts and accessories with their part number and costing.
8.7 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.
8.8 Must submit user list and performance report within last 5 years from major hospitals.
8.9 Back to back comprehensive warranty to be taken by the supplier from the principal to supply spares for minimum 10 years.

5. ICU MONITORS:

Technical Specifications of I.C.U Monitors are mentioned below:

1. ICU Monitors having integrated non-invasive, invasive measurements & features suitable for Neonate, Pediatrics & Adult patients. Should come with separate probes and leads for each age group.

2. Monitor should have high resolution 19" or more integrated color, TFT, touch Screen display. Should be able to display at least 6 wave forms along with related numerical parameters on single screen.

3. Should be able to monitor ECG, NIBP, SpO2, Respiration, 2 Temperature, 2 IBP and side stream Capnography

4. Respiration – Display of respiration waveform with respiration rate using impedance pneumography principle. User selectable apnea alarm delay: 5-90 sec.

5. ECG Monitoring: 3/5/12 Lead, Cascade ECG Waveform HR Range 20-300 bpm, authenticated arrhythmia detection, authenticated ST segment analysis.

6. Capnography - Side stream Module, Capnography with numeric display of EtCO2, FICO2 & Respiration

7. Non-Invasive Blood Pressure (NIBP)- Measurement and display of Systolic, Diastolic & Mean Pressure values of NIBP measurement through Oscillometric method for adult, child and neonate, Mode: Manual, STAT(Continuous 5min. operation) and automatic selectable interval 2-90 minute

8. Monitor must be ready to connect for CO & CCO Noninvasive Continuous Cardiac Output measurement (invasive & non invasive methods), BIS, TOF.

9. Must have graded & Color coded (in different colors) visual /audio alarms

10. The monitor should have facility for enlarge numeric format with multiple layout of screen.

11. Should have full disclosure for user selectable waveforms facility as standard. Must have following features as standard event recall, minimum of 72 hours graphical and tabular trends, , alarm logs. Monitor with time linked review function will be preferred.

12. It should have drug, oxygenation, ventilation and homodynamic calculation packages. drug dose calculations Lung function calculation & Oxy CRG also should be present

13. Facility to interface to external slave monitor.

14. Should be capable to take print of any review data from any bedside monitor through network printer.

15. The unit should have a battery backup of minimum 120 minutes along with battery charge indicator.

16. All monitors must be ready for Central station and it should have facility/ capability to access patient information residing on the hospital intranet as standard feature.

17. Should have facility to interchange all the modules/ servers between all the monitors, so that one or more optional modules/ servers can be operable on all monitors at different point of time.

18. Monitor must be US FDA and European CE approved.

19. Each monitor to be supplied with following:
    a. 3and 5/6 Leads ECG electrode cable- 05 no. each
    b. Pulse oximeter probes with cables 20 (5 adult, 5 pediatric , 5 neonatal)
    c. Adult SpO2 sensor – 01 no. each
    d. NIBP cuff 20 (10 adult, 5 Paed, 5 neonatal)
    e. Temp Probe – 02 no (Skin & esophageal one each).
    f. Disposable pressure Transducer Domes 50
    g. Reusable pressure transducers– 10 no's.
    h. Compatible Cables for disposable pressure transducers - 10

6. Syringe Infusion Pump:

Technical Specifications of Syringe Infusion Pump are mentioned below:

1. It should be Light Weight (<5 kg), Compact & should be able to work on standard disposable syringes of 10, 20 & 50/60 ml sizes of different makes. Volumetric accuracy must be within ± 2% with syringes.

2. Programming : Should be ml/hr & time x volume limit.

    a) Should have flow rate programmable from 0.1 to 999 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate with soft touch key button/knob option.
    b) Volume Limit should be 999.9 ml.
    c) Bolus rate should be programmable to 900 ml/hr or more for 50 ml syringe. Purge volume should continue to be delivered till the bolus key/keys are pressed with continuous display of bolus volume infused.

3. Should have drug library for at least for 30 drugs.

4. Should have pre alarms such as End of Infusion, visual & sound alarms like Syringe Positioning error, occlusion, infusion completed, syringe error, programming error, Block error, clamp error, low battery etc.

5. Should have CHECK facility for the programmed parameters in case of occlusion or alarms.

6. Special Functions Like: Clear Volume.

7. Should have a clear LED display to observe parameters and with indications (audio/visual) for pump running and paused from distance of 8-10 feet.

8. Should have comprehensive alarm package including: Occlusion limit exceed alarm, Near end of infusion pre-alarm & alarm, Volume limit alarm, Low battery alarm, AC power failure alarm, Drive disengaged and Non operative time exceeded alarm.

9. Must have occlusion pressure at least 3 levels with marking indicator.

10. Keep Vein Open (KVO) must be available1ml/ 2 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.

11. Should have front loading method for syringes with auto size detection. Fluid ingress due to leakage in the system should be absent.

12. Should have selectable occlusion pressure trigger levels selectable from 100 - 900 mmHg.

13. Should have rechargeable battery having at least 9 hours backup for 5ml/hr flow rate with 50ml syringes.

14. Should have infrared interface/RS232 port to integrate with Patient Data Management System (PDMS) / Hospital Information System (HIS).

15. Should be US FDA or CE for European norms approved product and Manufacturer should be ISO certified for quality standards.

16. Should meet IEC-60601-1, General Requirements of Safety for Electromagnetic Compatibility

17. Should meet IEC 529 Level 3 (IP3X)/IP22 (spraying water) for enclosure protection, water ingress.

18. Certified for meting IEC60601-2-24: Particular requirements for the safety of infusion pumps and controllers

19. Classification type BF, Class II

20. Power input to be 220-240VAC, 50Hz

21. Accessories - One communication rack system for 04 pumps to allow power & communication centralisation, so that all the 04 pumps can be connected to PDMS/HIS with one cable. Price to be quoted separately for each communication rack system.

7. Washer Disinfector:

Technical Specifications of Washer Disinfector with Accessories are mentioned below:

1. Should be capable of processing and disinfecting all types of instruments and OT eqpt including hollow instruments and scopes. The process shall include prewash, wash and thermal disinfection cycle separated by rinse cycles and followed terminally by drying cycle .Thermo disinfection - by attaining temperature of 93°C and holding the temp through programmable length of time.

2. The unit shall be suitable for electrical operation and would be complete with water circulation pump, necessary valves & fittings.

3. Should be Micro-processor controlled thermal washer disinfector dryer to ensure correct program sequence and irregularities or deviations which are displayed immediately

4. Double wall construction and thorough insulation to reduce heat loss and save on electricity.

5. Double door drop down/ sliding with safety locks. Double doors should be made of HST tempered glass/stainless steel for see through & should facilitate the loading process.

6. Chamber Capacity: Operational Volume should be at least 225 L. Should supply **10 Nos** of large DIN trays (480mmX250mmX50mm). The chamber should be made of SS 316L quality with electro polished washed surfaces. The chamber edges should not have the pockets & folds so as to avoid bacterial growth. Chamber should have self cleaning tank with rounded edges. The wash chamber should also be fitted with bright light for clear visibility of the washing process. Chamber dimension should suit the capacity.

7. Washer should have following feature :
    a) Washing pump with high flow rates of 400 – 600 L/min and effective spray pressure for cleaning equipments.
    b) Wash carts should be equipped with cleansable spray arms between each shelf so as to facilitate water to reach all the surfaces which needs to be cleaned.
    c) Baskets injection connection system to the washing water pipe sending water directly into objects hollow to be treated in order to guarantee thermo disinfection.
    d) The washer should be equipped with independent temperature monitoring and validation test port.
    e) Data interface RS232 should be available.
    f) Washer should be equipped with audible alarm that alerts if error code occurs.
    g) The washer should have Automatic Detergent Dispensing System for programmable dispensing of 3 (detergent, alkaline & lubrication) for process chemicals, instrument lubricants/ enzymatic cleaners
    h) Water connections-Nos – 3, for cold, warm and RO (reverse osmosis) water
    i) Built in hot air drying system with heat exchanger & HEPA filtration with adjustable time and temperature settings.
    j) Recirculation pump filters -Triple water filter system/ built in self cleaning debris filter to capture residues and prevent recirculation as well as save pump life.

8. The washer should perform:
    a) Pre-rinses with cold water.
    b) Main washes with hot water (60C) and detergent.
    c) Final rinse with water (55C)
    d) Disinfection with hot water (85C)

9. The Vendor should provide
    a) Boiler for preheating RO water
    b) One compatible/suitable Reverse Osmosis (RO) water generation system alongwith an automatic distribution pump required for the equipment.

10. Unit to have LCD display and operating console to have membrane key pad for durability.

11. Unit should feature safety measures such as:
    a) Automatic door lock.
    b) Automatic temperature regulation.
    c) Electronic adjustment of water level
    d) Should have Audio visual alarms for cycle start, finish and alarms.
    e) Should have critical event log for eqpt malfunction

12. The unit should also have an interface as standard for an optional batch printer.

13. Should ensure essential washing accessories:
    a) Instrument loading trolley with wheels – Qty 02.
    b) Instrument holding baskets- DIN standard made of corrosion proof SS316 Qty -10.
    c) Mobile unit for MIS Instruments and mobile unit for Anaesthesia instruments – One each.
    d) Mobile unit for Surgical Instruments - Qty One.
    e) Stop valves, anti-suction device and plastic water trap.
    f) Should provide necessary consumables for 100 cleaning cycles.

14. Ratings /connections
    a) Standard electrical connection (international) 400-440 Vac 3phase + N / 50Hz
    b) Noise level < 60 dB
    c) Capable of functioning at ambient temp -5-50deg C.
    d) Breathe pipe/steam vent

15. Standards & Norms:
    a) Should be **US FDA/European CE certified.**
    b) Manufacturer should be ISO 13485:2003/ EN ISO15883/ISO9001.
    c) Eqpt should comply with international guidelines for decontamination **– EN ISO 15883-1/2 OR HTM 2030.**

8. Sealing Machine:

Technical Specifications of Sealing Machine – Plain Sealer are mentioned below:

1. Rotary heat sealers should provide validated sealing of sterilization bags and clear-view pouches (paper/plastic laminate).

2. It should be microprocessor-controlled.

3. The rotary heat sealer should give documentation of process parameters via an integrated printer and could be integrated with documentation system.

4. The ergonomically design should be tilted forward for increased user convenience and space saving installation.

5. The sealer housing should be powder-coated and the control panel is of the flat-membrane type for easy cleaning.

6. It should be operationally simple. When a bag is fed into one side of the machine, the machine should start automatically or by pushing a button moving the bag through the machine and applying pressure and heat to form a perfect seal.

7. The warm-up time should not exceed 30 seconds and the feed speed should be approx. 10 m/min.

8. The temperature should be adjustable from 50–200°C with a tolerance of 1% of the set value.

9. It should be regulated by a heating element that is highly sensitive to temperature fluctuations assuring even temperature and perfect seals.

10. It should offer a number of additional features including:

    a) Automatic start-up .
    b) Reverse feed function in case an instrument accidentally enters the sealing area .
    c) Energy-saving stand-by mode .
    d) Pre-set temperatures .
    e) Re-settable counter function .

11. Rotary heat sealers come with a port and cable for connection of the sealer to a PC and printer enabling monitoring and documentation of the entire process.

12. Should have a protection mechanism against overheating and start prevention at temperature deviations outside +/- 5° C tolerance.

13. Rotary heat sealer should be European CE /US FDA / ISO certified.

9. **Defibrillators:**

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

2. Operational Requirements
2.1 Defibrillator should be Bi- Phasic, light weight and latest model
2.2 Should monitor vital parameters and display them
2.3 Should print the ECG on thermal recorders.
2.4 Should work on Manual and Automated external defibrillation (AED) mode Manual selection up to360 J.
2.5 Should be capable of doing synchronized & asynchronized cardioversion
2.6 Can be operated from mains as well as battery
2.7 Should have defibrillator testing facility
2.8 Demonstration of the equipment is a must.

3. Technical Specifications
3.1 Should be a Low Energy Biphasic defibrillator monitor with Recorder, having capability to arrest all arrhythmia within a maximum energy of 360 Joules
3.2 Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles. Should have Automatic Lead switching to see patient ECG through paddles or leads
3.3 Should measure and compensate for chest impedance for a range of 25 to 125 ohms
3.4 Should have a built in 50mm strip printer/ thermal recorder
3.5 Should have charging time of less than 3 seconds for maximum energy. Charging indicator should be there.
3.6 Should have bright electroluminescent display for viewing messages and ECG waveform of 4 seconds
3.7 Should have external & internal paddles with paddles contact indicator – for good paddle contact. Single Adult and pediatric paddles should be available.
3.8 Should have event summary facility for recording and printing at least 250 events and 50 waveforms. Patient data storage 90 mins of ECG and events.
3.9 Should have a battery capable of usage for at least 90minutes or 30 discharges.
3.10 Should be capable of printing Reports on Event summary, configuration, self-test, battery capacity etc
3.11 Should have facility for self-test/check before usage and set up function
3.12 Should have SP02 and NIBP integrated facility
3.13 Should be capable of delivering energy in increments of 1-2 joules up to 30J and increments of maximum 50J thereafter.
3.14 Should have user friendly 1,2,3 color coded operation.
3.15 Voice prompts on AED mode
3.16 Printing reports of events summary configuration/set test/ battery capacity
3.17 Optional noninvasive pacing/ transcutaneous pacing

4. System Configuration Accessories, spares and consumablesSl Name
4.1 Defibrillator -01

4.2 Paddles Adult/Paediatric (pair) -01
4.3 Paddles –Internal (pair) -01
4.4 Patient cable -02
4.5 ECG Rolls -50
4.6 Disposable pads-10 nos.
4.7 NIBP Cuff Adult – 02 NIBP Cuff Paediatrics- 02 NIBP Cuff Infants- 02
4.8 Reusable SPO2 Finger Probe-Adult -02
Reusable SPO2 Paediatric Finger Probe - 02
4.9 Complete set of ECG Leads- 02

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

6. Power Supply
6.1 Power input to be 220-240VAC, 50Hz
6.2 Resettable overcurrent breaker shall be fitted for Protection

7. Standards, Safety and Training
7.1 Should be FDA or CE approved product
7.2 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)
7.3 Drop Test-Withstands 1 meter drop to any edge, corner or surface.
7.4 Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.
7.5 Should meet IEC 529 Level-2 (IP2X) for enclosure protection solid foreign object ingress.
7.6 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
7.7 Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

8. Documentation
8.1 User Manual in English
8.2 Service manual in English
8.3 List of important spare parts and accessories with their part number and costing
8.4 Certificate of calibration and inspection from factory.
8.5 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
8.6 List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.7 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
8.8 Must submit user list and performance report within last 5 years from major hospitals

10. **Transport Ventilator:**

Technical Specifications of Transport Ventilator are mentioned below:

1. **Broad Specifications**

   a) Microprocessor turbine controlled electrically driven intensive care ventilator adult and paediatric.

   b) Should be possible to operate from a varicty of power sources including AC power (220), rechargeable external/internal batteries (Lithium ion/ Nickel-cadmium battery or equivalent standard).
   c) Should have invasive & Noninvasive ventilation with leakage compensation.
   d) Ventilator should weight not more than 5kg (five kg) .

2. **Modes:** Should have the following modes :-

   a) PCV (pressure controlled ventilation) / PACV (pressure assisted controlled ventilation)
   b) CV (controlled volume)/ ACV (assisted controlled volume)
   c) SIMV (synchronous intermittent mandatory ventilation).
   d) PSV-S(pressure support ventilation) / PSV-ST (pressure support with apnea backup rate).
   e) CPAP (continuous positive pressure)
   f) Should have target tidal volume available with all dual pressure modes .
   g) Ramp control for pressure modes
   h) Should have availability to change the flow pattern in volume control (rectangle and decelerate)
   i) Should have automatic adjustment of flow at airway pressure for delivering set tidal volume.

3. **Parameter settings:**

   a) Tidal volume : 50-2000ml
   b) Rate: 4-60bpm .
   c) Inspiratory flow rate:10 to 200 liter/min.
   d) SIMV rate 2-40 bmp.
   e) PEEP: 2-20mbar .
   f) Pressure support - ASB: 0-40 cm H2O relative to PEEP .
   g) Inspiration pressure: 0-100 mbar .
   h) I/E ratio:1.0-3.0
   i) Inspiratory time control cycle 0.1-0.3 sec (time cycke operation).
   j) FiO2 measurement from 21 to 100% .
   k) Flow trigger 3-15 liter /min (adults) & 0.15-15 liter/min (pediatrie).

4. Must have in-built O2 blender with sensor. Should provide oxygen enrichment on both low (0.5 psi) and high-pressure (40 to 60 psi) oxygen supply source.

5. Should have built in air supply.

6. Should have double limb ventilation.

7. Should have battery back up for at least 10 hours.

8. Should have both pressure and flow trigger.

9. Display **(real time)**:
    a) Should display ventilator parameters: inspired positive airway pressure (IPAP) expired positive airway pressure (EPAP), inspired tidal volume, leak , breath rate, FiO2, SpO2, I/E, inspiratory time. Peak pressure. Plateau pressure, CPAP/PEEP. Inspired minute volume.
    b) Must display real time pressure and flow waveforms with
    c) Should have history browse facility.
    d) Should display pressure volume loop and flow volume loop.

10. Must include respiratory diagnostic software package and display:
    a) Dynamic Lung Mechanics (Compliance, Resistance and mean air way pressure)

11. Must provide 24 Hours trending and browsing of monitored parameters.

12. Alarms

    a) Should have minimum & maximum inspired tidal volume alarm.
    b) Should have minimum exhaled tidal volume leak maxi alarm.
    c) Should have fr(frequency) maxi .
    d) Should have min &maxi inspiratory time alarm.
    e) Should have alarms for high/low peak pressure, apnea, external power low/ failure, disconnection, PEEP not set, low battery /fail.high /low minute volume and oxygen line failure.
    f) Alarm silence & reset facility should be available.

13. **Ventilator should be supplied with following accessories**:

    a) Adult breathing cricuits 4 sets.
    b) Pediatric breathing eircuits 4 sets.
    c) Rechargeable batteries 2 sets.
    d) Base to mount ventilator .

11. Patient Trolley:

Technical Specifications of Patient Trolley are mentioned below:

1. Overall Size: 1905 mm L x 710 mm W x 660-910 mm H with a X-ray permeable removable stretcher. Stretcher dimension 1830 mm L x 555 mm W.

2. Two section top. Backrest raised on ratchet.

3. Height adjustment shall be obtained by hydraulically operated, mono-block type, linear actuator pump, foot-operated actuation having stroke of 140+/- 5mm, push-force 10KN at 270 bar, number of complete pump stroke 22 to 24 for full stroke length.

4. Quick trendelenburg as well as reverse trendelenburg positions shall be provided with easily accessible operating handle provided with two gas springs for easy action.

5. SS saline rod with 12mm dia. SS rod shall telescope into SS socket tube 15.8 mm dia x 18G welded on angular base bracket of 14G SS sheet.

6. Nylon bracket provided to prevent colour damage. It could be placed at four different locations.

7. It shall have a pair of Stainless steel tuck down type railings made of 19mm dia x 18G tube fitted with M.S. brackets
    a) Effective railing height above main frame is 235 mm & length of the railing is 1175 mm.

8. Trolley should have sliding X-ray cassette holder, storage tray covered handles ,oxygen cylinder arrangement.

9. Complete with corner buffers one on each corner

10. Trolley shall
    a) Be mounted on 125mm dia non-rusting imported castor wheels; two with brakes and two without.
    b) Castor housing and wheels made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.

11. All mild steel components should be thoroughly in-house pretreated chemically to remove rust, grease, oil, etc. by dip-tank processes.

12. The treated metal surface should then be coated in-house with epoxy polyester powder with paint film thickness of 60 microns (minimum) and oven baked at 180 deg. to 200 deg. centigrade. All SS used should be of 304 grade.

13. Suitable 4” thick latex free, cleanable, washable breathable , non-staining mattress should be supplied with the trolley with cover and pillow.

12. I.C.U Beds:

1. Description of Function
1.1 ICU Beds are required in the Intensive Care for comfort &safety of the patient and to facilitate comfortable transfer to and fro emergency/OT/Wards etc. It is also required to carry out point of care procedures including radiological procedures at the bedside.

2. Operational Requirements
2.1 The system should be electrically operatable and adjustable for heights, trendelenburg etc. It should also be having radiotransluscent top for carrying out X-Ray at the bedside.
2.2 Demonstration of the system is a must

3. Technical Specifications
3.1 Should have four section mattress base
3.2 Should have X-Ray translucent back section made up of high pressure laminate.
3.3 Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed.
3.4 Base frame & support frame should be made up of Stainless steel for long life & prevention from rusting .
3.5 Should have stepless electrical adjustment for the following :-
a. Height: 450-840 mm
b. Back section: 0- 50 degrees
c. Leg Section: 0-30 degrees
3.6 Should have step-less pneumatic adjustment for Trendlenburg (25°C approx.), anti-trendlenburg (15°C approx.)
3.7 Should have a manual quick release mechanism for back section adjustment during emergency situation
3.8 Should be equipped with four articulated half-length tuck away side rails
3.9 Should be equipped with large castors (diameter 150 mm) with central braking and steering facility.
3.10 Mattress of the Bed should be made up of high density foam with Anti-Microbial agent incorporated into all components that assists in Prohibiting growth of bacteria & fungi and easy to clean.
3.11 Mattress should be fully Radiolucent for ease in performing portable X-Rays.
3.12 Should have bumpers at all four corners and place for fixing accessories
3.13 Dimensions of bed:
Length: 2200 -2290 mm
Width: 850 -1020mm
Mattress Size: appropriate as per bed size

4. System Configuration Accessories, spares and consumables
4.1 I.C.U Bed Mainframe perforated heavy gauge sheet
4.2 Heavy Gauge & total weight of Bed
4.3 Bed Ends, detachable: 01 pair
4.4 Articulated half-length tuck away side rails : 04 Nos.
4.5 IV Rods: 04No.s
4.6 Mattress 12 cm Thick: 01 No.

5. Environmental factors

5.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

6. **Power Supply**

6.1 Power input to be 180-270VAC, 50-60Hz as appropriate fitted with Indian plug

6.2 Resettable over current breaker shall be fitted for protection

7. Standards, Safety and Training

7.1 Electrical safety conforms to standards for electrical safety IEC-60601 /IS-13450

7.2 Should be FDA or CE or BIS approved product

7.3 Manufacturer should have ISO certification for quality standards.

7.4 Electric Shock Protection level-Class-B

7.5 Electric current Protection- Class -1

7.6 Certified to be compliant with IEC 60601-2-38 Medical Electrical Equipment part 2-38 Particular requirements for safety of electrically Operated Hospital Beds

7.7 Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

7.8 Comprehensive warranty for 2 years and provision of CMC for next 5 years.

8. **Documentation**

8.1 Certificate of Calibration and inspection from the factory

8.2 List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.

8.3 List of important spare parts and accessories with their part number and costing

8.4 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

8.5 Service manual in English

8.6 User manual in English

8.7 Must submit user list and performance report within last 5 years from major hospitals.

13. Warming Blankets:

Technical Specifications of Warming Blankets are mentioned below:

1. The convective air patient warming system should have a basic warming unit and disposable blankets.

2. The convective air patient warming system should have fast warming, reaching 38°C within 30 sec.

3. The warming system should have temperature range settings of 30°C to 34°C, 36°C to 40°C and 42°C to 46C°.

4. The warming system should have an automatic step down facility. After 45 min temperature will come down from high mode to medium mode.

5. Should have Hepa filter of 0.05 micron filtration efficacy.

6. Machine should have multiple mounting options: Cart, Bedrail, IV Pole and floor.

7. Machine should be on castor wheels or with a stainless steel movable trolley for mobile purpose.

8. Machine should have hour meter to understand total run time.

9. Machine should have auto power-cut facility to control the set pressure and sensors to prevention patient burn.

10. Should be European CE / US FDA certified.

11. The blankets for the convective air patient warming system:

    a) Should be compatible with the basic warming unit.
    b) Should be lighter and resistance to puncture and fluids.
    c) Should latex free, made of 2 ply material – non -woven outer layer and polyethylene inner layer. They should be precision dye cut to have an even airflow and smooth surface.
    d) Should be non conductive, non irritable & must confirm flammability standards.
    e) Should be disposable available in sizes – Adult upper body, Adult lower body, Adult Full Body, Cardiac Blanket, Pediatric blanket

14. Multi-Para Monitors:

BBQRS FOR MULTIPARAMETER MONITORS

Serial No.	Specifications
1.	Monitor shoud have high resolution 12" or more integrated color, TFT, preferably touch Screen display. Should be able to display at least 6 wave forms.
2.	Should be able to monitor ECG, NIBP, SpO2, Respiration, 2 Temperature, 2 IBP and side stream Capnography.
	a) ECG Monitoring 3/5/12 Lead, Cascade ECG Waveform HR Range 20-300 bpm, arrhythmia detection, ST segment analysis
	b) Pulse Oximetry (SpO2)-Display of plethysmograph with pulse strength & SpO2 values.
	c) Non-invasive Blood Pressure (NIBP)- Measurement and display of Systolic, Diastolic & Mean Pressure values of NIBP measurement through Oscillometric method for adult, child and neonate, mode: Manual, STAT(Continuous 5min. operation) and automatic selectable interval 2-90 minute
	d) Respiration – Display of respiration waveform with respiration rate using impedance pneumography principle. User selectable apnea alarm delay: 5-90 sec.
	e) Temperature – should be able to monitor 2 temperatures simultaneously. The unit selection should be possible.
	f) Invasive Blood Pressure – Should be able to monitor dual IBPs simultaneously.
	g) Capnography – Side stream Module, Capnography with numeric display of EtCO2, FICO2 & Respiration
3.	Should be able to provide 72hrs graphical /tabular trends.
4.	Should display critical alarm summary of elapsed reading.
5.	Suitable for Adult/pediatric/neonatel applications. Should come with separate probes and leads for each age group.
6.	Must have graded & Color coded visual /audio alarms.
7.	User selectable screen formats & user – friendly menu driven functions.
8.	Facility to interface to external slave monitor.
9.	Networking facility with central nursing station
10.	The unit should have a battery backup of minimum 120 minutes
11.	The equipment must conform to relevant, safety general electrical standards for Medical Equipment.

15. BLOOD BANK REFRIGERATOR:

(for blood bank as well as storage)

The Technical Specifications of Blood Bank Refrigerator are mentioned below:

1. **Purpose of Equipment**

   i. A refrigerator for storing whole blood or red cell packs in a blood bank.
   ii. Must be designed specifically for blood bank use. Commercial or modified commercial refrigerators for other purpose are not acceptable.

2. **Type of Equipment:**

   - Approved standard electrical Blood bank refrigerator that uses a compressor circulating CFC-free refrigerant.

3. **Quality Standard**

   i. Manufacturing should be compliant with ISO 13485 and ISO 9001:2008.
   ii. Should be compliant with CE Class IIA and/or US FDA.
   iii. Equipment must meet electrical safety specifications of IEC 61010-1.

4. **Capacity:**

   - At least 300 standard blood bags.

5. **Construction**

   i. Outside C. R. (Corrosion Resistant) Sheet at least 1 mm thick.
   ii. Inside stainless steel of at least 22 G.
   iii. Insulation >50 mm thick, foaming agent CFC free.

6. **Drawers**

   i. Stainless steel, scratch resistant.
   ii. Roll out type.
   iii. At least four or more in number.

7. **Door**

   i. Glass door with full visibility of units without opening door.
   ii. Automatic/Magnetic closing.
   iii. Door opening audio and visual alarm.
   iv. Door lock should be available.

8. **Electrical characteristics**
   i. Compatible with Input voltage: 240V 50 Hz Single phase Ac.

ii. Should have an integrated voltage stabilizer and external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).
iii. Minimum compressor starting voltage should be 22% below normal voltage.
iv. At room temperature of 25°C should be able to maintain at ideal compressor running time of 27%.

9. Internal Temperature

i. Blood Bank Refrigerator should have inside temperature range of 2℃ - 6°C.
ii. User parameter settings: Set point, High alarm point, low alarm point, buzzer off time, C/F unit display choice.
iii. Whatever the load, setting accuracy less than or equal to 0.5°C (preferably 0.1℃).
iv. Should ensure frost free performance thereby avoiding either freezing or heating. If defrosting function used, temperature should not go outside range specified above.

10. External Ambient Temperature:

- Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +30 °C.

11. Hold-Over Time:

- A full load of blood packs at +4 °C (±1 °C) should take more than 1.5 hours to rise to above +6 °C if power off.

12. Cooling Down Time:

- A full load of blood packs at +25 °C should not take more than 13 hrs for all the packs to reach below +6 °C.

13. Temperature monitoring, thermograph and related alarms

i. Protected digital RTD Sensor should preferably be dipped into in a product simulation bottle.
ii. Microprocessor controlled primary temperature control with user defined parameters.
iii. Digital temperature (LED) display with at least 0.5 °C resolution of graduation.
iv. Integrated Visual AND Audible Temperature alarm systems.
v. Provision to be connected to a remote monitoring system and remote alarm.
vi. The temperature record should be electronically logged (USB accessible data logger) and also documented on a physical thermograph; preferably with a 7-day, ink-less, pressure-sensitive circular chart recorder.
vii. Must have Battery backup for temperature recordings which is especially needed during power failure/fluctuations.
viii. Additional Battery backup for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.

14. Air circulation

i. The temperature inside should be kept uniform in all shelves by forced air circulation through fans.
ii. The fans shut off when door is opened.

15. Lighting

i. All shelves should have sufficient illumination so that labels on units can be easily read.
ii. Should have light bulbs/tubes that can be changed without removing the drawers.

16. Additional requirements:

i. All equipment should specify qualifications for design, installation, operation and performance.
ii. Validation and calibration reports should have traceability to applicable national and international standards.
iii. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer and a suitable UPS with maintenance free batteries for minimum one-hour back-up for each equipment should be supplied with the system.
iv. Warranty for 2 years and CMC/AMC for three years with spare parts availability.
v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
vi. Necessary catalogues technical write up in English should be attached with the offer both in hard and electronic copies.
vii. Performance, efficiency & other factors as applicable should be furnished.
viii. Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
ix. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
x. Should provide a set of equipments for calibration (eg; thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
xi. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

16. Deep Freezer:

The Technical Specifications of Deep Freezer are mentioned below:

1. **Purpose of Equipment**

   i. To Freeze or store Plasma.
   ii. Must be designed specifically for blood bank use. Commercial or modified commercial freezers for other purpose are not acceptable.

2. **Type of Equipment:**

   - Approved standard electrical Blood Bank plasma freezer that uses a compressor circulating CFC-free refrigerant.

3. **Quality Standard**

   i. Manufacturing must be compliant with ISO 13485, and ISO 9001:2008.
   ii. Should be compliant with European CE Class IIA and/or US FDA.
   iii. Equipment must meet electrical safety specifications of IEC 61010-1

4. **Capacity:**

   - At least 300 standard plasma bags.

5. **Construction**

   i. Outside C. R. (Corrosion Resistant) Sheet at least 1 mm thick
   ii. Inside stainless steel of at least 22 G.
   iii. Insulation polyurethane foam >80mm thick foaming agent.
   iv. CFC free should be mounted on lockable caster wheels.

6. **Drawers:**

   - At least four or more in number.

7. **Door**

   i. Separate inner doors to prevent cold loss.
   ii. Automatic/Magnetic closing of at least inner doors.
   iii. Heating device in front to avoid condensation.
   iv. Opening angle limited (e.g. <135°).
   v. Door open/ajar audio and visual alarm.
   vi. Door lock should be available.

8. Electrical characteristics

i. Compatible with Input 240V 50 Hz Single phase Ac.
ii. Should have an integrated voltage stabilizer and external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).
iii. Minimum compressor starting voltage should be 22% below normal voltage.

9. InternalTemperature

i. Should be able to maintain internal temperature not warmer than -30°C.
ii. Whatever the load setting accuracy less than or equal to 1°C.
iii. Automatic defrosting if present, temperature should not go outside safe range.

10. External Ambient Temperature:

- Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +30 °C.

11. Hold-Over Time

i. A full load of plasma packs at -36 °C takes at least 1 hr to rise to above -20 °C.
ii. A full load of plasma packs at -36 °C takes at least 32 hrs to rise to above -5 °C.

12. Cooling DownTime

i. A full load of plasma packs at +25°C takes a maximum of 5 hrs for all the packs to reach below -5 °C.
ii. A full load of plasma packs at +25 °C takes a maximum of 30 hrs for all the packs to reach below -20 °C.

13. Temperature monitoring, thermograph and related alarms

i. Digital temperature (LED) display with 0.1 °C graduation.
ii. Microprocessor controlled primary temperature control.
iii. Integrated Visual and Audible Temperature alarm systems,
iv. There should be a method to test the alarm system.
v. Alarm history: temperature maximum and minimum, average temperature during alarm period, time of duration of alarm.
vi. Provision to be connected to a remote monitoring system and remote alarm.
vii. The temperature record should be electronically logged (that can be retrieved eg by USB port) and also documented on a physical thermograph; preferably with a 7-day graphic chart recorder with supply of free charts for full period of warranty.
viii. Must have Battery backup for temperature recordings which is especially needed during power failure/fluctuations.
ix. Additional Battery backup for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm for.

14. Desirable:

- At room temperature of 25°C should be able to maintain at ideal compressor running time of <60-70%.

15. <u>Additional requirements:</u>

i. All equipment should specify qualifications for design, installation, operation and performance.
ii. Validation and calibration reports should have traceability to applicable national and international standards.
iii. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer and Suitable UPS with maintenance free batteries for minimum one-hour back-up for each equipment should be supplied with the system.
iv. Warranty for 2 years and CMC/AMC for Three years with spare parts availability.
v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
vi. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
vii. Performance, efficiency, other factors as applicable should be furnished.
viii. Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
ix. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
x. Should provide a set of equipments for calibration (eg thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
xi. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

17. MICROSCOPE:

The Technical Specifications of Binocular Microscope are mentioned below:

The microscope should have a sturdy base and be fitted with standard outfit as below:

1. Objective - Achromatic, spring loaded - 4x (NA 01); 10x (NA 0.25); 40x (NA 0.35); 100 x (NA1.25) (Oil immersion)-one pair each.

2. Eye pieces- 5 x, 10 x-one pair each.

3. Inbuilt arrangement of illumination halogen lamps fitted directly under field lenses (Koehler's system).

4. Transformer and other electricals fitted inside the base with extra mirror attachment.

5. Condenser- Bright field Abbe's NA 1.25 and dark field NA 1.25.

6. Nosepiece - quadruple, revolving on smooth ball bearing.

7. Power supply - 220/240 volts, 50 cycles, single phase.

8. Inclination angle - to be declared by the bidder.

9. Spare Halogen Lamps - 6 Nos. to be supplied with each microscope.

10. Technical Literature - The firm shall positively submit printed illustrated technical Literature/leaflet indicating the model quoted by them. If quoted model is a modified version of their any standard product that also shall be indicated in the offer.

11. Warranty : The warranty and maintenance contract should be for a period of at least 3 years along with spare parts.

18. CENTRIFUGE:

The Technical Specifications of Bench Top Centrifuge are mentioned below:

1. Capacity: 16-24 up to 15 ml.

2. Built in time: (1 minute ± 5 seconds) and speed regulator, ± 20 rpm with suitable speed indication and lid lock system.

3. RPM: 500 to 5000 rpm.

4. Power supply - 220/240 volts, single phase, 50 cycles plus minus 12 AC.

5. A line voltage corrector of suitable rating should form part of the configuration as per IS: 9815/89 or latest amended.

6. Installation, commissioning and trail run will be the responsibility of the supplier.

7. Technical literature - The firm shall positively submit printed illustrated technical Literature/leaflet indicating the model quoted by them. If quoted model is a modified version of their any standard product that also shall be indicated in the offer.

8. Warranty : The warranty for 2 years from date of installation followed by comprehensive Annual maintenance contract including spare parts for subsequent four years.

19. BLOOD BANK TRANSPOSITION BOX (COLD CHAIN BOXES)

The Technical Specifications of Blood Bank Transposition Box are mentioned below:

1. **Purpose of Equipment**

   i. To transport Blood Component including Fresh Frozen Plasma in vehicles that may or may not have sufficient electric outlet.
   ii. Must be designed specifically for blood component transportation use.

2. **Quality Standard**

   i. Both manufacturer and distributor/service provider should be ISO 9001:2008 compliant.
   ii. Should be compliant with European CE or US FDA for this specific purpose.

3. **Operational Requirements**

   i. Should have a Battery backup of at least 4-6hrs, and should be chargeable by Mains/Car battery.
   ii. All the internal corners should be rounded to make easy any cleaning operation
   iii. Insulation should CFC-free.
   iv. Should be high thickness value, the refrigerators should maintain the internal temperature for long time beyond when its battery backup is exhausted.
   v. For easy handling of the portable refrigerator there should be handles and there should either be inbuilt wheels or an attachable trolley.
   vi. Lid should be fully insulated and fitted up with a perimetric rubber gasket, with a special locking device (granting a perfect seal).
   vii. Internal partitioning and securing should be possible for easy handling and preventing damage to fragile FFP units during tilting/harsh transport conditions.
   viii. Temperature range: infinitely adjustable between +10 C to –18C.
   ix. Adjustable thermostat should be present to set for different temperatures for different transport functions eg +4°C for RBC and -18°C for FFP, and the present temperature and set temperature both should be displayed.
   x. Cooling unit should have a hermetically sealed compressor and should be industrial grade granting the maximum reliability and safety during transport.
   xi. Refrigerant should be CFC-free.
   xii. Should be able to store at least 30-40 bags.
   xiii. Voltages: both 12/24 V and 220-230V/1 phase /50 Hz.
   xiv. Connecting cables (included): for both the voltage (12/24V and 220-230V).

4. **Additional requirements:**

i. All equipment should specify qualifications for design, installation, operation and performance.
ii. Validation and calibration reports should have traceability to applicable national and international standards.
iii. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer with the charging set.
iv. Warranty for 2 years and CMC/AMC for Three years with spare parts availability.
v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
vi. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
vii. Performance, efficiency, other factors as applicable should be furnished.
viii. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
ix. Should provide a set of equipments for calibration (eg thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
x. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

20. PHARMACEUTICAL FREEZER

The Technical Specifications of Pharmaceutical Freezer are mentioned below:

1. Structure should be external structure in hot – dip galvanized steel, anti- corrosion treated and white PVC film coated with Stainless steel internal structure.

2. Minimum storage capacity of 500 litres.

3. Insulation must be 60 mm of insulation obtained by injection of high density ecological polyurethane CFC – free foam for excellent product preservation and best energy saving.

4. Door of Self – closing glass door (double insulating – low emissivity glass) with folding magnetic gasket on four sides for perfect closing, Right hand opening with full length handle & lock with key.

5. Minimum 4 Drawers with sliding drawers.
6. Light should be LED (energy saving up to 70%, ecological) with automatic switch at door opening. Manual switch on control panel.

7. Range of temperature between $+2^{o}$ C and $+10^{o}$ C Factory preset to $+4^{o}$ C.

8. Refrigeration system should be completely sealed, silent and highly efficient hermetic com45r pressure and ventilated air condenser (suitable also for topical countries). Internal ventilated evaporator. This system forcing air circulation ensures to provide uniform temperature inside the refrigerator even in case of frequent door openings. Evaporator fan shuts off during door openings. CFC – free refrigerant.

9. Defrosting Fully automatic defrosting cycle and auto evaporation of condensed water.

10. Control panel and alarms Microprocessor control panel with easy-to-read digital LCD 4”/7” display showing inside temperature it has a PT1000 probe. Audible and visual alarms including: high and low temperature (adjustable threshold), open door, condenser efficiency, damaged probes, power failure, low battery.

11. Data logger to download temperatures and alarms registered in last 60 days on USB pen drive.
12. Back up battery Self-powered back up battery supplying energy to generate alarms in case of power failure.

13. Standard fitting are: 4 Drawers, Four one- way wheels and two stabilizing adjustable feet, power cord with Schuko type plug or British type plug, Protection fuses, RFI filter, Main power switch, Electronic control panel with alarm system. Back up battery for Display. Remote contact (dry, volt-free) for alarm, USB port and Memory for last alarms.
14. Product must have certificate for medical devices according to directive ISI, CE & FDA.
15. Supplier must have service center in Delhi.

16. Must have 3-5 installation in Government sector in Delhi of offered model.

21. AGITATOR & INCUBATOR:

The Technical Specifications of Agitator & Incubator are mentioned below:

1. **Purpose of Equipment**

   i. To continuously agitate platelet concentrate in an even suspension in a temperature controlled environment +22 °C ±2 °C in standard platelet bags (random unit or apheresis).
   ii. Must be designed specifically for blood bank use. Commercial or modified commercial incubators for other purpose are not acceptable.

2. **Type of Equipment**

   i. Flatbed agitator fitted inside a temperature controlled incubator that uses CFC-free refrigerant and CFC free insulation material.

3. **Quality Standard**

   i. Manufacturing should be compliant with ISO 13485, and/or ISO 9001:2008.
   ii. Should be compliant with European CE Class IIA and/or US FDA
   iii. Equipment must meet electrical safety specifications of IEC 61010-1

4. **Capacity:**

   - At least 96 standard random platelet unit bags.

5. **Construction**

   i. Outside C. R. (Corrosion Resistant) sheet preferably coated with bacteria resistant material
   ii. Inside stainless steel.
   iii. Insulation foaming agent CFC free

6. **Drawers and agitator**

   i. Nonslip corrosion resistant drawers coated with bacteria resistant material
   ii. Drawers perforated to ensure good air circulation
   iii. The agitator holding the shelves is suspended in such a way as to ensure minimum noise for the life of the agitator.
   iv. Gentle side to side agitation at 1.5 inch (3.6–4 cm) and 60– 70 strokes/min.
   v. Heavy duty ball bearing gear motor for noiseless and continuous operation for 24 hours a day 365 days a year
   vi. Auto-pause of agitator on opening door
   vii. Push button switch to pause agitator

7. **Door**

i. Glass door with full visibility of units without opening door
ii. Door lock should be available

8. Electrical characteristic cs

i. Compatible with Input 240V 50 Hz Single phase Ac
ii. Should have an integrated voltage stabilizer or external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).

9. Internal Temperature

i. Platelet agitator should have inside temperature range of 20°C - 24°C
ii. Whatever the load, setting accuracy less than or equal to 0.5°C (preferably 0.1°C).
iii. Should ensure frost free performance thereby avoiding either freezing or heating. If defrosting function used, temperature should not go outside range specified above.

10. Temperature monitoring, thermograph and related alarms

i. At least 1 temperature sensor.
ii. Digital temperature (LED) display with 0.1 °C graduation.
iii. Integrated Visual AND Audible alarm systems for temperature, motion failure, sensor failure, agitator off, power failure
iv. Provision to be connected to a remote monitoring system and remote alarm.
v. The temperature record should be electronically logged (that can be retrieved eg by USB port) and also documented on a physical thermograph; preferably with a 7-day, graphic chart recorder with supply of free charts for full period of warranty.
vi. Must have Battery backup for temperature recordings which is especially needed during power failure/fluctuations
vii. Additional Battery backup for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.

11. Air circulation

i. The temperature inside should be kept uniform in all shelves by Forced air circulation through fans.

12. Additional requirements:

i. All equipment should specify qualifications for design, installation, operation and performance.
ii. Validation and calibration reports should have traceability to applicable national and international standards
iii. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer and Suitable UPS with maintenance free batteries for minimum one-hour back-up for each equipment should be supplied with the system.
iv. Warranty for 2 years and CMC/AMC for Three years with spare parts availability.

v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
vi. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
vii. Performance, efficiency, other factors as applicable should be furnished.
viii. Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
ix. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
x. Should provide a set of equipments for calibration (eg thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
xi. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

22. THAWING SYSTEM:

The Technical Specifications of Thawing System are mentioned below:

1. **Purpose:**

   - The Cryo Bath is designed for rapid and uniform thawing of fresh frozen plasma bags at 4 ºC +/- 0.2 ºC such that the cryoprecipitate remains solid, and a cry supernatant liquid is formed that can be transferred out of the bag in order to manufacture cryoprecipitate units.

2. **Operational Requirements**

   i. Floor standing system, mounted on lockable castors.
   ii. Should be able to thaw ten to twelve plasma units (FFP ~200-300 ml) at a time.
   iii. Should have Stainless Steel Tank of 22G, and an insulated lid covered with 20G Stainless Steel.
   iv. Should be fitted with compartments that have removable rack/tray system for securely holding the plasma bags and ensuring that entry ports are not contaminated with water.
   v. Should be a microprocessor controlled water bath based system operating at a temperature at 4 ºC +/- 0.2 ºC or alternative can also be safely set at 37 ºC +/- 0.2 ºC.
   vi. Digital, electronic system with provision for programmable temperature adjustment setting with LED display with temperature resolution of 0.1 ºC
   vii. Programmable temperature range covers 3-50 ºC.
   viii. Should not take more than 2 hours at full loads to thaw the plasma into cry supernatant.
   ix. Should have a deep thawing chamber with a stirrer for water circulation & gentle rocking for uniform heating
   x. Should have a system to drain the chamber without lifting or tilting, and should be fitted with a shut off valve.
   xi. The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90% without getting rusted.
   xii. Compatible with Input voltage: 240V 50 Hz Single phase Ac
   xiii. Should have an integrated voltage stabilizer or external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).
   xiv. Resettable over current breaker shall be fitted for protection.

3. **Quality standards**

   i. Manufacturing should be compliant with ISO 13485 and ISO 9001:2008.
   ii. Should be compliant with European CE Class IIA and/or US FDA
   iii. Equipment must meet electrical safety specifications of IEC 61010-1

4. **Additional requirements:**

i. All equipment should specify qualifications for design, installation, operation and performance.
ii. Validation and calibration reports should have traceability to applicable national and international standards.
iii. Complete with comprehensive set of spare parts, and a suitable capacity voltage stabilizer and Suitable UPS with maintenance free batteries for minimum one-hour back-up for each equipment should be supplied with the system.

iv. Warranty for 2 years and CMC/AMC for Three years with spare parts availability.
v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
vi. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
vii. Performance, efficiency, other factors as applicable should be furnished.
viii. Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
ix. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
x. Should provide a set of equipments for providing calibration (eg thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
xi. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

23. Computer & Printer:

23A. Desktop Computer		
S.No.	Items	Detailed Specification
1	Processor	Intel Core i5 650 (minimum 3.2 GHz or higher)/AMD Phenom II X4 955 (minimum 3.2 GHz or higher) processor
2	Chipset	Intel H57 Express chipset / AMD 785G series or Equivalent Chipset
3	Motherboard	Micro ATX Motherboard
4	Memory	4-GB DDR3 SDRAM 1066-MHz expandable up to 8GB RAM with at least four DIMM slots
5	Hard Disk Drive & controller	320 GB SATA 3Gbps HDD, 7200rpm NCQ . Integrated dual Port SATA-II controller.
6	Optical Drive	Dual Layer DVD –Writer
7	Audio	Integrated HD audio controller
8	Ethernet	Integrated Gigabit Ethernet Controller IPV6 compliant
9	Slots	with minimum two PCI-ex Slots free
10	Ports	1x fast serial port, 4x USB 2.0 ports (2 ports on front), 1xKeyboard port, 1xMouse port
11	System Chassis	Slim Chassis with enough cooling Fans, One free internal Peripheral bay and Suitable Power supply with volume 8-14 liters
12	Monitor	OEM 18.5" TFT LCD Flat/wide monitor with 5 ms response time & TCO05 Certified.
13	Keyboard	104 Keys OEM Keyboard with new Indian Rupee logo & bilingual support & Key Skin Cover
14	Mouse	OEM optical scroll Mouse with mouse Pad
15	Power Management & DMI	System with Power management features & Desktop Management Interface implementation
16	Operating System	Preloaded Windows 7 Professional (64 bit) with DVD media & documentation.
17	Preloaded Software	Norton/McAfee/E-Trust or equivalent Antivirus (Latest Version)
18	Drivers for different Operating systems	Drivers & diagnostic utilities should be made available in optical media.
20	OS Support & Certification	Windows (XP & VISTA) & Linux (latest version)

23B. MULTIFUNCTION PRINTER DEVICE

LaserJet Printer, Scanner, Fax & Copier (All in one) (A4 Size)

Printer

Speed (min.)	43 PPM or higher (A4)
Memory(min.)	256 MB
HDD	40 GB
Technology	Laser
Resolution	1200x1200 dpi
Language support	PCL6, PS2
Interface	USB 2.0 & Ethernet
Monthly Duty Cycle	200000 pages
Printing	Automatic Duplex Printing
Media size support	A4 , legal, letter & envelope
Toner Capacity	In accordance to ISO/IEC std. vendor has to mention the guaranteed yield
Drivers & accessories	Driver CD for Linux & Windows, Power, Ethernet & USB Cable

Scanner with ADF

Flat bed scanning should be possible	
Resolution	600x600 dpi optical

Fax

Modem Speed	33.6 Kbps or more

Copier

Speed	43 CPM/PPM

24. TUBE SEALER:

The Technical Specifications of Tube Sealer are mentioned below:

1. **Purpose of Equipment**

    i. Handheld Blood Bag Tube Sealer is a compact handheld equipment to seal the Blood Bag pilot PVC tubing by transient radio frequency heating and sealing, with no haemolysis.

2. **Quality Standard**

    i. Manufacturing should be compliant with ISO 13485, and ISO 9001:2008.
    ii. Should be compliant with European CE Class IIA and/or US FDA
    iii. Equipment must meet electrical safety specifications of IEC 60601.

3. **Operational requirements**

    i. Should gently seal tubing with no haemolysis, using radiofrequency heating
    ii. Should be capable of making wide seal of at least 2 mm width
    iii. Should be rechargeable battery operated compact (less than 3 Kg) hand held type, not bench top type.
    iv. Sealing time should not be >2 sec
    v. Electrodes should be well protected by a cover to prevent blood splutter.
    vi. Sealing trigger should be automatic (on sensing tube in the slot).
    vii. Should have indicator lamp for sealing process
    viii. No warm up time should be required
    ix. Should have tear-seal feature to make segments that can be easily separated by hand
    x. No. of seals per charge should be more than 1000 continuous seals from a fully charged battery.
    xi. Charger should be compatible with Input voltage: 240V 50 Hz Single phase Ac

4. **Additional requirements:**

    i. All equipment should specify qualifications for design, installation, operation and performance.
    ii. Validation and calibration reports should have traceability to applicable national and international standards.
    iii. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer and surge protector with the charging set.
    iv. Warranty for 2 years and CMC/AMC for Three years with spare parts availability.
    v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
    vi. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.

vii. Performance, efficiency, other factors as applicable should be furnished.
viii. Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
ix. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
x. Should provide a set of equipments for calibration and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
xi. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

25. CROSS MATCHING MACHINE

The Technical Specifications of Cross Matching Machine are mentioned below:

1. **Purpose of Equipment**

   i. Immunohematologic Gel-microcolum-Card-centrifuge to perform manual centrifugation step for Blood Grouping, Cross Matching, antibody screening or identification or phenotyping by coombs and enzyme phase by gel microcolum technique to detect both IgG & IgM antibodies, and also potentially usable for C3d, Partial/weak D, Single Rare antigens, PNH, Heparin/PF4 Ab Test (HIT), Syphilis antibody test etc.
   ii. Must be designed specifically for blood bank use. Commercial or modified commercial centrifuges for other purpose are not acceptable.

2. **Quality Standard**

   i. Manufacturing should be compliant with ISO 13485, and ISO 9001:2008.
   ii. Should be compliant with European CE according to IVD Directive 98/79/EC or US FDA for this specific purpose.
   iii. Equipment must be certified for electrical safety specifications of IEC/TR 61010-3-020: "Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 3-020: Conformity verification report for IEC 61010-2-020:1992 Particular requirements for laboratory centrifuges"

3. **Capacity, Construction and Functioning**

   i. Centrifuge head should have minimum 12 slots to accommodate 12 of corresponding manufacturer's immunohematologic Gel microcolumn cards.
   ii. Swing out suspensions for Gelcard slots
   iii. Aerodynamic compact construction with vibration free performance; Noise level should be less than 60dB.
   iv. Bottom of the microcolumn should have a conical (v) shape, u shaped bottom is not acceptable.

4. **Lid**

   - The lid of the centrifuge should be transparent and should have auto-locking during spinning.

5. **Electrical characteristics**

   i. Must be compatible with Input voltage: 220/240V 50/60 Hz Ac
   ii. Should have an integrated voltage stabilizer or should come with external stabilizer.
   iii. Microprocessor controlled programming with LCD screen displaying Rpm or RCF, time and other functions should be displayed real time.

6. **Additional requirements:**

i. All equipment should specify qualifications for design, installation, operation and performance.
ii. Validation and calibration reports should have traceability to applicable national and international standards.
iii. Complete with comprehensive set of spare parts, and a suitable capacity voltage stabilizer and Suitable UPS with maintenance free batteries for minimum one-hour back-up for each equipment should be supplied with the system.
iv. Warranty for 2 years and CMC/AMC for Three years with spare parts availability.
v. The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
vi. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
vii. Performance, efficiency, other factors as applicable should be furnished.
viii. Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
ix. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
x. Should provide a set of equipments for calibration (eg tachometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
xi. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

26. SURGICAL OPERATING MICROSCOPE
(For Ophthalmology, Major OT)

Retender (IInd Time)
TECHNICAL SPECIFICATIONS

Compact microscope body

High quality apochromatic optics

Should have retina protection device, UV filter, Blue blocking filter, fluorescence filter and contrast enhancement aperture

Objective lens should have focal length f= 200mm, 65mm diameter
Should have motorized Zoom magnification, magnification factor 0.4-2.4X, with facility for manual override

Motorized foot control & motorized X-Y coupling with range of 40mm X 40mm or more. Key for resetting to initial position of X- Y coupling and focus

This should be with automatic recentering and X- Y inversion facility
Inclinable binocular tube with integrating image inverter, facility for IPD adjustment.

Stereo coaxial illumination for unique detail recognition, high contrast & stability of Red reflex even for strongly pigmented, decentered and ametropic eye.

Pair of high eye point wide field push- in (magnetic) eyepieces 12.5X, field of view diameter 18mm or more , diopter setting from -7D to +5D or better, also suitable for spectacles wearers.

Independent integrated binocular assistant microscope with 5 step magnification changer , inclined binocular tube and focusing.It should be without beam splitter with independent illumination path/ optics.

The assistant microscope should be rotable/positionable on both side of surgeon with option to be detached from the microscope
Integrated handgrips

High quality programmable floor stand with large, swivel arm, magnetic breaks and clutches for easy positioning through handles and suspension arm. Load carrying capacity at least 19 kg or more

Stand should have integrated power supply for all motorized functions with display and programmable facility for speeds of zoom, focus, X-Y movements and settings of intensity
Stand should have Xenon illumination.
Foot switch should be water proof or water resistant with at least 12 functions and joystick

All fibreoptics cables should be integrated routed preferably
3 CCD Camera attachments with digital output.

Colour television, video objectives lens, C- mount adapter, Beam splitter 80:20
Wide angled non contact view in system with field of viewing 120 deg(minimum)

27. 3D Colour Ultrasound Scanner with Color Doppler

1. The system should be latest sate of the art high-end with full digital technology and should be for the whole body applications which would include abdominal, peripheral vascular, small parts imaging such as Thyroid, Intra-cavity applications, etc. system should be trolley mounted.
2. The system should incorporate facility for high resolution 2D, 3D, M-mode, PW, HPRF PW, Color Doppler imaging, Power Doppler imaging, Duplex & Triplex imaging modes. The system should be capable of simultaneous dual display of B-mode & color mode.
3. All transducers should have Broad Bandwidth technology for extremely high resolution imaging. Frequency range of Transducers should be 2-17 MHz or more. All transducers should have multifrequency selection (Preferably more than three).
4. The system shall have three universal transducer ports with electronic switching capability allowing any transducer to be connected to any port.
5. The system should have 30000 or more digital processing channels and the system should have 256 Grey Scale or more.
6. The system should have a scanning depth of 28 cm or more.
7. The system should have a high dynamic range more than 180 dB.
8. The system should be able to support at least 3 transducers with universal ports allowing electronic switching between transducers.
9. The system should support Convex, Linear & Sector Probes.
10. The system should have a very high frame rate of at least 500 frames per second in B mode and more than 300 fps in /Color mode. Please specify.
11. The System must have integrated high – resolution TFT/LCD/Single monitor of 19 Inches or more with tilt and swivel facility.
12. The system should have Tissue Harmonic imaging & should be available in Convex, Linear & Sector probes
13. The system should be able to work in combined mode of Harmonic Imaging and Real time Compound Imaging to get excellent Image quality. The system shall offer Tissue Harmonic Imaging in Power Doppler Imaging mode.
14. The system should have contrast Harmonic Imaging and should have optimization settings to detect the Contrast Agents.
15. The system should have real time frequency and Spatial Compound imaging technology with multiple lines of sight to obtain the image at real time frame rates for improved visualization and better image quality.
16. The system should have image processing algorithms to analyze between targets and artifacts to as to sharpen target anatomy and reduce the speckle and artifacts for improved image quality.
17. The system should have a full alphanumeric keyboard.
18. The system should have cine loop review facility in individual and mixed modes cine loop greater than 4000 frames and greater than 30 seconds of spectral Doppler and M mode. System should have 120 GB or more HDD.
19. The system should have the facility of digital storage and retrieval of B/W and color image data on built-in CD/DVD Drive.
20. Power Doppler Angio for perfusion studies should be available for visualization of flow in small vessels and system should be able to acquire flow in small blood vessels at very high frame rate.
21. The system should have automatic gain and STC/TGC controls in B-mode and velocity range and base line shift for Doppler through one touch operation.

22. The system should have trapezoidal imaging and steerable imaging for 2D image, Color box & Doppler with linear probe. Please mention the angle of steering for 2D & Color Box.
23. The system should have Panoramic imaging.
24. The System should be DICOM compatible.
25. The system should have advanced 3D imaging package with the following :
a) Multi planner Views (MPR).
b) Surface & Volume rendering.
c) 3D grey scale (B-mode).
d) 3D power angio mode & 3D Color Doppler Mode.
26. The system should have automatic real time quantification of Doppler Parameters like velocity, frequency, time, heart rate, slope, flow volume, pulsatility index, resistivity index, peak velocity, average volume, point value, area and diameter flow volume etc.
27. The system should have support real time acquisition and display of two image planes simultaneously with color by incorporating electronic volume Transducer for this function.
28. The system should have extensive calculation software package for general measurements, OB/Gynae, Vascular, small parts & cardiac application.
29. Equipment with above mentioned features to be offered with following broad bandwidth probes & accessories:
A. Broad band convex array transducer with frequency range 2-5 MHz +/- 1 MHz or better.
B. Broad band linear array probe with frequency range 6-12 MHz +/- 1 MHz or better.
C. Broad band transvaginal/transrectal probe with frequency range 5-9 MHz +/- 1 MHz or better.
D. Phased Array Sector Probe range 2-5 MHz +/-1 MHz
E. Color Laser Printer.
F. B & W thermal printer with 10 high density paper rolls.
G. Suitable on line UPS for complete unit with 30 min. backup.

28. PAEDIATRIC VENTILATOR:

SPECIFICATION FOR PAEDIATRIC VENTILATOR

1. Microprocessor Controlled integrated suitable for neonate and child ventilation.
2. Should have not less than 10 inch colored TFT screen capable for the monitoring of the ventilation parameters, curves and loops .
3. Should have the automatic compliance, leakage compensation.
4. Should have the facilities for following setting for neonate to child
    a) Tidal Volume(2-250 ml)
    b) Flow Pattern
    c) Inspiration Plateau
    d) Pressure ramp
    e) SIMV Rate
    f) CPAP/PEEP
    g) Pressure Support
    h) FiO2
    i) Pause Time
    j) Inspiration trigger sensitivity to flow & pressure
    k) Base Flow
    l) Sensitivity for cycling to expiration
5. Should have the capability of monitoring of the following parameters,
    a) Airway Pressure
    b) Expired tidal Volume
    c) Minute Volume
    d) Spontaneous Minute Volume
    e) Total Frequency
    f) Fio2
    g) Auto PEEP
    h) Rapid Shallow Breathing Index
    i) Plateau Pressure
    j) Inspiratory & Expiratory Resistance
    k) Static Compliance
    l) Imposed Work of Breathing
    m) Peak, Plateau and mean airway pressure
    n) Plateau Pressure
6. Should have the Alarms (User Selector) for all the measured and monitored parameters.
7. Should have the following Modes of ventilations,
    a) Volume controlled
    b) Pressure Controlled
    c) Pressure Support
    d) SIMV (Pressure Control and volume control) with pressure support.
    e) CPAP/PEEP (0 – 50 CM H20)
    f) Auto mode /Auto flow preferable
    g) PRVC
    h) Biphasic preferable
    i) High frequency ventilation (Optional)
8. Sensors should be automatically calibrated every time it is switched on.

9. Should have the ability to calculate
    a) Intrinsic Peep
    b) Occlusion Pressure
    c) Negative Inspiratory force
10. Other Features
    a) Should have Nebuliser
    b) Should have the servo controlled Humidifier with digital monitoring of inspired gas temperature.
    c) Should have an imported stand-alone air compressor integrated with the Ventilator to provide an oil free Medical air.
    d) CVT as appropriate
    e) Should have silicone autoclave-able two sets of Pediatric hoses.
    f) Should be supplied with imported non-corrosive trolley and hinged arms.
    g) Demonstration is a must.
    h) Comprehensive guarantee for five year.
    i) Comprehensive Annual maintenance contract for five years after guarantee