BIDDING DOCUMENT

(Two Bid System for Machinery & Equipment)

FOR NATIONAL CANCER INSTITUTE ALL INDIA INSTITUTE OF MEDICAL SCIENCES (JHAJJAR CAMPUS)

NIB Ref: HITES/PCD/NCI-AIIMS/28/18-19



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SECTION -I

NOTICE INVITING BIDS (NIB) (GLOBAL)

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Ansari Nagar, New Delhi-110 029

NIB Ref: HITES/PCD/NCI-AIIMS/28/18-19

Procurement & Consultancy Services Division of **HLL INFRA TECH SERVICES LIMITED** (a fully owned subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise) for and on behalf of **Director, AIIMS - New Delhi,** invites e-tenders in two bid system (technical and price bid) from the reputed, eligible & qualified firms/ manufacturers for purchase/supply of following goods at **National Cancer Institute Jhajjar, Haryana (AIIMS, New Delhi-29)**.

					•
Sl. no.	Rfx no.	Short Description of goods	Quantity (Nos.)	Bid Security (BS) (Rs.)	Tender Processing Fee incl. GST (Rs.)
1	3000003282	Blood Bank	1	26,00,000	5,900
Pre-bid conference		Venue for pre-b	id meeting	g	Date & Time of pre-bid meeting
	ting with spective lers	Committee Room, (No. 149), 1st Floor, Dr. BRAIRCH Building, AIIMS, New Delhi-29.			23.08.18 at 02:30 PM
Last tend		of online submission of	14.09.2018 at 12:00 Noon		
Last date and time of physical submission of EMD, Tender processing Fee, any other document specified in the Bidding Document			14.09.2018 at 2:00 PM		
Date of tender Opening			1.	4.09.2018 at 2	:30 PM

2. Interested bidders are advised to download the complete Tender Enquiry document from the websites www.hllhites.com or www.lifecarehll.com or <a href="www.

Project Officer: DVP(PCD), HITES

Email: hll.ncij@hllhites.com

- 3. The prospective bidders have to register with the E-procurement system of HLL at https://etender.lifecarehll.com/irj/portal. On completion of the registration process, the bidders will be provided user ID and password within 48 hours (excluding non-working days). In order to submit the bids electronically, bidders are required to have a valid Class 3-B Digital Signature Certificate (signing and encryption/decryption certificates).
- 4. Bidders are requested to read the bidders help document on e-tender web site link before proceeding for bidding.
- 5. Post receipt of User ID & Password, Bidders can log on for downloading & uploading tender document.
- 6. The bidders shall submit the required Tender Processing Fee (in form of Demand Draft or Banker's Cheque) and EMD (as per GIT clause no. 19.3) in physical form in favour

Contact Person

Dated: 10.08.2018

- of 'HLL Infra Tech Services Limited' at the scheduled time and venue. Tender processing Fee is required from all the bidders irrespective of their registration with NSIC or any other Govt. organisation.
- 7. The online submission of tender(s) can only be done through https://etender.lifecarehll.com/irj/portal
- 8. All prospective bidders (maximum two representative of a firm bearing ID proof issued by their firm) may attend the Pre-bid conference meeting. The venue, date and time indicated above.
- 9. Bidders shall ensure that their tender(s), complete in all respects, are submitted online through HLL's e-portal (as described above) **ONLY. No DEVIATION is acceptable.**
- 10. Tender Processing Fee and Bid Security (BS) in original should be deposited within the scheduled date & time in the Tender Box located at: HLL Infra Tech Services Limited, Procurement and Consultancy Services Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh.
- 11. Prospective bidders are advised to browse the above websites regularly before submission of their bids as any further amendments will be published in these websites only.

CEO (HITES)

SECTION - II

GENERAL INSTRUCTIONS TO BIDDERS (GIB) CONTENTS

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GENERAL INSTRUCTIONS TO BIDDERS (GIB)

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. "Purchaser" means means HLL INFRA TECH SERVICES LIMITED (HITES) for and on behalf of The Director, AIIMS, New Delhi.
- ii. "Bid" means Quotation / Tender received from a Firm / Tenderer / Bidder.
- iii. "Bidder" means Tenderer/ the Individual or Firm submitting Bids / Quotation / Tender
- iv. "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract/purchase order.
- v. "Goods" means all articles, material, commodity, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, vehicles, medicines, assemblies, sub-assemblies, accessories, intangible products like software, technology transfer, licenses, patents or other intellectual properties purchased or otherwise acquired for the use of Government but excludes books, publications, periodicals, etc. for a library. The term 'goods' also includes works and services which are incidental or consequential to the supply of such goods, such as, transportation, insurance, installation, commissioning, training and maintenance.
- vi. "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.
- vii. "Bid Security" (BS) means Earnest Money Deposit / monetary or financial guarantee to be furnished by a bidder along with its tender.
- viii. "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.
- ix. "Performance Security" means monetary or financial guarantee to be furnished by the successful bidder for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
- x. "Consignee" means the Center/Hospital/Department/Sections /person to whom the goods are required to be delivered as specified in the Contract.
- xi. "Specification" also called Technical Specifications means the document/standard that prescribes the requirement with which goods or service has to conform.
- xii. "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 mentioned in the contract to determine conformity.
- xiii. "Day" means calendar day.

1.3 Abbreviations:

- (i) "NIT" means Notice Inviting Tenders.
- (ii) "GIB" means General Instructions to Bidders
- (iii) "SIT" means Special Instructions to Bidders

- (iv) "GCC" means General Conditions of Contract
- (v) "SCC" means Special Conditions of Contract
- (vi) "LC" means Letter of Credit
- (vii) "DP" means Delivery Period
- (viii) "BG" means Bank Guarantee
- (ix) "GST" means Goods & Service Tax
- (x) "CD" means Custom Duty
- (xi) "BL" means Bill of Lading
- (xii) "FOB" means Free on Board
- (xiii) "CIF" means Cost, Insurance and Freight
- (xiv) "CIP (Destinations)" means Carriage and Insurance Paid up to named port of destination. Additionally the 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.
- (xv) "INCOTERMS" means International Commercial Terms as on the date of Bid Opening
- (xvi) "CAMC" means Comprehensive Annual Maintenance Contract (labour, spare and preventive maintenance)

2. Introduction

- 2.1 The Purchaser has issued these Bidding 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 Instructions to Bidders") provides the relevant information as well as instructions to assist the prospective bidders in preparation and submission of bids. It also includes the mode and procedure to be adopted by the bidder for receipt and opening as well as scrutiny and evaluation of bids and subsequent placement of contract.
- 2.3 The bidder shall also read the Special Instructions to Bidders (SIB) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIB and the SIB, the provisions contained in the SIB shall prevail over those in the GIB.
- 2.4 Before formulating the bid and submitting the same to the purchaser, the bidder should read and examine all the terms, conditions, instructions, checklist etc. contained in the Bidding Document. Failure to provide and/or comply with the required information, instructions etc. incorporated in these Bidding Documents may result in rejection of its Bid.

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 Bid

4.1 The bid submitted by the bidder and all subsequent correspondence and documents relating to the bid exchanged between the bidder and the purchaser, shall be written in the English language. However, the language of any printed literature furnished by the bidder in connection with its bid may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the bid, the English translation shall prevail.

5. Eligible Bidders

5.1 This Invitation for Tenders is open to all bidder 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. Bid Expense

7.1 The bidder shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its bid including preparation, mailing and submission of its bid 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 bidding process.

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice Inviting Tender" (NIT), the Bidding Documents include:

Section II - General Instructions to Bidders (GIB)
Section III - Special Instructions to Bidders (SIB)
Section IV - General Conditions of Contract (GCC)
Section V - Special Conditions of Contract (SCC)

Section VI - List of Requirements

Section VII - Technical Specifications & General Points

Section VIII - Qualification Criteria

Section IX - Bid Form

Section X – Price Schedules

Section XI - Check List

Section XII - Bank Guarantee Form for Bid Security Section XIII - Manufacturer's Authorization Form

Section XIV - Bank Guarantee Form for Performance Security/CAMC Security

Section XV - Contract Forms A & B

Section XVI - Proforma of Consignee Receipt Certificate

Section XVII - Proforma of Consignee Acceptance Certificate by the consignee

Appendix A – **Integrity pact**

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for bidding, bid 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 bidders are expected to examine all such details etc to proceed further.

9. Amendments to a Bidding documents

9.1 At any time prior to the deadline for submission of bids, the purchaser may, for any reason deemed fit by it, modify the Bidding Documents by issuing suitable amendment(s) to it.

- 9.2 Such an amendment will be notified through CPPP (eprocure.gov.in/cppp) and/or www.hllhites.com and/or www.lifecarehll.com and will be binding on them.
- 9.3 In order to provide reasonable time to the prospective bidders to take necessary action in preparing their bids as per the amendment, the purchaser may, at its discretion extend the deadline appropriately for the submission of bids and other allied time frames, which are linked with that deadline.

10. Clarification of Bid document

10.1 A bidder requiring any clarification or elucidation on any issue of the Bidding Documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser not later than ten days (unless otherwise specified in the SIB) prior to the prescribed date of submission of Bids.

C. PREPARATION OF BIDS

11. Documents comprising the e-Bid

- 11.1 The bid(s) shall only be submitted online as mentioned below:
 - 1. Technical Bid (Consisting of Techno-Commercial bids in excel format provided with the tender enquiry along with the supporting documents i.e. scanned copies of Tender Processing Fee, BID SECURITY, Eligibility Criteria & Technical Specifications viz. Product Specification Sheets/Brochures, OEM Certificate, etc.) have to be attached in the C-folder of e-tendering module. Bidders have to ensure that the documents uploaded in pdf and/or excel format or as per format instructed elsewhere are legible.
 - 2. Price Bid has to be submitted in the prescribed excel format provided with the tender enquiry.

Note:

- a. The tender Processing fee and BID SECURITY has to be submitted in physical form as per Section I, Notice Inviting Tender of this tender enquiry.
- b. The bidders have to follow the steps listed in Bidding Manual Attachment Modem available in the Bidder Help Documents of e-tender portal login screen for uploading the Techno-Commercial Bid.

A) Techno-commercial Bid (Un-priced Bid)

(Bidders shall furnish the following information along with technical tender in pdf and/or excel format or as per format instructed elsewhere):

- i) Bid Security furnished in accordance with GIB clause 19.1 alternatively, documentary evidence as per GIB clause 19.2 for claiming exemption from payment of Bid Security.
- ii) Bid Form as per Section IX (without indicating any price).
- iii) Documentary evidence, as necessary in terms of clauses 5 and 17 of GIB establishing that the bidder is eligible to submit the bid and, also, qualified to perform the contract if its bid is accepted.
- iv) Bidder who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form. While giving authorization to agent, to quote on their behalf, manufacturer has to give the reasons for

- not quoting directly against this bid in the Manufacturer's Authorisation Form
- v) Power of Attorney in favour of signatory and/or who is digitally signing the bidding documents and signatory of Manufacturer's Authorization Form.
- vi) Documents and relevant details to establish in accordance with GIB clause 18 that the goods and the allied services to be supplied by the bidder conform to the requirement of the bidding documents.
- vii) Performance Statement as per section VIII along with relevant copies of orders and end users' satisfaction certificate.
- viii) Price Schedule(s) as per Section X filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
 - ix) Documents confirming to Sole Proprietorship/Partnership/Private Limited Firm in the country of origin as the case may be.
 - x) Checklist as per Section XI.
 - xi) Copies of GST registration certificate and PAN Card.
- xii) Copies of annual report, audited balance sheet and profit & loss account as per tender requirement.
- xiii) Non conviction /no pending conviction certification issued by Notary on non-judicial stamp paper for preceding three years.
- xiv) Notarized affidavit that bidder does not have any relation with the person authorized to evaluate technically or involve in finalizing the tender or will decide the use of tendered items.
- xv) A self-declaration on Rs. 10/- non-judicial Stamp Paper that the rates quoted in the tender are the lowest and not quoted less than this to any Government Institution (State/Central/ other Institute in India).
- xvi) Technical and Commercial Compliance statement in excel format provided in the e-tender portal.
- xvii) Product catalogues/original Data Sheets for all quoted items.
- xviii) Copies of quality certificates, if applicable, namely, BIS, ISO, FDA, CE, etc.

B) Price Tender:

Prices are to be quoted in the prescribed Price Bid format in excel provided along with the tender enquiry in the e-tender portal. The price should be quoted for the accounting unit indicated in the e-tender document.

Note:

- a) The bidder has to be diligent while filling up the Techno-commercial Bid and Price Bid provided in excel formats and must not tamper the contents of the sheets.
- b) It is the responsibility of bidder to go through the TE document to ensure furnishing all required documents in addition to above, if any.
- c) The bidders have to follow the steps listed in Bidding Manual Attachment Mode available in the *Bidder Help Documents of e-tender portal login screen* for uploading the Price Bid.
- 11.2 The authorized signatory of the bidder must sign the bid duly stamped at appropriate places and initial all the remaining pages of the bid. Individuals signing the bid 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. In case of partnership firm 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.

Note:

- 1. In case of (ii) above, a copy of the partnership agreement duly registered with "Registrar of Firm's" 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 bid and all other related documents must be signed by every partner of the firm.
- 3. A person signing the bid 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, liable for rejection of bid or cancel of contract and hold the signatory liable for all cost and damages.
- 11.3 A bid, 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.

12. Bid Currencies

- 12.1 The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees.
- 12.2 For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed/undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the Price Schedule and will be payable in Indian Rupees only after satisfactory supply, installation and acceptance of the goods. The rate of conversion shall be taken as on the date of placement of purchase order.
- 12.3 Bids, where prices are quoted in any other way shall be treated as non-responsive and rejected.

13 Bid Prices

- 13.1 The Bidder shall indicate on the Price Schedule provided under Section X all the specified components of prices shown therein including the unit prices, applicable taxes and total bid 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 bidder, same should be clarified as "NA" by the bidder.
- 13.2 If there is more than one schedule in the "List of Requirements", the bidder has the option to submit its bid for any one or more schedules and, also, to offer special

discount for combined schedules. However, while quoting for a schedule, the bidder 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 separately in the applicable Price Schedules attached Under Section X.
- 13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:
- 13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding Price Schedule shall be entered separately in the following manner:
 - a) The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including packing charges and GST and Custom Duty 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) Any taxes and duty, which will be payable on the goods in India if the contract is awarded;
 - c) Charges towards 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;
 - d) The price of Incidental Services (including installation & commissioning, supervision, demonstration and training), at the consignee site as mentioned in List of Requirements, Technical Specification and Price Schedule;
 - e) The prices of Turnkey Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - f) The price of CAMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.
- 13.4.2 For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:
 - a) The price of goods quoted on FOB at port/ FCA at airport of shipment, as mentioned in List of Requirements, Technical Specification and Price Schedule
 - b) The amount of Freight and Insurance (port of loading to port of entry) and other incidental costs.
 - c) The price of Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site as mentioned in List of Requirements, Technical Specification and Price Schedule
 - d) The price of Extended Insurance (local transportation and storage) from port of entry to the consignee site for a period including 3 months beyond date of delivery.
 - e) The Unit Price on CIP Name port of Destination + Extended Insurance (local transportation and storage)
 - f) The price of total Price on CIP Named port of Destination +Insurance (local transportation on and storage)
 - g) The prices of Turnkey Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - h) The price of CAMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Taxes and Duties:

13.5.1GST (Goods & Services Tax)

If the bidder desires to ask for GST (goods and services tax) to be paid extra, the same must be specifically stated. In the absence of any such stipulation, the price will be taken inclusive of GST and no claim for the same will be entertained later.

13.5.2 Customs Duty

The Purchaser will pay the Customs duty wherever applicable.

- 13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.
- 13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.
- 13.8 Unless otherwise specifically indicated in this Bidding Document, the terms FCA, FOB, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS 2010, published by the International Chamber of Commerce, Paris
- 13.9 The need for indication of all such price components by the bidders, as required in this clause (viz., GIB clause 13) is for the purpose of comparison of the bids by the purchaser and will no way restrict the purchaser's right to award the contract on the selected bidder on any of the terms offered.

14. Indian Agent

- 14.1 If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, in a manner described under GIB sub clause 12.2 above, shall also furnish the following information:
 - a) The complete name and address of the Indian Agent.
 - b) The details of the services to be rendered by the agent for the subject requirement.
 - c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CAMC period.

15. Firm Price

- 15.1 Unless otherwise specified in the SIB, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- 15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIB clause 13 will apply.

16. Alternative Models

16.1 Alternative Models are permitted. The Bidder can quote alternate models meeting the specifications of the bidding document of same manufacturer with single Bid Security.

- 16.2 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 ATE for the same item/product. In a bid, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same models in the same ATE.
- 16.3 One Principal/OEM cannot authorize two agents simultaneously for the same item against same ATE.

17 Documents Establishing Bidder's Eligibility and Qualifications

- 17.1 Pursuant to GIB clause 11, the bidder shall furnish, as part of its bid, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its bid is accepted.
- 17.2 The documentary evidence needed to establish the bidder's qualifications shall fulfill the following requirements:
 - a) In case the bidder offers to supply goods, which are manufactured by some other firm, the bidder has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The bidder shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIII in this document.
 - b) In case the bidder 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.

18. Documents establishing good's Conformity to Bidding Document.

- 18.1 The bidder shall provide in its bid the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the bid fully conform to the goods and services specified by the purchaser in the Bidding Documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the Bidding Documents to establish technical responsiveness of the goods and services offered in its bid.
- 18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the bidder, the bidder shall list out the same in a chart form without ambiguity and provide the same along with its bid
- 18.3 If a bidder furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its bid will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Bid Security (BS)

19.1 Pursuant to GIB clauses 8.1 and 11.1 A (i) the bidder shall furnish along with its bid, Bid Security for amount as shown in the Notice Inviting Bids (NIB). The Bid Security is required to protect the purchaser against the risk of the bidder's unwarranted conduct as amplified under sub-clause 19.7 below.

- 19.2 The bidders who are currently registered with MSME for the specific goods as per bidding document specification shall be eligible for exemption from Bid Security as defined in MSE Procurement Policy issued by the department of MSME. In case the bidder falls in this category, the bidder shall enclose relevant certificate of registration issued by department of MSME.
- 19.3 The Bid Security shall be denominated in Indian Rupees or equivalent currencies as per GIB clause 12.2. The Bid Security shall be furnished in one of the following forms:
 - i) Account Payee Demand Draft/ Banker's cheque
 - ii) Fixed Deposit Receipt
 - iii) Bank Guarantee
- 19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the bidder, in favour of the "......" (as indicated in the NIB) payable at New Delhi. In case of Bank Guarantee, the same is to be provided from any commercial bank in India or country of the bidder as per the format specified under Section XII in these documents.
- 19.5 The Bid Security shall be valid for a period of forty-five (45) days beyond the validity period of the bid. As validity period of Bid as per Clause 20 of GIB is 270 days, the Bid Security shall be valid for 315 days from Techno-Commercial Bid opening date.
- 19.6 The Bid Security of unsuccessful bidders will be returned without any interest, after expiry of the bid validity period, but not later than thirty days after conclusion of the resultant contract. The Bid Security of successful bidder will be returned without any interest, after receipt of performance security from that bidder.
- 19.7 Bid Security is required to protect the purchaser's right against the risk of the Bidder's conduct, which would warrant the forfeiture of the Bid Security. Bid Security of a bidder will be forfeited, if the bidder withdraws or amends its bids or impairs or derogates from the bid in any respect within the period of validity of its bid or if it comes to the notice that the information/documents furnished in its bid is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The Bid Security of the successful bidder will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.
- 19.8 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalized bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

20. Bid Validity

- 20.1 If not mentioned otherwise in the SIB, the bid shall remain valid for acceptance for a period of 270 days (Two hundred and Seventy days) after the date of bid opening prescribed in the Bidding Document. Any bid valid for a shorter period shall be treated as unresponsive and rejected.
- 20.2 In exceptional cases, the bidder may be requested by the purchaser to extend the validity of their bids up to a specified period. Such request(s) and responses thereto shall be conveyed by mail/fax/email. The bidders, who agree to extend the bid validity, are to extend the same without any change or modification of their original bid and they are also to extend the validity period of the Bid Security accordingly. A

- bidder, who may not agree to extend its bid validity after the expiry of the original validity period, their bid will not be considered further and the Bid Security furnished by them shall be returned.
- 20.3 In case the day up to which the bids are to remain valid falls on/subsequently declared a holiday or closed day for the purchaser, the bid validity shall automatically be extended up to the next working day.

21. Signing and Sealing of Bid

- 21.1 The bidders shall submit their bids as per the instructions contained in GIB Clause 11.
- 21.2 Unless otherwise mentioned in the SIB, a bidder shall submit only one copy of its bid marking it as "Original". Bidders are requested to submit their Bids after binding and page numbering.
- 21.3 The Bid shall either be typed or written in indelible ink and the same shall be signed by the bidder or by a person(s) who has been duly authorized. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the bid.
- 21.4 All the documents of the bid shall be duly signed at the appropriate places as indicated in the Bidding Documents and all other pages of the bid including printed literature (if any), shall be initialled and stamped by the same person(s) signing the bid. The bid shall not contain any eraser or overwriting, except as necessary to correct any error made by the bidder and, if there is any such correction; the same shall be initialled and stamped by the person(s) signing the bid.
- 21.5 The bidder is to seal the bid and writing the address of the purchaser and the bid reference number on the envelopes. The sentence "NOT TO BE OPENED" before ______ (The bidder is to put the date & time of bid opening) are to be written on this envelope. If the envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.
- 21.6 Bidding Document seeks quotation following "Two Bid System", in two parts. First part will be known as Techno-Commercial Bid', and the second part 'Price Bid' as specified in clause 11 of GIB. Bidders shall seal 'Techno-Commercial Bid' and 'Price Bid' separately and covers will be suitably super scribed. Both these sealed covers shall be than put in a bigger cover and sealed and procedure prescribed in Paras 21.1 to 21.5 be followed.

D. SUBMISSION OF BIDS

22. Submission of Bids:

- 22.1 Unless otherwise specified, the bidders are to drop the Bids in the tender box located at **HLL Infra Tech Services Limited**, **Procurement and Consultancy Division**, **B-14 A**, **Sector-62**, **Noida-201307**, **Uttar Pradesh** or the same shall be submitted by the bidder by hand to concerned Project Officer dealing hand or his nominee. The necessary entry will be made in the Bid Receipt Register.
- 22.2 The bidders must ensure that they submit the on-line bids within the scheduled closing date & time. They shall also ensure to submit the original Tender Processing Fee and Bid Security within its scheduled date & time. It is the

responsibility of the bidder to ensure that their Bids 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 bid falls on / is subsequently declared a holiday or closed day for the purchaser, the bids will be received up to the appointed time on the next working day.

23. Late Bid:

23.1 A bid, which is received after the specified date and time for receipt of bids will be treated as "late bid" and will be ignored.

24. Alteration and Withdrawal of Bid

- 24.1 The bidder, after submitting its bid, is permitted to alter/modify its bid, within the deadline for submission of bids. Alterations/modifications to bids received after the prescribed deadline will not be considered.
- 24.2 No bid should be withdrawn after the deadline for submission of bid and before expiry of the bid validity period. If a bidder withdraws the bid during this period, it will result in forfeiture of the Bid Security furnished by the bidder in its bid.

E. BID OPENING

25. Opening of Bids:

- 25.1 The purchaser will open the bids at the specified date and time and at the specified place as indicated in the NIB.
 - In case the specified date of bid opening falls on / is subsequently declared a holiday or closed day for the purchaser, the bids will be opened at the appointed time and place on the next working day.
- 25.2 Authorized representatives of the bidder, who have submitted bids on time may attend the bid opening provided they bring with them letter of authority from their bidder. The bid opening official(s) will prepare a list of the representatives attending the bid opening. The list will contain the representatives' names & signatures and corresponding bidder's names and addresses.
- 25.3 Two Bid System as mentioned in Para 21.6 above will be as follows. The "Techno-Commercial Bids" are to be opened in the first instance, at the prescribed time and date as indicated in NIB. These Bids shall be scrutinized and evaluated by the competent committee/authority with reference to parameters prescribed in the Bidding Document. During the Techno-Commercial Bid opening, the bid opening official(s) will read the salient features of the bids like brief description of the goods offered, Bid Security and any other special features of the bids, as deemed fit by the bid opening official(s). Thereafter, in the second stage, the Price Bids 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 Bid. The prices, special discount if any of the goods offered etc., as deemed fit by bid opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF BIDS

26. Basic Principle

26.1 Bids will be evaluated on the basis of the terms & conditions already incorporated in the Bidding Document, based on which bids have been received and the terms, conditions etc. mentioned by the bidders in their bids. No new condition will be brought in while scrutinizing and evaluating the bids.

27. Scrutiny of Bids

- 27.1 The Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required Bid Securities have been furnished, whether the documents have been properly signed stamped and whether the Bids are generally in order.
- 27.2 The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.
- 27.3 The Bids will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the Bidding Documents. The bids, which do not meet the basic requirements, are liable to be treated as non-responsive and will be rejected.
- 27.4 The following are some of the important aspects, for which a bid shall be declared non-responsive during the evaluation and will be ignored;
 - (i) Bid form as per Section IX (signed & stamped) not enclosed.
 - (ii) Bid is unsigned.
 - (iii) Bid validity is shorter than the required period.
 - (iv) Required Bid Security (Amount, validity etc.)/ Exemption documents have not been provided.
 - (v) Bidder has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorization Form as per Section XIII.
 - (vi) Bidder has not agreed to give the required 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.
 - (vii) Bidder has not agreed to other essential condition(s) specially incorporated in the bidding document like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism, and applicable law.
 - (viii) Poor/unsatisfactory past performance.
 - (ix) Bidders who stand de-registered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes.
 - (x) Bidder is not eligible as per Clauses 5, 6 & 17 of GIB.
 - (xi) Bidder has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
 - (xii) Bidder has not agreed for the delivery terms and delivery schedule.

28. Minor Informality/Irregularity/Non-Conformity

28.1 If during the evaluation, the purchaser find any minor informality and/or irregularity and/or non-conformity in a bid, the purchaser will convey its observation on such 'minor' issues, which has not price implication, to the bidders by registered/speed post/ e-mail/fax etc. asking the bidder to respond by a specified date. If the bidder does not reply by the specified date or gives evasive

reply without clarifying the point at issue in clear terms, that bid will be liable to be ignored.

29 Discrepancies in Prices

- 29.1 If, in the price structure quoted by a bidder, 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 bidder 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.
- 29.2 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
- 29.3 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.
- 29.4 If, as per the judgment of the purchaser, there is any such arithmetical discrepancy in a bid, the same will be suitably conveyed to the bidder by registered/speed post/email. If the bidder does not agree to the observation of the purchaser, the bid is liable to be ignored.

30. Qualification Criteria

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

31. Conversion of Bid currencies to Indian Rupees

31.1 In case the Bidding Documents permits the bidder to quote their prices in different currencies, all such quoted prices of the responsive bidder will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Bid' opening.

32. Schedule-wise Evaluation

1.1 In case the List of Requirements contains more than one schedule, the responsive bids will be evaluated and compared separately for each schedule. The bid for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the bid. However, as already mentioned in GIB sub clause 13.2, the bidders 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 bidder for each schedule, subject to bidder (s) being responsive.

33. Comparison of Bids

33.1. Unless mentioned otherwise in Section – III – Special Instructions to bidder and Section – VI – List of Requirements, the comparison of the responsive Bids shall be carried out on Free Delivery at consignee site basis. The quoted Turnkey Work prices and CAMC prices will also be added for comparison/ranking purpose for evaluation. "Net Present Value (NPV) of the Comprehensive Annual Maintenance Contract Charges (CAMC) quoted for 5 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." However the payment of CAMC shall be made to the successful bidder at approved rates.

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

- 34.1 Further to GIB Clause 33 above, the purchaser's evaluation of a bid 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, GST which will be contractually payable (to the bidder), on the goods if a contract is awarded on the bidder; and
- ii) in the case of goods of foreign origin offered from abroad, customs duty and GST which will be contractually payable (to the bidder) on the goods if the contract is awarded on the bidder.
- 34.2 The purchaser's evaluation of bid will also take into account the additional factors, if any, incorporated in SIB in the manner and to the extent indicated therein.
- 34.3 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive Bids.

35. Bidder's capability to perform the contract

- 35.1 The purchaser, through the above process of bid scrutiny and bid evaluation will determine to its satisfaction whether the bidder, whose bid has been determined as the lowest evaluated responsive bid 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, inter alia, take into account the bidder satisfying all the requirements of the purchaser as incorporated in the Bidding Document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the bidder in its bid 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 bid to the time of awarding the contract, if a bidder needs to contact the purchaser for any reason relating to NIB/Bidding Document and / or its bid, it should do so only in writing.
- 36.2 In case a bidder attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of bids and awarding the contract, the bid of the bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that bidder, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

37. Purchaser's Right to accept any bid and to reject any or all bids.

37.1 The purchaser reserves the right to accept in part or in full any bid or reject any or more bid(s) without assigning any reason or to cancel the bidding process and

reject all bids at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder(s).

38. Award Criteria

38.1 Subject to GIB clause 37 above, the contract will be awarded to the lowest evaluated responsive bidder decided by the purchaser in terms of GIB Clause 35.

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

- 39.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded off to next whole number) without any change in the unit price and other terms & conditions quoted by the bidder.
- 39.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded off to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract.

40. Notification of Award

- 40.1 Before expiry of the bid validity period, the purchaser will notify the successful bidder(s) in writing, by registered / speed post or by fax/email (to be confirmed by registered / speed post) that its bid for Goods & Services, which have been selected by the purchaser, has been accepted, also briefly indicating there in the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful bidder must furnish to the purchaser the required Performance Security within thirty days from the date of dispatch of this notification, failing which the Bid Security will be forfeited and the award will be cancelled. Relevant details about the Performance Security have been provided in clause 5 of GCC under Section IV.
- 40.2 The Notification of Award shall constitute the conclusion of the Contract.

41. Issue of Contract

- 41.1 Promptly after notification of award, the Purchaser will mail the contract form (as per Section XV) duly completed and signed, in duplicate, to the successful bidder by registered / speed post.
- 41.2 Within twenty one days from the date of the contract, the successful bidder shall return the original copy of the contract, duly signed and dated, to the Purchaser/by registered / speed post/courier.
- 41.3 The Purchaser reserves the right to issue the Notification of Award consignee wise.

42. Non-receipt of Performance Security and Contract by the Purchaser

42.1 Failure of the successful bidder in providing Performance Security and/or returning contract copy duly signed in terms of GIB clauses 40 and 41 above shall make the bidder liable for forfeiture of its Bid Security and, also, for further actions by the Purchaser it as per the clause 24-Termination of default of GCC under Section IV.

43. Return of Bid Security

43.1 The Bid Security of the successful bidder and the unsuccessful bidder will be returned to them without any interest, whatsoever, in terms of Clause 19 of GIB.

44. Publication of Bid Result

44.1 The name and address of the successful bidder (s) receiving the contract(s) will be mentioned in the Website of AIIMS, CPPP and HITES.

H. CORRUPT OR FRADULENT PRACTICES

45. Corrupt or Fraudulent Practices

- 45.1 It is required by all concerned namely the Bidder/ Suppliers/Purchaser/Consignee/End User 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 anything 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 bidders (prior to or after Bid submission) designed to establish Bid 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 Bidder 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 BIDDERS (SIB)

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

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

S1. No.	GIB Clause No.	Topic	SIB Provision	Ref. Page No.
Α	1 to 7	Preamble	No Change	
В	8 to 10	Bidding Document	Change in GIB Clause no. 8.1 and 10.1	
	8.1	In addition to Section I – "Notice inviting e-Tender" (NIT), the TE documents include:	Added Point: Appendix A- Integrity pact	9
	10.1	Clarification of Bid document	Changed as under	10
С	11 to 21	Preparation of Bids	Change in GIB Clause no. 11.1 a., 11.1 A), 11.1 (B), 19, 21.1	
	11.1 Note a.		Changed as under	
	11.1 A)		Additional Para. xix) as under	
	11.1		Additional Note 'd' as under	
	19		Additional para 19.9 as under	
	21.1		Changed as under	25
D	22 to 24	Submission of Bids	Guiding notes given as under	26
E	25	Bid Opening	No Change	
F	26 to 36	Scrutiny and Evaluation of Bids	Change in GIB Clause no. 27.4	
	27.4		Added Point no. (xiii)	26
	33	Comparison of Bids	Additional para 33.2 as under	26
	34	Additional Factors	Additional Para as below	
G	37 to 44	Award of Contract	No Change	
Н	45	Corrupt or Fraudulent Practices	No Change	

10. Clarification of Bid document

10.1 A bidder requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing in their letter head duly signed and scanned through email to hll.ncij@hllhites.com. The purchaser will respond to such request provided the same is received 2 (two) days prior to the Pre-bid Meeting

Conference. Any queries/representations received after the pre-bid meeting will not be taken into cognizance.

11.1 Note:

a. The tender Processing fee, BID SECURITY and Integrity Pact (Appendix A) on non-judicial stamp paper has to be submitted in physical form as per Section – I, Notice Inviting Tender of this tender enquiry.

11.1 A) Techno-commercial Bid (Un-priced Bid):

xix) The Integrity pact (At Appendix-A) on non-judicial stamp paper shall be a part and parcel of this document and has to be signed by bidder(s) at the pre-tendering stage itself, as a pre-bid obligation and should be submitted along with the Techno-Commercial Bids. All bidders are bound to comply with the integrity pact clauses.

Bids submitted without signing the integrity pact will be *ab initio* rejected without assigning any reason.

11.1 (B) Price Tender:

Note:

d) The Price is to be quoted for all the line items strictly as per the given price-bid format on the e-tender portal, failing which the bid shall be straight away rejected.

19. Bid Security (BS)

19.9 HITES Bank details for necessary issuance of 'Structured Financial Messaging System (SFMS)' in case the Bid Security (i.e. EMD) is submitted in the form of Bank Guarantee:

Name of the Beneficiary	Bank Details	IFSC Code
HLL INFRA TECH SERVICES LTD.	HDFC BANK LTD, NOIDA, UTTAR PRADESH	HDFC0000088

21. Digital Signing of e-Bid

21.1 The bidders shall submit their bids online as per the instructions contained in GIB Clause 11 and any other specific instruction mentioned in the e-Tender portal using the digital signature.

Instruction on submission of Bids

- i) All the documents pertaining to the event/RFx no. may be downloaded from the e-portal by clicking on the **'Technical RFx'** option in the 'top-left portion of the web-page' when the RFx/event is in **Display Mode**.
- ii) All the necessary documents as prescribed in the NIB shall be prepared and scanned in different files (in PDF and/or Excel format or as per format instructed elsewhere) and uploaded for on-line submission of Proposal.
- iii) The scanned copies of Bid Processing Fee, Bid Security, all document(s)/information(s) including the Financial Proposal should be uploaded **online**

only in the prescribed format given in the designated e-tendering portal website. No other mode of submission shall be acceptable.

However, Bid Processing Fee, Bid Security, Catalogue(s)/Data-sheet(s) related to all quoted items must be submitted in original at the desired venue before the last date and time of physical submission as mentioned in the NIB.

- iv) The prospective bidders may **scan the documents in low resolution (75 to 100 DPI)** instead of 200 DPI. The documents may be scanned for further lower resolution (if possible). This would reduce the size of the Cover and would be uploaded faster.
- v) The Individual file size of uploading is restricted up to 5 MB. Bidders may upload multiple files (Not exceeding 5 MB individually) & give relevant file name indicating the contents.
- vi) The file name of price bid should not be different from the price bid format uploaded by the Bid inviting Authority in the e-portal. This can be downloaded from the **Notes & Attachment** under **Details** of item when the RFx/event is in **Display Mode** or as mentioned in point no. i) above.
- vii) Bidders may simulate online bid submission (technical & financial) at least one week in advance of the bid submission deadline. No clarifications/troubleshooting regarding any problems being faced during bid submission online shall be entertained in the last week of bid submission.

27. Scrutiny of Bids

27.4 (xiii) The Integrity pact (At Appendix-A) on non-judicial stamp paper shall be a part and parcel of this document and has to be signed by bidder(s) at the pre-tendering stage itself, as a pre-bid obligation and should be submitted along with the Techno-Commercial Bids. All bidders are bound to comply with the integrity pact clauses. Bids submitted without signing the integrity pact will be ab initio rejected without assigning any reason.

Qualification Criteria (Ref. GIB Clause 30.1)

The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non-portable and heavy equipment) for technical acceptability as per the bidding document specifications, before the opening of the Price Bid.

33. Comparison of Bids

33.2 Unit Prices for all optional items/accessories/services (if any) asked in the tender specifications must be quoted separately by all the bidders in their price bid. Such unit prices after multiplying by the required quantity shall be added and taken into consideration for comparison and ranking of bids.

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

34.1 Further to GIB Clause 33 above, the purchaser's evaluation of a bid will include and take into account the following (added para):

iii) The items under this tender enquiry are intended to be specifically delivered and installed for use at National Cancer Institute, AIIMS (Jhajjar Campus) which is a Research cum Cancer Institute. Accordingly, custom duty, cess, IGST, payable at the time of Import in the name of the Institute shall be applicable as per Custom Notification No. 51/96-Cus dated 23.07.1996 and its subsequent amendments, if any. Similarly, CGST/SGST payable at the time of supplies in the name of the Institute from Indian suppliers shall be applicable as per notification no. 47/2017-Integrated Tax (Rate) dated 14.11.2017 issued by Department of Revenue, Ministry of Finance, GOI. The ranking of bids shall also be made by taking into such rates of taxes & duties for those items as mentioned in the said notifications.

Added Para (Ref. GIB Clause 33 & 34):

The comparison of bids will be based on GIB Clause 33, 34 and if any, as specified in the Technical specification(s). However, at the time of award of contract, the value of award (bid value/contract value) shall be limited to the upfront charges payable by the exchequer for Supply, Installation, Testing & Commissioning value only on DDP basis which is inclusive of warranty (for number of years specified at section VI; List of Requirement, Part I) and any other item(s)/services detailed for upfront purchase in the technical specifications. The cost of any other parameters like CAMC price beyond the warranty period, cost of any Consumables, any other recurring expenditure, etc. which have been considered for ranking of bids or for freezing of rates shall not be part of tender/award/bid/contract value.

SECTION - IV

GENERAL CONDITIONS OF CONTRACT (GCC) TABLE OF CLAUSES

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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 Bidding 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, trademarks 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, the supplier, shall furnish Performance Security to the Purchaser for an amount equal to ten percent (10%) of the total value of the contract, valid up to

- ninety (90) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.
- 5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:
 - 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 XIV of this document in favour of the Purchaser. The validity of the Fixed Deposit Receipt or Bank Guarantee will be for a period up to ninety (90) days beyond Warranty Period.
- 5.3 In the event of any failure/default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CAMC security as per Performa in Section XIV, the amount of the performance security is liable to be forfeited. The needful will be done 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 fifteen (15) 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 Comprehensive Annual Maintenance Contract as per the 'Contract Form B' in Section XV with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CAMC 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 Consignee wise bank guarantee for CAMC security in favour of concerned Director AIIMS/Chief of Centres/MS of Hospital/Head of the Department/Dean as per the format in Section XIV.

6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform 'Technical Specification' under Sections VII 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 under Section VII 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 under Section VII 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 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 and 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, and if same is accepted by Purchaser/Consignee, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."
- 8.2 The Technical Specification 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 re-submit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-dispatch 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.
- 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-dispatch inspection mentioned above.

"On rejection, the supplier 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/consignee and/or its inspector 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 Principal/ Foreign supplier shall also have the equipment inspected by recognized/ reputed agency like SGS, Lloyd, Bereau Veritas, TUV etc. prior to dispatch 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 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (Named port of destination) terms.

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 on Free Delivery at Consignee's 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 for an amount equal to 110% of the value of the goods from warehouse to warehouse (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.

ii) In case of supply of the imported goods on CIP (named port of Destination Basis), the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from warehouse to ware house (consignee site) on all risk basis.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will have to be 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/End User, 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/End User 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/End User 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/End User, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/End User.
- 12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty and CAMC period.

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, Demonstration, Trial run etc. of the goods.
 - ii) Turnkey work (if any).
 - iii) Training of Consignee's/End Users 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

The supplier shall send all the relevant dispatch documents well in time to enable the purchaser clear or receive (as the case may be) the goods in terms of the contract. Unless otherwise specified in the SCC, the usual documents involved and the drill to be followed in general for this purpose are as follows:

Within 24 hours of dispatch, the supplier shall notify the concerned Store Officer in AIIMS Clearing Agent and others concerned the complete details of dispatch and also supply following documents by air mail/ courier etc. with intimation by e-mail:

- a) Commercial Supplier's Invoice giving full details of the goods including quantity, value, etc.;
- b) Packing list;
- c) Certificate of country of origin;
- d) Bill of Lading/Airway Bill;
- e) Insurance Certificate; (if applicable)
- f) Manufacturer's guarantee and Inspection certificate; (if applicable)
- g) Inspection certificate issued by the Purchaser's Inspector; (if applicable)
- h) Any other document(s) as and if required in terms of the contract.

15. Warranty and CAMC

- 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 warranty shall include all spares, labour and preventive maintenance from the date of completion of the satisfactory installation and acceptance till warranty period.
- 15.3 The Comprehensive Annual Maintenance Contract shall include all spares, labour and preventive maintenance from the date of completion of the satisfactory installation and acceptance till warranty period.
- 15.4 Warranty as well as Comprehensive Annual Maintenance Contract will be inclusive of all accessories and turnkey work and it will also cover the following, wherever applicable:-
 - All kinds of Motors.
 - Plastic & Glass Parts against any manufacturing defects.
 - All kinds of sensors.
 - All kinds of coils, probes and transducers.
 - Printers and imagers including laser and thermal printers with all parts.
 - UPS including the replacement of batteries.
 - Air-conditioners
- 15.5 In case of any claim arising out of this warranty and CAMC period 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 unless revised in SCC in Section V of Bidding Document.

- 15.6 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 conditions laid down in the Bidding Document.
- 15.7 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 up to the completion of the original warranty period of the main equipment.
- 15.8 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.
- 15.9 During Warranty and CAMC 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.
- 15.10 The Purchaser/Consignee reserve the rights to enter into Comprehensive Annual Maintenance Contract between the Purchaser and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.
- 15.11 The supplier along with its Manufacturer, Indian Agent and the CAMC provider shall ensure continued supply of the spare parts for the machines and equipment supplied by them to the purchaser for 10 years from the date of installation and handing over.
- 15.12 The Supplier along with its Manufacturer Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipment/machines/goods etc. and shall always give the most competitive price for its machines/equipment 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 bid. Such notification, in its original bid 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 dispatch,
 - 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 bid and incorporated in the contract except for any price adjustment authorized in the SCC.

20. Taxes and Duties

- 20.1 Supplier shall be entirely responsible for GST 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 through electronic transfer in NEFT/RTGS subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner:

- A) Payment for Indigenous Goods (M&E) Or Foreign Origin Located Within India. Payment shall be made in Indian Rupees as specified in the contract in the following manner:
 - a) **On delivery**: 75% payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:
 - (i) Original copies of supplier's invoice showing contract number, goods description, quantity, packing list, unit price and total amount;

- (ii) Consignee Receipt Certificate as per Section XVI of bidding document in original issued by the authorized representative of the consignee;
- b) **On Acceptance**: Balance 25% payment would be made against "Installation and Acceptance Certificate" of goods to be issued by the End User subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. "Installation and Acceptance Certificate" need to be issued by the concerned End User after installation, commissioning, testing and successful trial run (if applicable).
- **B)** Payment for Imported Goods (M&E): Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:
 - a) **On Shipment**: 75% of the net FCA/CIP price (i.e. FCA/CIP price less Indian Agency commission) of the goods despatch by Sea/Air shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:
 - i) Commercial Supplier's Invoice giving full details of the goods including quantity, value, etc.;
 - ii) Packing list;
 - iii) Certificate of country of origin;
 - iv) Negotiable clean Bill of Lading/Airway Bill;
 - v) Insurance Certificate; (if applicable)
 - vi) Manufacturer's guarantee and Inspection certificate; (if applicable)
 - vii) Inspection certificate issued by the Purchaser's Inspector; (if applicable)
 - viii) Any other document(s) as and if required in terms of the contract.
 - b) **On Acceptance**: Balance payment of 25% of net FCA/CIP price of goods would be made against "Installation and Acceptance Certificate" to be issued by the End User through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any. "Installation and Acceptance Certificate" need to be issued by the concerned End User after installation, commissioning, testing and successful trail run (if applicable).
 - c) Payment of Consumable Imported Goods/Reagents/Kits would be made 100% against "Installation and Acceptance Certificate" to be issued by the End User through Wire Transfer.
 - d) **Payment of Incidental Costs:** Incidental costs till consignee site towards Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training), if applicable will be paid in Indian Rupees to the Indian Agent on submission of "Installation and Acceptance Certificate" by the End User.
 - e) **Payment of Indian Agency Commission**: Indian Agency Commission (IAC) will be paid to the Authorised manufacturer's agent in Indian rupees indicated in the contract (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation/exchange variation. The agency commission payment shall be made on submission of "Installation and Acceptance Certificate" by the End User.
- **C) Payment of Civil/Electrical Works at site:** The payment related to Civil/Electrical Works at site will be made as indicated in the contract (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject

to further escalation/exchange variation. The payment for Civil/Electrical works shall be made on submission of "Installation and Acceptance Certificate" by the End User.

D) Payment for Comprehensive Annual Maintenance Contract Charges: The consignee will enter into CAMC with the supplier at the rates as stipulated in the contract. The payment of CAMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the End User 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 of the bidding document valid till 3 months after expiry of entire CAMC period. The Performance Bank Guarantee for CAMC will be applicable in case of contract value is more than Rs. 10 lakh.

21.2 Terms of payment for imported goods

- 21.2.1 The supplier shall not claim any interest on payments under the contract.
- 21.2.2 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.
- 21.2.3 Irrevocable & non-transferable LC shall be opened by the Purchaser. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser, the charges thereof shall be borne by the supplier.
- 21.2.4 The payment shall be made in the currency/currencies authorised in the contract.
- 21.2.5 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date.
- 21.2.6 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.
- 21.2.7 While claiming reimbursement of duties, taxes etc. (like GST, sales tax, excise duty, custom duty) from the Purchaser, 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, the supplier shall refund to the Purchaser forthwith.

22. Delivery

- 22.1 The supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the Purchaser 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 no later than the date(s) as specified in the contract.
- 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 in writing about the same and its likely duration and make a request to the Purchaser for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser 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 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 GST 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 shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty and GST 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 for extension of delivery period and obtain the same before dispatch. 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 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 or install/commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser shall, without prejudice to other rights and remedies available to the Purchaser 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, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser 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 without prejudice to any other contractual rights and remedies available to it the Purchaser, 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 pursuant to GCC sub-clauses 22.3 and 22.4.
- 24.2 The Performance Security in such cases will be forfeited.
- 24.3 Unless otherwise instructed by the Purchaser, 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.

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, 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 in writing of such conditions and the cause thereof within twenty one days of

occurrence of such event. Unless otherwise directed by the Purchaser 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 is unable to fulfil its contractual commitment and responsibility, the Purchaser will notify the supplier accordingly and subsequent actions taken on similar lines described in above subparagraphs.

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 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 GIB 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 Facsimile/email 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/Consignee 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/Consignee 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.
- 30.3 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 to be appointed by the Director, AIIMS. 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 in case the value of claim in reference exceeds Rupees One lakh (Rs. 1,00,000/-).
- 30.4 **Venue of Arbitration:** The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.
- 30.5 **Jurisdiction of the court** will be from the place where the Bidding Document has been issued, i.e., New Delhi, India.

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

- 32.1 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 contract made by the supplier with the purchaser, pending finalization or adjudication of any such claim.
- 32.2 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. Fall Clause

Fall clause is a price safety mechanism. The fall clause provides that if the contract holder reduces its price or sells or even offers to sell the contracted goods of identical specification and terms & conditions to that of the contract, at a price lower than the contract price, to any person or organization during the currency of the Contract, the Contract price will be automatically reduced with effect from that date for all the subsequent supplies under the Contract and the contract amended accordingly.

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.

Any specific clause, mentioned in the technical specification shall prevail and will supersede the similar clause mentioned anywhere in the tender.

The warranty & CAMC period will be as mentioned in the list of requirement as per section VI of the Bidding Document.

SECTION- VI

LIST OF REQUIREMENTS

Part I:

Sl. no.	Rfx/ Event number	Short Description of goods	Quantity	Warranty Period	CAMC period after warranty
1	3000003282	Blood Bank	1	5 years	5 Years

Part II: Required Delivery Schedule:

For Indigenous or Imported goods:

Supply, Installation and Commissioning to be completed within **120 days** from the date of NOA or date of opening of LC or date of approval of layout drawing (in case applicable), whichever is later.

(In case of LC opening, necessary documents like valid Performance Security and Proforma Invoice are to be submitted within 30 days from the date of release of NOA. In case layout drawing approval is applicable, it should be submitted by the supplier within 21 days from the date of release of NOA.)

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

Part V: Warranty period as per details mentioned in technical specification and as specified in Part I above. Warranty period will start from the date of installation, commissioning and acceptance.

Comprehensive Annual Maintenance Contract (CAMC) as per details in Technical Specification as specified in part I above. Comprehensive Annual Maintenance Contract (CAMC) will start from the date of successful completion of warranty period.

Part VI: Required Terms of Delivery and Destination.

a) For Indigenous goods or for imported goods if supplied from India:

Free Delivery at Consignee's Site(s)

b) For Imported goods directly from abroad:

The foreign bidders are required to quote their rates on CIP (Named Port of Destination Basis) giving breakup of the price as per the Proforma prescribed in the Price Schedule. Purchaser will place the order on CIP (Named Port of Destination basis).

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.

c) The Consignee details are as under but the supplier is required to deliver the goods at the designated site in the floor and building of concerned Centers/Hospital/Departments:

Consignee	Site	Contact Address.	Air Port	Sea Port
NCI-AIIMS (National Cancer Institute – All India Institute of Medical Sciences)	Jhajjar Campus	Badsha Village Jhajjar, Haryana PIN - 124507	New Delhi	ICD Tuglakabad (for containerised shipments) Or ICD Patparganj

<u>Note</u>: The consignee will ensure timely issue of NMIC, CDEC etc., wherever applicable to the supplier.

SECTION - VII

TECHNICAL SPECIFICATION AND GENERAL POINTS

A. TECHNICAL SPECIFICATION:

Item No. 1 (Rfx/Event number 3000003282)

Blood Bank

I	Scope of Work		
1	Proposal is for Plan, Design, Supply, Install, commission and maintenance of blood bank equipment for 710beds on Turnkey Basis for 10 years.		
2	The Planning & designing of the Blood Bank should be strictly as per D & C Act, (Drug and Cosmetic Act) WHO Guidelines (Design Guidelines for Blood Centres), NACO and CDISCO Guidelines.		
3	The Blood Bank should be divided into various functional areas Vis: Reception area, Screening area, Blood Donating area, Component area, Apheresis area etc.		
4	Planning & Designing of the Blood Bank should be in such a way that the functional flow should be unidirectional. The pressure, temperature, humidity and other physical and functional barriers of various areas in Blood Bank have to be according to D&C Act, WHO, NACO and CDISCO Guidelines.		
5	BOQ item's specifications for various areas of Blood Bank is specified in Annexure 1 and Total BOQ is mentioned at Annexure-4. The offered items should be as per		
6	The items like General Furnitures and other accessories where if technical specification is not provided, should be of reputed makes and of good quality. All general furniture should be modular and should be of reputed make like Hermen Miller, Godrej, Featherlite, Wipro. All the general furniture items and other accessories should be supplied by the bidder only after approval of NCI-AIIMS authorities.		
7	Sufficient storage in Blood Bank has to be provided by the bidder according to D&C Act, WHO, NACO and CDISCO Guidelines. In addition to the above, storages in office areas, seminar room etc. has to be provided by the bidder after the approval of NCI-AIIMS authorities.		
8	Bidder has to quote prices of reagent and consumables as per mentioned in Annexure 2A, 2B & 2C This consumables and reagent rate shall be included for calculating L1 ranking. The unit rate of consumables and reagents etc as defined in Annexure 2A & 2B shall be valid for the duration of the contract and NCI-AIIMS reserves the right to procure the consumables from the bidders at quoted rates or from any other sources as per requirement.		
9	All machinery/equipment and furniture etc paid for by NCI-AIIMS under CAPEX shall be the property of NCI-AIIMS from the date of issue of LC/CRC.		
10	Proper signages have to be displayed in various sections of the Blood bank and should match aesthetically with the existing signages of other areas.		
11	Blood bank will run 24*7 all days. The design layout should be approved by NCI-AIIMS before starting the turnkey works.		

12	Authorized personnel of bidder may collect NCI brochure including list of user areas and CAD drawings from room number 160, 1st floor, DR. BRAIRCH, AIIMS, New Delhi for better understanding of area provided for Blood Bank and to study the interrelationship of other areas vis: wards/ICUs/OTs/OPD/etc with blood bank		
13	The bidders are strongly advised to visit the site before submission of the bid for assessment of work.		
14	The bidder has to co-ordinate with Pneumatic Tube System vendor for the installation of Pneumatic Tube front load station in Blood Bank.		
II	Tentative Peak Load of the Blood Bank for 710 Beds per day		
1	Apheresis: 20 per day (Stem Cell 4 per day, Single Platelet donor 15 per day, Plasma Exchange: 6 per Month & Granulocytes: 1 per Day), RBC: 75 Per day, Platelet Rich Plasma = 75 per day, FFP & Plasma = 10 per day.		
III	Payment		
1	 CAPEX price as per Annexure-4/Total BOQ items. CAMC price from 6th to 10th year Note: CAMC must be quoted separately and should not be quoted under CAPEX. 		
IV	L1-Ranking		
1	L1-Calculation will be based on the total cost of CAPEX as in Annexure -4 + Cost of CAMC from 6th to 10th year + Reagents cost as per Annexure 2A + Consumable cost as per Annexure 2B + Consumable cost as per Annexure 2C, however the payment of CAMC shall be paid on annual basis from 6th year onwards.		
V	PENALTIES		
1	During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period.		
2	Up time & penalty for delays in repair & maintenance: the firm will ensure uptime of 365 days in a year during warranty period & CMC period.		
3	Whenever there is breakdown the firm will carry out the repair within 24 hours of receipt of such information (either by telephone or by any other means).		
4	If there is delay beyond 24 hours then the firm will be penalized at the rate of 1% of the cost of product per day. This financial penalty can be waived off on recommendation of the user dept. if the reasons of delay are genuine the same are recorded & endorsed by the concerned dept.		
5	If the down time is exceeded in a year from 20 days then the warranty shall stand extended by double the no. of days machine was out of order.		
VI	TURNKEY - As per Annexure - 3.		

Annexure-1

Technical Specifications for all required items:

Sl. No.	Name of item	Technical Specifications
1.	Weighing Scale with Height Measurement for Blood Donors	 Should be accurate and sensitive with graduation of 100 grams. Should be capable of measuring both height and weight with digital display. Should be steady and sturdy. Should have anti rust coated parts. Should have the capacity of weighing up to 150 Kg. Should measure height up to 6.5 feet. Should have provision for the printer that can print date, time, weight, and height. Electrical: The equipment should be able to run on the existing electrical provision.
2.	Blood Collection Monitor	 Should have facility to preset total volume of blood to be collected and accordingly monitor and display amount collected. It should have facility to clamp to stop the collection of blood as soon as preset volume is collected and not allow over collection. Should have the facility for LIS integration (preferably wireless). Battery backup should be > 8 hours with continuous work load. Battery charger should be inbuilt. Should be portable (Suitable for outdoor blood donation camps). Should have standby / park mode. Should be able to operate at 10 - 50°C. There should be digital display of preset volume, rate of collection and total time taken at the end of collection. Oscillation: 16 ± 2 rpm. Should mix the blood with anti - coagulant solution during collection and ensure that only correct amount of blood is collected. There Should be Visual display and audible alarm: (i) when flow rate goes below 20ml / min or high flow rate above 180 ml / min (ii) at the end of collection (iii) when battery low (iv) during pause function (v) any abnormal condition Every Bio-mixer should be provided with carry box with handle. Firm should supply the relevant calibration certificate for the equipment from NABL accredited Lab.

		13. Original literature of equipment should be submitted.
		14. Should be USFDA or European CE approved product.
		15. Manufacturer should be ISO 9001 certified and
		should have ISO 13485 certification for quality
		standards. It shall meet IEC-60601-1-2 (Or Equivalent
		BIS) General Requirements of Safety for
		Electromagnetic Compatibility.
3.	Blood Donor Couch	1. Mobile Foldable Blood Donor Couch designed to fold
		into a compact
		 Not more than 24"W X 46" LX8"H Weight should not be more than 20 Kg
		3. Weight should not be more than 20 Kg4. Should be easily to clean and maintain
		5. Should be cashy to clean and maintain 5. Should be in durable tubular aluminum frame
		6. Should be able to bear the larger donors weight up to 150 Kg
		7. Should have padded armrest for extra comfort to the donor, adjustable for proper arm placement.
		8. Couch should easily be reclined into a secured shock
		position 9. Pockets to be provided at the back of each couch for keeping accessories
		10. Should be provided with washable linen covers (1
		pair) with each couch 11. Should be sturdy and should be able to withstand
		transportation rigors
		12. Should be provided with transportation trolley to hold maximum 5 couches
		13. Cost of transportation trolley should be quoted separately
		14. Original literature of equipment should be submitted.
		15. It should meet IEC-60601-1-2 (Or Equivalent BIS)
		General Requirements of Safety.
4.	Tube Stripper	Should have completely anti-rust, stainless steel
		body.
		2. Should be lightweight.
		3. Should ensure the uniform pressure while pressing
		to close and automatic recoiling of spring to release
		handle for opening.
		4. Should have Screw- less rollers to avoid loosening of
		the rollers.
		5. Should have extra sharp cutting edges.
		6. Should behave ergonomically designed handle for
		better grip.
		7. Should have roller guide to avoid any damage of
		tube.
		8. Should have provision for manual tube sealing by
		aluminium rings.
		9. Original literature of equipment should be submitted.
5	Dielectric Tube	1. Purpose of Equipment: Handheld Blood Bag Tube
	Sealer - Handheld	Sealer is a compact handheld equipment to seal the
		Blood Bag pilot PVC tubing by transient radio

frequency heating and sealing, with no hemolysis. 2. Quality Standard: 2.1 Manufacturing should be compliant with ISO 13485, and both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. 2.2 Should be compliant with CE Class IIA or US FDA. 2.3 Equipment must meet electrical safety specifications of IEC 60601. 3. Should gently seal tubing with no hemolysis, using radiofrequency heating. 4. Should be capable of making wide seal of at least 2 mm width. 5. Should be rechargeable battery operated compact (less than 3 Kg) hand held type, not bench top type. 6. Sealing time should not be >2 sec 7. Electrodes should be well protected by a cover to prevent blood splutter. 8. Should have indicator lamp for sealing process 9. No warm up time should be required 10. Should have tear-seal feature to make segments that can be easily separated by hand 11. No. of seals per charge should be more than 1200 continuous seals from a fully charged battery. 12. Charger should be compatible with Input voltage: 240V 50 Hz Single phase AC. 6 Blood Bank 1. Storage Capacity: Should be at least 700 Liters Refrigerator - 700 capacity and should be able to accommodate minimum 350 triple bags of 350 ml and 450ml capacity. 2. Set temperature 4°C with temperature range 2°C to 6° C and adjustable with setting accuracy of $\pm 0.1^{\circ}$ C. 3. Refrigeration: Non-CFC cooled refrigeration. 4. Should have good insulation to maintain required temperature. 5. Should have double walled glass door. 6. Microprocessor based temperature controller with integrated audiovisual temperature and power alarm function with digital monitoring display. 7. Safety features: Audio alarm for all the following parameters should be there - temperature fluctuation & power failure, set point alarm, low alarm point, Door opening audio and visual display alarm. 8. Independent safety thermostat to avoid negative temperatures. 9. Should have battery backup for temperature and power alarm.

77	Damostic	10. Should have 1000 nos. of seven days graphic temperature recorder along with data logging device. The cost of the temperature recorder chart paper will be included in the total cost of the equipment financial comparison. 11. Internal temperature hold over time in case of power failure should be at least 1.5 hours. 12. Should have fluorescent light inside the Blood Bank Refrigerator with On/Off switch. 13. Should have castor wheels with locking facility. 14. While in operation, the noise level must not exceed 60 dB. 15. Original literature of equipment should be submitted. 16. Firm should supply the relevant calibration certificate for the equipment from NABL accredited Lab. 17. Firm will have to supply the stabilizer if required along with the equipment free of cost. 18. Should be USFDA or European CE approved product. 19. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
7	Domestic Refrigerator	 Should be 300-350 L capacity, double door type. Should be exclusive protected evaporate to eliminate the risk of ice pick damage. Should be Diagnostic circuitry installed with green and red LED indicator. Should be Face panel is interchangeable Should have Recessed handle providing a small, sleek surface Should be Full width freezer compartment Should have adjustable shelves and racks Should be CFC free and environmental friendly Should be stainless steel fittings Electrical: 220 volt, 50 Hz.
8	Refrigerated Blood Bag Centrifuge - 12 bags	 Design: Stable, sturdy all-steel design with stainless steel rotor chamber. Easy to clean / corrosion resistant paintings & provision of both drain and condense water collection. Max. rcf: 6,000 x g to 6400 x g Max. speed: At least 4,000 rpm to 4500 rpm. Max. volume: Should be able to accommodate twelve-sixteen 350ml and 450ml single, double, triple, quadruple, quintuple blood bags with SAGM bag and empty

- satellite bags with 'In Line filter system'.
- 5. Drive unit: Maintenance free induction drive.
- 6. Operation:
 - 6.1 Should have 25-30 programming of all parameters
 - 6.2 Should have digital display
- 7. Programme: Should be tamper proof.
- 8. Safety of operation: Lid-lock and interlock, imbalance display and cutout, steel-armoured chamber, protection of overheating of rotor and compressor
- 9. Protection of data: In event of power interruption or complete failure, data should remain stored for 2-3 weeks.
- 10.Documentation: Should have software which should be compatible with hospital information system of the institute and/or Blood Bank software any interfacing required must be provided by the firm.
- 11. User-friendly handling: The equipment should be movable on castor wheels however it should have facility to be placed on four solid feet. There should be no need for ground fixing. Digital display should have keys for controlling basic functions located on the front panel of the machine for immediate access. The machine should be equipped with an automatic lid lock.

12. Digital display and adjustment parameters should Include:

- (a) Acceleration: Different acceleration profiles
- (b) Deceleration: Different deceleration profiles
- (c) RCF value: 4 digit, should be adjustable
- (d) Speed: 4 digit, should be adjustable
- (e) Centrifugal time: Format should be as hour and minutes
- (f) Programme number: Multiple programmes
- (g) Temperature control: Adjustable in 10 intervals
- (h) Temp. range: 4degC to +22degC
- (i) Min. temp. at max. rcf: 4degC
- (j) Error message: Programme error, imbalance, lid open or any other error
- 13. Refrigerant: CFC-free
- 14. Warm air Outlet: From sides and rear of the Machine

15. Should be supplied with following Standard Accessories:

15.1 Swing-out rotor with wind shield, should be able to accommodate twelve-sixteen 350ml and 450ml single, double, triple, quadruple/quintuple blood bags with SAGM bag and empty satellite bags with In Line filter

system. 15.2 Six (6) buckets (one bucket for 2 blood bags) for centrifuging 12 units of blood bags. Removable Plastic inserts, for centrifuging 15.3 twelve-sixteen 350ml and 450ml single, double, triple, quadruple/quintuple blood bag system with SAGM bag and empty satellite bags with In Line filter system for preparing blood components like Red Blood Cells, Plasma /FFP/ Platelets concentrate and Cryoprecipitate. One extra set of above Plastic inserts will 15.4 have to be provided by the firm. 15.5 The firm must supply balancing weights and balancing plates. The firm must supply Hook adapter to spin 15.6 small volume of Cord Blood and Buffy coat. Operation and Maintenance manual should 15.7 be provided in original. Firm must supply the stabilizer with the equipment. 16. Noise Level should be less than 60 dB 17. Firm should supply the relevant calibration certificate for the equipment from NABL accredited Lab. 18. Original literature of equipment should be submitted. 19. Should be USFDA or European CE approved product. 20. Manufacturer should be ISO 9001 certified and should have ISO 13485 certification for quality standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. 9 Refrigerated Blood 1. Design: Stable, sturdy all-steel design with stainless Bag Centrifuge - 16 steel rotor chamber. Easy to clean / corrosion bags resistant paintings & provision of both drain and condense water collection. 2. Max. rcf: 6,000 x g to 6400 x g 3. Max. speed: At least 4,000 rpm to 4500 rpm. 4. Max. volume: Should be able to accommodate twelve-sixteen 350 ml and 450 ml single, double, triple, quadruple, quintuple blood bags with SAGM bag and empty satellite bags with 'In Line filter system'. 5. Drive unit: Maintenance free induction drive. 6. Operation: 6.1 Should have 25-30 programming of all parameters 6.2 Should have digital display 7. Programme: Should be tamper proof.

- 8. Safety of operation: Lid-lock and interlock, imbalance display and cutout, steel-armoured chamber, protection of overheating of rotor and compressor
- 9. Protection of data: In event of power interruption or complete failure, data should remain stored for 2-3 weeks.
- 10.Documentation: Should have software which should be compatible with hospital information system of the institute and/or Blood Bank software any interfacing required must be provided by the firm.
- 11. User-friendly handling: The equipment should be movable on castor wheels however it should have facility to be placed on four solid feet. There should be no need for ground fixing. Digital display should have keys for controlling basic functions located on the front panel of the machine for immediate access. The machine should be equipped with an automatic lid lock.

12. Digital display and adjustment parameters should Include:

- a) Acceleration: Different acceleration profiles
- b) Deceleration: Different deceleration profiles
- c) RCF value: 4 digit, should be adjustable
- d) Speed: 4 digit, should be adjustable
- e) Centrifugal time: Format should be as hour and minutes
 - f) Programme number: Multiple programmes
 - g) Temperature control: Adjustable in 10 intervals
 - h) Temp. range: 4degC to +22degC
 - i) Min. temp. at max. rcf: 4degC
- j) Error message: Programme error, imbalance, lid open or any other error
- 13. Refrigerant: CFC-free
- 14. Warm air Outlet: From sides and rear of the Machine

15. Should be supplied with following Standard Accessories:

- 15.1 Swing-out rotor with wind shield, should be able to accommodate twelve-sixteen 350ml and 450ml single, double, triple, quadruple/quintuple blood bags with SAGM bag and empty satellite bags with In Line filter system.
- 15.2 Eight (8) buckets (one bucket for 2 blood bags) for centrifuging **16 units** of bags.
- 15.3 Removable Plastic inserts, for centrifuging twelve-sixteen 350ml and 450ml single, double, triple, quadruple/quintuple blood bag system with SAGM bag and empty satellite

		bags with In Line filter system for preparing
		blood components like Red Blood Cells,
		Plasma /FFP/ Platelets concentrate and
		Cryoprecipitate.
		15.4 One extra set of above Plastic inserts will have
		to be provided by the firm.
		15.5 The firm must supply balancing weights and
		balancing plates.
		15.6 The firm must supply Hook adapter to spin
		small volume of Cord Blood and Buffy coat.
		15.7 Operation and Maintenance manual should be
		provided in original.
		15.8 Firm must supply the stabilizer with the
		equipment.
		16. Noise Level should be less than 60 dB
		17. Firm should supply the relevant calibration
		certificate for the equipment from NABL accredited
		Lab.
		18. Original literature of equipment should be submitted.
		19. Should be USFDA or European CE approved product.
		20. Manufacturer should be ISO 9001certified and
		should have ISO 13485 certification for quality
		standards. It shall meet IEC-60601-1-2 (Or
		Equivalent BIS) General Requirements of Safety for
		Electromagnetic Compatibility.
10	Platelet Agitator	1. Flat-bed agitator fitted inside a temperature-
	cum Incubator	controlled incubator operating with CFC-free
	(Upright Model) (150-200 random	refrigerant gas and CFC-free insulation material.
	donor platelet	2. Construction:
	units)	a. Internal: Stainless steel (min. 304 grade)
		b. External: Corrosion Resistant sheet, coated with
		anti-bacterial material.
		c. Designed to hold a load of random platelet bags
		or apheresis platelet bags or a mixture of both
		types.
		d. Doors: must be made of glass, must be frost free
		and must enable inspection of contents without
		opening the door.
		3. Design of Shelves:
		a. Shelves must be made of corrosion resistant
		material and must have anti-bacterial coating with
		sufficient space between two shelves.
		b. Must allow easy loading and withdrawal of
		platelet bags.
		c. Shelves must be perforated to ensure good air
		circulation.
		d. The shelves must have a provision so that it
1		cannot be pulled out completely from the equipment.

- e. The agitator must be noiseless (< 60db)
- 4. Capacity: 150-200 random donor platelet units
- 5. Internal Temperature Control:
 - a. Must have fan cooling provision for maintaining uniform air circulation and temperature maintenance.
 - b. Must have electronic temperature control to maintain even temperature at 22 ± 2 °C in all shelves with accuracy of 0.5 °C
 - c. Must have at least 2 temperature sensors with digital temperature (LED) display with 0.1 °C graduation.
- 6. Integrated audio-visual alarm systems must be there for
 - a. Temperature failure,
 - b. Temperature sensor failure,
 - c. Agitator off,
 - d. Power failure,
 - e. Motion failure and
 - f. Door ajar.
- 7. Must have Battery backup for temperature recordings which is especially needed during powerfailure/fluctuations. Additional Battery backup for alarm must be there so that alarm will notfail in case of power failure, and must be able to sustainthe alarm.
- 8. Range of External Ambient Temperature and Humidity for optimal equipment performance: An ambient temperature range of up to 10 to +45 ±1 °C and Relative Humidity of 60-90%
- 9. Performance: Agitation at 1.5 inch (3.6–4 cm) side to side stroke, 65–75 strokes/min.
- 10. Firm must submit the documentation for qualifications for design, installation, operation and performance.
- 11. Firm must submit validation and calibration reports which must have traceability to applicable national and international standards.
- 12. Fully detailed operator manuals must be provided in English.
- 13. Electrical Requirements:
 - a. Nominal input voltage: AC, 220/240V, 50Hz, Single phase.
 - b. Must have an integrated voltage stabilizer or external servo stabilizer of appropriate ratings as per ISI specifications (Input 160-260 V and output 220-240 V and 50 Hz).
 - c. Equipment meets electrical safety specifications such as that of the IEC 61010-1.

14. Must have seven day chart recorder with a graphic chart recorder with battery backup. The firm should supply charts for free of cost during the entire warranty period. 15. Should be US-FDA or European CE approved product. 16. Manufacturer should be ISO 9001 certified and should have ISO 13485 certification for quality standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. 11 Platelet Agitator 1. Flat-bed agitator fitted inside a temperaturecum Incubator controlled incubator operating with CFC-free (Upright Model) refrigerant gas and CFC-free insulation material. (48 random donor 2. Construction: platelet units) a. Internal: Stainless steel (min. 304 grade) b. External: Corrosion Resistant sheet, coated with anti-bacterial material. c. Designed to hold a load of random platelet bags or apheresis platelet bags or a mixture of both types. d. Doors: must be made of glass, must be frost free and must enable inspection of contents without opening the door. 3. Design of Shelves: a. Shelves must be made of corrosion resistant material and must have anti-bacterial coating with sufficient space between two shelves. b. Must allow easy loading and withdrawal of platelet bags. c. Shelves must be perforated to ensure good air circulation. d. The shelves must have a provision so that it cannot be pulled out completely from the equipment. e. The agitator must be noiseless (< 60db) 4. Capacity: 48 random donor platelet units 5. Internal Temperature Control: a. Must have fan cooling provision for maintaining uniform air circulation and temperature maintenance. b. Must have electronic temperature control to maintain even temperature at 22 ± 2 °C in all shelves with accuracy of 0.5 °C c. Must have at least 2 temperature sensors with digital temperature (LED) display with 0.1 °C graduation. 6. Integrated audio-visual alarm systems must be there Temperature failure,

b. Temperature sensor failure, c. Agitator off, d. Power failure, e. Motion failure and f. Door ajar. 7. Must have Battery backup for temperature recordings which is especially needed during powerfailure/fluctuations. Additional Battery backup for alarm must be there so that alarm will notfail in case of power failure, and must be able to sustainthe alarm. 8. Range of External Ambient Temperature and Humidity for optimal equipment performance: An ambient temperature range of up to 10 to +45 ±1 °C and Relative Humidity of 60-90% 9. Performance: Agitation at 1.5 inch (3.6-4 cm) side to side stroke, 65-75 strokes/min. 10. Firm must submit the documentation for qualifications for design, installation, operation and performance. 11. Firm must submit validation and calibration reports which must have traceability to applicable national and international standards. 12. Fully detailed operator manuals must be provided in English. 13. Electrical Requirements: a. Nominal input voltage: AC, 220/240V, 50Hz, Single phase. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. b. Must have an integrated voltage stabilizer or external servo stabilizer of appropriate ratings as per ISI specifications (Input 160-260 V and output 220-240 V and 50 Hz). c. Equipment meets electrical safety specifications such as that of the IEC 61010-1. 14. Must have seven day chart recorder with a graphic chart recorder with battery backup. The firm should supply charts for free of cost during the entire warranty period. 15. Should be USFDA or European CE approved 16. Manufacturer should be ISO 9001 certified and should have ISO 13485 certification for quality standards. 12 Plasma thawing 1. Digital, microprocessor controlled electronic bench bath top system is required with LED display and soft touch buttons.

		2. Should be compact in size [LxWxH (in ft.) should not be more than 3x1.5x1.5].
		3. Should be able to thaw 12-16 plasma bags within 30-45 mins.
		4. Should give an alarm when the plasma bags are thawed.
		5. Should have eparate stainless steel basket/ SS tray assemblies with built-in system for securely holding
		the plasma bags of all sizes.
		6. Should have water bath based system which should
		be operational at 4 degree Celsius temperature to 37 degree Celsius.
		7. The equipment must have in-built pumping mechanism for uniform thawing of plasma bags.
		8. Should have programmable thawing cycles with facilities to set temperature and time duration.
		9. Should have alarm systems for over-temperature, cycle completion and any error.
		10. Should have a convenient draining system to drain the chamber. The equipment should be strictly leak proof.
		11.Chamber material should be made up of non
		corrosive stainless steel and Exterior should be
		bacteria-resistant powder coated.
		12. The firm must supply a Cover (PVC) to keep the unit
		covered when not in use. 13. The firm must supply system compatible plastic
		pouches for holding the plasma bags to be thawed to
		avoid cross-contamination in case of leakage and
		direct contact with the water.
		14. Power input to be 220-240VAC, 50Hz.
		15.UPS of suitable rating should be supplied. 16.The quoted model should have FDA or CE or ISO
		certificate and copy of the same should be enclosed along with the technical bid.
		17.Shall meet IEC-60601-1-2:2001(Or Equivalent BIS)
		General Requirements of Safety for Electromagnetic Compatibility.
		18.Two numbers of Complete
		User/Technical/Maintenance manuals to be
		supplied in English (Soft copy & Hard copy).
		19. Certificate of calibration and inspection from factory.
13	Water Bath	1.1 Should be rectangular & volume within 20-25 liters
		1.2Should be double walled chamber with inner chamber made of stainless steel and the outer is
		made of thick sheet and duly powder coated.
		1.3The cavity between the two chambers should be
		filled with high quality mineral glass wool. Dome
· <u></u>		

shaped cover with knob to be provided. 1.4Temperature should be controlled at increments of 1° C or less and is controlled by thermostat from room temperature to 100° C with an accuracy of ± 1° 1.5 Heating should be provided with immersion type heater 100 watts capacity. 1.6It should be supplied with the drain facility of the bath contents 1.7LED/LCD display of temperature 1.8 Mercury thertometer to read up 100° C. 1.9 Should have a water circulatory device. 1.10 Should have warning alarm for deviation from the set temperature. 1.11 Should have an inbuilt timer. 2. Acessories, Spares and Consumables 2.1 Should be supplied with removable stainless trays for accommodating test tubes and flasks to fit the water bath. 3. Standard, Safety and Training 3.1 Instrument must be accompanied with calibration certificate by NABL-accredited agency 3.2The manufacturer should have ISO certification. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. 4. Documentation 4.1 Two numbers of Complete User/Technical/Maintenance manuals to be supplied in English (Soft copy & Hard copy). 4.2 Service Manual in english 4.3 Certificate of calibration and inspection from factory. 14 Electronic Double 1. Should be two pan balance Pan Component 2. Should have digital display of weight and other Balance parameters 3. Accuracy ± 1 grams 4. Should have two independent weight sensors, which display individual weight of each bucket with accuracy 5. It should have individual display monitor to display the weight of each bucket with blood bags 6. Visual or audio alarm should get on as soon as the two plates get balanced 7. Weight Measurement: Should be able to measure weight till 3-5 Kgs 8. Should be appropriate to weigh and balance blood holding baskets of standard size 9. Weight of balance should not be more than 6 Kgs

	10. Original literature of equipment should be submitted. 11. Firm will have to supply the stabilizer if required along with the equipment free of cost 12. Firm should also provide the relevant calibration certificate for the equipment from any NABL accredited Lab. 13. Should be USFDA or European CE approved product. 14. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
15 Deep Freezer (-40°C) 700 L	 Should be suitable for storage of FFP / plasma/cryoprecipitate in blood banks. Operating temperature range should be from -20°C to -40°C at ambient temperature and adjustable with setting accuracy of ±1°C. Upright model with internal capacity 700 liters or more. Solid outer cabinet of painted steel to prevent corrosion. Inner cabinet of stainless steel. Separate inner doors to prevent temperature loss. System should have 4-6 inner shelves of stainless steel. Automatic closing of front door below an opening angle of 90° It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display. It must have minimum four hours battery backup for temperature display. System must have in-built features to identify any temperature deviation beyond set point. Should be provided with data logger device. System should have operating temperature & high /low limit alarm functions with set point adjustable in steps of 1°C. System should have CFC free refrigerants. System should have automatic voltage boost compensations for low voltage conditions. System should have safety alarms with automatic, continuous charged battery back up to provide alarm functions even in case of power failure. System should have appropriate insulation to maintain temperature. System should have double seal lid gasket to

		minimize frost build up.
		18. System should have minimum vibrations, and noise
		level should not exceed 70 db.
		19.It must have automated defrost or a heating device
		on frame to avoid condensation
		20.It must have seven days graphic temperature
		recorder along with data logging device.
		21. Should have castor wheels with locking facility.
		22.Original literature of equipment should be
		submitted.
		23. Should provide the relevant temperature calibration certificate for the equipment from any NABL
		accredited Lab.
		24. Should supply 400 temperature recorder chart
		papers and 10 ink pens (if the temperature recorder
		is not inkless) along with the equipment free of cost.
		25. Should supply suitable stabilizer if required along
		with the equipment free of cost.
		26. Should be USFDA or European CE approved
		product. 27. Manufacturer should be ISO 9001certified and
		should have ISO 13485 certification for quality
		standards.
		28. It shall meet IEC-60601-1-2 (Or Equivalent BIS)
		General Requirements of Safety for Electromagnetic
		Compatibility.
		Companion.
16	Deep Freezer	1. Should be suitable for blood / plasma storage in
	(-80°C) 800 L	blood banks.
		2. Operating temperature range should be from -50°C
		to -80°C at ambient temperature and adjustable
		with setting accuracy of ±1°C.
		3. Vertical model with internal capacity 800 L or more.
		4. Solid outer cabinet of painted steel to prevent
		corrosion. Inner cabinet of stainless steel.
		corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss.
		corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless
		corrosion. Inner cabinet of stainless steel.5. Separate inner doors to prevent cold loss.6. System should have 5-6 inner shelves of stainless steel.
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90°
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation
		corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display.
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display. 9. It must have minimum four hours battery backup
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display. 9. It must have minimum four hours battery backup for temperature display.
		corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display. 9. It must have minimum four hours battery backup for temperature display. 10. System should have inbuilt features to identify any
		 corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display. 9. It must have minimum four hours battery backup for temperature display. 10. System should have inbuilt features to identify any temperature deviation beyond alarm set point.
		corrosion. Inner cabinet of stainless steel. 5. Separate inner doors to prevent cold loss. 6. System should have 5-6 inner shelves of stainless steel. 7. Automatic closing of front door below a opening angle of 90° 8. It must have microprocessor control for operation with integrated audio/visual temperature alarm function with digital monitoring display. 9. It must have minimum four hours battery backup for temperature display. 10. System should have inbuilt features to identify any

	Т	
		11. System should have operating temperature & high/low limit alarm functions with set point adjustable in steps of 1°C. 12. System should have CFC free refrigerants. 13. System should have washable condenser filter to maintain peak cooling efficiency. System should have automatic voltage boost compensations for low voltage conditions. 14. System should have adjustable safety alarms with automatic, continuous charged battery back up to provide alarm functions even in case of power failure. 15. System should have appropriate polyurethane insulation. 16. System should have double seal lid gasket to minimize frost build up. 17. System should have minimum noise and vibration. 18. It must have automated defrost or a heating device on frame to avoid condensation. 19. It must have seven days graphic temperature recorder along with data logging device. 20. Should have castor wheels with locking facility. 21. Original literature of equipment should be submitted. 22. Firm should also provide the relevant temperature calibration certificate for the equipment from any NABL accredited Lab. 23. Should supply 400 temperature recorder chart papers and 10 inkless pens along with the equipment free of cost. 24. Should supply suitable stabilizer if required along with the equipment free of cost. 25. Should be USFDA or European CE approved product. 26. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality standards. 27. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
17	Dielectric Tube	The system should be heavy duty and simple to
	sealer (Bench top)	 handle. System should gently seal the blood bag tubing of all manufacturers with no haemolysis. The sealing time should be between 0.5-2 seconds. It should be able to make 70-80 seals/hr. Sealing triggering should be automatic. The sealing length should be of at least 1 mm.

		 The sealing should provide a notch for easy detachment of the sealed tubing. Should have an option of extended portable hand unit with coaxial cable of 1.5-2.0 meter. Should have indication lamps for "Sealing Process" on handle as well as main unit and LED. No warm-up time should be required. Should ensure easy separation of tube segments after the sealing. System should run on mains. Should be light weight not more than 6 Kg. It should give alarm in case of detection of wet tube, leakage and sealing defect. Power input: 220-240V/ 50 Hz AC. The quoted model should have FDA or CE certificate and copy of the same should be enclosed along with the technical bid. Should have the ISO certification and the copy of the same should be enclosed along with the technical bid. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
18	Manual Plasma Extractor	 Should be suitable to manually express blood components (Plasma, Platelets) from collection blood bags. Front panel should be spring loaded to apply uniform pressure on container causing transfer of fluid. Compression plate should be made of durable transparent acrylic Metal used for the apparatus should be noncorrosive and can be cleaned with antiseptics Base portion and vertical surface should be made to have better strength and long lasting performance Certifications: Product certification: CE class IIA or US FDA certified. Quality certification: ISO certified
19	Sterile Connecting Device	 Should accommodate and weld all types of blood bags tubing in use in our country. The welding should be seamless. Should be capable of joining wet-wet/wet-dry/dry-dry tubes. Digital, microprocessor controlled electronic bench top system is required with LED display. Should be compact in size [LxWxH (in ft.) should not be more than 2x2x1.5]. The time taken to make one sterile connection should be less than 1 min.

		7. Welding should not affect the quality of the tube in terms of its physical and chemical properties and it
		should not cause haemolysis.
		8. It should have LED indicators/ display to show the
		actual status of the ongoing procedural steps and
		audio – visual alarm system for any functional
		irregularities.
		9. The welding accessories should be available with the
		local agent throughout year.
		10. The cost of consumable wafers per 100 pieces will be
		taken into account during price evaluation.
		11. Firm will have to supply compatible UPS with
		minimum half hr backup along with the equipment
		free of cost.
		12. Original literature of equipment and consumables
		should be submitted.
		13. Certifications:
		13.1 European CE class II A or US FDA certified
		13.2 Quality certifications: ISO certified. It shall
		meet IEC-60601-1-2 (Or Equivalent BIS) General
		Requirements of Safety for Electromagnetic
		Compatibility.
		Companionity.
20	Blast Freezer	1. Rapid plasma bag (200 to 1000 ml) freezing to core
		temperature of -30 °C. Operation temperature of -
		50°C without rupturing plasma bags.
		2. Minimum capacity of 24 bags of 250ml liters.
		3. Contact plate shock freezing technology with only
		bottom contact plate moving upward. Refrigeration
		for both plates.
		4. Rapid freezing to handle several batches in a day
		without loosing freezing temperature.
		5. Able to achieve plasma bags (200 to 500ml) core
		temperature of -30 °C within 30 minuets at ambient
		temperature of 32 °C
		6. Multi-channel process & controller-with temperature
		controller, monitor with capacity to produce
		validation graphs.
		7. Solid cabinet casing with high grade stainless steel
		to prevent corrosion with smooth lockable castors.
		O Facily alcomoble weathing auniforce
		8. Easily cleanable working surfaces.
i		9. Ergonomic design, compact, service- maintenance
		9. Ergonomic design, compact, service- maintenance
		9. Ergonomic design, compact, service- maintenance friendly construction. Trouble free cleaning and
		 Ergonomic design, compact, service- maintenance friendly construction. Trouble free cleaning and disinfection.
		 Ergonomic design, compact, service- maintenance friendly construction. Trouble free cleaning and disinfection. Castors for mobility with stabilizers/peripherals
		 Ergonomic design, compact, service- maintenance friendly construction. Trouble free cleaning and disinfection. Castors for mobility with stabilizers/peripherals Integrated colored LCD process automatic controller:
		 Ergonomic design, compact, service- maintenance friendly construction. Trouble free cleaning and disinfection. Castors for mobility with stabilizers/peripherals Integrated colored LCD process automatic controller: Indicating top and bottom plate temperature.

		14. Indicating freezing process.
		15. Indicating freezing time.
		16.Indicating temperature diagram.
		17. Indicating defrosting process.
		18. Selector switch freezing / defrosting
		19. Selector button table open / close.
		20. Emergency switch off button.
		21. Main switch on / off.
		22.8 control channel & 4 program channels
		23.50 programs, with 1000 segment under dynamic
		management.
		24. Multi-channel processor with color display.
		25. Semi-hermetic (repairable) air cooled compressor
		with reliable refrigeration and low noise and
		vibration.
		26. Short pre-cooling phase to -50°C in 20 minutes.
		27. Refrigerant CFC free
		28. The equipment of continuous duty and frost free.
		29. Hot Gas Defrosting, with less than 10 minuets
		30. Meeting protection class I Safety.
		31. Standard package with accessibility for network
		connection (RS 232, 485, Ethernet/LAN/ or any
		equivalent) for temperature recoding and monitoring
		to validation requirements.
		32. Conforming to EMI directive / EEC, Low voltage
		directive.
		33. Optional Barcode reader & software
		34. Power failure alarm, Phase error alarm,
		35. Operational on 3 phase 400 V at 50 Hz. 32 A. It
		shall meet IEC-60601-1-2 (Or Equivalent BIS)
		General Requirements of Safety for Electromagnetic
		Compatibility.
		36. Max energy consumption of 1500-2000 W per cycle
		37. Power rate 4 KW.
		ornower rate + 11
21	Cooling Table	1. Applications: used for temporary storage of blood
		units for labelling etc. to maintain cold chain. It
		must maintain temperature between 4- 6°C with
		stability of± 2°C
		2. Must have inclined work space to evacuate the
		condensation with facility for drainage so that there
		is no accumulation of water on table.
		3. Must have automatic defrost with static cooling / Air
		condenser
		4. Must have a hood over the table working area to
		stabilise the required temperature
		5. Must have independent power supply.
		6. Dimensions:
		6.1 External: 2000mm(L) x 1000mm(W) x 1000mm
	1	

		 (H) 6.2 Working area (Min.): 1500mm x 700mm x 200mm 7. Electrical requirement: 230V / 50Hz, Single phase. The equipment must be able to run on the existing electrical provision. Any additional electrical requirements must be specified by the firm. 8. Must perform at an ambient temperature range of up to +45 ± 1 °C and Relative Humidity of 10-90% 9. Firm must submit the documentation for qualifications for design, installation, operation and performance. 10. Firm must submit validation and calibration reports which must have traceability to applicable national and international standards. 11. Fully detailed operator manuals (English) must be provided.
22	Biological X-ray based blood irradiator	 All goods supplied in accordance with the Contract MUST be new and of good construction, sound materially, of adequate strength and free of defects in design materials and workmanship so as to be safe and without risk to health when properly used. If there are manufacturing defects known to the firm, then it MUST identify such defects and state their policy regarding the repair of known defects. Radiation Source should be X-ray based with minimum 1-2 X-ray tubes. The system MUST have X-ray tube output limits up to 220 kV, 30 mA and/or 3 kW. The X-ray tubes should have life span of atleast 5 years/5000 hours. It should be able to provide uniform and controlled dose of irradiation to blood and blood products with a central dose of min. 25 Gy and Max. up to 50 Gy at the periphery during the full cycle. Centre dose rate should be between 2.5-5 Gys per min It must have self-contained cooling system without requirement of external water supply. Canister volume should be able to accommodate a minimum of 6 to 8 blood bags each of 300 ml at a time The system MUST be self-contained with respect to the irradiation chamber and electronics, and MUST NOT exceed a physical foot print of 1.5 x 1.5 m, height 3 m and weight 1,200 kg. The system MUST include a positioning function for beam and specimen alignment.

- 11. The system MUST have software in place requiring operators to login using a designated user ID and password for secured operations.
- 12. The system MUST have storage facility (on-board) for min. 40,000 components. The system MUST enable user to export the data onto an external storage device for archives.
- 13. The system should include integrated touch screen panel/controller.
- 14. The supplier MUST be able to provide software updates, if applicable. All software/hardware upgrades to the system, which become available during the life of the contract, MUST be provided free of charge.
- 15. The system MUST be accompanied by a calibrated dosimeter, for dose and dose rate measurements within the irradiation chamber. The firm will also have to supply the radiation tags along with any other quality control requirements. The rates for the same must be quoted in the tender.
- 16. Firm MUST submit copies of certificates of all relevant testing or compliance certificates (AERB and/or IAEA).
- 17. The firm MUST provide certificates of satisfaction from 3 institutions of repute (Indian/International) for similar systems.
- 18. The system MUST be fully physics commissioned and dose calibrated within the irradiation chamber.
- 19. The equipment must be able to run on the existing electrical provision. Any additional electrical requirements must be specified by the firm. The installation of all electrical items MUST be in accordance with, but not limited to, the existing guidelines in India.
- 20.A stabilizer (if required) and UPS (with 30 min power back up) MUST be provided to temporarily power the unit in the event of a power cut.
- 21. The firm MUST state details of timeline for lead time to installation, commissioning and training.
- 22. The commissioning of the equipment MUST be successfully carried out by Supplier trained engineers.
- 23. The firm MUST have dedicated X-ray irradiator specialists at their disposal and fully qualified service personnel who can respond to service calls within the stated response times residing in Delhi/NCR.
- 24. The firm MUST provide confirmation of the

availability of service and replacement parts & kits for at least 5 years after commissioning. 25. Firms are asked to provide details of a training programme to include but not limited to the following: a. The firm MUST provide on-site training after commissioning, to include use of instrument, system familiarization, operation, dosimeterbased calibration, maintenance and troubleshooting. b. All operators' system manuals, Service and maintenance manuals and any other relevant documentation MUST be supplied in English language. 23 Fully Automated 1. The Instrument should be floor/ bench top model Random Access with castor wheels with locking facility, Random Chemiluminescence Access Chemiluminescence based with facility of continuous loading of samples. 2. The instrument should have throughput of at least 40 tests/hr. 3. The sample carrier should be capable of taking different sizes of tubes for collection of blood and instrument should be capable of automatic sampling from different sizes of tubes. 4. The instrument should be capable of loading minimum of 50 samples at a time with customized on-site priority positions and continuous access for reagent and sample should be possible during run. 5. The system should have liquid stable ready to use reagents including control, calibrator. 6. The instrument should have the facility of performing following tests -6.1 Fourth generation test for HIV 1 and 2 including P24 Ag/Ab (both essential) 6.2Anti HCV 6.3HBsAg 6.4 Syphilis. 7. The instrument should have minimum contamination with carryover of as low as 0.1 ppm. 8. The instrument should have a facility of lot calibration, auto loading & unloading of reagents while instrument is in running mode. 9. The instrument should have bar code as well as bidirectional facility. 10. Firm should supply compatible UPS with minimum one hr backup along with the equipment free of cost. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic

Compatibility. 11. The bidder should also quote separately the running cost of the machine (without any exclusion) and the cost of kits/consumables/reagents for each quoted test for a period of 5 years. 12. The firm should also supply 500 tests for each TTI markers i.e. fourth generation HIV including P24 Ag/Ab, Anti HCV, HBsAg and Syphilis, free of cost along with the equipment. 13. Original literature of equipment and consumables should be submitted. 24 Table Top 1. Must perform in wide temperature range (0-45°C) Centrifuge and in humidity of up to 90%. 2. The firm must supply swinging bucket rotor. Swing bucket rotor must accommodate at least 16 tubes of 12x100mm tubes. 3. It must have option of braking system so that the centrifuge stops within 60 ± 10 secs. 4. Noise level must be strictly less than 60 dB and documentary certificate for the same is to be furnished by the firm. 5. Must be supplied with in-built compatible stabilizer. 6. Max. Speed: up to 1,000 to 4000 rpm, maximum RCF must be ≥ 2000xg (Swinging bucket rotor) 7. Must have provision for setting the timer. 8. Must have inverter controlled Brushless Induction drive system 9. Safety features: Lid locking, Emergency lid release, Lid dropping protection, Automatic rotor recognition, Imbalance detector and shut-off, Motor overheating protection, Over speed sensors/detector must be available in the equipment. 10. Display: LED display with user-friendly soft-touch tactile buttons with easy to use User-interface. 11. Dimension: Must be < 20 inch (W) x < 30 inch (D) x < 20 inch (H) mm. 12. Centrifugation chamber must be made up of rustfree stainless steel for better durability. 13. Power Requirement: Single phase, AC 220/240 V, 50Hz. The equipment must be able to run on the existing electrical provision. Any additional electrical requirements must be specified by the firm. 14. Ambient temperature and humidity for operation: from 2 to 45 °C with 10-90% humidity. 15. The firm must supply suitable separate sturdy tables for installing each of the centrifuges. 16. Firm must submit validation and calibration reports for speed, acceleration/deceleration and time which

	must have traceability to applicable national and international standards. 17. Fully detailed operator manuals must be provided. 18. Should be USFDA or European CE approved product. 19. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
Reagent Refrigerator	 Storage Capacity: Should be at least 600 Liters capacity. Set temperature 4°C with temperature range 2°C to 6°C and adjustable with setting accuracy of ± 0.1°C. Refrigeration: Non-CFC cooled refrigeration. Should have good insulation to maintain required temperature. Should have good metallic door. Microprocessor based temperature controller with integrated audiovisual temperature and power alarm function with digital monitoring display. Safety features: Audio alarm for all the following parameters should be there - temperature fluctuation & power failure, set point alarm, low alarm point, Door opening audio and visual display alarm. Independent safety thermostat to avoid negative temperatures. Should have battery backup for temperature display and power alarm. Internal temperature hold over time in case of power failure should be at least 1.5 hours. Should have castor wheels with locking facility. While in operation, the noise level must not exceed 60 dB. Original literature of equipment should be submitted. Firm should supply the relevant calibration certificate for the equipment from NABL accredited Lab. Firm should supply the temperature recorder chart paper (1000 nos.). The cost of the temperature recorder chart paper will be included in the total cost of the equipment financial comparison. Should be USFDA or European CE approved product. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality

		standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
26	Micro pipette set (Manual adjustable)	 Should be manual adjustable micropipette set having the following capacities a. 1 – 2.5 μl b. 0.5 – 10 μl c. 2-20ul d. 10-100ul e. 20 – 200 μl f. 100- 1000ul Fully autoclavable. Must show accuracy in measurement Ejector should ensure safe eject contaminated tips, positioned for perfect ergonomics. Must have precision in control, spring loaded tip cone. One-button operation for aspiration, dispensing and tip ejection. Volume setting automatically locks. Chemically resistant. 4-digit display. Accuracy: +/- 1% for all. Calibration certificate should be provided with the supply. Disposable tips 5000 each volume. Should be supplied with tips holder rack & pipettes stand. Should be US FDA or European CE approved.
27	Multichannel Pipette	 Premium pipette with Quick and secure volume setting, volume lock with single button operation. Adjustment window for adjusting pipette to a specific liquid type. Control Button with very low operating force, Colour indication for pipette volume. Volume Display: 4 Digits with magnifier. To provide thermal, mechanical and chemical stability piston should be madeofFortron/steel material Serial number is printed on multiple components of the pipette. Very easy removable lower part for cleaning pipette. Fully Autoclavable. No discoloration upon UV irradiation. Pipettes should have advanced Radio-Frequency Identification device (RFID chip) to enter all relevant data regarding the pipette (serial no., Certificate of Conformity, article no. etc.). Optional software for read and write in RFID chip.

		 11. Channel indicator to use pipette the same way round. 12. Channels can be removed for adjusting the distance between channels to use it for different format like 24 well plate, 6 well plate, etc. 13. Spring-loaded tip cone for reproducible tip fit and reduced effort with option to be switched on/off. 14. Volume range 0.5 – 10 μl, 10 – 100 μl, 30 – 300 μl.
28	Digital pH Meter	 It must be microprocessor based for fast and accurate pH measurement with soft touch control panel (3 point) It must measure pH range (0-14) It must have auto-calibration with 2 buffers It must have built-in Auto buffer recognition It must have pH and Temperature display It must have refillable Triode 3-in-1 epoxy body combination pH electrode It must run on 220-240 V: 50/60 Hz, It must have automatic temperature compensation (0-100 deg. C) The firm should supply standard buffers 4,7,10 pH (250 ml each) with the equipment. The firm should supply 1 extra set of electrode. Original literature should be attached Firm will have to supply the stabilizer if required along with the equipment free of cost. Original literature of equipment should be submitted. Should be USFDA or European CE approved product. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality standards.
29	Walk-in modular cold room	 Purpose of Equipment: Walk in cold room to store blood bags and reagent kits at an appropriate temperature of 4-6°C until specified expiry dates. It should be able to maintain a temperature range of 4 ± 2 °C (Accuracy: 1 °C). Type of Equipment: Should be operating with CFC-free refrigerant gas and must include all insulated walls, ceilings, doors, mechanical refrigeration systems, controls, internal lighting, and other ancillary items required for a completely fabricated and operational walk-in. External Dimension: 9 ft. (D) x 7.5 ft. (W) x 10 ft. (H) Wall and ceiling panels must be made up of non-ozone depleting material and Polyurethane Foam

- (PUF) insulated panels (minimum 6 cm thick).
- 5. Panels shall consist of CFC-free insulation sandwiched between interior and exterior wall.
- 6. Panel edges must have air tight vapour proof joint. Edges must be smooth.
- 7. Construction shall allow disassembly for possible relocation or expansion at a later date.
- 8. The entire interior surface and front panel of the exterior surface must be made up of stainless steel (Min. 0.5 mm thick) and rest of the exterior surface facing the walls must be made up of pre painted galvanised iron sheets (PPGIS).
- 9. Door construction: Door construction shall match the insulated panels with sliding doors.
- 10. Safety features:
 - a. It must have pad lock system and Human safety release knob.
 - b. Safety latch on the inside of door must be provided to allow anyone trapped inside to get out and/or an alarm (panic button).
 - c. Inside the chamber, a glass window of (dimension: min. 1 sq. ft.) must be placed as a safety measure.
 - d. Lighting: LED light fixtures suitable for the environment are to be provided by the supplier. Manual door open lighting system must be present.
 - e. Floor panel must also be insulated by PUF with granite/ Kota stone flooring which must withstand load of up to 5000 kgs.

11. Refrigeration System:

- a. All refrigeration piping required shall be furnished and installed by the manufacturer (turnkey basis).
- b. Condensing units and evaporator coils should preferably but not mandatorily be from the same manufacturer. The responsibilities of maintaining both the equipment lies with the supplying firm.
- c. Two air-cooled condensing and evaporating units must be of 10,000 BTU capacities to achieve and maintain the individual room operating temperature requirements and must be sized to handle additional loads appropriate for the application.
- d. Both refrigeration systems must have backup and emergency automatic and programmed switch-over of refrigeration systems to ensure uninterrupted cooling. Air

- cooling system should be split type.
- e. Refrigeration lines must be insulated to prevent any condensation and insulation exposed to the weather must have additional protection.
- 12. Must have low noise level (< 60 dB) and minimal vibration.
- 13. Option of Pre-set alarm at +1.5 °C and +8 °C must be provided.
- 14. Two separate Temperature Display Units (Digital LED/LCD) at 0.1 °C graduations must be provided for the two cooling units.
- 15. Audio-visual alarms: Temperature out of range, door open alarm system and power failure warning with battery back-up must be installed.
- 16. For continuous Temperature Recorder a digital temperature data logger as well as a 31 days chart with battery back-up must be provided with an in built thermal printer.
- 17. Shelves: Firm must supply suitable stainless steel racks for storage of blood bags and kits according to the design and dimensions required by the department. The racks should have minimum of 6-8 shelves (Depth of 18 inches each). The edges must be smooth and non-traumatic. Hooks for hanging blood bags must be provided on the inner walls as per the requirement of the department.
- 18. Air Circulation: Forced air circulation to maintain uniformity of temperature of the chamber.
- 19. Cold-room should be able to function at an ambient external temperature of $+20-45 \pm 1$ °C and in humidity of up to 90%.
- 20. Separate drain line provision must be installed for the drainage waste water generated from floor cleaning. Condensate drain line must be provided which should run in copper tubing to nearest floor sink. To prevent condensation, drain line is to be insulated where it exits the insulated panels. All this has to be done by the firm.
- 21. Installation: Supplier must install the cold room as per the requirement. The supplier must test all equipment operation and performance of walk-in cold room and to make all adjustments and repairs as and when required.
- 22. Walk-in supplier shall have ≥ 10 years of documented experience and be an established organization and production facility specializing in this type of equipment.
- 23. Supplier shall have the demonstrated ability to

produce the specified equipment of the required quality and the proven capacity to complete an installation of this size and type within 1 month of time limit. 24. Firm must submit the documentation for qualifications for design, installation, operation and performance and should take the complete responsibility for commissioning the unit. 25. Firm must submit validation and calibration reports which should have traceability to applicable national and international standards. 26. Fully detailed operator manuals must be provided in English. 27. Electrical: Nominal input voltage: AC, 220/240V, 50Hz, Single phase with 2 MCBs of 32 Amps each. Equipment meets electrical safety specifications such as that of the IEC 61010-1. The equipment must be able to run on the existing electrical provision. Any additional electrical requirements must be specified by the firm. It must be a complete automated walk away 30 Fully Automated Immunosystem. Must be capable of doing blood grouping, Haematology (IH) cross matching, antibody screening and/or platelet platform serology in a completely automated manner with latest model. 2. All necessary requirements for installation and proper functioning should be provided by company along with UPS. 3. The platform may be based on principles of SPRCA or EM technology or CAT. 4. All operations should be monitored by appropriate software. The software should be user friendly in operation, complete traceability of tests, samples, results and operators. 5. It should be easy to use and have safety and traceability of the reports. 6. The machine should be compact with inbuilt processor and reader. 7. Should have through-put of 80 or more samples per hour or should be able to do 80 or more Blood Groupings and hundred or more cross matching in one hour. 8. It must have provision for distinguishing serum from plasma before centrifugation 9. It must have provision for sample clot detection and low volume level notification (at least 0.5 ml of serum). 10. It must have facility for LIS integration of the

		 instrument. 11. Firm will have to supply the UPS with 1 Hr back along with the equipment free of cost 12. Original literature of equipment should be submitted. 13. Should be USFDA or European CE approved product. 14. Manufacturer should be ISO 9001certified and should have ISO 13485 certification for quality standards. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
R	Blood Bank Refrigerator 300- 50 L	 Description of Function 1.1 For storing blood & blood products. It should be microprocessor based. Technical Specifications Blood Bank Refrigerator should have capacity to hold 300-350 blood bags of 450ml capacity Temperature range from 2 deg C to 6 deg C. Holdover time: full load of blood bags at 4 deg C should take more than 1.5 hrs to rise above 6 deg C if power off and it should be supported by providing performance curves Cooling down time: A full load of blood bags at 25 deg C should not take more than 12 hrs for all the bags to reach below 6 deg C and it should be supported by providing performance curves. Is should have galvanized sheet steel construction, powder coated and adjustable feet. No welded joint to be exposed for rusting. Insulation of high-grade pressure – foam material. Lockable door with front glass and tight sealing (Magnetic closing) surround to prevent cold loss. Should have at least 4 rollout type drawers with stainless steel make Automatic defrosting and condensed melt water evaporation. Re-circulating air-cooling system. Hermetically enclosed, low noise, vibration proof/ low vibration compressor. Visual and audio signal alarm system for over temperature, under temperature ,power failure, door opening Epoxy coated outside finish and GS interior. Low noise, automatic defrosting, CFC free & HCFC free. HCFC free HCFC fre

		2.15 Digital temperature display should be provided.
		Should provide datalogger or circular chart
		recorder.
		2.16 Calibration certificate shall be provided at the
		time of installation in respect of all the
		parameters that require calibration.
		2.17 Power input to be 220-240VAC, 50Hz. It shall
		meet IEC-60601-1-2 (Or Equivalent BIS)
		General Requirements of Safety for
		Electromagnetic Compatibility.
		2.18 Should be European CE or US FDA approved
		product
		2.19 The units shall be capable of being stored
		continuously in ambient temperature of 0 - 35
		deg C and relative humidity of 15-90%.
		2.20 The units shall be capable of being operating
		continuously in ambient temperature of 10 -
		40C and relative humidity of 15-90%.
		3. Accessories
		3.1 Datalogger - 1 no or Circular chart recorder
		1000 nos
		3.2 Suitable voltage regulator/stabilizer meeting ISI
		specification - 1 no
32	Apheresis Machine	Continuous Flow Blood Cell Separator.
		2. Single/Dual Needle operation. (Optional accessory
		required for Single Needle)
		3. Should have the system to monitor the cell harvest
		of interest .
		4. The equipment should perform all therapeutic and
		donor related apheresis procedures, which all
		should be US-FDA and/or European CE approved
		5. Automatic Pump Loading & Priming of disposables sets.
		6. Automated Self test to ensure maximum Donor
		Safety.
		7. Built in Leukoreduction (<5 x 106) for Platelets &
		Plasma.
		8. Automatic Leukoreduction validation of platelets
		and plasma at the end of procedure.
		9. Adjustable product concentration.
		10. Separate Anticoagulation pump with custom
		programming adjustability
		11.Configurable maximum volume depletion levels
		either by weight or percentage of Total Blood
		Volume.
		12.Extracorporeal volume 150-250ml
		13.Inlet & return flow rate upto 20-100ml/minute
		14.Built in Access & Return Pressure sensor.
<u> </u>	1	

		15. Built in air detectors to prevent air embolism.
		16.Built in ACD Detector.
		17.Built in contamination monitor for monitoring &
		preventing RBC contaminations in platelet collection
		and plasma exchange.
		18. Audio visual alarms along with the tube sealer
		19. Periodic Instrument Calibration certificate for the
		various parameters and QC of the products should
		be provided/maintained by the vendor
		20. Additional accessories :
		a. 50 disposable platelet pheresis kits should be
		provided with the system
		b. Suitable online UPS for min 1 hr backup with
		maintenance free batteries
		c. All consumables required for installation &
		standardisation should be supplied
		21.European CE with 4 digit notified body no. or US-
		FDA approval and necessary approval from the
		licensing authority in India for the apheresis kit
		22. Onsite training should be provided by the technical
		expert to the users as per requirement
		23. The units shall be capable of being stored
		continuously in ambient temperature of 10 - 40C
		and relative humidity of 15-90%.
		-
	Azztamantad E mant	1 Charled be fully entempted E Dowt differential
33	Automated 5-part	1. Should be fully automated 5 Part differential
33	blood cell counter	hemato-logy analyzer based on flow cytometry, Light
33	_	hemato-logy analyzer based on flow cytometry, Light scattering.
33	_	hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and
33	_	hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility.
33	_	hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC,
33	_	hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only 4. Should give WBC, RBC, HGB, HCT, MCV, MCH,
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT,
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only 4. Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT,
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only 4. Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes.
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33	_	hemato-logy analyzer based on flow cytometry, Light scattering. 2. Should have automatic start-up, shut down and sample analysis facility. 3. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only 4. Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO 5. Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes. 6. Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes. Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples per hour in Retics mode.
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes. Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples per hour in Retics mode. Should have multi-channel analysis for better
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes. Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples per hour in Retics mode. Should have multi-channel analysis for better resolution & reproducibility's like
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes. Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples per hour in Retics mode. Should have multi-channel analysis for better resolution & reproducibility's like Dual differential count for WBC
33	_	 hemato-logy analyzer based on flow cytometry, Light scattering. Should have automatic start-up, shut down and sample analysis facility. Should have five discrete analysis modes CBC, CBC+ DIFF, CBC + Retic, CBC+Retic+Diff & Retic only Should give WBC, RBC, HGB, HCT, MCV, MCH, MCHC, CHCM, RDW, HDW, PLT, MPV, PDW, PCT, % RETIC, # RETIC, Absolute & % values for NEUT, LYMPH, MONO,EOS, BASO Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes. Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples per hour in Retics mode. Should have multi-channel analysis for better resolution & reproducibility's like

		11.HGB – Should have photometric and direct cellular	
		measurement	
		12. Retics – Should have on board, light scatter for	
		reticulocytes	
		13. Should have clot detection facility	
		14. Should have on-board reagents facility and	
		automatic reagent inventory management.	
		15. Should had have linearity atleast as follows	
		a. WBC - 0.02- 400 x 103 /ul	
		b. RBC - 0 - 7.0 x 106 / ul	
		c. PLT - 5 - 3500 x 103 / ul	
		d. HGB - 0- 22.5 g/d	
		e. RETIC – 0.2- 24.5%	
		16. Should be free of tubings & pinch valves ensuring	
		minimum maintenance	
		17. Should have Carryover of < or = to 1 % for all	
		parameters	
		18. Sample volume required in all modes not to exceed	
		200 ul.	
		19. Dead volume required should be < 300 ul.	
		20. Should have extensive QC features	
		a. 3D Bar & SDI Graphs	
		b. LJ plot	
		c. Table Format	
		d. Delta checks for cumulative review	
		e. Patient moving average	
		f. QC file management	
		21. Should have comprehensive Data management such	
		as	
		22. User-friendly Windows 2000 based software	
		23. Network integration should be possible with lab information system	
		24. Database storage capacity of atleast 10, 000 records	
		including graphics	
		25.UPS required to run the instrument should be	
		provided free of cost by the firm.	
		26. Should be FDA or European CE certified	
34	Lab Autoclave	1. Should be a fully automatic micro processor based	
		High pressure, high vacuum autoclave for sterilizing	
		material including blood bags, disinfection of	
		materials and waste decontamination.	
		2. Should be top loading, have Rectangular, vertical	
		chamber with well insulated jacket, chamber	
		Volume minimum 450 liters or more.	
		3. Should have single sliding door to have a pass	
		through system. Door should have the following	
		features.	
		a. Electrically controlled having fully automatic	
		a. Electrically controlled having fully automatic	

- function with multiple safety arrangements.
- b. Sealing system should be based on silicone seal.
- c. Should have at least 50mm thick insulation materials on jacket and in doors to ensure low thermal losses. Working temp. of the door should be less than 45 deg. C.
- 4. Should be high grade Stainless steel.
- 5. Should have preferably a built in Color touch screen.
- 6. Should have audio visual alarms in case of undesired situations.
- 7. Should have programmable Operators access level.
- 8. Should have pre programmed standard cycles and user programmable cycles.
- 9. Should have temperature adjustable from 121 Deg. C. to 135 Deg. C.
- 10. Safe Working pressure range should be from 15 to 32 PHI (1.1 bar 2.2 bar)
- 11. Should have complete monitoring of cycle operation and provided with at least two pressure sensors and two Temp. Sensors in addition to analog meters for chamber pressure, jacket pressure and steam generator pressure indication.
- 12. The unit should be equipped with multiple safety mechanisms for Emergency Stop over pressure safety valves for chamber and jacket, over temp safety, steam traps and electrical safety.
- 13. The unit should include Non fade built in thermorecorder for step progress values during the cycles with time and date and alarm condition if any.
- 14. Should have built in feature of Water Saving System for water conservation.
- 15. Should be supplied with complete set of high quality stainless steel trolleys and sterilization baskets:
- a. External trolley = 01 nos.
- b. Internal trolley with steel roller
- c. Shelves = 01 nos. and
- d. sets of Sterilization baskets.
- 16. All accessories & electric fitting must be supplied by the firm.
- 17. Three compulsory visits for calibration and checkup irrespective of complaints in year.
- 18. The steam Generator should be also be made of Ti steel & the steam generator should be equipped with automatic cleaning facility.
- 19. The equipment must have Integrated waste water cooling, integrated water saving device and draining facility.
- 20. The equipment should be having ports (RS 232 or

		equivalent) for LIS interface. 21.Should be US FDA/European CE certified. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
35	Bio-Safety Cabinet	 Floor model, horizontal flow, well lighted, work space, low vibration and noise. Easy to manoeuvre due to caster wheel provision. Overall dimension of workspace should be approximately 1200mmx600mmx600mm. Class 2A type. Construction: Cabinet: Stainless steel sheet of 20 SWG lining Front panels: Removable transparent scratch resistance sheet of approximately 6 mm thickness Side Panels: Fixed transparent scratch resistant sheet of approximately 6 mm thickness. Firm will have to supply the stabilizer with the equipment if required. Electrical: 230 volts 50 Hz, Single Phase. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
36	Coagulation Analyzer	 The equipment should be a table top, four channel, and random access open system. The instrument should be able to provide simultaneous measurement of Clotting assays. Principle of clot detection must either be turbidimetric/ turbodensitometric/ mechanical clot detection or LED optical detection methods. Technology should be insensitive to lipaemic, coloured, hemolysed plasma and turbid reagent. It must be able to run minimum tests which should include but not limited to PT, APTT, Fibrinogen, Factor VII and Factor VIII. The instrument must use spun plasma and preferably be able to use primary sample tube. The test analyses must be complete in 6-10 minutes. Throughput/hour should not be less than 30 samples. Instrument should be able to automatically detect sample and reagent positions. Instrument should have data storage capacity of minimum of 100 tests. Multi batch Q.C., Levy- Jennings graphs should be available in the system. Automatic mixing for sample and reagents should be possible. It must be able to integrate with the blood bank

		software. 13. Must have Battery backup for temperature recordings and alarms which is especially needed during power failure/fluctuations. 14. Must be able to perform in an ambient temperature range of up to +45 ± 1 °C and Relative Humidity of 60-90%. 15. It shall meet IEC-60601-1-2 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
37	Binocular Microscope	 Description: The equipment should have the following features: Optical system: Infinity corrected system Focus: Vertical stage movement 25mm or more per coarse Stroke Vertical stage movement 100micron or less per Fine stroke. Illuminator: Lamp House for LED with connecting cable having life Span of 20,000 hrs approx Revolving nosepiece: Reversed Sextuple revolving nosepiece. Objectives:
38	Electronic Analytical Balance	 Electronic balance with transparent case. Digital display of weight and other parameters should be there. Readability: 1 mg Capacity: 1 mg - 100g Accuracy: ±1 mg Stabilization time: less than 10 Sec Should have facility for automatic calibration.

		 8. Original literature should be attached 9. Firm should supply the relevant calibration certificate for the equipment from NABL accredited Lab. 10. Firm will have to supply the stabilizer if required along with the equipment free of cost 11. Original literature of equipment should be submitted. 12. Firm should also provide the relevant temperature calibration certificate for the equipment from any NABL accredited Lab. 13. Electrical: The equipment should be able to run on the existing electrical provision.
39	Hot Air Oven	 Should be made of double walled. Inner and outer chamber should be made of steel. Heating element placed at the bottom and both side ribs for uniform temperature all over the space. Temperature knob should be graduated in centigrade degree. 2 or 3 removable shelves. Dimension (Approximately): 600 mm x 600 mm x 600 mm (W x H x D). Maximum temperature should be up to 200 °C Should have Air Circulating fan. Should have Digital display temperature indicator. Electrical: The equipment should be able to run on the existing electrical provision. Should be ISI marked.
40	Blood & Component Balance	 Should be micro controller based Blood Bank Scale designed for weighing Blood and blood Components. Should have LED/LCD display, displays the weight and volume with an accuracy of 1gm/1ml. Should have weighing range upto 5kg and accuracy of 1mg/1ml. Should have easy conversion of weight to volume. Should display volume and weight of blood components. Should have Auto Calibration and Over load indication features. Should run on 230V ac and should have battery back up of atleast 1hour.
41	Wireless Data Logger	 Used for Real Time alarms and collection of Data from blood bank equipment. The system should be radio frequency based system and approved in India The system must have provision to cover more than

		30 locations on a single receiver and software
		4. Software must be 21 CFR part 11 compliant
		5. User defined for collection and transmission of Data
		from 1 minute to 1 day
		6. Sensors must be calibrated
		7. Accuracy of temperature ± 0.1 °C
		8. Digital signaling for no loss of data
		9. The alarms are transmitted by landline, mobile
		phone, email, fax and print out
		10. Alarms are generated for any technical fault e.g.
		physical damage to the sensors.
		11. The software is LAN enabled
		12. Repeaters can be used to boost signal between radio
		receiver and radio module.
		13. Wireless for fast and hassle free installation
		14. Dual probe for humidity and temperature
		15. Temperature range covering from 100 C to – 85 C
		with different modules
		16. User friendly software for easy monitoring of
		parameters
		17.Software can be upgraded
		18.3000 internal memory points for temperature
		module
		19.Hardware required should also be provided
		20. Original literature of equipment must be submitted.
		21. Should have a valid certification specific for the
		product which must be submitted by the firm.
		22. Firm must supply the relevant calibration certificate
		for the equipment from an accredited agency.
42	Blood Bank Software	A. General specifications
	Software	1. A Web based software that fulfils all the
		requirements starting from registration of the donors
		to the transfusion of blood components to the
		patients including all the investigations that are
		carried out in the blood bank.
		2. The software must be provided with security
		features against any virus, malware attack etc. The
		data will not be shared with any other
		organization/institution.
		3. At the time of demonstration for technical
		evaluation, the required standard features must be
		available in software.
		a.a.a.a.
		4. Provision of biometric fingerprint/ iris scanning,
		AADHAR integration, capturing of donor
		photograph, donor registration through web/mobile
1	1	self-registration, self-registration at kiosk, and

- option for other biometric methods must be provided.
- 5. Data encryption for data security must be in-built in the software. The data shall be property of NCI-AIIMS and at no cost be allowed to be shared by any organization/institution in India or Abroad.
- 6. Basic requirements must be fully incorporated in the software at the time of installation and time bound customization within a given time frame of 6 months.
- 7. Must have different customized modules as per the requirement of each laboratory/section and must provide integration of all blood bank equipment with main software.
- 8. The firm must support for developing any new module in future for any new tests and/or procedures that may be chargeable. The heads of charges for the same should be written in the technical bid.
- 9. Administrative right to access server, cloud server, application modules to modify certain specified field and values to be given to the designated blood bank authority.
- 10. Must have option to send SMS and email alerts for donors that can be auto generated, custom or manual to multiple number of blood donors.
- 11. Must provide interfacing with various blood bank equipment with the software by instant/pool consumption of the data received through interfacing of equipment.
- 12. Inventory management with facility of verification of physical stock tallying with barcode scanning. Facility to send alert system via email or SMS to officer In-charge in case of shortage of blood units with pre-defined stock limits for each element must be provided.
- 13. Must be integrated with HIS system of NCI-AIIMS.
- 14. Store management modules for accepting and releasing bulk store supply to allow user consumption and must have an alert system via SMS, email if stock is low.
- 15. Biomedical waste management modules from

- generation of waste to the discard of reactive, expired blood product or any other hospital waste material according to guidelines that are issued from time to time.
- 16. Flash pop-up messages for various alerts in the software to notify all active users for quick information.
- 17. Provision of various reports of generated data in multiple formats (pdf/xls/html).
- 18. The software must unambiguously provide system generated unique identification number series to the patients and unique registration number series to the donors.
- 19. Software must follow a defined transfusion chain management path and **must not** allow by-passing of any steps.
 - a. Blood collection Chain [Donor Registration → Screening → Medical Examination → Blood Collection(Bag generation, Donation and Donor Card printing) → (TTI Markers, Component Preparation and Blood Grouping) → Stock(only after successful completion of TTI (sero negative)]
 - b. Transfusion Chain [Patient Blood Request {Patient Requests → Patient grouping crossmatching(in available stock only and matrix compatible) → Issuing → Return to Stock if not transfused}]

B. Specification for various lab modules in Blood Banking Software

1. Donor Registration

- a. Registration facility for the donors should be available online and/or registration desk and/or locally installed Kiosks. If registration is made online or on Kiosk, then donor questionnaire must be filled by the user with the facility for taking printouts by oneself or else at the registration desk.
- b. Unique Donor registration number that must remain same regardless of donor encounters.
- c. Registration of donors at blood bank registration desk capturing with their photograph and

- various biometric identification and through AADHAR. If donor has done his online/kiosk registration then only biometric identification and photograph to be taken at registration desk to create donor encounter for the donation. Immediate retrieval of data regarding the previous visits of the donor must be available.
- d. Provisions of donor self-registration by locally installed self-registration touch screen kiosk; online registration for In-house donation or for a particular scheduled camp or a simple voluntary donor registration must be provided. Unique registration number at registration desk along with a printable barcode must be generated.
- e. Unique registration numbers for donors in outdoor camps, in-house, apheresis and blood units from external sources must be separately and unambiguously generated by the software.

2. Donor demographic (screening) and Medical Examination

- a. Must have provision of donor questionnaire with demographic details and questions w.r.t. different medical, surgical, drug intake and life style behaviors as per the Drugs and Cosmetics (D&C) Act, 1940 and rules therein as well as recent guidelines.
- b. Pre-defined brief medical examination module must be incorporated.
- c. Reason of deferral with date and deferral duration for donors must be user definable.
- d. Pre-donation counseling module must be provided.

3. Blood donation

- a. Modules for the following elements must be incorporated:
- b. Bag generation with a unique bag no., provision of segment no. of allotted bag and bag type, generation of bag barcode with collection date etc.
- c. Printing of donor card(preferably smart card type)

d. Post donation counselling module.

4. Blood donation camps

a. Separate simplified module for managing the camp related activities must be provided.

5. Aphaeresis

 a. Separate modules for the aphaeresis procedures along with screening, medical examination.
 Modules for collection details and post donation counselling remain the same as that in whole blood donation.

6. Transfusion Transmitted Infectious Marker Investigation

a. Single, multiple and interfaced reporting of various infection markers with validation and secondary confirmation for both serology (ELISA and/or Chemiluminescence) and NAT.

7. Blood Grouping

a. Grouping of donors, IPD and OPD patients by specified techniques (example QWALYS, microplate, tube etc.) by single, multiple and interfaced reporting and secondary validation facilities must be provided.

8. Component Separation, Inventory and issue

- a. Single, multiple and bulk component separation modules and issuing of components to patient and/or bulk issue to other organization or a centre must be provided.
- b. The software must provide a module for hassle free incorporation of units received in bulk from external sources to the inventory.

9. Blood Requisition

- a. Generation of blood/blood component request forms from the wards in a pre-defined format must be made available.
- b. The user must have options to choose from a list of options in relation to the urgency, type of components, and special requirements and/or modifications (if any) of required components.
- c. With the unique hospital identification number

(UHID) of the patient, the software must flash a pop-up message on the screen with the information regarding the Blood group and details of previous history of blood component transfusions. This information must be provided in the printed request form as well.

d. The software must provide the option to approve the generated request forms at the blood bank so as to keep track of the timeline from generation of the forms at the ward to reception of the printed forms at the blood bank.

10. Cross-match

- a. Cross-matching of required PRBC and/or whole blood units with available blood stock (matching matrix) must be provided. Module for platelet cross-matching should be there.
- b. On entering the UHID of the patient, the software must flash a pop-up message on the screen with the information regarding the Blood group and details of previous Transfusion history of patient.

11. Issue

- a. Module for issue of cross-matched blood and/or blood components to patient and bulk issue to centres/ organization must be defined.
- b. While issuing, with the UHID of the patient, the software must flash a pop-up message on the screen with the information regarding the Blood group and details of previous history of blood component transfusions.
- c. Option for unit discard/bulk discard must be provided.

12. Immuno-haematology Investigation

- a. Carrying various investigations which come to blood bank and reporting modules as defined by the department must be provided.
- b. This includes ICT, DCT, Antibody Screening, antibody identification, titrations for different antibodies (e.g. Anti A, Anti B etc.) etc.

13. Supply Store Module

a. Building stock and inventory for store.

- b. Raising of requirement requests from various labs and issuing supply from store.
- c. Alert system for define limit stock for store as well as labs.

14. Special modifications of blood components

- a. Separate check-boxes must be provide against components to indicate leukodepletion and irradiation,
- b. Software must provide modules for special modifications for blood components such as
 - i. paediatric unit preparations with provisions for part issue of units (e.g. 2017B/2000 P1 (70 mL), 2017B/2000 P2 (70 mL), 2017B/2000 P3(70 ml) and
 - ii. Intra-uterine transfusions etc.

15. Reports

a. Various reports those are mandatory as per D&C Act and are required on day to day basis in blood bank and a master register as per regulations must be provided.

16. Hardware requirements:

- a. The firm must provide one local server for the database and application at the blood bank with provision of automatic real-time syncing facility in a secured cloud service for both application and database at a remote (server) location (in India only) with dynamic DR and automatic failover. Servers must be provided to run the software efficiently.
- b. 20 PCs (Intel core 8th Generation i5 processors, 4GB RAM (DDR 4), 1 TB HDD, Latest Windows 10, 19" LCD/LED, Wireless keyboard and mouse) along with all other required peripherals must be provided.
- c. The software must run on 200 nodes/users and the data will be the property of the department.
- d. All the licensure required for running the software and hardware must be procured by the firm and the respective costs must be indicated as a part of the tender.

		e.	Bar-code printers and scanners (10 Nos. each) must be provided.
		f.	Digital signature pads, Webcams, Biometric scanners and iris scanners (3 Nos. each) must be provided.
		g.	Up time & penalty for delays in repair & maintenance: the firm will ensure uptime of 365 days in a year during warranty period & CMC period.
		h.	Whenever there is breakdown the firm will carry out the repair within 24 hours of receipt of such information (either by telephone or by any other means).
		i.	If there is delay beyond 24 hours then the firm will be penalized at the rate of 1% of the cost of product per day. This financial penalty can be waived off on recommendation of the user dept. if the reasons of delay are genuine the same are recorded & endorsed by the concerned dept.
		j.	If the down time is exceeded in a year from 20 days then the warranty shall stand extended by double the no. of days machine was out of order.
43	Glucometer		
44	Bp apparatus		
45	Hemoglobinometer		
46	Needle Destroyer		
47	Oxygen cylinder and nasal mask		
48	Tourniquets		
49	Rh View box		
50	Hand lens		
51	sample racks and trays		
52	Transport bags (Insulated temp. maintaining)		
53	TEG/aggregometer		
54	Neubauer's chamber/ Naegotte's chamber		

55	WBC counting
33	chamber
	Trolleys for
	transportation- Big
	and small
56	Transport boxes
	(wheeled cello
	boxes and/or
	refrigerated)
57	Turnkey as per
37	Annexure-3

Annexure - 2A

REAGENT COST (Only for bid ranking purpose) Α **Reagent Pack Details** No. of tests Total No. of (approximate Reagent Reagent load over 10 Pack List of Pack -No. of packs to be years being Catalogue **Parameters** make/ tests/pack used for No. factored for No. brand of tests in bid ranking column"A" only) **Blood Grouping** 1 Anti A 5,00,000 Anti B 5,00,000 Anti D (IgM) 5,00,000 Anti D (IgM+IgG) 5,00,000 Anti AB 5,00,000 Anti H 1,00,000 Anti A1 Lectin 1,00,000 Blood 2 Crossmatching AHG 15,00,000 Gel Cards 15,00,000 **Blood Antibody** 3 Screening Screen Cells (3 2,00,000 cells) ID Panels (11 2,00,000 Cells) ID Panels (6 2,00,000 Cells) CAT (K) 1,00,000 CAT (k/Celino) 50,000 50,000 CAT (Lea) CAT (Leb) 50,000 50,000 CAT (Duffy a) 50,000 CAT (Duffy b) CAT (Kidd a) 50,000 CAT (Kidd b) 50,000 CAT (M) 50,000 CAT (N) 50,000 CAT (S) 50,000

CAT (s)

CAT (CW)

50,000

50,000

CAT (P1)	50,000	
CAT (U)	50,000	
Antisera (K)	1,00,000	
Antisera (k/Celino)	50,000	
Antisera (Lea)	50,000	
Antisera (Leb)	50,000	
Antisera (Duffy a)	50,000	
Antisera (Duffy b)	50,000	
Antisera (Kidd a)	50,000	
Antisera (Kidd b)	50,000	
Antisera (M)	50,000	
Antisera (N)	50,000	
Antisera (S)	50,000	
Antisera (s)	50,000	
Antisera (CW)	50,000	
Antisera (P1)	50,000	
Antisera (U)	50,000	
Anti-E	2,00,000	
Anti-e	2,00,000	
Anti-C	2,00,000	
Anti-c	2,00,000	
CAT (NaCl Type)	3,00,000	
CAT (Extended DCT)	1,00,000	
Enzymes Papain	1,00,000	
LISS	15,00,000	
Bromelin	5,00,000	
Bovine serum albumin (22%)	50,000	
Glycine	50,000	
EDTA	50,000	
Sulphuric acid	50,000	
HC1	50,000	
Sodium Dihydrogen phosphate	50,000	
DiSodium hydrogen diphosphate	50,000	
PEG	50,000	
Xylene	50,000	
Glacial acetic acid	50,000	
Sodium chloride	50,000	

	Potassium chloride	50,000	
	Potassium dihydrogen phosphate	50,000	
	Buffer capsules (pH variants)	50,000	
	pH strips	50,000	
	Enzymes Ficin	50,000	
	DTT	50,000	
	Eosin	5,00,000	
	2- mercaptoethanol	50,000	
	Formaldehyde	50,000	
	Ammonia	50,000	
	Glycerol	50,000	
	Kit for cold autoantibody removal	50,000	
	Kit for warm autoantibody removal	50,000	
4	HB screening		
	Micro-Cuvettes	4,00,000	
5	Screening cost HIV		
	HIV 1 & 2	4,00,000	
6	Screening cost HBsAG		
	HBsAG	4,00,000	
7	Screening cost HCV		
	HCV	4,00,000	
8	Screening cost Syphillis		
	Syphillis	4,00,000	
9	Screening cost Malaria		
	IC Cards for Rapid Testing	4,00,000	
10	5-Part Hematology		
	CBC	7,30,000	
	CBC + Diff	7,30,000	
	CBC + Diff + Retic	3,65,000	

Annexure - 2 B

Consumable cost other than reagents (Only for bid ranking purpose)

	Items/ Pack Details						
S1. No.	Type of Consumable (Bidder may add additional rows)	Details of Tests / Analyzers/ Equipment, etc. the consumable is being used for	Make/ brand	Catalogue No.	Total No. of Consumable item/ packs to be used for cumulative no. of tests from serial no. 1 to 11 as detailed in column"A" of Annexure- 2A		
1	Calibrators						
2	Quality controls						
3	Additives						
4	Cleaners						

Important Note:

Any reagent, consumables & Essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed in column "A" of Annexure-2A if not quoted shall be provided free of cost by the bidder during the validity of the contract.

	Annexure - 2 C					
	Essential consumables to be quoted (Only for bid ranking purpose)					
		H				
S1.No	Name of the consumable	Quantity (approximate quanity over 10 years being factored for bid ranking only)				
1	Triple Blood Bags 350 ml	100000				
2	Quadruple Blood Bags 450 ml	100000				
3	Top & bottom Blood Bags 450ml with Integral filters	200000				
4	Transfer bags 300 ml with Spike Ports	50000				
5	Platelet Filter	100000				
6	Apheresis Kits platelets	50000				
7	Apheresis Kits stem cell harvest	20000				
8	RBC filter	100000				
9	Slides	500000				
10	Tubes (Glass plain) (12*100 mm)	1000000				

11	Fistula needles 16" guage	50000
12	Pasteur pippettes with rubber teats	10000
13	Beakers (40-100 ml)	5000
14	Conical flasks (100ml)	2
15	Conical flasks (5000 ml)	2
16	Measuring cylinder (glass) (100-1000 ml)	2
17	Lab thermometers	100
18	Microtips (10-1000ml)	1000000
19	Microtips (1 mL)	500000
20	Alcohol swabs	500000
21	Betadine swabs	500000

Any reagent, consumables & Essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed in column "A" of Annexure-2A, and items quoted in Annexure-2B & 2C if not quoted shall be provided free of cost by the bidder during the validity of the contract.

Annexure – 3

Turnkey works for Blood Bank

- 1. Bidder has to do all required turnkey as defined in the specifications. Institute will provide shell structure of approx. 7000 sq feet with one point electrical, water & drain supply. Bidder has to do rest of all from planning, designing, supply, installation and commissioning of all equipment on turnkey basis.
- 2. The cost of Turnkey for the area of 7000 sq feet will be considered for Ranking / Evaluation purpose however payment shall be made at actual on pro-rata basis.
- 3. Bidders are strongly advised to visit the site and carry out the assessment of works. All demolition, construction, & site modification shall be the sole responsibility of the bidder. Total area dedicated for Blood Bank is approx. 7000 sq feet. Bidder can modify the allocated area as per requirement. Only those vendors who offer the entire range of state of the art equipment comprehensively as a package deal will be considered. While designing the Blood Bank, bidder has to keep provision for future expansion of Blood Bank. This provision should be made without disrupting the zoning of the Blood Bank. All ancillary services like (electricity, water points, plumbing, R.O, HVAC/AHU, WiFi internet etc.) required for future expansion has to be built in while designing and furnishing the Blood Bank.
- 4. Bidder has to submit the layout design proposed with material used for construction/civil works to NCI -AIIMS for approval, Bidder can start the execution of civil works after getting approval from NCI-AIIMS.
- 5. Civil works includes construction of brick wall, plastering, painting, etc required as per the approved lay out plan, laying of tiles on walls & floors, provision of doors & windows as per approved lay out plan. Leveling of floor (if required) before lying of suitable anti-slippery floor and strengthening of floor should be bidder's responsibility (if required). All the items should be of suggested makes.

- 6. Bidder has to construct toilets, rest room, change room (Male & Female) eye-shower and shower facilities for workers as specified. All floors and walls in processing areas must be smooth, impervious to fluids and easily cleaned.
- 7. Any other necessary work not mentioned in BOQ/technical specifications/turnkey but required for successful completion of Installation, Commissioning, and maintenance of Blood Bank should be carried out by the bidder.
- 8. Bidder has to install CCTV cameras covering all major areas with recording of 60 days.
- 9. Bidder has to install communication system (microphones and speakers) in the following areas:
 - 1. Donation Area/Bleeding Area
 - 2. Component Lab
 - 3. Irradiation Lab
 - 4. NAT Lab
 - 5. TTI Lab (Chemiluminescence Lab)
 - 6. IH Lab
 - 7. Apheresis Lab
 - 8. QC Lab
 - 9. Office Room
- 10. Bidder has to plan following rooms as per cGMP guidelines.
 - 1. Component Lab
 - 2. NAT Lab
 - 3. TTI Lab (Chemiluminescence Lab)

11. List of items and suggested manufacturers:

- i. Vitrified Tiles for flooring Somany, Kajaria, H&R Johnson, RAK India
- ii. Paint Dulux, Asian Paints, Nerolac
- iii. Electrical:
 - a. Cables Finolex, Havells ,V-Guard.
 - b. Switches Legrand, L&T, Crabtree, Roma.
 - c. Distribution Box, MCB Legrand, L&T, Siemens, Havells.
 - d. Light Fittings Philips / Crompton / Kesselec-Schreder / Wipro.
 - e. Electrical panel ABB/ L&T/ Legrand/ Snider/ Siemens.
- iv. Air Conditioning Daikin, Hitachi, Blue Star, Voltas.
- v. Furniture Hermen Miller, Godrej, Featherlite, Wipro.

12. Electrical works:

i. Institute will provide three phase supply at one point in Blood Bank area and further distribution within the blood bank area will be responsibility of bidder as per approved layout. All remaining work has to be done by the bidder including Electrical Isolators, MCBs, Electrical boards, Switches, Sockets and any other thing which are required for smooth running of blood bank equipment

- ii. All electrical work required for commissioning and installation of equipment like cable wire, electrical outlets, switches, cable trenches, trays, railings, etc. should be fire proof, of reputed make, certified for electrical safety.
- iii. The suggested makes of electrical panel are ABB/ L&T/ Legrand/ Snider/ Siemens. Panel fabricator should be CPRI approved.

13. Lighting & Ventilation:

- a. Provision of 2ftx2ft LED lights to provide illumination of 500 lux in all areas. LED lights to be flush mounted to the false ceiling.
- b. Toughened glass sealed windows with curtains to be provided to allow natural sun light wherever possible.
- c. Exhaust air fans to be provided wherever required.

14. Plumbing & Drainage Works:

- i. Institute will provide one point water & drain supply and further distribution will be responsibility of bidder as per approved layout.
- ii. All plumbing work associated with proper functioning of Equipment has to be carried out by the vendor.
- iii. Drain should be such that there is safe disposal of solid & liquid waste generated during the process of the work.
- iv. Any other plumbing works associated with proper functioning of blood bank has to be carried out by the vendor.

13. Fire safety:

- i. Fire safety equipment shall be installed as per the norms and requirements of the fire department regulations applicable to NCI-AIIMS in Jhajjar (Haryana).
- ii. Fire detection and alarm system with conventional optical type smoke detectors, RIs/ MCP, fire control panel and its wiring with copper conductor FRLS wire shall be provided as per CPWD specifications.
- iii. Make of smoke detectors as suggested shall be Apollo/ Edward/ Siemens/ Honeywell.
- iv. Suggested make of RI, Hooters, MCP, Fire control panel shall be of Agni/ Safex/ Minimax.
- v. Fire fighting system shall be installed comprising of Hose reels, fire hydrants, landing valve, hose pipes, branch pipe, nozzles, valves as per CPWD specifications. The hosing and internal pipeline needs to be laid down by the vendor. However the water connection will be provided by the institute.
- vi. Automatic sprinkler system with adequate size of pressurization pump with pressure gauge, flow switch, annunciation panel etc shall be installed by the vendor, as per CPWD specifications. In case automatic sprinkler is not suitable

- for certain areas of Blood Bank, other alternative shall be installed as per the applicable norms.
- vii. Vendor shall provide adequate fire extinguishers of required type. (According to Fire safety rules).

14. Air-conditioning:

- a) Bidder has to do Air conditioning requirement as per zoning concept and as per D & C Act, (Drug and Cosmetic Act) WHO Guidelines (Design Guidelines for Blood Centres), NACO and CDISCO Guidelines.
- b) NCI-AIIMS will provide chilled water supply at one point outside the Blood Bank.
- 15.All necessary work & accessories required to install and complete functioning of equipment should be included in offer.
- 16. General Furniture and other items as per Table should be supplied as part of turnkey.

Table	Table showing detail loading of General Furniture and other items as part of Turnkey work					
S1.No	Area/Room Description	Item	Minimum required Quantity	Short Description of item		
1		Waiting Chair 3 Seater	20	As per technical specification		
2	Waiting Area	Modular Table	4	Modular table made od MDF material with suitable size for designed room/area.		
3		Drinking water facility	1	As required		
4	Reception/Regis tration Area	Reception Counter (Wooden)	1	Reception counter made of wooden materail with suitable size for designed room/area.		
5		Staff Chair	4	As per technical specification		
6		Staff Table	1	As per technical specification		
7	Pre donor	Staff Chair	1	As per technical specification		
8	Counseling Room	Visitor Chair	2	As per technical specification		
9		Storage Cupboard	2	As per technical specification		
10	Medical Screening Room	Modular Table	1	Modular table made of MDF material with suitable size for designed room/area.		
11		Staff Chair	4	As per technical specification		
12		Waste Bins set	1	As per technical		

				specification
13	-	Storage Cupboard	1	As per technical specification
14		Patient stool with back rest	2	As per technical specification
15		Patient stool with back rest	2	As per technical specification
16		Staff Chair	1	As per technical specification
17	Sample	Waste Bins set	1	As per technical specification
18	Collection Room	Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
19		Storage Cupboard	2	As per technical specification
20		Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
21		Staff Chair	6	As per technical specification
22	Donation	Waste Bins set	1	As per technical specification
23	Area/Bleeding Area	Storage Cupboard	1	As per technical specification
24	Area	Audio visual system	2	Television system with LED display with latest technology. Screen size suitable for designed room/area. Suggested Makes: Sony/Samsung/LG
25		Modular Table	1	Modular table made od MDF material with suitable size for designed room/area.
26	Post donor Counseling	Staff Chair	1	As per technical specification
27	Room	Visitor Chair	2	As per technical specification
28	-	Storage Cupboard	1	As per technical specification
29	Store Room (Donation Area)	Storage Cupboard	5	As per technical specification
30	,	Sofa set - 8 seater	1	As per technical specification
31	Refreshment Room	Tea Table	2	As per technical specification
32		Storage Cupboard	1	As per technical specification

	Audio visual system	1	Television system with LED display with latest technology. Screen size suitable for designed room/area. Suggested Makes: Sony/Samsung/LG
	Conference Table (10 seater) with chairs	1	High quality 10 seater wooden conference table with 10nos of cushioned conference chairs with castors and backrest.
	Interactive screen for display	1	Screen size suitable for designed room/area.
Meeting/Discus sion Room/	Projector	1	As required. Suggested makes: Barco/NEC/Canon/E pson/HP
seminar hall	Audio visual system	1	Television system with LED display with latest technology. Screen size suitable for designed room/area. Suggested Makes: Sony/Samsung/LG
	Book Rack	1	As required
	Journal Rack	1	As required
	Staff Table	1	As per technical specification
Decident Decem	Staff Chair	1	As per technical specification
Resident Room	Visitor Chair	2	As per technical specification
	Storage Cupboard	1	As per technical specification
	Staff Table	1	As per technical specification
Office for MCCO	Staff Chair	1	As per technical specification
Office for MSSO	Visitor Chair	2	As per technical specification
	Storage Cupboard	1	As per technical specification
Component Lab	Laminar Air Flow	1	As per requuirement of as per D & C Act, (Drug and Cosmetic Act) WHO Guidelines (Design Guidelines for Blood Centres), NACO and CDISCO Guidelines.
	Staff Chair	6	As per technical specification
	sion Room/ seminar hall Resident Room Office for MSSO	Meeting/Discussion Room/seminar hall Book Rack Journal Rack Staff Table Staff Chair Storage Cupboard Staff Chair Visitor Chair Storage Cupboard Staff Chair Visitor Chair Storage Cupboard Staff Chair Visitor Chair Storage Cupboard Laminar Air Flow Component Lab	Conference Table (10 seater) with chairs 1

50		Central Working Table	1	Central working table made of SS 304 grade with suitable size (minimum 7ft length x 5ft width) for designed room/area.
51		Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
52	Tong disable to Lab	Modular Table	1	Modular table made od MDF material with suitable size for designed room/area.
53	Irradiation Lab	Staff Chair	1	As per technical specification
54		Storage Cupboard	1	As per technical specification
55	TTI Lab	Waste Bins set	1	As per technical specification
56		Staff Chair	4	As per technical specification
57		Staff Table	4	As per technical specification
58	IH Lab	Reagent rack	1	As required
59		Storage Cupboard	2	As per technical specification
60		Waste Bins set	1	As per technical specification
61	Storage Area (Record)	Storage Cupboard	6	As per technical specification
62	(record)	Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
63	Blood Grouping Room	Lab Chair	6	With backrest, height adjustable, cushioned, with castors. With suitable dimention matching to modular table of the lab/room.
64		Storage Cupboard	1	As per technical specification
65	1	Waste Bins set	1	As per technical specification
66		Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
67	Cross Matching	Staff Chair	2	As per technical specification
68	Cross matching	Lab Chair	2	With backrest, height adjustable, cushioned, with castors. With suitable dimention matching to modular

				table of the lab/room.
69		Central Working Table	1	Central working table made of GraniteTop with suitable size for designed room/area.
70		Waste Bins set	1	As per technical specification
71		Modular Table	1	Modular table made of MDF material with suitable size for designed room/area.
72	Issue Counter	Issue Counter (Wooden)	1	Issue counter made of wooden materail with suitable size for designed room/area.
73		Staff Chair	2	As per technical specification
74		Waste Bins set	1	As per technical specification
75		Storage Cupboard	1	As per technical specification
76		Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
77		Lab Chair	5	With backrest, height adjustable, cushioned, with castors. With suitable dimention matching to modular table of the lab/room.
78	Apheresis Lab	Storage Cupboard	2	As per technical specification
79		Waste Bins set	1	As per technical specification
80		Audio visual system	1	Television system with LED display with latest technology. Screen size suitable for designed room/area. Suggested Makes: Sony/Samsung/LG.
81	Apheresis Section for therapeutic procedures	Modular Table	1	Modular table made of GraniteTop with suitable size for designed room/area.
82		Waste Bins set	1	As per technical specification
83		Staff Chair	4	As per technical specification
84	Discard room	Refrigerated Storage Facility	1	Refrigerated Storage Facility segregated to 8 parts (Chest model

				referigerator).
85	-	Staff Table	1	As per technical specification
86	1	Staff Chair	1	As per technical specification
87	1	Waste Bins set	1	As per technical specification
88	_	Scrub facilty	1	As required
89		Staff Table	1	As per technical specification
90		Staff Chair	4	As per technical specification
91	Dept.al store facility	Storage racks	12	Wall mounted storage racks with locking facility. As required as per room dimension.
92		Storage Cupboard	2	As per technical specification
93		Modular Table	2	Modular table made of GraniteTop with suitable size for designed room/area.
94	QC lab	Lab Chair	4	With backrest, height adjustable, cushioned, with castors. With suitable dimention matching to modular table of the lab/room.
95		Storage Cupboard	1	As per technical specification
96		Waste Bins set		As per technical specification
97		Staff Chair	4	As per technical specification
98	Office Room	Modular Table	1	Modular table made od MDF material with suitable size for designed room/area.
99	=	File Cabinet	1	As required
100		Storage Cupboard	1	As per technical specification
101	Faculty office	Modular Table	1	Modular table made od MDF material with suitable size for designed room/area.
102	-	Staff Chair	4	As per technical specification
103	Toilet	Standard Toilet fixtures	As required	Toilets to be seperated for male and female with standard toilet fixures.
104	Other Requirements	Air Curtains for Labs	As required	As required

105	(for each lab)	Air Purifiers for Labs	As required	As required
106		Shoe cover dispensers	As required	As required
107		UV Based Fly/ mosquito Repellant	As required	As required
108		Dinning table (10 Seater) with chairs	1	High quality 10 seater wooden dining table with 10nos of cushioned dining chairs with backrest.
109		water purifier	1	As required
110	Staff common room	Lounge chairs	4	High quality cushioned longe chairs .
111		Modular lockers	1	Modular lockers made of wooden material to accommodate 30 individual lockers with individual locking facility.

Technical Specifications of major furniture Items mentioned in above table:

I. Waiting Chair 3 Seater

- 1. Chair should be a combination of three seats.
- 2. The chair should be of stainless steel 304 grade.
- 3. Seat, handles, legs, and beam should be made Stainless Steel 304 grade material.
- 4. Approximate Overall Dimension (+/- 10%): 180 cm (W) x 75 cm (H) x 65 cm (D)
- 5. Should be of high quality.

II. Staff Chair

- 1. Should be medium back revolving type with height adjustable facility.
- 2. Seamlessly upholstered seat and backrest, with poly foam cushion.
- 3. Padded and upholstered arm rests and comfortable back rest.
- 4. Should be available in blue/red/meroon/brown/grey colours and should be supplied in colour scheme approved by NCI-AIIMS authorities.
- 5. Staff chair should be ergonomically designed, sturdy and of good quality.

III. Visitor Chair

- 1. Should be low back non-revolving type with fixed height.
- 2. Seamlessly upholstered seat and backrest, with poly foam cushion.
- 3. Padded and upholstered arm rests and comfortable back rest.
- 4. Should be available in blue/red/meroon/brown/grey colours and should be supplied in colour scheme approved by NCI-AIIMS authorities.
- 5. Visitor chair should be ergonomically designed, sturdy and of good quality.

IV. Storage Cupboard

- 1. Over all Size : 180 cmH x 90 cmL x 45 cmD (+/-10%).
- 2. Should be made up of wooden material
- 3. With 4 shelves.
- 4. With high quality hinges and overlapping two doors with locking facility and interlocking design.

V. Patient stool with back rest

- 1. Should be height adjustable cushioned stool with backrest and wheels for easy movement.
- 2. Height adjustable with pneumatic mechanism.
- 3. Should have five-leg castor base.

VI. Sofa Set - 8 seater

- 1. Should be sofa set of 8 seater capacity (Two nos of 3 seater and two nos of single seater).
- 2. Legs, base and other supporting structure should be made of solid wooden material.
- 3. Seat and back section should be made of high quality upholstery.
- 4. Should be supplied in colour scheme approved by NCI-AIIMS authorities.

VII. Tea Table

- 1. Approximate Dimensions: 90cm Length x 60cm Width x 45cm Height
- 2. Made of solid wooden material and top made of high quality glass.
- 3. Should have under storage space.

VIII. Waste Bins Set

- 1. Should be supplied and colour coded as per Bio Medical Waste Rules 2016
- 2. Should be supplied with black, blue, red, yellow coloured plastic puncture proof wastebins as required as per Bio Medical Waste Rules 2016
- 3. Small Size: 2 Nos each (with all required colour coding)
- 4. Big Size: 1 No each (with all required colour coding)

Technical Specification of Consumable Items:

I. General Specifications for all Blood Bags

1. Manufacturer must comply with ISO 9002 quality system certification and provide proof of same. Plastic Blood Bags should meet all the standards as laid down in ISO 3826, for the manufacturers have to produce documentary evidence from the laboratories approved by Government of India. Blood Bags must conform to ISO 3826 for container, design, plastic (physical, chemical,

- biological) anticoagulant, labels and needles. Needle must conform to ISO 1135-3. Proof of compliance with ISO 3826 and ISO 1135-3 should be submitted by company.
- 2. Bio-compatibility of the material of the plastics blood bags must be certified by the manufacturer and must be supplied by the test reports of the following:
 - a. Cell culture cytotoxicity
 - b. Haemolysis
 - c. Systemic infections (acute toxicity)
 - d. Sensitization
 - e. Intra-cutaneous injection (irritation)
 - f. Pyrogen test
 - g. Sterility
- 3. To assess quality of stored blood, manufacturer should provide documented evidence of following biochemical parameters of blood stored in CPDA-1/CPDA-1-SAGM containing DEHP plasticized PVC blood bags manufactured by the company on 28th, 35th and 42nd day of storage. The parameters are:
 - a. Plasma pH (6-7)
 - b. ATP (3-4mmol/gm of Hb).
 - c. 2,3-DPG (% of initial volume)(0-9mmol/gm Hb)
 - d. Plasma K+ (70-80 mEq/l)
 - e. % of viable red cells (>70% in 24 hrs post transfusion)
 - f. DEHP leaching(5-7 mg/dl)
 - g. DEHP should not be more than 0.01% w/v in the PVC
- 4. The platelet storage bag material should have good gas permeability to allow maintaining an optimum pH balance (not <6) during storage of platelets for 5 days.
- 5. The plastic blood bag should have a shelf-life of minimum 2 years. Stability reports from an accredited laboratory must be produced.
- 6. Slit present at the bottom of the bag should be "adequate to hang the blood bag during transfusion".
- 7. Packing: Individual plastic blood bags should be packed in a plastic pack and such 3-6 bags should be packed in aluminium foil pack. Aluminium foiled packs should be packed in the corrugated boxes which should indicate clearly and legibly the name of the manufacturer, name of the product, batch number, quantity, date of manufacturing, date of expiry, gross and net weight and consignee's name and address and other particulars as required.
- 8. External sterility of the plastic blood bags should be ensured and respective sterility reports of each lot should be provided along with.
- 9. Quality assessment of all the components shall be done and shall be a part of the technical evaluation.
- 10. Manufacturer must provide satisfactory user's list/ supply order of last two years from any three blood banks having facility of component separation in Delhi/ NCR.
- 11. Samples of each type of bag and filters need to be provided for technical evaluation.
- 12. The firm must qualify other general tender terms and conditions of AIIMS.
- 13.NOTE: ALL TYPES OF BLOOD BAGS MUST QUALIFY THE GENERAL

SPECIFICATION ALSO ALONGWITH THE INDIVIDUAL SPECIFICATION.

II. Triple Blood Bags (350 ml)

- 1. Blood collection bag made up of DEHP (Di-2-ethylhexyl phthalate) plasticized PVC, collapsible non-vented sterile containers complete with collecting tube for completely closed system to avoid the chances of contamination.
- 2. Capacity: 350 ml

3. Design and shapes:

- a. Flexible pre-sterilized
- b. Pyrogen free
- c. Non-toxic, non-haemolytic, biocompatible material
- d. No risk of contamination and air embolism (closed system) with all leak proof seals (Disposable Bags)
- e. Slit on the both sides of the bags should be enough to accommodate 2-6 ml volume test tubes
- f. The capacity of the bag should be enough to prevent any ballooning/rupture of the bag from the seam when it is filled up with the requisite volume of blood

4. Tubing of bag:

- a. Flexible non-kinking
- b. Non-sticking
- c. Transparent
- d. Leak-proof
- e. Multiple printed segment numbers (13-15 segments)

5. Needle:

- a. 16 gauge ultra-thin walled and straight and rust proof
- b. Sharp regular margins and bevelled tip (A visible or tactile means of indicating the position of the needle bevel)
- c. The design of the needle and the needle guard assembly must not significantly interfere with the venepuncture process and Design of the donor line and integral needle must incorporate a needle guard which can be permanently sleeved over the needle once removed from the venepuncture site and prior to disposal
- d. Tightly fixed with hub covered with sterile guard
- e. Hermetically sealed

6. External Port:

a. Easily accessible, tamper proof and shouldn't be re-capped

7. Package:

- a. Protective dual packaging (Individual & Aluminium) eliminating microbial contamination on surface maintaining the contents of the bag
- b. Easy to handle

8. Anticoagulant and preservative solution:

- a. CPDA-1 (49 ml/63 ml i.e. 14 ml/100 ml of blood) and 80 ml/100 ml SAGM solution for extended storage of red cells (up to 42 days)
- b. Clear & colourless
- c. No discolouration on storage at room temperature

d. Manufacturer to supply anticoagulant quality check certificate

9. Label:

- a. Non peel off
- b. Heat sealed labels
- c. Remain attached between room temperature to -80°C with a transparent adhesive
- d. Date of manufacturing, date of expiry and lot number must be mentioned on each bag legibly with indelible ink
- e. The expiry date should be at least 2 years from the date of supply of blood bags to the institute

10. Resistance to distortion:

a. Filled to normal capacity shall withstand a maximum acceleration of 5000g for 30 min at temperature 37°C to 240oC without becoming permanently distorted and should withstand temperature up to -80°C without breakage.

11. Diversion pouch and Luer adapter holder (LAH)

a. Integrated with the primary collection tube for maintaining sterility of the collected blood and sample collection

12. Automated component extractor

a. To be provided by the manufacturer along with all the required documentations

13. QC parameters of component(s)

a. Detailed QC parameters of the components are to be provided for technical evaluation

III. Transfer bags 300 ml with Spike Ports

- 1. Capacity of Transfer bags: 300ml
- 2. Must comply to the general specifications.
- 3. Manufacturer must comply with ISO 9002 quality system certification and provide proof of same.
- 4. Blood Bags must conform to ISO 3826 for container, design, plastic (physical, chemical, biological,) anticoagulant, labels, needle. Needle must conform to ISO 1135-3. Proof of compliance with ISO 3826 and ISO 1135-3 should be submitted by company.
- 5. External sterility of the blood bag must be assured.
- 6. RBC Values for ATP %, 2,3 DGP, DEHP leaching, % hemolysis, and pH must be furnished for 28/35 days.

IV. Quadruple Blood Bags 450 ml

- 1. Blood collection bag made up of DEHP (Di-2-ethylhexyl phthalate) plasticised PVC, collapsible non-vented sterile containers complete with collecting tube for completely closed system to avoid the chances of contamination.
- 2. Capacity: 450 ml (4 bags including the primary bag with top and bottom outlets)

3. Design and shapes:

- a. Flexible pre-sterilized
- b. Pyrogen free

- c. Non-toxic, non-haemolytic, biocompatible material
- d. No risk of contamination and air embolism (closed system) with all leak proof seals (Disposable Bags)
- e. Slit on the both sides of the bags should be enough to accommodate 2-6 ml volume test tubes
- f. The capacity of the bag should be enough to prevent any ballooning/rupture of the bag from the seam when it is filled up with the requisite volume of blood

4. Tubing of bag:

- a. Flexible, non-kinking and Leak-proof
- b. Non-sticking
- c. Transparent
- d. Tubes should have multiple printed segment nos. (13-15 segments)

5. Needle:

- a. 16 G ultra-thin walled ,straight, non traumatic and rust proof
- b. Sharp regular margins and bevelled tip (A visible or tactile means of indicating the position of the needle bevel)
- c. The design of the needle and the needle guard assembly must not significantly interfere with the venepuncture process and Design of the donor line and integral needle must incorporate a needle guard which can be permanently sleeved over the needle once removed from the venepuncture site and prior to disposal
- d. Tightly fixed with hub covered with sterile guard
- e. Hermetically sealed
- 6. External Port: Easily accessible, tamper proof and shouldn't be re-capped

7. Package:

- a. Protective dual packaging (Individual & Aluminium) eliminating microbial contamination on surface maintaining the contents of the bag
- b. Easy to handle

8. Anticoagulant and preservative solution:

- a. CPDA-1 (63 ml i.e. 14 ml/100 ml of blood) and 100 ml SAGM solution for extended storage of red cells (up to 42 days)
- b. Clear & colourless
- c. No discolouration on storage at room temperature
- d. Manufacturer to supply anticoagulant quality check certificate

9. Label:

- a. Non peel off
- b. Heat sealed labels
- c. Remain attached between room temperature to -80°C with a transparent adhesive
- d. Date of manufacturing, date of expiry and lot number must be mentioned on each bag legibly with indelible ink
- e. The expiry date should be at least 2 years from the date of supply of blood bags to the institute

10. Resistance to distortion:

a. Filled to normal capacity shall withstand a maximum acceleration of 5000g for 30 min at temperature 40°C to 240°C without becoming permanently distorted and should withstand temperature up to -80°C

without breakage.

11. Diversion pouch and Luer adapter holder (LAH)

a. Integrated with the primary collection tube for maintaining sterility of the collected blood and sample collection

12. Automated component extractor

a. To be provided by the manufacturer along with AMC/CMC and all the required documentations

13. Sterile connecting device with consumables

a. To be provided by the manufacturer to use filters in a closed system

14. QC parameters of component(s)

a. Detailed QC parameters of the components are to be provided for evaluation

V. Top & bottom Blood Bags 450ml with Integral filters

- 1. Blood collection bag made up of DEHP (Di-2-ethylhexyl phthalate) plasticized PVC, collapsible non-vented sterile containers complete with collecting tube for completely closed system to avoid the chances of contamination.
- 2. Capacity: 450 ml Quadruple bags with inline integral filters

3. Design and shapes:

- a. Flexible pre-sterilized
- b. Pyrogen free
- c. Non-toxic, non-haemolytic, biocompatible material
- d. No risk of contamination and air embolism (closed system) with all leak proof seals (Disposable Bags)
- e. Slit on the both sides of the bags should be enough to accommodate 2-6 ml volume test tubes
- f. The capacity of the bag should be enough to prevent any ballooning/rupture of the bag from the seam when it is filled up with the requisite volume of blood

4. Tubing of bag:

- a. Flexible, non-kinking and leak-proof
- b. Non-sticking
- c. Transparent
- d. The tubes should have multiple printed segment numbers (13-15 segments)

5. Needle:

- a. 16 G ultra-thin walled, straight, non traumatic and rust proof
- b. Sharp regular margins and bevelled tip (A visible or tactile means of indicating the position of the needle bevel)
- c. The design of the needle and the needle guard assembly must not significantly interfere with the venepuncture process and Design of the donor line and integral needle must incorporate a needle guard which can be permanently sleeved over the needle once removed from the venepuncture site and prior to disposal
- d. Tightly fixed with hub covered with sterile guard
- e. Hermetically sealed
- 6. External Port: Easily accessible, tamper proof and shouldn't be re-capped

7. Package:

a. Protective dual packaging (Individual & Aluminium) eliminating microbial

contamination on surface maintaining the contents of the bag

b. Easy to handle

8. Anticoagulant and preservative solution:

- a. CPDA-1 (63 ml i.e. 14 ml/100 ml of blood) and 100 ml SAGM solution for extended storage of red cells (up to 42 days)
- b. Clear & colourless and No discolouration on storage at room temperature
- c. Manufacturer to supply anticoagulant quality check certificate

9. Label:

- a. Non peel off
- b. Heat sealed labels
- c. Remain attached between room temperature to -80°C with a transparent adhesive
- d. Date of manufacturing, date of expiry and lot number must be mentioned on each bag legibly with indelible ink
- e. The expiry date should be at least 2 years from the date of supply of blood bags to the institute

10. Resistance to distortion:

- a. Filled to normal capacity shall withstand a maximum acceleration of 5000g for 30 min at temperature 40°C to 240°C without becoming permanently distorted and should withstand temperature up to -80°C without breakage.
- 11. Diversion pouch and Luer adapter holder (LAH): Integrated with the primary collection tube for maintaining sterility of the collected blood and sample collection

12. Inline filter for RBC

- a. Residual WBC count should be less than 5 X 106 after filtration
- b. Percentage of haemolysis: < 1%
- c. Housing Volume: 30 to 40 ml
- d. Should have 500-600 ml capacity transfer bag attached.
- e. Usable with blood of core temperatures in the range 4°C 30°C

13. Automated component extractor

a. To be provided by the manufacturer along with all the required documentations

14. QC parameters of component(s)

a. Detailed QC parameters of the components are to be provided for evaluation

VI. Specification for Leukocyte Filters

a. Leukocyte Removal Filter for Red Blood Cell (Lab-side)

- 1. Biocompatible material with unique porous structure for improved leukocyte removal and less damage to RBC. RBC recovery should be more than 90%.
- 2. Housing Volume: 30-40 ml
- 3. Residual WBC count: $< 5x10^6$ after filtration and Percentage of haemolysis: < 1%
- 4. Must not have any open air vent in the filter
- 5. Should have 500-600 ml capacity transfer bag attached
- 6. Sterile connecting device with the cost of consumables/disposables should be provided by the firm to use filters in a closed system. One for each

filter.

b. Leukocyte Removal Filter for Platelets With Storage Bag

- 1. Biocompatible material with unique porous structure (2-10 micron) for improved leukocyte removal and less damage to platelet
- 2. Filter housing of small size (priming volume of 15-20 ml)
- 3. Capable of yielding more than 90% recovery of platelet with residual leukocyte count below $5x10^6$ /unit
- 4. Small priming volume (15-20 ml) to reduce the platelet loss
- 5. Filtration procedure should not predispose to platelet activation.
- 6. Integrated with 1000 ml transfer bag for storage of pooled platelets
- 7. Platelet storage bag with special plasticizer material to have high gas permeability and to ensure shelf life of 5 days
- 8. Filter housing should not have any air vent
- 9. The device is with a by-pass line to remove air inside the bag and thereby to ensure high platelet recovery
- 10. Sterile and should have minimum 24 months of shelf life
- 11. The device can be used with an automatic component extractor, a plasma stand or just by using gravity.
- 12. Sterile connecting device including the cost of consumables should be provided by the firm. 4-5 per filter to be provided by the firm.

VII. Specification for EDTA Vacutainer

- 1. Sterile, PET blood collection tube 6 ml (Vacuum) containing spray coated K₂ EDTA as recommended by CLSI and/or ICSH.
- 2. Each tube should have clean label and must contain information like name, age, sex, Date, ID etc.
- 3. CE certified marked for IVD use
- 4. The firm must provide two mixers along with the vacuum tube.

VIII. Specification for Disposable Blood Lancet

- 1. Each unit must be a sealed unit.
- 2. Tip should be sharp with length 3-4 mm with bevelled tip.
- 3. Should be mounted on a plastic handle of not less than 2.5 cm in length
- 4. Tamper evident sealed tip, which breaks easily for use.
- 5. Firm must submit certificate of sterility.

IX. Specifications for Glass Slide

- 1. Made from selected optical flat sheet glass
- 2. Size 70 mm long x 20 mm wide thickness should be 1-1.5 mm

X. Specifications for micro tips

- 1. Should be made of good quality plastic, sterile.
- 2. Variable Volume = 10 to 1000 microlitre
- 3. Should fix on the pipette properly and eject easily by ejector/manual from the pipette.

XI. Specification for Glass Tube Plain

1. The tubes should be of very good and smooth quality glass for both inside and outside so that cell pellet does not stick to the tube and the agglutination is clearly visible.

- 2. Size 12X100 mm with smooth rim, volume = 6-8ml, with good thermal resistance.
- 3. Should withstand centrifugal force at 4000 RPM centrifugation
- 4. Good quality permanent black marker should be provided by the supplier in the ratio of 1 marker for 500 tubes

XII. Specification for Alcohol Swab

- 1. The swab should be made of non woven cellulose. It should be lint free.
- 2. Each swab measuring not less than 25x25 mm
- 3. Should contain 450 mg (approx.) of a mixture of isopropyl alcohol I.P. and purified Water I.P. (70:30).
- 4. There should be no dry swabs.
- 5. Should have one fold and appropriate packing material to ensure its shelf life for as long as the sachet is not opened/damaged.
- 6. The packing must have proper indication/serrations for peeling so that the swab is not damaged.

XIII. Specification for Betadine Swab

- 1. The swab should be made of non woven cellulose. It must be lint free also.
- 2. Each swab measuring not less than 25 x 25 mm
- 3. Should contain 1% povidone Iodine.
- 4. There should be no dry swabs.
- 5. Should have one fold and appropriate packing material to ensure its shelf life for as long as the sachet is not opened/damaged.
- 6. The packing must have proper indication/serrations for peeling so that the swab is not damaged.

Annexure - 4

BOQ FOR SUPPLY AND INSTALLATION OF BLOOD BANK EQUIPMENT

S1.No	Item	Description	Minimum Quantity to be offered
1	Weighing Scale with Height Measurement for Blood Donors	As per technical Specification	2
2	Blood Collection Monitor	As per technical Specification	12
3	Blood Donor Couch	As per technical Specification	13
4	Tube Stripper	As per technical Specification	2
5	Dielectric Tube Sealer - Handheld	As per technical Specification	3
6	Blood Bank Refrigerator - 700 L	As per technical Specification	3
7	Domestic Refrigerator	As per technical Specification	3
8	Refrigerated Blood Bag Centrifuge - 12 bags	As per technical Specification	2
9	Refrigerated Blood Bag Centrifuge - 16 bags	As per technical Specification	2

10	Platelet Agitator cum Incubator (Upright Model) (150-200 random donor platelet units)	As per technical Specification	1
11	Platelet Agitator cum Incubator (Upright Model) (48 random donor platelet units)	As per technical Specification	2
12	Plasma thawing bath	As per technical Specification	2
13	Water Bath	As per technical Specification	4
14	Electronic Double Pan Component Balance	As per technical Specification	2
15	Deep Freezer (-40°C) 700 L	As per technical Specification	3
16	Deep Freezer (-80°C) 800 L	As per technical Specification	2
17	Dielectric Tube sealer (Bench top)	As per technical Specification	2
18	Manual Plasma Extractor	As per technical Specification	10
19	Sterile Connecting Device	As per technical Specification	2
20	Blast Freezer	As per technical Specification	1
21	Cooling Table	As per technical Specification	2
22	Biological X-ray based blood irradiator	As per technical Specification	1
23	Fully Automated Random Access Chemiluminescence	As per technical Specification	2
24	Table Top Centrifuge	As per technical Specification	8
25	Reagent Refrigerator	As per technical Specification	2
26	Micro pipette set (Manual adjustable)	As per technical Specification	4
27	Multichannel Pipette	As per technical Specification	1
28	Digital pH Meter	As per technical Specification	2
29	Walk-in modular cold room	As per technical Specification	1
30	Fully Automated Immuno- Haematology (IH) platform	As per technical Specification	2
31	Blood Bank Refrigerator 300-350 L	As per technical Specification	4
32	Apheresis Machine	As per technical Specification	7
33	Automated 5-part blood cell counter	As per technical Specification	1
34	Lab Autoclave	As per technical Specification	2
35	Bio-Safety Cabinet	As per technical Specification	1
36	Coagulation Analyzer	As per technical Specification	1
37	Binocular Microscope	As per technical Specification	1
38	Electronic Analytical Balance	As per technical Specification	1
39	Hot Air Oven	As per technical Specification	1
40	Blood & Component Balance	As per technical Specification	1
41	Wireless Data Loggers	As per technical Specification	18
42	Blood Bank Software	As per technical Specification	1

43	Glucometer	As required	7
44	Bp apparatus	As required	15
45	Hemoglobinometer	As required	8
46	Needle Destroyer	As required	2
47	Oxygen cylinder and nasal mask	As required	1
48	Tourniquets	As required	20
49	Rh View box	As required	6
50	Hand lens	As required	As required
51	sample racks and trays	As required	As required
52	Transport bags (Insulated temp. maintaining)	As required	20
53	TEG/aggregometer	As required	2
54	Neubauer's chamber/ Naegotte's chamber	As required	2
55	WBC counting chamber	As required	1
56	Trolleys for transportation- Big and small Transport boxes (wheeled cello boxes and/or refrigerated)	As required	As required
57	Turnkey as per Annexure-3	Turnkey as per Annexure - 3.	Lumpsum

B. GENERAL POINTS:

1. Warranty:

- a) The bidders must quote for Five years Comprehensive Warranty as per Conditions of Contract of the bidding document for complete equipment (Including all spares, labour and third party items) and Turnkey Work (if required) from the date of satisfactory installation, commissioning, trial run, handing over and acceptance of the goods by the User Department.
- b) The warranty charges shall not be quoted separately.
- c) All software updates should be provided free of cost during Comprehensive Warranty period.
- d) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

2. After Sales Service:

After sales service centre should be available at the city of Institution 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 Bidder/Indian Agent. Undertaking by the Principals in the "Manufacturer Authorisation Form" that the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.

3. Training:

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

4. Comprehensive Annual Maintenance Contract (CAMC) of subject equipment:

- a) The cost of Comprehensive Annual Maintenance Contract (CAMC) which shall include preventive maintenance including testing & calibration as per technical/service/operational manual of the manufacturer, labour and all spares, after satisfactory completion of Warranty period may be quoted for next five years on yearly basis for complete equipment including third party items as per Price Schedule.
- b) The cost of CAMC may be quoted along with GST applicable on the date of Bid Opening.
- c) Cost of CAMC will be added for Ranking/Evaluation purpose on NPB basis.
- d) Before commencement of CAMC period, the suppliers shall furnish a Performance Bank Guarantee for 2.5% of the cost of the equipment (as per Performa given in bidding document) valid till 3 months extra after expiry of entire CAMC period. The Performance Bank Guarantee for CAMC will be applicable in case of equipment cost is more than Rs.10 lakh.
- e) All software updates should be provided free of cost during CAMC. In case of failure by the supplier, the Bank Guarantee of CAMC will be forfeited.

- f) The payment of CAMC will be made on half yearly basis after satisfactory completion of said period duly certified by end User.
- g) During the CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

5. Uptime & Downtime Penalty Clause:

- a) The firm should provide uptime guarantee of 95% during warranty period and CAMC period.
- b) During the Warranty period and CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

6. Turnkey Work:

Turnkey Work is to be indicated in the Technical Specification wherever required. The Bidder shall examine the existing site where the equipment is to be installed, in consultation with User Department. The Bidders are required to quote separately for the equipment and Turnkey Work as per Price Schedule. The Turnkey Work costs may be quoted in Indian Rupee and the same will be added for Ranking Purpose.

The Turnkey Work should completely comply with AERB requirement, wherever required.

SECTION - VIII

QUALIFICATION CRITERIA

1. Status of Bidder:

The bidder should be a manufacturer or supplier for Blood Bank equipment with experince in complete supply, installation, etc. of Blood Bank equipment.

[In case the manufacturer does not quote directly for any of the equipment mentioned at para 3 below, the bidder should submit "Manufacturer Authorization Form" for the same as per given proforma at Section-XIII in this bidding document to quote and enter into a contractual obligation.] - *This is a non-exlusive MAF*

2. Financial Status:

Eligible Bidders should have a minimum annual average **turnover of Rs. 10 crore** during the last 3 (three) financial years **in Blood Bank equipment.** A certificate in this regard from a Chartered Accountant to be submitted along with technical bid. Bidder should also submit copies of audited Balance Sheet and Profit & Loss Account for the last 3 (three) financial years prior to closing of bid submission.

3. Minimum Work of Similar Nature:

Eligible bidder(s) should have in the past 5 (five) years prior to closing of bid submission, successfully supplied and executed order(s)** to hospital(s) (with minimum 200 bed), like any Govt. hospitals/institutes of national importance or at any other reputed hospitals/institutes globally as detailed below.

**The order(s) individually or in combination should include the following:

- a. Apheresis machine- 3 (three) nos.
- b. Chemiluminescence- 1 (one) no.
- c. Blood donor couch- 4 (four) nos.
- d. Blast freezer- 1 (one) no.

[The copies of aforesaid order(s) along with its completion certificate(s), indicating that the specified order(s) have been successfully delivered and installed, are to be submitted with technical bid. In case the bidder is a 100% owned Indian Subsidiary of an International firm, the Global experience of the parent international firm shall also be considered]

PROFORMA 'A'

PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

NIB No./RFx No.			:				
Date of E	Bid Oper	ning		:			
Name an	d addre	ess of the Bide	der	:			
Name an	ıd addre	ess of the Mar	nufacturer	· :			
Order	Order	Description (Model no.)	Value of	Date of Con contr		Remarks indicating	Have the goods been functioning
placed by (full address)	no. and date ##	and quantity of ordered goods.	order (Rs.)	As per Contract	Actual	reasons for delay, if any	satisfactorily (attach documentary proof)**
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 Bid Security.							
						Name	
				H	Business Ac	ldress	

- ** The documentary proof will be a certificate from the consignee/end user with crossreference of order no. and date in the certificate duly self-attested by the bidder.
- ## The bidders are requested to submit the latest purchase order copies supplied to AIIMS, PGIMER, JIPMER, RML Hospital, Safdarjung Hospital, Institute of National importance for the specific model quoted along with the price-bid.

Place: _____

Signature of Bidder_____

Seal of the Bidder_____

SECTION - IX

BID FORM

security of required amount in an acceptable form in terms of "General Conditions Contract", Section - IV read with modification, if any "Special Conditions of Contract", in Section - V, for due performance of the contract.

We agree to keep our bid valid for acceptance as required in the "General Instruction to Bidders", read with modification, if any in "Special Instructions to Bidders", Section – III or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this bid up to the aforesaid period and this bid may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this bid 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 bid you may receive against your above-referred advertised tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes.

We confirm that we fully agree to the terms and conditions specified in above mentioned bidding document, including amendment/ corrigendum if any.

"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 bid security."

	Name
	Business Address
Place:	Signature of Bidder
Date:	Seal of the Bidder

SECTION - X

PRICE SCHEDULE

Price to be filled in the relevant field strictly as per the Price Format provided in the e-tender portal 'https://etender.lifecarehll.com/irj/portal' under the RFx No. as per terms of the tender.

SECTION - XI

CHECK LIST

The bidders should furnish specific answers to all the questions/issues mentioned in the Checklist detailed below:

Name of Bidder:	 -
Name of Manufacturer:	 -

S1. No.	Activity	Yes/ No/ NA	Bid File Name and Page no.	Remarks
1. a.	Have you enclosed Bid Security of required amount for the quoted schedules?			
b.	In case Bid Security is furnished in the form of Bank Guarantee, has it been furnished as per standard format of the bidding document?			
c.	In case Bank Guarantee is furnished, have you kept its validity 45 days beyond the validity of Techno Commercial Bid?			
2.a.	security being MSE as defined in MSE procurement policy issued by department of MSME.			
b.	If yes, have you enclosed certificate of registration issued by department of MSME.			
c.	Does such certificate clearly mention the quoted item?			
3. a.	Have you enclosed duly filled bid form as per bidding document?			
b.				
4. a.	Have you enclosed clause-by-clause technical compliance statement (in excel format as provided on e-portal) 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?			
5. a.	Have you submitted satisfactory performance certificate as per the Proforma for performance statement given in the bidding document?			
b.	Have you submitted the documentary proof that goods have been functioning Satisfactorily?			
c.	Have you submitted latest purchase order copies?			

S1. No.	Activity	Yes/ No/ NA	Bid File Name and Page no.	Remarks
6.	Have you submitted Manufacturer's Authorization Certificate as per bidding document?		•	
7.a.	Have you quoted prices of goods, turnkey (if any), CAMC etc. in the Price Schedule as per bidding document?			
b.	quoted buy back prices along with applicable GST?			
8.	Have you kept validity of 270 days from the Techno Commercial Bid Opening date as per the bidding document?			
9. a.	In case of Indian Bidder, have you furnished GST No.?			
b.	In case of Foreign Bidder, have you furnished GST No. of your Indian Agent?			
10.	Have you intimated the name and full address of your Banker (s) along with your Account Number, IFSC Code etc.?			
11.	Have you furnished documents establishing your eligibility & qualification criteria as per bidding documents?			
12	Have you accepted all the terms and conditions of this bidding document?			
13.	Have you submitted the duly signed copy of Integrity pact (At Appendix-A) on non-judicial stamp paper?			

N.B.

- 1. All pages of the Bid should be page numbered and indexed.
- 2. The Bidder may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the bid and no column is left blank. If any column is not applicable, it may be filled up as NA.
- 2. It is the responsibility of bidder to go through the bidding document to ensure furnishing all required documents in addition to above, if any.
- 3. Wherever necessary and applicable, the bidders shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.
- 4. In case a bidders furnishes a wrong or evasive answer against any of the question/issues mentioned in the Checklist, its bids will be liable to be ignored.

	Name	_
	Business Address	
Place:	Signature of Bidder	_
Date:	Seal of the Bidder	

SECTION - XII

BANK GUARANTEE FORM FOR BID SECURITY

	(Name and address of the Bidder)
(Hereinafter called the "Bidders")	
Has submitted its Bid dated	for the supply of
(Hereinafter called the "Bid")	
Against the purchaser's ATE No	
	we having
our registered office at	
(Hereinafter called the "Bank")	
Are bound unto HLL Infra Tech Services L	td., Noida (for and on behalf of AIIMS)
(Hereinafter called the "Purchaser)	
In the sum of	for which payment will and truly to be binds itself, its successors and assigns by these
20	l of the said Bank thisday of
The conditions of this obligation are:	
1) If the Ridder withdraws or amends i	impairs or derogates from the bid in any respect
within the period of validity of this Bio	
	he acceptance of his Bid by the Purchaser during
the period of its validity:-	ı J
'C 41 1:11 C-11 C 4	
performance of the contract or	o furnish the performance security for the due
b. if the bidder fails or refuses to ac	cent /execute the contract or
	that the information/documents furnished in its
Bid are false or incorrect or misle	
We undertake to per the Durcheser up to	the chara amount upon receipt of its first written
_ ·	the above amount upon receipt of its first written to substantiate its demand, provided that in its
•	e amount claimed by it is due to it owing to the
	tions, specifying the occurred condition(s).
This guarantee will remain in force unto	(insert date of additional forty-five days
	pect thereof should reach the Bank not later than
the above date.	
(Signatur	re with date of the authorized officer of the Bank)
(Signatus	
	(Name and designation of the Officer)
(Seal, name &	address of the Bank and address of the Branch)

SECTION - XIII

MANUFACTURER'S AUTHORISATION FORM

The CEO HLL Infra Tech Services Limited B-14A Sector-62 Noida, Uttar Pradesh-201307

Noida, Uttar Pradesh-201307
Dear Sir,
Ref: Your TE document No dated
We, who are proven and reputable manufacturers of (name and description of the goods offered in the bid) having factories at, hereby authorise Messrs (name and address of the agent) to submit a bid, 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 state that we are not participating directly in this bid for the following reason(s):
We further confirm that no supplier or firm or individual other than Messrs.
We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent and the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.
We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly" Yours faithfully,
[Signature with date, name and designation] for and on behalf of Messrs [Name & address of the manufacturers]
Note:

- 1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.
- 2. Original letter may be sent.

SECTION - XIV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/CAMC SECURITY

WHEREAScalled "the supplier")	(Name and address of the supplier) (Hereinafter
has undertaken, in pursuance of Purchadated to supply (Hereinafter called "the Contract").	ase Order/ Contract no
furnish you with a bank guarantee by a so	you in the said contract that the supplier shall cheduled commercial bank recognized by you for compliance with its obligations in accordance
AND WHEREAS we have agreed to give the	e supplier such a bank guarantee;
behalf of the supplier, up to a total of guarantee in words and figures), and we demand declaring the supplier to be in cargument, any sum or sums within the	t we are guarantors and responsible to you, on (insert Amount of the undertake to pay you, upon your first written default under the contract and without cavil or limits of (amount of guarantee) as aforesaid, grounds or reasons for your demand or the sum
We hereby waive the necessity of your depresenting us with the demand.	emanding the said debt from the supplier before
contract to be performed there under or omade between you and the supplier shall	tion to or other modification of the terms of the of any of the contract documents which may be in any way release us from any liability under of any such change, addition or modification.
after completion of satisfactorily warrant additional Ninety days after completion ((insert date of additional Ninety days ty period in case of Performance Security and of satisfactorily CAMC period in case of CAMC treof should reach the Bank not later than the
(Signatur	re with date of the authorised officer of the Bank)
Oignatui	
	Name and designation of the officer
Seal, name 8	address of the Bank and address of the Branch

SECTION - XV

CONTRACT FORM - A

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

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

(Insert Name of concerned Centre/Hospital/Department/Section)

ANSARI NAGAR, NEW DELHI-110 029

Co	ntract l	No dated
То		
_		me of Supplier with address)
,		,
Th	is is in	continuation to this office's Notification of Award No dated
1. 2. 3.	ATE N Amen Suppl No	& address of the Supplier: and subsequent No of Bidding Documents: and subsequent dment No, dated (if any), issued by the Purchaser lier's Bid No dated and subsequent communication(s) dated (if any), exchanged between the supplier and the
4.	In add	laser in connection with this Bidding Document. dition to this Contract Form, the following documents etc, which are included in idding Documents mentioned under paragraphs 2 and 3 above, shall also be ed to form and be read and construed as integral part of this contract:
	(i) (ii) (iii) (iv) (v) (vi) (vii) (viii) (ix)	Special Conditions of Contract; List of Requirements; Technical Specifications; Quality Control Requirements; Bid Form furnished by the supplier; Price Schedule(s) furnished by the supplier in its Bid; Manufacturers' Authorisation Form (if applicable);
	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 Bidders" of the Bidding Document shall also apply to this contract.
5.		terms, conditions, stipulations etc. out of the above-referred documents are duced below for ready reference:
	(i)	Brief particulars of the goods and services which shall be supplied/ provided by

Schedule

No.

the supplier are as under:

Brief description of

of goods/services

Quantity to

be supplied

Accounting

unit

Terms of

delivery

Total

price

Unit Price

		Any other additional services (if applicable) and cost thereof: Total value (in figure) (In words)					
	(ii)	Delivery schedule:					
	(iii)	Details of Performance Security required:					
	(v)	Destination and despatch instructions:					
	(vi)	Consignee:					
6.	Warra	anty clause:					
7.	Payment terms:						
		(Signature, name and designation of the Purchaser authorised official) For and on behalf of Director, AIIMS					
Re	ceived						
		and accepted this contract					
of Fo	gnatur the su _l r and c	e, name and address of the supplier's executive duly authorised to sign on behalf					

CONTRACT FORM - B

CONTRACT FORM FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC)

	_	ve Annual I	Maintenan	ice C	Contra	act N	lo				
Betv	veen										
Dire	ctor, AIIM	S									
And											
(inse	ert Name (& Address	of the Sup	plier)						
inst	allation&	commission	ning, Trair	ning	and	CAM	C of	goo	ds& service		
										rder, the Contrac as under: -	t of
	1	2	3	4					5	6	
	Items Sr. No./	Brief / descriptio	Quantity (Nos.)		CAMC Cost for Each Unit year wise in Rs				GST Value in Rs (%)	Total CAMC Cost for 5 Years with GST (3) X[(4a+4b+4c+4d+4e) + (5)]	
	RFx no.	n of goods	(2.22.)	1 st	2 nd	3 rd	4 th	5 th			
				а	b	С	d	е			
Tota	The CAN		nce from to	the o	date (of ex	piry	of a	all obligatio	ons under Warranty xpire on	
c)	The cost of Comprehensive Annual Maintenance Contract (CAMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period as contained in the above referred contract on yearly basis for complete equipment as per contract including Turnkey Work(if any).										
d)	There will be 95% uptime warranty during CAMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CAMC period by double the downtime period and other penalty as per contract.										
e)	During CAMC 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 3 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 CAMC period.										

g)	The Bank Guarantee valid till [(fill the date) 3 months after expiry of entire CAMC 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 XIV of the Bidding Document, along with the signed copy of CAMC within a period of 21 (twenty one) days of start of CAMC failing which the Performance Security (10% of the contract value) submitted shall be encashed payable to the Purchaser/Consignee.							
h)	If there is any lapse in the performance of the CAMC as per contract, the proceeds Annual CAMC Bank Guarantee shall be forfeited and their bad performance will be considered while awarding future contracts.							
i)	Payment terms: The payment of CAMC will be made against the bills raised by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the concerned User Department. The payment will be made in Indian Rupees.							
(Sign	nature, name and designation of the Store Officer/ASO of the Purchaser)							
	nature, name and designation of the F&CAO of the Purchaser) and on behalf of Director, AIIMS							
Date	l of the Purchaser) e: e:							
Rece	eived and accepted this contract							
	nature, name and address of the supplier's executive duly authorised to sign on behalf ne supplier)							
For (Inse	and on behalf ofert Name and address of the supplier)							
Date	1 of the Supplier) e: e:							

Note:- The contract will be prepared on Non-judicial Stamp paper(currently of value of Rs. 100).

SECTION - XVI

CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's authorized representative)

The following store(s) has/have been received in good condition:				
1)	Contract/Purchase Order No. & date:			
2)	Supplier's Name:			
3)	Consignee's Name & Address:			
4)	Name of the item supplied:			
5)	Quantity Supplied:			
6)	Date of Receipt by the Consignee:			
,				
7)	Signature of Authorized Representative of Consignee with date:			
8)	Name and designation of Authorized Representative of Consignee:			
9)	Seal of the Consignee:			

SECTION - XVII

CONSIGNEE ACCEPTANCE CERTIFICATE

(To be given by consignee's authorized representative)

This is to certify that the goods as detailed below have been received in good conditions along with all the standard and special accessories in accordance with the contract. The same has been installed and accepted.

1)	Contract/Purchase Order No. & date:	
2)	Supplier's Name:	
3)	Consignee's Name & Address:	
4)	Name of the item Supplied :	
5)	Quantity Supplied :	
6)	Date of Receipt by the Consignee :	
7)	Date of Installation/Commissioning and Acceptance of Equipment:	
8)	The supplier has fulfilled its contractual obligations satisfactorily	
	OR	
	The supplier has failed to fulfill its contractual obligations with regard to t following:	h
	i) ii) iii) iv)	
9)	The amount of recovery on account of failure of the supplier to meet be contractual obligations is (here indicate the amount).	nis
10)	Signature of Authorized Representative of Consignee with date:	
11)	Name and designation of Authorized Representative of Consignee:	
12)	Seal of the Consignee:	

APPENDIX-A

INTEGRITY PACT

PRE-CONTRACT INTEGRITY PACT

This Pre-Contract Integrity Pact (herein after called the Integrity Pact) is made on day of the month of Year							
Between							
HLL Infra Tech Services Ltd. [HITES], a wholly owned subsidiary company of M/s. HLL Lifecare Ltd. a Government of India Enterprise with registered office at HLL Bhavan, Poojappura, Thiruvananthapuram 695 012, Kerala, India. (Hereinafter called "HITES", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Party.							
And							
m/s							
Preamble							
[Both HITES and BIDDER referred above are jointly referred to as the Parties]							
HITES intends to award, under laid down organizational procedures, Purchase orders / contract/s against Tender /Work Order /Purchase Order No. HITES desires full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.							
NOW, THEREFORE,							
To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-							
1. Enable HITES to obtain the desired materials/ stores/equipment/ work/ project done at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement; and							
2. Enable the BIDDER to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and HITES will commit to prevent corruption, in any form, by its officials by following transparent procedures.							
The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:							

Clause.1. Commitments of HITES

- 1.1 HITES undertakes that HITES and/or its Associates (i.e. employees, agents, consultants, advisors, etc.) will not demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 HITES will, during the tender process / pre-contract stage, treat all BIDDERs with equity and reason, and will provide to all BIDDERs the same information and will not provide any such information or additional information, which is confidential in any manner, to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERs in relation to tendering process or during the contract execution.
- 1.3 All the officials of HITES regarding this Integrity Pact will report to IEM, any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach shall not be permitted.
- 1.4 HITES will exclude from the process all known prejudiced persons and persons who would be known to have a connection or nexus with the prospective bidder.
- 1.5 If the BIDDER reports to HITES with full and verifiable facts any misconduct on the part of HITES's Associates (i.e. employees, agents, consultants, advisors, etc.) and the same is prima facie found to be correct by HITES, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by HITES. Further, such an Associate may be debarred from further dealings related to the contract process. In such a case, while an enquiry is being conducted by HITES the proceedings under the contract would not be stalled.

Clause 2. Commitments of BIDDERs/ CONTRACTORs

- 2. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
- 2.1 The BIDDER will not offer, directly or indirectly (i.e. employees, agents, consultants, advisors, etc.) any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of HITES, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 2.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of HITES or otherwise in procuring the contract or forbearing to do or having done any act in relation to obtaining or execution of the contract or any other contract with HITES for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with HITES.

- 2.3 The BIDDER will not engage in collusion, price fixing, cartelization, etc. with other counterparty(s).
- 2.4 The Bidder(s) will not pass to any third party any confidential information entrusted to it, unless duly authorized by HITES.
- 2.5 The Bidder(s) will promote and observe ethical practices within its Organization and its affiliates.
- 2.6 BIDDER shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 2.7 The Bidder(s) will not make any false or misleading allegations against HITES or its Associates.
- 2.8 BIDDER(s) shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 2.9 The BIDDER further confirms and declares to HITES that the BIDDER is the original manufacture or its authorised agent/integrator and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to HITES or any of its functionaries, whether officially or unofficially to award the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 2.10 The BIDDER while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of HITES or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 2.11 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 2.12 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 2.13 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of HITES, or alternatively, if any relative of an officer of HITES has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender.
 - The term 'relative' for this purpose would be as defined in Section 2(77) of the Companies Act 2013
- 2.14 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of HITES.
- 2.15 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract, and will not enter into any undisclosed agreement or understanding with other Bidders, whether formal or informal. This applies in particular to prices, specifications,

- certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.16 The BIDDER will not commit any offence under the relevant Indian Penal Code, 1860 or Prevention of Corruption Act, 1988; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the HITES as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 2.17 The BIDDER will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.18 The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign Principal(s), if any.
- 2.19 The Bidder(s) shall not approach the courts while representing the matters to IEM and the Bidder(s) will await their decision in the matter.

Clause.3. Previous contravention and Disqualification from tender process and exclusion from future contracts

- 3.1 The BIDDER declares that no previous contravention occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process
- **3.2** The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

If BIDDER before award or during execution has committed a contravention through a violation of Clause 2, above or in any other form such as to put his reliability or credibility in question, t HITES is entitled to disqualify the BIDDER from the tender process.

Clause.4. Equal treatment of all Bidders/Contractors / Subcontractors

- 4.1 The Bidder(s)/ Contractor(s) undertake(s) to demand from his Subcontractors a commitment in conformity with this Integrity Pact.
- 4.2 HITES will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 4.3 HITES will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Clause.5. Consequences of Violation / Breach

- 5.1 Any breach of the aforesaid provision by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle HITES to take all or any one of the following action, wherever required:-
- i. To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
- ii. If BIDDER commits violation of Integrity Pact Policy during bidding process, he shall be liable to compensate HITES by way of liquidated damages amounting to a sum equivalent to 5% to the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- iii. In case of violation of the Integrity Pact after award of the contract, HITES will be entitled to terminate the contract. HITES shall also be entitled to recover from the contractor liquidated damages equivalent to 10% of the contract value or the amount equivalent to security deposit/ performance guarantee, whichever is higher.
- iv. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- v. To recover all sums already paid by HITES, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from HITES in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid amount.
- vi. To encash the advance bank guarantee and performance guarantee /warranty bond, if furnished by the BIDDER, in order to recover the payments already made by HITES, along with interest.
- vii. To cancel all or any other contract with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to HITES resulting from such cancellation/recession and HITES shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- viii. To debar the BIDDER from participating in future bidding processes of HITES for a minimum period of five (5) years, which may be further extended at the discretion of HITES or until Independent External Monitors is satisfied that the Bidder (s) will not commit any future violation.
- ix. To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
- x. In cases where irrevocable Letters of credit have been received in respect of any contract signed by HITES with the BIDDER, the same shall not be opened.
- xi. Forfeiture of performance guarantee in case of a decision by HITES to forfeit the same without assigning any reason for imposing sanction for violation of the pact.
- 5.2 HITES will be entitled to all or any of the actions mentioned in para 5.1(i) to (x) of this pact also on the commission by the BIDDER or any one employed by it or

- acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 5.3 The decision of HITES to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent External Monitor(s) appointed for the purposes of this Pact.

Clause.6. Fall Clause

The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems OR providing similar services at a price / charge lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found any stage that similar product/systems or sub systems was supplied by the BIDDER to any to the Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to HITES, if the contract has already been concluded.

Clause .7. Independent External Monitor(s)

7.1 HITES has appointed Sh. A.K. Arora, EX-DG, Indian Defense Service of Engineers as Independent External Monitor(s) (hereinafter referred to as IEM(s)) for this Pact in consultation with the Central Vigilance Commission. Contact details of IEM is as below:

Sh. A.K. Arora Independent External Monitor (IEM)

Office: HLL Infra Tech Services Ltd B-14-A, sector 62, Noida 201307, U.P.

Tel: 0120 4071500

Residence: B-333, Chittaranian Park

New Delhi – 110019 Tel: 011 26273406

Mobile: +91 8130588577 Email: iem@hllhites.com

- 7.2 The responsibility of the IEM(s) shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 7.3 The IEM(s) shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4 Both the parties accept that the IEM(s) have the right to access all the documents relating to the project/ procurement, including minutes of meetings.
- 7.5 As soon as the IEM(s) notices, or has reason to believe, a violation of this pact, he will so inform the CEO/CMD.
- 7.6 The BIDDER(S) accepts that the IEM(s) have the right to access without restriction to all project documentation of HITES including that provided by the BIDDER. The BIDDER will also grant the IEM(s), upon his request and demonstration of a

valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors engaged by the BIDDER. The IEM(s) shall be under contractual obligation to treat the information and documents of the BIDDER/ Subcontractor(s) with confidentiality.

- 7.7 HITES will provide to the IEM(s) sufficient information about all meetings among the parties related to the Project provided such meeting could have an impact on the contractual relation between the parties. The parties will offer to the IEM(s) option to participate in such meetings.
- 7.8 The IEM(s) will submit a written report to the CEO/CMD of HITES within 3 to 5 weeks from the date of reference or intimation to him by HITES/BIDDER.

Clause.8. Criminal charges against violating Bidder(s)/ Contractor(s)/ Subcontractor(s)

If HITES obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if HITES has substantive suspicion in this regard, HITES will inform the same to the Chief Vigilance Officer, HLL

Clause.9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, HITES or its agencies shall be entitled to examine all the documents, including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

Clause. 10. Law and Place of Jurisdiction

Both the Parties agree that this Pact is subject to Indian Law. The place of performance and hence this Pact shall be subject to Delhi/ NCR Jurisdiction.

Clause.11. Other legal Actions

The actions stipulated in the Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

Clause.12. Validity and Duration of the Agreement

This Pact begins when both parties have legally signed it. It expires for the Contractor/Successful bidder 12 months after the last payment under the contract or the complete execution of the contract to the satisfaction of the both HITES/Consignee and the BIDDER/Seller, including warranty period, whichever is later, and for all other Bidders/unsuccessful bidders 6 months after the contract has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman and Managing Director/ CEO of HITES.

Clause. 13. Other provisions

- 13.1 Changes and supplements as well as termination notices need to be made in writing. Both the Parties declare that no side agreements have been made to this Integrity Pact.
- 13.1 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

13.1 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions

IN WITNESS THEREOF the parties have signed and executed this pact at the place and date first above mentioned in the presents of following witnesses:

HLL Infra Tech Services Ltd.	Bidder			
Witness	Witness			
1	1			
2	2			

^{*} Provisions of these clauses would be amended /deleted in line with the policy of the HITES in regard to involvement of Indian agents of foreign suppliers