NATIONAL HEALTH MISSION
Government of Meghalaya

No. DHS/MCH& FW/NHM/RCH/65/2021/ 3236 Dated 02.05.2022

NOTICE INVITING TENDER

Sealed Tenders in a Two Bid System affix a court fee stamp of Rs.25/- is invited by the Mission Director, National Health Mission, Meghalaya from registered firms "for Supply and Installation Of Blood Bank Equipments, Instruments and Consumables"

Technical & Financial Evaluation of the Tender Documents would be evaluated by the Tender Committee duly constituted by the Mission Director, National Health Mission, Meghalaya.

Sl. no.	Name of Items	**"Tender for Supply and Installation Of Blood Bank Equipments, Instruments and Consumables"**
1	Cost of Tender Documents	Rs.2000/- in demand draft in favor of Mission Director, NHM payable at Shillong, if tender document is obtained from the office of the undersigned. No tender fee required if bidder download the tender document from the NHM website
2	Earnest Money Deposit	2,00,000/-
3	Tender Documents	Can be obtained from the O/O Mission Director, Shillong or downloaded from www.nhmmeghalaya.nic.in
4	Date for downloading/obtaining the Tender Documents	05th/May/2022
5	Last date and time for submission of Tender Document	25th/May/2022 up to 11:00am
6	Tender opening date	25th/May/2022 at 1:00pm

Copy of Tender documents may please be collect from the Office of Mission Director, NHM or downloaded from our website www.nhmmeghalaya.nic.in and the EMD mentioned above may please be deposited in the form of 'demand draft' / 'pay order'/ Receipt in favor of Mission Director, National Health Mission, payable at Shillong. Please write the name of company/firm on the reverse side of the 'Demand Draft'/ BG/ FDR. Please note that the downloaded tender documents are subject to verification with the original documents as given in the Website.

National Health Mission, reserves the right to reject any or all the tenders without assigning any reason.

Note: Any changes or any further notification in respect to the above Tender documents shall be made available only at the above mentioned website. Hence respective bidders are advised to visit the website regularly for the above purpose.

Mission Director,
NHM Meghalaya, Shillong.

Office of Mission Director, National Health Mission
Directorate of Health Services, Health Complex, Upper New Colony, Laitumkhrah, Shillong - 793003
Phone: (0364) 2504532 Email: nrhmmegh@gmail.com
www.nrhmmeghalaya.nic.in Nhm Meghalaya @iecbccnhmmegh IEC&CC NHM Meghalaya

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Tender Guidelines

1. Definitions

P.O – Purchase Order
Contract – Terms informed in the PO
EMD - Earnest Money Deposit
DD – Demand Draft
PBG – Performance Bank Guarantee
BC – Banker's Cheque

Purchaser – NHM, Meghalaya
Tenderer – Bidders who have submitted Valid Tender Documents
Supplier = Successful Bidder (s), to whom, the tender quantity is distributed to
Sample – One sample manufactured /Supplied by the bidder/Catalogue as applicable
Bidder – MANUFACTURER or Authorized Trading partner such as dealers/distributors/suppliers
OEM- Original Equipment Manufacturer

The Prices quoted and quantities offered for supply in the tender shall remain open for acceptance – 180 days from the date of bid opening.

2. PRICE SCHEDULE:

A. Price shall be quoted as mentioned in Annexure-III. Price will remain firm and fixed for all supply orders placed during the period of Rate contract i.e. of minimum 1 year

3. TERMS OF DELIVERY:

a. Delivery for all orders shall be required to be made at **the Blood Bank or Blood Storage within the State or** any other locations within the state capital as instructed by the authority from time to time and shall be inclusive in the rate quoted for by the bidder. If any delivery asked to be made outside the state capital may be charged additional, to the specified rate keeping in mind the location and situation of delivery.
b. The Tenderer shall be responsible to arrange safe delivery of goods, by rail/road at the delivery address givenabove. The rates quoted by the tenderer should include all costs for free delivery to consignee's site.

4. **ELIGIBILITY CRITERIA:**

a. Medical equipments customer feedback or supply order from Central/State Govt. Dept/ PSU or Private Company completed within last three years,failing which bidders will be disqualified. The customer feedback or supply order as indicated above should be in the name of the firm participating in the tender.
b. Annexure II,III,IV,V,VI & VII shouldbe duly filled and complete in all respects.
c. Submission of EMD amount as per Annexure-IV in the form of Demand Draft /BG/FDR in favor "Mission Director, National Health Mission, Meghalaya, Shillong. EMD should be valid fora period of 90 days as per Annexure –IV
d. In case of dealer the bidder should submit Dealership certificate from the Company and failing to meet the requirement shall be rejected.
e. Deleted
f. Quality Standards and Safety certificate
   i) As per relevant quality standard
   ii) Manufacturer ISO certificate
g. In addition to the above, the bidder should furnish the following:-
   i) A Valid company/Firm registration certificate
   ii) A valid Trade License Certificate from KHADC/JHADC/GHADC for Non Tribal firm
   iii)A Valid GST Registration certificate
   iv)PAN/TIN Card of the firm or of the person in whose name the Proprietorship, Firm etcis registered under.
h. Bidder should have an Average Turnover of 100lakh for the last 3 Accounting years (C.A Audited statement) i.e. 2018-19, 2019 – 2020 & 2020 -2021.
i. Affidavit to be submitted on Non – Judicial Stamp paper attested by Public Notary that there is no vigilance / CBI case or arbitration cases pending

j. The tenders received after the due date and time specified or unsealed or incomplete, or by facsimile or email will be summarily rejected.
k. The purchaser will notify the successful bidder in writing that its Bid has been accepted and issue purchase order (PO) to the successful post signing of contract.
l. Within 7 days of receipt of such intimation, the successful bidder shall give itsacceptance to the Mission Director,NHM, Govt of Meghalaya.
m. The Mission Director NHM, Govt of Meghalaya reserves the right to reject/cancel any or all other including the lowest bidder without assigning any reason thereof.
n. On received of Purchase Order the selected bidder will have to be delivered within a delivery period specified in the purchase order and installed as and when instructed.
o. Compliance certificate from the bidder for the items participated

5. Submission of the Bid:

i) The Bid should be in sealed cover super- scribed **"Tender for Supply and Installation Of Blood Bank Equipments, Instruments and Consumables"**and clearly mention the tender reference number and date. The super scribed sealed cover shall consist of three sealed cover inside **(i) "Technical Bid" (ii) "Financial Bid"**

ii) Super scribed Sealed Cover A –Technical Bid:

a) Tender document duly filled and signed by the authorized person in all pages
b) Medical equipments customer feedback or supply order from Central/State Govt. Dept/ PSU or Private Company completed within last three years,failing which bidders will be disqualified. The customer feedback or supply order as indicated above should be in the name of the firm participating in the tender.
c) AnnexureV,VI & VII shouldbe duly filled and complete in all respects.
d) Submission of EMD amount as per Annexure-IV
e) A Valid company/Firm Registration certificate
f) A valid Trade License Certificate from KHADC/JHADC/GHADC for Non Tribal firm
g) A Valid GST Registration certificate
h) PAN/TIN Card of the firm or the person in whose name the Proprietorship, Firm etc is registered under.
i) Bidder should have an Average Turnover of 100lakh for the last 3 Accounting years (C.A Audited statement) i.e. 2018-19, 2019 – 2020 & 2020 -2021.
j) Affidavit on Non Judicial stamp paper attested by Public Notary that there is no vigilance / CBI case or arbitration cases pending
k) Quality Standards and Safety certificate
   i) As per relevant quality standard
   ii) Manufacturer ISO certificate
   iii) Annexure Wise Technical bid as per format Annexure –I & II

(iii) Super Scribed Sealed Cover B for – Financial Bid/Price Bid

Annexure Wise Price Bid as per format Annexure – III

Instructions:

- ✓ Please mention clearly on each sealed cover the annexure, meant for.
- ✓ The main cover should be addressed to **Mission Director, National Health Mission Directorateof Health Services, Red Hill, Upper New Colony Health Complex, Laitumkhrah, Shillong – 3,Meghalaya**
- ✓ The Bid should be dropped in the box provided for this purpose in the office **of Mission Director, National Health Mission, Laitumkhrah, Shillong.**
- ✓ All documents submitted should be properly page numbered, signed and should have appropriate and relevant contents.
- ✓ Index sheet of each document should be submitted for ease& fast documentations verifications.
- ✓ Bid documents that do not provide complete information and /or that are submitted after the above specified date or time shall be rejected.
- ✓ Bidder should quote their prices in the schedule format supplied in this tender (Annexure III) giving the breakup of prices. Tenders received in any other form will not be entertained.

- ✓ Bidder should sign the certificate provided in the tender form Annexure – IV "That they have read and understood, all the Terms and Conditions stipulated for in the Tender, and are willing to abide by these tender terms and conditions ", before submitting the tender documents. Tenders submitted without the Signed declaration certificate will be considered incomplete and will not be considered.

6. **Bids will be open in three stages.**
   (I) Envelope A : Technical bid- Annexure I & II
   (II) Envelope B : Financial/Price Bid (As per Annexure – III)

7. If the envelopes are not sealed and marked as required above, the bid will be subjected to rejection at the tender opening stage itself.

8. The bid shall be opened in three stages. At the time of opening only first cover (Envelope A) containing the Pre-Qualification bid shall be opened at the first stage and subsequently (Envelope B) Technical bidonly after qualifying the Pre-Qualification Bid and (Envelope C) financial bid shall beopened only after qualifying the Technical Bid. The date, time and venue for second stage onward, opening will be intimatedseparately by the Tender Inviting Authority (TIA) only to selected/qualified bidders.

9. **Validity of the Tender:**
The validity of the tender shall remain valid for 180 days from the date of opening the tender.

10. **Venue of Tender Opening:**
The **"Tender for Supply and Installation Of Blood Bank Equipments, Instruments and Consumables"** will be opened in the presence of the bidders or theirauthorized representatives and Tender Committee Members at the venue mentioned hereunder.

Venue of Tender Opening:
Office of Mission Director, National Health Mission,
Laitumkhrah, Shillong-793003, Meghalaya

11. **EMD Amount:**
Tenderer needs to deposit the EMD Amount as per Annexure-IV in the Form of DD/FDR/Bank Guarantee in favorof "Mission Director, National Health Mission", payable at Shillong, Meghalaya and a copy of EMD in sealed envelopeshould be submitted along with pre-qualification documents in the Technical Envelope.

(i) The EMD shall be returned back to unsuccessful bidders within a period of eight (8) weeks from the date ofexecution of the agreement subject to the receipt of a written application addressed to the Mission Director,NHM, Meghalaya. The return of EMD shall not carry any Interest Component.

(ii) The E.M.D. / Security Deposit shall liable to be forfeited in the following circumstances when the,
   a) Tender is rejected due to failure to furnish the requisite documents in the proper format or giving any misleading statement or submission of false affidavit or fabricated docs.
   b) Party fails to sign the agreement for entering into contract in case the offer is accepted, due to anyreason whatsoever.
   c) Party fails to supply the goods / items as per the orders / Rate Contract(R.C) placed by NHM, Meghalayawithin the delivery period so stipulated.
   d) Party fails to replace/correct the supplied material /pre-printed stationeries declared to bewrong /different from specification and R.C. holder / successful bidder have to refund the cost of such goods

12. Performance Security Bond (PSB):

(a) The successful Bidder will liable to deposit 5% of value of the Contract/Purchase Order as Performance Security Deposit in favor of "Mission Director, National Health Mission, Shillong Meghalaya" by way of "Performance Bank Guarantee in the format given at

"Annexure-VI" from nationalized/Commercial Bank refundable after expiry of the contract/or after the completion number of warranty period + 3 months in case of supply of Equipment whichever is higher, subject to successful fulfilment of terms and conditions. Security Deposit/EMD is liable to be forfeited if the bidder withdraws or impairs the bid in any respect. Security deposit is for due performance of the agreement. Non submission of Performance security within the specified time shall also lead to forfeiture of the EMD/PSB.

(b) Performance security deposit is retained as a security deposit until the period of work / contract may befound satisfactorily and completed. The Performance security deposit may be refunded on receipt of a writtenapplication addressed to the Mission Director, NHM, Meghalaya. Refund of Performance security deposit shall notcarry any Interest Component.

13. Price:

- ✓ The price offered in the tender should be as per the structure requested in the Tender document Annexure-III
- ✓ All Quotes shall be in Indian Rupees and duly attested in case of any corrections.
- ✓ All freight costs & Transit insurance are to be borne by the bidder.
- ✓ In case of imports, all duties and any other costs (foreseen or unforeseen) have to be borne by the bidder and to be clearly indicated in the quote
- ✓ If more than one bidder has quoted exactly the same price in their bids, and if it has become the Lowest Bid (L1), the decision of the Tender Committee is final to equally distribute the schedule quantity among the L1 bidders.

14. Technical evaluation:

- ✓ Technical evaluation of the items tendered will be done by a Technical Committee constituted by the NHM Meghalaya
- ✓ Specifications for each of the items will be as detailed in the respective Annexure
- ✓ Tenders submitted with technical specifications and commercial bid will alone be considered for evaluation.
- ✓ The commercial bids of suppliers who are successful in Technical Evaluation only would be considered.
- ✓ In case, if Technical Committee is not convinced with any of the bidder's samples with respect to Quality parameters, then it is the Committee's decision to scrap the Tender.
- ✓ The decision of the Committee formed by Purchaser would be final.

15. Quality Standards:

a) The Suppliers/OEM's are to meet the Quality Standards or any other reputed standard by the Country of Origin. The evaluation would be done by the technicalcommittee at the time of technical evaluation

b) During period of the contract, suppliers shall confirm to relevant standards wherever applicable and would be given priority over others.

c) Suppliers should supply equipments/goods which comply with quality standard or any other reputed standard only failing which payment of the same will not be made.

16. Sample Evaluations:

a) Samples whenever required, for valuation shall be provided by the supplier at free of Cost.

b) The products should fulfil technical specifications as per quality standard or any other reputed standard by the Country of Origin

c) Incase bidder quoted more than one item for a particular item, during Technical round the Tender committee will select one item only according to quality satisfaction & the price bid of the selected item only shall be taken into consideration.

d) The Tender committee has the right to reject any sample in case the sample quality is found unsatisfactory and bidder has no right for any objection.

17. Quantity Division:

Each Delivery Schedule of Requirement incorporate in the tender enquiry document will be ordered from the Lowest Responsive Bidder (L1). However, it is the purchaser's decision to assess

the capacity of the L1 bidder tosupport the requirement. If L1 refuses to supply and in case of L1 bidders capacity is less than the quantityrequired, the purchaser has the right to split the order quantity among the other bidders in the order of lowest tohighest bidder as per the provisions of transparency in Tenders Act & Rules, provided the next lowest bidder agrees to match the L1 rate.

18. Authority for signing Tender Documents:

- ✓ A person signing the Tender Form or any document, forming part of the contract on behalf of the supplier,shall carry the authorization letter stating his/her authority to sign such documents from the respective organization
- ✓ Any Agent who is participating on behalf of a manufacturer shall have the Valid authorization letter from the manufacturer to sell the goods in the area where the tender is meant for, without which the bid will not beconsidered as valid

19. Responsibility for Performance of Contract:

The Supplier shall be entirely responsible for the performance of the contract in all respects in accordance with theterms and conditions as specified in the Contract. The Supplier shall not sublet, subcontract, transfer or assign thecontract.

20. Quality Inspection:

a) For every unit supplied by the supplier, the conformance to the Specifications mentioned in the Tendershall be established by the supplier.

b) Supplier represents and warrants that it shall fully comply with all written quality assurance requirementsor instructions of NHM, Meghalaya, and as amended from time to time at the sole discretion of NHM,Meghalaya. Supplier further represents and warrants that the Product supplied by the Supplier in strict compliance with all applicable central, state and local laws.

c) The supplier shall maintain the highest standard of quality in the Product. Supplier shall follow and abideby all directions, requests, suggestions or instructions of NHM, Meghalaya regarding the quality standards required by NHM, Meghalaya in connection with the manner of Packaging, storage and delivery of the Product.

d) The supplier shall facilitate in-process and / or Pre-delivery inspection by the Representatives of thePurchaser, as and when, the same is required by the Purchaser

e) Notification by Supplier – In case of inspection at the Supplier's premises, notice in writing shall be sentby the Supplier, sufficiently in advance, to the Purchaser when the items to be supplied, are ready forinspection.

f) Rejections – At delivery, NHM, Meghalaya in its sole discretion may reject any Product produced ormanufactured by Supplier for any reason, including Non-compliance with the relevant quality standard or any other reputed standard, but not limited to defects, or failure to meet quality standards, etc.

g) Removal of Rejections - Any supplies inspected and rejected at the Purchaser's premises must be removed by the Supplier, within 7 days from date of receipt of intimation of rejection of supplies in case of indigenous suppliers & 28 days in case of foreign suppliers. If the rejected goods have already been paid for (partly or fully), the supplier shall before removal of rejected goods , either deliver correct replacement goods at Purchaser's premises completely free of cost (including cost of goods , freight, taxes, duties etc) or refund the payment received as well as make full compensation for freight taxes , duties etc. Such rejected items shall lie at supplier's risk from the time of such rejections and if not removed within the above time limit, the Purchaser shall have the right to disposeoff the said rejected materials as he may deem fit without any financial obligation to the supplier.

h) If found that the Successful Bidder is incompetent to provide the supply as requested, in such a situation,the proposal may be reviewed for award of the contract to the next qualifying bidder or go for a fresh biddepending on the circumstance. No form of compensation shall be payable in any form whatsoever to theforfeited firm. In case it is decided to go for the next qualifying bidder, negotiation maybe considered tobring down their price nearer to the originally Evaluated or Lowest bidder in consideration to theequipment's to be supplied.

21. Supplier Responsibility:

a) Under any circumstances, No supplier shall supply the goods, in which recycled materials are used / used- disposables to NHM, Meghalaya. If NHM, Meghalaya finds any such instance, it will lead to cancellation ofPurchase Order and subsequent severe punitive (legal and financial) actions by

b)

NHM, Meghalaya. However, all the consequential costs are to be borne by the Supplier to NHM, Meghalaya.

c) The supplier is responsible for the delivery of the goods in satisfactory condition and without any loss ordamage at the final destination and until the same is actually received by the Purchaser at its works or other place of final destination. For this purpose, goods carried by the roadway or other carrier shall be deemed to be carried at the risk of the supplier. If on inspection at final destination the Purchaser discovers any discrepancy, the Purchaser will be entitled (not-with-standing that the property of goods shall have passed on to the company) to refuse acceptance of the goods altogether and claim damages and/or cancel the contract and buy its requirement in the open market at the risk and cost of the supplier, reserving always to itself, the right of forfeiture of any amount found due and payable or the deposit, if any, placed by the supplier for the due fulfilment of the contract as also to recover any amount, if already paid.

22. Responsibility for proper packing, wherever required:

a) The Supplier shall be responsible for the items being sufficient and properly packed, for transport byrail/road/sea/air/ or any combination of the above, so as to ensure their being free from loss or damage onarrival at the destination.

b) In case if a bidder has got successful for more than one item, the supply shall be packed in lot, as per theinstructions of NHM, Meghalaya.

c) Marking of Packages, Packing: Each package delivered under the contract shall bear the following:-

- Name of the Supplier
- PO Number
- Consignee's name and address
- Description and quantity of contents
- Gross weight, Net weight,
- Distinctive number or mark which is also to be shown, for the purpose of Identification, on theSupplier's packing list.

23. Delivery:

a) Timely delivery is the essence of the contract & must be completed as per the dates specified therein.

b) The Supplier shall deliver the items in strict accordance with the delivery terms indicated on the PurchaseOrder issued to the successful bidder.

c) Notification of delivery or dispatch in regard to each and every consignment shall be made by the Supplier tothe authorities named in the Contract.

24. Failure and Termination:

Should the Supplier fail to deliver the items or any consignment thereof, within the period prescribed for suchdelivery, the Purchaser shall be entitled at his/ her option, to the following:

Delayed Penalty & Liquidity Damage:

Up to 7 Days from Delivery Due Date	0.75% from the total PO value
From 8th day to 15 Day	1.00% from the total PO value
From 16th day to 22nd Day	3.00% from the total PO value
From 23rd day to 30th Day	5.00% from the total PO value
Above 30 Days	10.00% from the total PO value

25. Risk Purchase:

If the Supplier fails to deliver the items either in full or in part, within the prescribed delivery period, thePurchaser shall be entitled at his option to take alternate procurement action, at the risk & cost of the supplierfor the unsupplied portion of the goods / items without cancelling the contract in respect of the items not yet duefor delivery, or to cancel the contract based on progress of work, including items not due for delivery, and, ifthought fit/necessary, to purchase the items at the risk and cost of the Supplier. The price differential in thecase of higher cost to Purchaser, if any, shall have to be borne by the defaulting supplier. Moreover thedefaulting supplier shall have no claim over the quantity, which they failed to supply.

26. Addendum & Corrigendum:

At any time prior to the date of submission of the Bids, the Tender Inviting Authority may, for anyreason whatsoever, whether on his own initiative or in response to a clarification requested by prospective bidders, modify the Tender Documents by an act of amendment thereafter referred to asan Addendum for Addition & Corrigendum for Correction. All prospective bidders who havereceived the bid documents will be notified of the Addendum / Corrigendum and that will bebinding on them. In order to provide reasonable time to take the Amendment into account, theTender Inviting Authority may at its discretion extend the date and time for submissions of Bids.The bidders should check for such amendments or Corrigendum on the NHM website. No separateintimation will be issued to them.

27. Ethics:

Any attempt by a Tenderer to obtain confidential information, enter into unlawful agreements with competitorsor influence the committee or the Contracting Authority during the process of examining, clarifying, evaluatingand comparing tenders shall make the tender submitted by that tenderer liable for rejection.

28. Quantity of Delivered Items:

a) If the quantity received by the Target Delivery date is less than the P.O Scheduled quantity, then the physicalquantity received will be the quantity certified by the Purchaser.
b) If the quantity received is more than the P.O quantity, the excess quantity shall not be paid for, by thePurchaser.
c) In case of any supply quantity with an upper or lower tolerance of over 5%, NHM, Meghalaya will have the right to accept or reject the material immediately

29. Taxes, Duties and Levies:

a) Tenderers must clearly mention their GST Registrationin their offers and invoices.
b) Sales Tax/GST shall be clearlymentioned in the offer indicating the applicable rates.
c) In case if there is a decrease in the Statutory Taxes / Duties / Levies, the same has to be passed to the Purchaser

30. Guarantee:

The supplier must take the entire responsibility to supply the Quality-oriented products to NHM, Meghalaya.In case of distributors, the responsibility lies with the distributor to ensure the supply of right quality materialsto NHM, Meghalaya.

31. Indemnity:

The Supplier shall at all times indemnify the Purchaser against all claims which may be made in respect of theitems, for infringement of any right protected by Patent, Registration of design or Trade Mark and shall take allrisk of accidents or damage which may occur or failure of the supply arising. The Supplier shall be entirelyresponsible for the sufficiency of all the means used by them for the fulfilment of the contract.Supplier shallagree to indemnify, defend and hold NHM, Meghalaya and its officers, Directors, Employees, its parent andassigns harmless from and against any and all liability, losses, damages, claims, liens, expenses or causes ofaction including, but not limited to reasonable legal fees and expenses that may be incurred by NHMMeghalaya, arising directly or indirectly out of, or in connection with, Supplier's violation or breach of any ofthe terms of this Agreement or any act or omission to act by Supplier in violation of the Agreement.
NHMMeghalaya shall provide the Supplier with prompt written notice of any claim for which indemnification issought and shall have the right to participate in the defence of any such claim.

32. Warranties and Obligations:

a) Supplier irrevocably offers warranty of the product or as given by the manufacturer, against any manufacturing defects and contamination of materials.
b) Supplier represents and warrants that it will use its best efforts to produce and distribute the Product inaccordance with the terms and conditions of this Agreement.
c) Supplier shall be solely responsible for the production and distribution of the Product and will bear all relatedcosts associated therewith, except as otherwise provided in this Agreement.
d) Replacing the defective items should be done immediately within 5 working days.

33. Compliance of the Laws of the land:

a) The supplier shall comply with all state and local laws and regulations, shall obtain all necessary licensing forthe operation of its business and shall further comply with all quality control standardspromulgated by the authority from time to time.

34. Documentation requirements:

A supplier has to send the following documents along with the shipment.

a) Invoice in original along with two additional copies, both duly signed and stamped by the Supplier.
b) Original Packing list.
c) A copy of Purchase order raised by NHM, Meghalaya

35. Product Withdrawal:

a) If it is deemed necessary at any time by either NHM, Meghalaya or Supplier or any local, state, or centralgovernmental agency or other authority to recall or withdraw the Product produced by Supplier/Manufacturer and beingsupplied to NHM, Meghalaya, either as a result of failure of the Productor Supplier to strictly comply withNHM, Meghalaya quality standards or any governmentalhealth rule or regulation, or shall fail to comply withany other governmental authority or agency having jurisdiction, supplier shall bear all costs and expensesincurred by it and/or in complying with the recall or withdrawal procedures, unless such recall or withdrawal issolely the result of the negligence or misuse by NHM, Meghalaya.

b) If Supplier fails or refuses to promptly comply with the recall or withdrawal of the product upon request by the Purchaser, NHM, Meghalaya shall take such action as it deems necessary to recall or withdraw the product and Supplier shall immediately reimburse for the costs and expenses incurred.

c) If the product supplied is not as per the specification on analysis of the samples by appropriate approvedauthority, then the rejected and available quantities have to be lifted back by the supplier. All cost andconsequences of such rejected quantities shall be borne by the supplier.

36. Product Allocation and Stocking:

In the event there is an emergency shortage of the product, as announced by Supplier or its designatedrepresentative, Supplier shall stand ready to stock adequate quantities of the Product so that scheduled suppliesto NHM, Meghalaya, should not suffer for the full contract period. In an event of Supplier failing to supply thematerial in order quantities and as per time schedules, NHM, Meghalaya, reserves the right to procure theproduct of same or superior quality at same or higher price from an alternate supply source and any differencein cost of procurement shall be debited to the Supplier.

37. Trademarks:

The supplier shall not, without prior written consent of NHM, Meghalaya use the trademarks or service marksor sales marks of NHM, Meghalaya in any manner whatsoever, unless, and then only to the extent, such use isauthorized by NHM, Meghalaya in writing and then only in accordance with NHM, Meghalaya directions orspecifications

38. Termination:

NHM, the Meghalaya Tender Committee shall have the right to immediately terminate this Agreement bygiving a written notice to the Supplier in the event that Supplier does any of the following:

I. Fails to supply the order from the date of target delivery date or extension of delivery.
II. Files a petition in bankruptcy or is adjudicated bankrupt or insolvent, or Supplier discontinues its business
III. Breaches any provision of this Agreement, and fails to cure such breach within seven (7) days after it receivesa written notice of breach from the NHM, Meghalaya.
IV. NHM, the Meghalaya Tender committee has Right to Terminate without giving any Cause. NHM, Meghalayashall have the right to terminate this Agreement by written notice to Supplier.
V. Upon receipt of the notice of termination from the Purchaser, the Supplier shall either immediately or upon thedate specified in the notice of termination, cease all further supplies except for such as the Purchaser mayspecify in the notice of termination. In the event of termination of the Contract the Purchaser shall only pay tothe Supplier, the Price for the parts executed by the Supplier as of the date of termination.

39. Infringements:

a) The supplier agrees to fully cooperate with NHM, Meghalaya in the prosecution of any such suit against a thirdparty and shall execute all papers, testify on all matters, and otherwise cooperate in every way necessary anddesirable for the prosecution of any such lawsuit.

40. Governing Law; Dispute Resolution:

a) This Agreement shall be governed by, and construed in accordance with, the laws of the India; without regard to conflict of law principles, and under the jurisdiction of Meghalaya and language shall be English

41. Notice:

a) Any notice required to be given pursuant to this Agreement shall be in writing and delivered personally or by anationally recognized overnight courier service, or mailed by certified or registered mail, return receiptrequested, to the other party at its address as set forth at the top of this Agreement.
b) All such notices shall be effective upon delivery or upon refusal to accept delivery.
c) Either party may change the address to which notice is to be sent by written notice to the other in accordance with the provisions of this paragraph.

42. Miscellaneous:

a) If any term, clause or provision hereof is held invalid or unenforceable by a court of competent jurisdiction,such invalidity or unenforceability shall not affect the validity or operation of any other term, clause orprovision, and such invalid or unenforceable term, clause or provision shall be deemed to be severed from theAgreement.
b) This Agreement constitutes the entire understanding of the parties, and revokes and supersedes all prioragreements between the parties, and is intended as a final expression of their agreement. It shall not bemodified or amended except in writing signed by the parties hereto and specifically referring to this Agreement.
c) Bidders or employees of bidder cannot claim or construed as employees of NHM Meghalaya.

43. Force Majeure:

If at any time during the validity of the Contract, the performance in whole or in part by either party of anyobligation under this Contract shall be prevented or delayed by reasons of War, Hostility, Acts of PublicEnemy, Civil Commotion(s), Sabotage, Fire(s), Flood(s), Explosion(s), Epidemic, Quarantine Restrictions,Acts of State or Acts of God, hereinafter referred to as eventualities, then the Contract period will get extendedfor the period of Force Majeure, provided Notice of the happenings of any such eventualities is given,supported by a certificate of appropriate authority or Chamber of Commerce by either party to the other within15 days from the date of occurrence thereof. Neither party shall by reason of such eventualities be entitled toterminate this contract nor shall either party have any claim for damages against the other in respect of suchnon-performance or delay in performance. Work under this contract shall resume as soon as practicable aftersuch eventualities have come to an end or ceased to exist. Should one or both parties be prevented fromfulfilling their contractual obligations by state of Force Majeure lasting continuously for a period of at leastthree months, the parties shall consult each other regarding further continuation of the Contract.

44. Dispute Redressal Committee:

All disputes can be addressed by amicable settlement by a committee constituted by Mission Director of NHM,Meghalaya.

45. Declaration by the Tenderer/Conflict of Interest:

The Tenderer shall be required to declare whether the proprietor or any partner of the firm or Director of their company as the case may be, has any relation to any employee working with the Purchaser and if so, give the name of the employee and the relationship.

46. Waiver:

Failure to operate or to enforce any condition under this Contract shall not operate as a waiver of the conditionitself or any subsequent breach thereof.

47. Payment Terms:

Payment will be made after successful execution of the order in totality or postal delivery, inspection,acceptance, Receipts of the Goodsand successful installations. The bidder should submit the bills/invoices with a copy of deliveryChallans and installation report – duly acknowledged by the Purchaser and order copy with a satisfactory inspection report of thedesignated Technical Committee after Delivery duly signed and accepted should be submitted at NHMMeghalaya, DHS Office, Laitumkhrah, Shillong Meghalaya in original. Three copies of each document shouldbe made and one copy handed over to the authority at the delivery site.

48. FALL CLAUSE:

The prices quoted for the material supplied under this tender by the Supplier shall in no event exceed thelowest price at which the Supplier sells or offers to sell similar material in similar volume of identicaldescription to any person(s)/organization(s) including the Purchaser or any other NHM office located at any other place in India. If at any time during the said period, the supplier reduces the sale price, sells or offers to sell such stores to any person(s)/organization(s) including the Purchaser or any Statutory Undertaking of the Central or a State Government, as the case may be, at a price lower than the price chargeable under this contract, he shall forthwith notify such reduction or sale or offer to sale to the Purchaser and the price payable under the contract for the material supplied after the date of coming into force of such reduction or sale or offerof sale stand correspondingly reduced.

49. Blacklisted:

An Affidavit on a Non Judicial Stamp Paper of Rs. 10/-, attested by a Notary Public (In Original) that there is novigilance / CBI Case or arbitration cases pending with the Government of Meghalaya against the Form/Supplierthat the Proprietor/Director/Members of the Board of Directors of the Bidder and the Principal Manufacturer onwhose behalf they have quoted has never been blacklisted by any Institution (Government or Public).

50. SAVING CLAUSE: No suit, prosecution or any legal proceedings shall lie against Bid Inviting Authority or anyperson for anything that is done in good faith or intended to be done in pursuance of the Tender

GENERAL TERMS AND CONDITIONS

i. Qualified Bidders are required to arrange a demonstration of the equipment, preferably in the office of Mission Director, NHM Laitumkhrah, and Meghalaya Shillong. The Tenderer demonstrate the Equipment at office of Mission Director, NHM on date fixed by the technical committee duly constituted by competent authority. Failure to arrange for a demonstration on the given date may lead to cancellation of the bid. Cost of organizing such demonstration shall be borne by the bidder.

ii. Tenders should be quoted only by the actual manufacturer or their authorized distributors or selling agent of aparticular firm. The bidder is responsible for the supply of stores. If the Principal Manufacturer withdraws rights ofdistribution from the bidder during validity period of rate contract, Mission Director, NHM Meghalaya has right tocancel the eligibility of the bidder and accept the candidature of new coming authorized distributor. For supplying items at approved rates, new coming firm may have to deposit the EMD, subject to approval from the authority.

iii. The model of the equipment offered should not be obsolete /out of production for next 5 years.

iv. Warranty period (as specified in Annexure-I Onsite Warranty including Spare Parts & Labour etc.)

a) Tenderer and Manufacturer should give an undertaking stating that "The equipment being offered is the latest model as per the specifications and the spares for the equipment will be available for a period of at least 5 years after the warranty period.

b) Guarantee/warranty to the effect that before going out of production of spares parts , the manufacturers and/or tenderers will give adequate advance notice to the purchaser of the equipment so that the later may undertake to procure the balance of the life time requirements of spare parts.

c) The supplier warrants comprehensively (period as specified in Annexure:I) for Onsite Warranty including Spare Parts & Labour etc. that the Equipment/Stores 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. Thesupplier further warrants that the Equipment/Stores supplied under the contract shall have no defect arising fromdesign, materials (except when the design adopted and / or the material used are as per

thePurchaser's/Consignee's specifications) or workmanship or from any act or omission of the supplier that maydevelop under normal use of the supplied Equipment under the conditions prevailing in India.

d) No conditional warranty like mishandling, manufacturing defects etc. will be acceptable.
e) Comprehensive Warranty as well as Comprehensive Maintenance contract should be inclusive of all accessories and Turnkey work.
f) Replacement and repair will be under taken for the defective Equipment/Stores.
g) Proper marking has to be made for all spares for identification like printing of installation and repair dates.
h) The firm will be required to warranty/guarantee that during the warranty period as well as during the servicecontract period, the equipment including the accessories will be maintained in good working condition for a periodof 347 days out of a period of 365 days (i.e. 95% uptime).

v. Upon receipt of such notice, the supplier shall, within 48 hours on a 24 X 7 X 365 basis respond to take action to repair or replace the defective Equipment/Stores or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/Equipment/Stores after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/Equipment/Stores thereafter. The penalty clause for non- replacement will be applicable as per tender conditions mentioned above or as decided by the Mission Director.

vi. The tenderer hereby declares that the goods/equipment/stores/articles supplied to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and the particularscontained/mentioned in the clauses here of and the tenderer hereby guarantee/ warranty that the said goods /equipment / stores/ articles conform to the description and quality aforesaid. The purchaser will be entitled to rejectthe said goods/equipment/stores/articles or such portion thereof as may be discovered not to conform to the saiddescription and quality as follows:-

a. Tenderer should state categorically whether they have fully trained technical staff for installation/commissioningof the equipment and efficient after sales services.
b. It is specifically required that the tenderer will supply all the operating and service manuals along with blue-prints and drawings including circuit diagram of the equipment supplied as well as its components.
c. If the supplier, having been notified, fails to respond to take action to replace the defect(s) within 48 hours on a 24 X 7X 365 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 thepurchaser may have against the supplier.
d. During Warranty period, the supplier is required to visit at consignee's site at least once in 3 months commencing from the date of the installation for preventive maintenance of the Equipment/Stores.

vii) Onsite GUARANTEE/WARRANTY inclusive of all Spares and Labour: -
The bidder will give an onsite guarantee/ warranty for trouble free functions and maintenance of the equipments including spares and labour from the date of installation, commissioning and acceptance of the equipments.

viii) Bidders are required to quote strictly as per specification of the equipment. Deviation to specification must be brought out clearly giving deviation statement in Annexure-II.

ix) Additional features (in case of equipment), if any, should be listed separately in the offer.

x) The firms should confirm that the equipment is brand New, is of latest technology and have facility for up gradation, if necessary.

xi) The Mission Director, NHM Meghalaya has full authority to take into account the performance of manufacturer/authorized dealer or distributor/bidder and they should submit (if asked) a latest performance certificate from any other Govt. Hospitals/Institutions/PSUs to testify the proper dealing & performance as well as installation and maintenance of equipment.

x) The minor nature in works like minor Electrical/Civil Works, if required for Equipment installation, will carried out and borne by the Successful or L1 bidder, and for this purpose no extra payment, what so ever will not paid by Mission Director, NHM Meghalaya to any bidder.

Note: All bidders should quote equipment/items with following approved standards/requirement:-

a) All equipment should be as per the approved quality standard .
b) Manufacturers/Suppliers should have ISO certification for quality standards
c) Electrical safety conforms to standards for electrical safety.

d) All Literature (Log Book/Maintenance Record/Troubleshooting/Operation Manuals etc.) supplied with each ofequipment by Principal Manufacturer should be in Original.
e) All consumables required for installation and standardization of equipment should be supplied free of cost withEquipment.
f) All required Training to the associated concerned staff at Client Site (i.e. as specified at page no. 4 clause 3(a) under Term of delivery) should be organized by the Tenderer on his cost.

Arbitration:

i) In the event of any question, dispute or difference arising under this contract (except as to any matters the decision of which is specially provided for by the general or the special conditions.), the same shall be referred to the sole arbitrator or an officer appointed to be the arbitrator by the Mission Director NHM Meghalaya. It willbe no objection that the arbitrator is a Government Servant or that he had to deal with the matters to which the contract relates or that in the course of his duties as a Government servant he has expressed views on all or anyof the matters in dispute or difference. The 'Award' of the arbitrator shall be final and binding on the parties tothis contract.

ii) In the event of the Arbitrator dying, neglecting or refusing to act or resign or being unable to act for any reason,or his Award being set aside by the Court for any reason, it shall be lawful for the Mission Director NHMMeghalaya to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid.

(iv) It is further a term of this contract that no person, other than the person appointed by the Mission Director NHMMeghalaya as aforesaid, should act as arbitrator and that, if for any reason that is not possible, the matter is notto be referred to Arbitration at all.

(v) Upon every and any such reference, the assessment of the costs incidental to the reference and Award,respectively, shall be at the discretion of the arbitrator.

(vi) Subject as aforesaid, the Arbitration Act, 1996 as amended and the rules there under and any statutorymodification thereof for the time being in force shall be deemed to apply to the Arbitration proceedings under this clause.

(vii) The venue of arbitration shall be the place from which formal Acceptance of Tender is issued or such otherplace as Mission Director NHM Meghalaya at his discretion may determine.

51. Annexure – I

SPECIFICATIONS

Alle quiments must comply to Product quality standards and Warranty period
All equipments should be provided with 3 years Warranty periods.

	List of Equipment's
1.	Deep Freezer -40°C
2.	Blood Bank Refrigerator
3.	Deep Freezer -80°C
4.	Platelet Incubator & Platelet Agitator
5.	Semi Automated Coagulometer
6.	Plasma Thawing Bath
7.	Dielectric Tube Sealer
8.	Blood Collection Monitor
9.	Pre Vacuum Autoclave
10.	Manual Plasma Expresser
11.	Refrigerated Water Bath (Cryobath)
12.	Elisa Reader and Washer
13.	Table Top Centrifuge
14.	Haemoglobinometer
15.	Incubator
16.	Water Bath
17.	Refrigerated Component Centrifuge
18.	Cell Counter (Automated Hematology Analyzer)
19.	Laminar Airflow Bench (Bio-Safety Cabinet)
20.	Donor Couch
21.	Sterile Connecting Device
22.	Micropipettes(Set)
23.	Micropipettes(Single Piece Adjustable)
24.	Leukocyte removal filter for red cells
25.	Hand Sealer with Tube roller & cutter
26.	Hot Air Oven
27.	Sphygmomanometer (Standing Type)
28.	Binocular Microscope
29.	Quality Control of ABO reagent (anti-A, anti-B, and anti-AB)
30.	Acceptable quality of anti-globulin reagent
31.	Acceptable Titer and Avidity of ABO reagents
32.	Acceptable Titer and Avidity of ABO reagents (continued)
33.	Quality Acceptable of Rh anti sera (Anti-D Ig M &IgG ,AntiC,c,E,e)
34.	Anti A1 Lectin and Anti-H Lectin
35.	Bovine Serum Albumin (BSA)
36.	Blood transportation Boxes
	List of Reagents
1.	Elisa Test Kits for 4th gen ELISA Kit
2.	HBsAg ELISA Kit
3.	4th Gen HIV ELISA Kit
4.	Third generation ELISA for the detection of antibodies to Syphilis .
5.	Rapid Test for Malaria Pv/Pf

DETAIL SPECIFICATIONS

General Note: All Equipments should have:-

1. **Electrical Specification:**

- Input Voltage: 220 V AC to 240 V AC
- Operating frequency: 50/60 Hz
- Rated Current: 2.5 A(+/- 10%) Main supply voltage fluctuations not to exceed +/- of rated supply voltage.

2. **Environmental Specification:**

- Temperature limit: Operational:10-30 degree C (50-86 F)
- Humidity Limit: 10% to 90%
- Altitude: Up to 2000m
- Minimum Clearance around device: 7.62 cm(3 inch)

3. **Certification:** Compliance US FDA 510 K, ANSI/UL 61010-1, CAN/CSA C 22.2 No 61010-1, IEC/EN 61010-1, IEC/EN 61010-2-02002006.
OR compliance to CDSCO certificate
ISO Certification No:

4. **UNDERTAKING:-** Undertaking for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown.
5. **Recommendations and Warnings:-** Any recommendations for best use and supplementary warning for safety should be declared.
6. **Service contract clauses:** Downtime: 48 hours or after penalty clause will be active. Local clinical staff/authorised officer on behalf pf purchaser to affirm completion of installation.
7. **Accessories and spare parts:-**the make rating model description, specifications, price quantity of each item shall be furnished separately.
8. **Protection:-**A line voltage corrector of appropriate rating will form part of standard configuration.
9. **Noise:-**noise factor should not exceed 60 decibels for all equipments.

Equipments	Specification
1. Deep Freezer - 40°C	**Clinical purpose:** To freeze and store plasma. Compression freezer with CFC free refrigerant. **Construction:** Internal Stainless steel (min 22g) (S.S v2 A-1.4301) External: Solid outer Corrosion Resistant (at least 1mm thickness), CFC free insulation Design: Upright Type, Mounted on Lockable Castor wheels 1. **Shelves:/trays:** **a) 3**/4 adjustable made of non corrosive stainless steel. b)Door does not project at side when opened c)The door should have minimum 100mm Polyurethane/Silicon insulation with heated glass ware d)Insulation and gasket should be Polyurethane/Silicon insulation should be minimum of 80 mm. e) heating device on frame to avoid condensation **Capacity**=300/400 lt capacity./300-410 plasma bags of 200ml each..

Internal Temperature Control:

1. Electronic temperature control,
2. Operating temperature reachable lowest up to -45 deg C with setting accuracy of 0.1 deg C whatever the load,
3. Fan air cooling,
4. Automatic defrost within safe temperature range
5. Casing & door should have insulation panel with polyurethane/silicon> 80mm thickness.

Refrigeration: Heavy duty hermetically sealed compressor air cooled cascaded refrigeration system, maintains inner temperature below-40 deg C. Refrigerant CFC free/ green gas.

External Ambient Temperature: Performs in an ambient temperature of +10 deg C to +40 deg C

Hold over time: 2 hrs at ambient temperature.

Cooling Down Time: A full load of plasma packs at +25 deg C takes a maximum of 5 hrs for all the packs to reach below (minus)-5 deg C

Temperature Monitoring: Digital temperature (LED) display with 0.1 deg C graduation.

Temperature recording: ink recording device .Each chart should record 7 days duration.

Alarms:

There should be independent continuous source of power for alarms.
Alarms: Audio – Visual :
1. Power on /failure
2. On/Off display of compressors
3. Display of battery status.
4. High / Low temperature
5. Door open/close.
6. UPS : Appropriate UPS online with automatic On/Off facility and two hours Power back – up. (Optional)
7. Should have compliance of : Drug & Cosmetic Act
8. All components : Should have appropriate compliance.
9. All components : Should have warranty for minimum 3 years.

Undertaking for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown.

- Power Requirements: Input voltage 220/240V, 50Hz .
- Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%
- Noise:-noise factor should not exceed 60 decibels.
- Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished.
- Users care, cleaning, Disinfection & Sterility issues: to be specified in the manual.
- Product certifications: CE class II A or US FDA/ CDCSO/CDCSO certified
- Quality certificate: ISO certified

	• Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigenous items should comply with BIS & CPCB standards. • Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance to be provided. • Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. • Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English to be attached with the offer both in hand and soft copies. • Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. • **Protection :-suitable auto voltage corrector with spike protector should be provided if required.**
2. Blood Bank Refrigerator	**Clinical Purpose:**A Refrigerator for storing whole blood /PRBC Units in a blood bank or BSU . **Construction:** Compression type refrigerator that uses CFC free refrigerant gas **Internal**: Stainless steel (min. 22g). **External** Solid outer Corrosion Resistant (at least 1mm thickness) **Drawers.** 1. Roll out type, Stainless steel scratch resistant material, 2. The separators, if provided in the drawers, should be Such that blood bags are held in a vertical position with the label side visible. 3. Glass door does not project at side when opened 4. Insulation and gasket should be of silicon or polyurethane 5. Polyurethane/Silicon insulation should be minimum 80mm thickness. 6. Door opening audio and visual display alarm. 7. Door locks should be available. 8. Interior lighting or illumination, 9. Auto defrosting. **Temperature Range**:+ 2 deg C to +6 deg C and adjustable with setting accuracy of :0.1 deg C with set temperature of 4 deg C. **User parameter settings set point,** high alarm point, low alarm point, buzzer off time. **Internal Temperature Control:** Electronic temperature control, range +2 deg C to +6 deg C with setting accuracy of :0.1 deg C whatever the load, Fan air cooling **External Ambient Temperature:** Performs in an ambient temperature of +10 deg C to +40 deg C **Hold over time**: A full load of blood packs at +4 deg C (#1 deg C) takes at least 30 minutes to rise to above +6 deg C. Internal temperature hold over time in case of power failure should be at least 1.5 hrs **Temperature Monitoring:** Digital temperature (LED) display with 0.1 deg C graduation, **Temperature recording:** ink recording device. Each chart should record for 7 days. Microprocessor control for operation with integrated audio visual temperature alarm function with digital monitoring display. Independent safety thermostat to avoid negative temperatures Atleast 2 temperatures sensors. **Capacity**-1)500-550 bags (350ml blood bags) -2)60-80bags (350ml blood bags) **Alarms:**

	There should be independent continuous source of power for alarms.
	Alarms: Audio – Visual :
	1. Power on /failure
	2. On/Off display of compressors
	3. Display of battery status.
	4. High / Low temperature
	5. Door open/close.
	6. UPS: Appropriate UPS online with automatic On/Off facility and two hours Power back – up. (Optional)
	7. Should have compliance of : Drug & Cosmetic Act
	8. All components: Should have appropriate compliance.
	9. All components: Should have warranty for minimum 3 years.
	Undertaking for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown • Noise:-noise factor should not exceed 60 decibels. • Power Requirements: Input voltage 220/240V, 50Hz . • Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% • Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. • Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. • Product certifications: CE class II A or US FDA/ CDCSO certified • Quality certificate: ISO certified • Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. • Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. • Service contract clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. • Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hard and soft copies. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. • **Protection :-suitable auto voltage corrector with spike protector should be provided if required.**
3. **Deep Freezer - 80°C**	**Clinical purpose**: To freeze and store plasma. Compression Freezer with CFC Free Refrigerant **Construction:** **Internal**: Stainless Steel (min 22g) (S.s. V2 A- 1 4301) **External**: Solid Outer Corrosion Resistant (at Least 1mm Thickness), CFC Free Insulation **Design**: Upright Type, , Mounted on Lockable Castor wheels

Shelves:/trays:3/4 adjustable made of non corrosive stainless steel.
Door does not project at Side When Opened .The Door Should have Minimum 100mm Polyurethane / Silicon Insulation With Heated Glass Ware.
Insulation and gasket should be polyurethane / silicon insulation forward share of the 80 mm Drawers.

- Heating device on Frame to Avoid Condensation

Internal Temperature Control:

- Electronic temperature control.
- Operating temperature reachable Lowest Up To -86 Deg C with Setting Accuracy of ± 1 Deg C Whatever the Load,
- Fan Air Cooling.
- Automatic Defrost Within safe Temperature Range,
- Casing & door should have insulation panel with polyurethane foam.

Refrigeration: heavy duty hermetically sealed compressor air cooled cascaded refrigerator system, maintain inner temperature below -80 deg C, Refrigerant CFC free/ green gas.
Should provide: appropriate voltage stabiliser.
Capacity: 300/400 Lit Capacity./300-410 plasma bags of 200ml each.
External ambient temperature: Performs in an ambient temperatures of +10 deg C to + 40 deg C
Hold over time: 2 hrs ambient temperature
Cooling down time: A full load of plasma packs at +25 deg C takes a maximum of 5 hrs for all packs to reach below (minus) -5 deg C
Temperature Monitoring: Digital temperature (LED) display with 0.1 deg C graduation,.
Temperature recording device: Ink recording device ,Each chart should record for 7 days.
Alarms:

There should be independent continuous source of power for alarms.
Alarms: Audio – Visual :
1. Power on /failure
2. On/Off display of compressors
3. Display of battery status.
4. High / Low temperature
5. Door open/close.
6. UPS :Appropriate UPS online with automatic On/Off facility and two hours Power back – up. (optional)
7. Should have compliance of : Drug & Cosmetic Act
8. All components : Should have appropriate compliance.
9. All components : Should have warranty for minimum 3 years.

Microprocessor control for operation with integrated audio visual temperature alarm function with digital monitoring display.
Independent safety thermostat to avoid negative temperatures
Atleast 2 temperatures sensors.
Undertaking for "Maximum Response time for repair of break down"
=undertaking should be provided that repair will be done within 48 hours after breakdown.

- Noise:-noise factor should not exceed 60 decibels.
- Power Requirements: Input voltage 220/240V, 50Hz alongwith a line voltage corrector of appropriate rating.
- Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%
- Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete

	construction, details in respect of material specifications, thickness, finish etc are to be furnished. • Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. • Product certifications: CE class II A or US FDA/ CDCSO certified • Quality certificate: ISO certified • Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. • Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. • Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. • Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. • Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. • **Protection :-suitable auto voltage corrector with spike protector should be provided if required.**
4. Platelet Incubator & Platelet Agitator	**Clinical purpose:** To continuously agitate platelet concentrates in an incubator. Flat bed agitator fitted inside a temperature-controlled Incubator operating with CFC free refrigerant gas **Construction:** **A. Platelet Incubator**: Should have the provision to store the agitator. **B.** Should have a single transparent outer door for clear visibility **C.** Should be able to maintain a temperature of 22±2 deg C. **D.** Set temperature of 22 deg C. **E.** Should have a digital temperature indicator. **F.** Seven day ink chart recorder with battery backup for minimum of 2 hours for continuous operation during power failure. **G.** Single digital temperature sensor for both recording and controlling. **H. Alarm:**Should have audible & visual **I'** high/low alarm for temperature control, ii battery on/low, iii.sensor failure, iv.agitator off, v. power failure, compressor and system vi.Should have forced air circulation method for the uniformity of the temperature at all sides of the incubator vii. Should have door open alarm. **I.** Chamber mounted electrical outlet for agitator should be available **J. Platelet Agitator:** Internal Surface: Sturdy, Stainless steel/powder coated External Surface: Sturdy and Corrosion resistant Transparent door **Design of shelves**: Shelves are made of non slip. corrosion resistant material, coated with bacteria resistant material perforated to ensure air circulation and with sufficient clearance to minimize noise. **Gentle side to side agitation at 3.6- 4cm side to side, 60-70 strokes/minute.** Heavy duty ball bearing gear motor for noiseless and continuous operation for 24 hrs a day throughout the year. Motor with internal fan **Capacity**-24 -26 platelet units.

- Appropriate voltage stabiliser to be provided if required. Should be specified.. Noise:-noise factor should not exceed 60 decibels.
- Power Requirements: Input voltage 220/240V, 50Hz
- Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%
- Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished.
- Users care, cleaning, Disinfection & Sterility issues: to be specified in the manual.
- Product certifications: CE class II A or US FDA/ CDCSO certified
- Quality certificate: ISO certified
- Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigenous items should comply with BIS & CPCB standards.
- Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided.
- Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation.
- Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies.

Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided.

Alarms:

There should be independent continuous source of power for alarms.
Alarms: Audio – Visual :
1. Power on /failure
2. On/Off display of compressors
3. Display of battery status.
4. High / Low temperature
5. Door open/close.
6. UPS :Appropriate UPS online with automatic On/Off facility and two hours Power back – up. (optional)
7. Should have compliance of : Drug & Cosmetic Act
8. All components : Should have appropriate compliance.
9. All components : Should have warranty for minimum 3 years.

- **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown.
- **Protection :-suitable auto voltage corrector with spike protector should be provided if required.**

5. Semi Automated Coagulometer	**Clinical purpose:** Coagulometer measures the blood clotting parameters. 1. Should be microcomputer controlled, Semi automatic with at least 4 channels optics 2. Based on optical principle with LED. Suitable for PT, a-PTT, fibrinogen, thrombin time, factors. II, V, VII, VIII, IX, X, XI. XII.

	Fletcher, AT-III, Protein C, Protein S, Heparin. STAT. 3. Results can be represented in seconds. % activity, ratio. INR g/L and mg/L Should be able to store specific test parameters in the system. 4. Should have LCD display. 5. Printer type should be specified with equipment specification.(Laser Printer with maintenance cost included in AMC) 6. Should generate the standard curve for factor assays. 7. Open system for reagent and low reagent consumption. 8. Construction: Should have integrated / external incubation block with pre-warming positions. 9. Printer: Complete system with printer or printer connectivity is required. 10. Display: LCD display 11. Calibration: Manual 12. Capacity:-storage capacity for detailed results including including histograms upto 500 tests. 13. Power Requirements: input voltage 220/240v 50Hz fitted with Indian plug. 14. UPS:- Suitable UPS with maintenance free batteries for minimum 30 minutes backup should be supplied with the system. 15. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 16. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 17. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 18. Product certifications: CE class II A or US FDA/ CDCSO and ISO certified 19. Quality certificate: ISO certified 20. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 21. Training of staff (medical, paramedical, Technicians) . Training of users in operation and basic maintenance to be provided. 22. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 23. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 24. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided 25. All components: Should have warranty for minimum 3 years. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
6. Plasma Thawing Bath	**Clinical purpose:** Plasma thawing bath is used for thawing of fresh frozen plasma (FFP) and cryoprecipitate as per the therapeutic requirements.. **Construction:** 1. Table top with top opening. Having a deep thawing chamber with a stirrer and with water maintained at +37±1 deg C with pumping mechanism and inline heating system to ensure uniform thawing. 2. Quick thawing (<20 minutes) Should be able to thaw 4/8 plasma bags (FFP/ cryoprecipitate / Apheresis or plasma bags of any size) Should have

	two separate basket assemblies with built-in fingers for securely holding the plasma bags of all sizes. 3. Tray with individual compartment to ensure that ports of bags may be kept above water level during the procedure. 4. Should give an alarm when the plasma bags are thawed. 5. Provision for programmable time setting for length of thawing 6. Should have digital timer clearly displaying the programmed set time or remaining cycle in minutes. 7. Should have audio visual over temperature alarm system. Should have a system to drain the chamber easily. 8. Should be supplied with a cover to keep the unit covered when not in use. 9. **Simple to use and easy to read LED display**. 10 Drain line with shut-off valve. 11.Tray: Removable type stainless steel trays with partitions for holding plasma bags 12.Capacity:-4-8 plasma bags. 11 Power Requirements: Input voltage 220/240v 50Hz single phase 12 Atmosphere/Ambience(air conditioning, humidity, dust): Capable of storage and operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 13 Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 14 Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 15 Product certifications: CE class II A or US FDA/ CDCSO certified 16 Quality certificate: ISO certified 17 Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 18 Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 19 Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 20 Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 21 Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided 22 All components: Should have warranty for minimum 3 years. 23 **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
7. Dielectric Tube Sealer	**Clinical purpose**: Blood Bag Tube Sealer is a compact equipment to seal the blood bag tubing. 1. The system should be heavy duty and be able to seal the blood bag tubing quickly and effectively. 2. Should be simple to handle. 3. System should gently seal the tubing with no hemolysis using radio frequency. 4. Should be capable of making wide seal of 2-6 mm thickness. 5. System should run on both mains and battery (more than 10hrs back up) 6. charger to be supplied 7. Back up battery should seal more than 500 seals on PVC-tubes in

	continuous mode. 8. Should be for bench-top use 9. Sealing trigger should be automatic. 10. Preferably have extended portable hand unit sealing hand should be with coaxial cable of 1.5-2 meter. **11. Should have indication lamps for "Sealing Process" on handle as well as main unit.** 12. No warm up time should be required 13. Should ensure easy separation of tube segments after the sealing. 14. Electrodes should be well protected by a cover. 15. Sealing Time: Should not be more than 2 seconds 16. Power Requirements: Input voltage 220/240v 50Hz AC. 17. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 18. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 19. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 20. Product certifications: CE class II A or US FDA/ CDCSO certified 21. Quality certificate: ISO certified 22. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 23. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 24. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 25. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 26. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided All components: 27. Should have warranty for minimum 3 years 28. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
8. Blood Collection Monitor	**Clinical purpose:** The system is used to collect desired amount of blood from the donor and automatically mixes blood uniformly with the anticoagulant in blood bag. 1. It is meant for stationary and mobile use. Gentle end to end mixing and control of collection time suitable for all blood bags. 2. Construction: **a)LED indication on commencement of collection.** **b)LED indication and audible alarm at the end of collection.** **3. Indication of time taken for collection.** **4. Indication of blood flow with audio alarm when blood flow is higher or lower than desired.** **5. Continuous display of collected volume, flow and time during collection.** **6. Automatic clamping at termination of preset volume collection.** 7. Continuous mixing of blood with anticoagulant during collection: 12-16 rpm.

	8. Equipment carry case for BCM should be provided for portability 9. Input port cable with 15 Plug and six way output terminal strip for two outlets. 10. Volume Settings :Pre-selection of volume to be collected. 11. Tarring of bag volume before collection. 12. Automatic storages and recall of set volume. 13. Measure volume with best accuracy. Preset value: 350/450 mL. 14.Tarring Range: 0-600 g 15.Power Requirements: input voltage 220/240v 50Hz fitted with Indian plug. 16 **Battery operation**: should operate on mains as well as rechargeable battery. On battery it should operate for minimum 5-8 hrs. 17.Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 18.Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. • Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. • Product certifications: CE class II A or US FDA/ CDCSO certified • Quality certificate: ISO certified • Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. • Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. • Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. • Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. • Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided • All components: Should have warranty for minimum 3 years • **Protection :-suitable auto voltage corrector with spike protector meeting ISI specifications should be provided if required** -(should be specified). • **Mobility:-portable for use in camp& blood center.** • **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
9. Vertical Pre Vacuum Autoclave	**Clinical purpose:** Autoclaves use pressurized steam to destroy microorganisms and are the most dependable systems available for the decontamination of laboratory waste and the sterilization of laboratory glassware. Autoclave which is exclusively designed for treatment and disinfection of biomedical waste. 1. Construction: • Should be made up of stainless steel. • Should be supplied with vaccum breaker, water level indicator, steam trap and automatic pressure control switch. • Temperature cutoff device • Pressure cutoff device. • Self locking safety doors. • Auto cutoff at low water level.

	• Separate steam release and • Separate drainage valve • Should come mounted on a robust stand. • Should have working pressure range of 5 psi to 20 psi. • Should have working temperature of 105 to 130 deg C. • **Digital Display panel**:-a)jacket and chamber pressure and temperature, indicators for pressure gauge, safety valve, release valve, indicator lights to show when the pressure control is cutting off current to heater. • should have ON/OFF switch • Should have ISI marked water immersion type industrial heating elements. 2. Water inlet & outer valves 3. Water level indication gauge glass with SS guard and with automatic water closing device in case of breakage of glass tube 4. Automatic pressure switch to control the boiler/jacket pressure 5. Should be equipped with timer and alarm system. 6. Power Requirements: Should work on 200-250V at 50Hz. 7. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 8. Capacity:-70/80/100 litres 9. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 10. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 11. Product certifications: CE class II A or US FDA/ CDCSO certified 12. Quality certificate: ISO certified 13. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 14. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 15. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 16. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 17. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 18. All components: Should have warranty for minimum 3 years 19. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
10. Manual Plasma Expresser	**Clinical purpose**:Should be suitable to express blood components (plasma, platelets) from blood bags 1. Mode of operation: Manual 2. Construction: Front panel should be spring loaded to apply uniform pressure on blood bag causing transfer of fluid. 3. Compression plate should be made of transparent acrylic and it should be durable. 4. Metal used for the equipment should be non corrosive and can be cleaned with antiseptics

	5. Base portion and vertical surface should be made to have better strength and long lasting performance. 6. Should have hooks for holding blood bags, suitable to express blood components (plasma. platelets) from blood bags 4. Power Requirements: NA 5. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 6. Capacity:-suitable for 350/450 ml filled blood bags. 7. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 8. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 9. Product certifications: CE class II A or US FDA/ CDCSO certified 10. Quality certificate: ISO certified 11. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 12. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 13. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 14. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 15. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. All components: 16. Should have warranty for minimum 3 years 17. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
11. Refrigerated Water Bath (Cryobath)	**Clinical Purpose**: For uniform thawing of plasma bags. 1. For uniform thawing of plasma bags at preset temperature of 4°C+/- 2°C. 2. **Construction:** For uniform thawing of plasma bags at preset temperature of 4 deg C+/-2 deg C. 3. High capacity pump to facilitate optimum and uniform thawing of plasma 4. System to prevent contamination of individual ports during thawing. 5. Microprocessor based digital controller to precise monitoring and controlling of temperatures at 4 deg C+/-2 deg C. 6. Stainless steel tank of 22 guage and stainless steel lid of at least 20 gauge. 7. Drain line with shut off valve. 8. Mounted on lockable castor wheels. 9. Temperature sensing method: Sealed sensor dipped directly in the water. 10. Power Consumption: Maximum 1600 W 11. Operating Temperatures: 2 deg C to 6 deg C 12. Programmable temp. range: 2 deg C to 50 deg C 13. Display resolution: atleast 1 deg C 14. Time taken: Time taken for one process should not be more than 2 hours for plasma bags store at -40 deg C 15. Tray: Stainless steel, removable tray of individual compartments for holding plasma bags. 16. Capacity:-10-20 bags per run or per one cycle

	17. Noise factor: should not exceed 60 decibels. 11. Power Requirements: Input voltage 230 + 10%V, 50Hz, 15 Amp single phase AC. 12. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 13. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 14. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 15. Product certifications: CE class II A or US FDA/ CDCSO certified 16. Quality certificate: ISO certified 17. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigenous items should comply with BIS & CPCB standards. 18. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 19. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 20. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 21. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 22. All components: Should have warranty for minimum 3 years 23. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
12. Elisa Reader and Washer	**Clinical purpose:** The system should be capable to wash flat, round and V bottom Elisa plates and strips. The system should be capable to read flat, round and V bottom Elisa plates and strips. **(A)Washer:** The system should be fully automated and easy to operate with 8 way manifold (1) The system should be capable to wash fiat, round and V-bottom Plates and Strips (2) They should have large display along with more than 40-50 program storage facility. (3) The system should be having automatic calibration facility like well depth, well detection and last row detection (4) The system should have warning facility for low liquid, vacuum and pressure (5) Should have specially designed peristaltic pump to dispense 300-400µl in each well. (6) Aspiration should be through diagram pump while dispensing to prevent overflow residual volume . (7)After washing residual volume should be less than 2µl per well. (8) Should be supplied with waste bottle and rinse bottle of capacity 2 liter with tubing's.

	(9) Waste bottle should have level sensor (10) Should have option for washing cycles like long wash, short wash ,rinsing and priming (11) Should be supplied with plastic cover and optional accessories like extra wash bottle. (12) Cross wise aspiration, over flow washing, bottom washing (13) Automatic manifold detection (14) 8 x12 channel manifold (15) Equipment should be in un-pressurized, capable of using any bottle or container. (16) Dispense volume 50-3000 ul with 50 uL increment (17) Precision at 10 ul < 5% and at 100 ul <2.5% (16) System should be FDA approved/European CE certified (17) Manufacturer should be ISO 13485 certified (18) Company should have local based engineer **B) Microplate Reader**: (1) Fully Automatic Elisa Plate Reader (2) Dichromatic optics with six wavelengths Wavelength range-400-800 n.m & must have 405,450.492 & 620 n.m filter (3) Should have tungsten/LED lamp with lamp saver feature (4) Parallel and serial port for External Printer (5) Printout of the full plate in matrix format (6) Microprocessor controlled (7) Should read Elisa Plate Horizontally A to H & Vertically to 12 (8) Multiple cavity hard coat Interference, filters with 10nm half band pass. (9) Photometric Accuracy should be ±1% or better (NIST) (10)Resolution 0.001-0.100 (11) Linear measurement range – 0.20 to 3.0 absorbance unit (12) Stability drift of no more than 005A in 8 hours (13) Non-volatile memory approximate 36 test with curve's (14) Measurement mode: single & dual Wavelength reading (preferably 450 & 620 n.m (15) Built in shaking with Programmable speed & time. (16) System should be FDA approved/European CE certified (17) Manufacturer should be ISO 13485 certified (18) Company should have local based engineer • Power Requirements: Input voltage 220/240V, 50Hz • Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% • UPS:-Compatible UPS to complete the ongoing procedure with a backup supply for atleast half an hour should be supplied alongwith the equipment. • Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. • Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. • Product certifications: CE class II A or US FDA/ CDCSO certified • Quality certificate: ISO certified • Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigenous items should comply with BIS & CPCB standards. • Training of staff (medical), paramedical, Technicians) OPTIONAL

	(Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. • Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. • Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. • Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. All components: • Should have warranty for minimum 3 years • **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown • **Protection :-suitable auto voltage corrector with spike protector should be provided if required.**
13. Table Top Centrifuge	**Clinical purpose**: Preparation of samples for clinical /Lab analysis. 1. Speed Range 500 to 4500 rpm on load with variable speed regulator. 2. It should be fitted with digital timer 0-59 minutes and digital speed indicator, LED/LCD display 3. The machine should be supplied with swing/angle rotor head having 16 tubes of 5 to 10 ml capacity. 4. It should be supplied with stainless steel tube carrier & rubber cushions. 5. The lid should be double walled, made of steel sheet/ABS plastic moulding for extra safety 6. It should also be fitted with electronic lid lock which should not open when machine is in running condition 7. The Motor of machine should be fitted with anti vibration pads. 8. Capacity:-can accommodate 16/24 tubes at a time. 9. Noise (in decibels):- noise factor should not exceed 60decibels 10. Power Requirements: Input voltage 220/240V 50Hz, 1/8 Hp Motor of 220V AC. 11. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 12. Accessories and spare parts:-.complete with comprehensive set of spare parts. Also supplied complete instruction manual, cord and plug, dust cover, 12 spare rubber cushions. The make, rating, model, description, specifications, price, quantity of each item shall be furnished separately. 13. Atmosphere /ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 14. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 15. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 16. Product certifications: CE class II A or US FDA/ CDCSO certified 17. Quality certificate: ISO certified 18. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigenous items should comply with BIS & CPCB standards. 19. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and

	basic maintenance has to be provided. 20. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 21. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 22. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided 23. All components: Should have warranty for minimum 3 years. 24. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
14. Haemoglobinometer	**Clinical Purpose:** To estimate Hb level of donor with finger prick method. 1. It should be digital and microprocessor based. 2. It should measure direct reading of Haemoglobin after feeding the set value of standard once. 3. Measuring time < 1 minute. 4. It should be light in weight and body should be made of ABS plastic moulding 5. Measuring range: 6-20 g/dl. 6. Display: 3-1/2 digit 7-segment LED 7. Should have LED/LCD display of hemoglobin in gm/dl. 8. Zero setting: Automatic 9. Sample Volume 0.01 ml 10. Calibration: Automatic 11. Accuracy of instrument should be +/- 2% as compared to international approved method of hemoglobin estimation 12. Instrument should work on dual wavelength, one for hemoglobin measurement (570 nm) and one for turbidity compensation (880 nm). 13. Portable for use during camps 14. 100 test strips/microcuvettes should be provided with equipment 15. Battery backup with chargeable battery. 16. Power Requirements: Input voltage 220/240V 50Hz. 17. Battery operated:- in built battery with charger to be included. 18. Accessories & spare parts:- complete with comprehensive set of spare parts. Also supplied complete instruction manual, cord and plug, dust cover, 12 spare rubber cushions. The make, rating, model, description, specifications, price, quantity of each item shall be furnished separately. 18.Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 19.Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 20.Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 21.Product certifications: CE class II A or US FDA/ CDCSO certified 22. Quality certificate: ISO certified 23. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigenous items should comply with BIS & CPCB standards. 24. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 25. Service contrast clauses including prices: Downtime: 48 hours or after

	penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 26. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 27. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 28. All components: Should have warranty for minimum 3 years 29. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
15. Incubator	**Clinical purpose:** Dry incubators are designed to incubate blood samples, microplates etc. 1. Body: This unit has double walled chamber, with PUF insulation. 2. Interior is made of Stainless Steel (minimum grade 304) and Exterior is either made of Mild Steel finished in powder coated steel or Stainless Steel 3. The unit should have full-length inner glass door and outside metal door with magnetic gasket and lock. 4. The unit should be provided with Mesh type /stainless steel trays. 5. Temp. Controller: Digital type 6. Temp. range: RT to 110 deg C 7. Accuracy: 1 deg C in the given range. 8. LED display. Specifications provided to be specified. 9. Slot for thermometer & thermometer to be supplied. 10. Power Requirements: Input voltage 220/240V 50Hz, 1/8 Hp Motor of 220V AC. 11. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 12. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 13. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 14. Product certifications: CE class II A or US FDA/ CDCSO certified 15. Quality certificate: ISO certified 16. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 17. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 18. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 19. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 20. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provide 21. All components: Should have warranty for minimum 3 years .

	22. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
16. Water Bath	**Clinical purpose:** A water bath is a device used in the laboratories to incubate sample in water maintained at a constant temperature. 1. Water Bath with MICROPROCESSOR technology and following specifications.:- a) Bright temperature display (LED) b) Seamless, splash-proof keypad c) Splash-proof mains switch d) Audible and optical warning signal for the cut-off function e) Drain screw for conveniently emptying the bath f) Dry-running protection g) Removable bottom plate h) Working temperature range: room temp(22 deg C) upto 100 deg C i) Temperature stability: +/-1 °C j) Visual Display of temperature: LED k) Display resolution: 1 °C l) Heater capacity: 2000 W m) Filling volume: 8 to 30 Liters n) Ambient temperature 5 deg C to 40 deg C o) Should have a stirrer. p) Stainless steel top cover to be supplied. 2. Power Requirements: 220/240V50Hz 3. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 4. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 5. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 6. Product certifications: CE class II A or US FDA/ CDCSO certified 7. Quality certificate: ISO certified 8. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 9. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 10. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 11. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 12. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 13. All components: Should have warranty for minimum 3 years 14. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown

17. Refrigerated Component Centrifuge	**Clinical Purpose**: For separation of blood components like packed cells, platelet rich plasma, platelet concentrate, plasma, cryoprecipitate. 1. Refrigerant Centrifuge with CFC free refrigerant. a) **Construction:** Microprocessor controlled system to make operation automatic. b) Programmable memory. Should be capable of storing multiple programmes for preparing PRBC, Plasma ,Cryoprecipitate, Platelet Concentrate, Washed RBC etc. c) Memory with tamper proof facility. d) Stainless steel chamber: Easy to clean, corrosion resistant with provision of both drain and condensed water collection container. e) Removable plastic cups with partition in every bucket to hold single/double/triple/quadruple/quintuple (soft filter) blood bags f) Insert with hook adapter to spin buffy coat or small volume of blood and balancing weights for inserts. g) Equipped with automatic lid lock. h) Speed variation: Microprocessor controlled rotor speed to within 10 rpm of set value. i) Acceleration and deceleration profiles shall be available. j) Microprocessor controlled rotor temperature within 1 deg C of set temperature regardless of the centrifuge speed. k) Programmable time: 0-99 minutes with minimum resolution of 1 minute. l) Programmable temperature :-0deg C to 40 deg C m) Programmable speed:-0 to 10,000rpm. n) Digital display of temperature, speed and time , deceleration ,acceleration and rcf. o) Minimum no. of 3 digit resolution. p) Motor imbalance detection: Automatic shutdown of centrifuge if rotor load is out of balance with appropriate indicator. q) Should incorporate alarms for imbalance detection lid interlock, over temperature, rotor over speed. r) The equipment should be capable of operation continuously for 8 to 12 hours. 2. Power Requirements: Input voltage single/three phase . 3. Line voltage corrector of appropriate rating should be provided. 4. Accessories and spare parts:- complete with comprehensive set of spare parts and a suitable capacity voltage stabiliser and bucket inserts to be provided. The make, rating, model, description, specifications, price, quantity of each item shall be furnished separately. 5. **Capacity:** Swing bucket blood bank rotor. With metal buckets, 4/6 x 2000ml, wind shielded. 6. Suitable adaptors for 8/12 blood bags of 350ml & 450ml with soft filter. 7. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 8. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 9. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 10. Product certifications: CE class II A or US FDA/ CDCSO certified 11. Quality certificate: ISO certified 12. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards.

	13. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 14. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 15. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 16. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 17. All components: Should have warranty for minimum 3 years • **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown • **Protection :-suitable auto voltage corrector with spike protector should be provided if required.**
18. Cell Counter (Automated Hematology Analyzer)	**Clinical purpose**: To determine the count of various blood cells and haemoglobin estimation for the screening of blood donors and quality tests of blood components such as PRBC, Platelet Concentrates, Plasma and Cryoprecipitate. 1. Should be a fully automated hematology 3 part differential analyzer with option to print the results with histograms of basic 8 parameters like RBC, WBC, Platelets, Hemoglobin (HGB), MCH and others. 2. The reportable RBC indices in Whole Blood & components such as PRBC,Platelet Concentrates, Plasma and Cryoprecipitate ,should be: Total RBC, HCT, HGB, MCV, MCH, MCHC and user definable settings for RBC count linearly should be above 6500000/uL. Reportable platelet count. The system should give the differential count as lymphocytes, mix population and neutrophils in percentage as well as absolute count **3 Construction:** a. The system should have auto probe wiper to clean the sample probe automatically after sample aspiration. b. The system a should have automatic floating threshold for correct separation of WBC, RBC's and platelets during overlap of of microcytosis / large platelets. c. The system should use cyanide free reagents d. Should be able to perform all blood counts from whole blood and blood components at different dilutions for the purpose of quality control e. **Sample type:** Venous blood, peripheral blood, pre-dilution peripheral blood and various dilutions of blood. f. **Rapid result turn around time**: upto 60 samples per hour throughput g. **Printer:** Built in thermal printer and it can be connected to external computer and printer **Display:** large color LCD, show all parameters and histograms at same screen. h. **Calibration**: Control and calibrator for eight check of parameters. i. **Capacity**:-Storage capacity for detailed results including histograms upto 1000 tests. j. **Settings** :- manual. k. Accessory: Should be supplied with sample mixer 4. Power Requirements: Input voltage 220/240V 50Hz, single phase with inbuilt FIE safety against high load voltage. 5. UPS:- Appropriate UPS as applicable should be provided. 6. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 7. Additional Requirements: All equipments should specify design

	qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 8. Protection:-on line Voltage Corrector of appropriate rating as per standard configuration. 9. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 10. Product certifications: CE class II A or US FDA/ CDCSO certified 11. Quality certificate: ISO certified 12. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 13. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 14. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 15. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 16. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 17. All components: Should have warranty for minimum 3 years 18. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
19. Laminar Airflow Bench (Bio-Safety Cabinet)	**Clinical Purpose:** Sterile hood for component separation. 1. Floor model, Horizontal flow, well lighted work surface, low vibration and noise, easy to manoevre due to castor wheel provision a) **Construction:** Cabinet Stainless steel sheet of 20 SWG lining. b) Front panels: Removable transparent scratch resistant sheet of approximately 6 mm thickness. c) Side panels. Fixed transparent sratch resistant sheet of approximately 6 mm thickness d) Work Table: Stainless steel sheet of 20 SWG lining e) Pre-Filters Filtration efficiency of 98% for all types of particles of sizes 8 micron and larger. f) HEPA Filters (fine filters): Filteration efficiency of 99. 999% for all types of particles of sizes 0.3 micron and larger. g) Housed in a frame with leak proof gaskets. h) Motor Blower: Dynamically balanced and specially constructed to suit low noise and vibration with adjustable speed. i) Motor shall conform to ISS or any international specifications. j) Air Velocity: Should not be more than 100 from over the work area k) Lighting: Flourescent tube lights with diffuser acrylic to get 120 decalux on work surface, Ultra-violet light source shall be provided l) Manometer. Should be provided with appropriate manometer to measure the air pressure m) All components: Should have warranty for minimum 3 years
	2. Power Requirements: Input voltage 220/240V 50Hz, single phase. The equipment shall be provided with both 5 Amp and 15 Amp and 15 Amp plug units inside the cabinet. 3. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of

	operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% 4. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 5. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 6. Product certifications: CE class II A or US FDA/ CDCSO certified 7. Quality certificate: ISO certified 8. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 9. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 10. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 11. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 12. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 13. All components: Should have warranty for minimum 3 years 14. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
20.Donor Couch	**Clinical Purpose:** Blood Donor Couch is a completely automatic enveloping, variable tilt couch and specially designed to make whole blood donation & apheresis donation safe and comfortable. 1. **Construction:** Variable positioning for either arm with comfortably wide arm-rests with swinging out as well as up and down moving facility. 2. Reclining and upright body positions with a smooth shifting to any position 3. One side should have supporting bracket for materials required for blood collection. 4. Ergonomically designed comfortable couch type for donor comfort Mattress should be comfortably cushioned with elegantly thick washable upholstery. 5. Seat, back rest and leg rest size designed for donor comfort. Should have facility of electronically remote controlled tilting in head low position and legs up position to manage donor reactions with in short time. 6. Should be mobile with lockable wheels. Comfortable working level for the operator. 7. Should be provided with two sets of donor couch covers 8. Lifting capacity:- approx 200 kgs 9. Power Requirements: Input voltage 220/240V 50Hz. 10. Atmosphere/Ambience(air conditioning, humidity, dust): Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%

	11. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished. 12. Accessories and spare parts:-.complete with comprehensive set of spare parts. Also supplied complete instruction manual, cord and plug, dust cover, 12 spare rubber cushions. The make, rating, model, description, specifications, price, quantity of each item shall be furnished separately. 13. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual. 14. Product certifications: CE class II A or US FDA/ CDCSO certified 15. Quality certificate: ISO certified 16. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards. 17. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided. 18. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation. 19. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies. 20. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided. 21. All components: Should have warranty for minimum 3 years 22. **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
21. Sterile Connecting Device	**Clinical Purpose:** Should accommodate and weld all types of blood bag tubing in use in our country. 1. **Construction:**The welding should be seamless Should be capable of joining tubes without leakage. 2. Welding should not affect the quality of the tube in terms of its physical and chemical properties and it should not cause hemolysis. 3. It should have LED indicators or LCD display to show the actual status of the ongoing procedural steps and audio visual alarm system for any functional irregularities. 4. The welding accessories should be available with the local agent throughout year. The cost per welding is to be considered while price evaluation. 5. The cost per welding will be preferably frozen during the period of warranty and maintenance and accessories made available. 6. Power Requirements: Input voltage 220, 50Hz AC. 7. Other energy requirements:- Compatible UPS with half an hour backup. 8. atmosphere/ambience(air conditioning, humidity, dust): capable of operating continuously in ambient temperature of 10 to 40 deg c and relative humidity of 15 to 90% 9. Accessories and spare parts:-.complete with comprehensive set of spare parts. Also supplied complete instruction manual, cord and plug, dust cover, 12 spare rubber cushions. The make, rating, model,

<table>
<tr><td></td><td>description, specifications, price, quantity of each item shall be furnished separately.
10. Additional Requirements: All equipments should specify design qualifications. Operational qualifications and performance qualifications, validation and calibration reports should have traceability towards applicable national/international standards. Performance, efficiency, other factors such as distortion etc, as applicable be also furnished. Complete construction, details in respect of material specifications, thickness, finish etc are to be furnished.
11. Users care, cleaning, Disinfection & Sterility issues: Specified in the manual.
12. Product certifications: CE class II A or US FDA/ CDCSO certified
13. Quality certificate: ISO certified
14. Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (class I) or ISO standards. For indigeneous items should comply with BIS & CPCB standards.
15. Training of staff (medical), paramedical, Technicians) OPTIONAL (Depending upon scope of work order): Training of users in operation and basic maintenance shall be provided.
16. Service contrast clauses including prices: Downtime: 48 hours or after penalty clause will be active. Local clinical staff / authorised officer on behalf of purchaser to affirm completion of installation.
17. Operating manuals, service manuals, other manuals: Necessary catalogues, technical write up in English shall be attached with the offer both in hand and soft copies.
18. Other accompanying documents: List to be provided of important spares and accessories with their part numbers and cost. Certificate of calibration and inspection to be provided.
19. All components: Should have warranty for minimum 3 years
20. Undertaking for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown</td></tr>
<tr><td>22. Micropipettes (Set)</td><td>Specifications of each set:
2-10 Micro litres
Adjustable 10-100 micro litres 2 sets per blood bank
Eight 100 – 200 Micro litres
Channel 200 – 1000 Micro litres
<table>
<tr><th></th><th></th><th>Accuracy</th><th>Reproducibility</th></tr>
<tr><td>I</td><td>2-10 Micro litre(Single Channel)</td><td>Plus Minus 1%</td><td>1% - 0.5%</td></tr>
<tr><td>II</td><td>10 – 150 Micro litre(Single Channel)</td><td>Plus Minus 1%</td><td>1.5% - 1%</td></tr>
<tr><td>III</td><td>100-1000 Micro litre(Single Channel)</td><td>Plus Minus 1%</td><td>0.5% - 0.4%</td></tr>
<tr><td>IV</td><td>100-1000 Micro litre(Multichannel & Adjustable)</td><td>Plus Minus 1%</td><td>0.5% - 0.4%</td></tr>
<tr><td>v</td><td>All components: Should have warranty for minimum 3 years</td><td></td><td></td></tr>
</table></td></tr>
<tr><td>23. Micropipettes (Single Piece Adjustable)</td><td>Specifications of each piece:
2-10 Micro litres
Adjustable 10-100 micro litres
Eight 100 – 200 Micro litres
Channel 200 – 1000 Micro litres
<table>
<tr><th></th><th></th><th>Accuracy</th><th>Reproducibility</th></tr>
<tr><td>I</td><td>2-10 Micro litre(Single Channel)</td><td>Plus Minus 1%</td><td>1% - 0.5%</td></tr>
<tr><td>II</td><td>10 – 150 Micro litre(Single Channel)</td><td>Plus Minus</td><td>1.5% - 1%</td></tr>
</table></td></tr>
</table>

			1%	
	III	100-1000 Micro litre(Single Channel)	Plus Minus 1%	0.5% - 0.4%
	IV	100-1000 Micro litre(Multichannel & Adjustable)	Plus Minus 1%	0.5% - 0.4%
	v	All components: Should have warranty for minimum 3 years		

24. Leukocyte removal filter for red cells	**Leukocyte Removal Filter For Red Cell (Lab Side)** a) Filter Material - Micro porous polyurethane material b) Housing - Polycarbonate c) Dimension - 93 x 70 x 15 mm d) Priming Volume - 38 ML e) Air vent - 0.2 um hydrophobic membrane and should be able to open and close f) No of Air vent - 2 air vents, One on the tube above the filter and one on the filter housing to ensure the recovery of components g) Efficiency of Filter - a. Recovery – 90% h) Average Residual Leukocyte count :- 4 log reduction 99% to 99.99%. i) Clamps - one clamp on the tube near to spike and one clamp below the housing j) Sterilization - Ethylene oxide gas k) Capacity - One RBC unit. L) Transfer bag:- to be included with filter with capacity of atleast 500ml.. l) 11. Recommendation ***** - Satisfactory performance certificate from any MCHs/Govt. Institute
25. Hand Sealer with Tube roller & cutter	• Should be made of rust free material. • Handle grip-durable and should have comfortable grip • For safer sealing-should be able to seal folded tubing with aluminium sealing clip. • Tube Roller-To be used for squeezing tubing and roll towards bag to clear tubing. • Cutter: Use to cut sealed tubing • All components: Should have warranty for minimum 3 years
26. Hot Air Oven	• Internal size: 45x45x45 cms • Single door with 2 shelves • Door fitted on heavy brass cast and chrome plated hinges • Cabinet double walled MS • Insulation: minimum thickness 2 of glass wool • Finish: Inside of the cabinet painted with heat resistant silver and outside with silver grey. • Temperature Stability +0.3°C • Timer ON/OFF • Temperature (Metric) 50°C to 250°C • Type Mechanical Convection • Electrical Requirements 230 V 50/60 Hz • LED-Display • No. of Shelves 2 supplied/19 max • All components: Should have warranty for minimum 3 years • **Undertaking** for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown
27. Sphygmomanometer (Standing Type)	• 0 to 300 mm of Hg graduation. • Fused type, permanent graduation marking on the glass tube • Special control valve for perfect pressure drop • Surface plating of all exposed metal parts to prevent corrosion • Optimum damping effect provided for easy and fast measurement • Valve to prevent leakage. • Mounted on stand for stability and for checking BP of donors. • All components: Should have warranty for minimum 3 years

	Undertaking for "Maximum Response time for repair of break down" =undertaking should be provided that repair will be done within 48 HRS after breakdown

28. Specifications for Binocular Microscope				
Sl. No.	***Name of Equipments***	***Specifications***	***Compliance Yes/No***	***Deviation / Remark***
1	Binocular Microscope	Achromatic loaded	Objective spring	
			4 x (NA 0.1)	
			10 x (NA 0.25)	
			40 x (NA 0.65)	
			100 x (NA 1.25)	
		Eye pieces 5x, 10x one pair each	Oil impression on pair each	
		In-build	Arrangement of illumination with halogen lamps fitted directly under filed lenses (Koehleres system)	
		Transformer and other fitted inside the base with extra mirror attachment		
		Condenser	Bright field abbe's NA 1.25 and dark field NA 1.25	
		Nosepiece	Quadruple, revolving on smooth ball bearing	
		Power Supply	220 – 240 volts, 50 cycles, single phase	
		Inclination angle	To be declared by the bidder	
		Spare lamps	Halogen 6 numbers to be supplied with each microscope	
		Technical literature	The firm shall positively submit printed illustrated technical literature/leaflet indicating the model quoted by them. If quoted model is a modified version of their any standard product that also be indicated in the offer.	
		Before placement of order, the selected tender (s) will be acquired to demonstrate 3 microscopes to the entire satisfaction of the purchaser. The demonstrated microscope if found suitable will be sealed for workmanship finish the resolution conformity to bulk supply apart from conforming to specification as above submit printed illustrated technical		
		All components: Should have warranty for minimum 3 years		

29. Quality Control of ABO reagent (anti-A, anti-B, and anti-AB)

Parameter	Quality requirements
Appearance	No turbidity, precipitate, particles or gel formation by visual inspection.
Specificity	Clear cut reaction with red cells having corresponding antigen(s); and no reaction with negative control. Specific for A,B & AB antigen respectively.

Avidity	Macroscopic agglutination with 50% red cells suspension in homologous serum/normal saline using the slide test; 3-4 seconds for anti-A, anti-B Avidity and anti-AB with A1 and/or B cells at R.T; :20seconds with A2 and A2B cells.
Reactivity	No immune hemolysis, rouleaux formation or Prozone.
Potency	Undiluted serum should give +++/C reactions in saline tube test using a Potency 3% red cells suspensions at R.T., titer should be at least 128 for anti-A, anti-B, and anti-AB with A, and/or B cells, 1:64 with A2 and A2B cells. Titre= 1.256 preferable.

30. Acceptable quality of anti-globulin reagent

Parameter	Quality requirement
Appearance	No precipitate, particles or gel formation by visual inspection.
Reactivity and	No prozone phenomenon
Specificity	• No hemolysis or agglutination of unsensitized red cells • Agglutination of red cells sensitizied with anti-D serum containing not more than 0.2 mg/ml antibody activity. • Agglutination of red cells sensitized with a complement binding antibody (e.g.anti Le"). • Agglutination of red cells coated with C3b and C3d, and no/ weak agglutination with C4 coated red cells. Minimum of AHG • Anti-IgG minimum requirements = 1:64 • Anti-C3/C4 minimum requirements = 1:4

31. Acceptable Titer and Avidity of ABO reagents

Antisera	Type of the reagent	Type of red cells (2-3% cells suspension)	Titer
Anti-A	Polyclonal	A	1:256
		A_2	1:128
		A_2B	1:64
		O	-
		B	-
	Monoclonal	A	1:256
		A_2	1:128
		A_2B	1:64
		O	-
		B	-
Anti-B	Polyclonal	B	1:256
		A_1B	1:128

32. Acceptable Titer and Avidity of ABO reagents (continued)

		O	-
		A_1	-
	Monoclonal	B	1:256
		A_1B	1:128
		O	-
		A_1	-
Anti-AB	Polyclonal	A	1:256
		B	1:256
		A_2	1:64
		O	-
	Monoclonal	A1	1:256
		B	1:256
		A1	1:128
		O	-

33. Quality Acceptable of Rh anti sera (Anti-D,C,c,E,e)

Parameter	Quality requirements
Appearance	No turbidity, precipitate, particles or gel formation by visual inspection.
Specificity	Clear cut reaction with R1,r and other specific cells
Avidity	Visible agglutination with 40% red cells suspension in homologous serum using the slide test.
Reactivity	No immune hemolysis, rouleaux formation or Prozone phenomenon.
Potency	Undiluted serum should give +++ reactions in designated test for each serum and a titer 32-64 for anti-D, anti-C, anti-E, anti-c, anti-e using R,r,R,r, red cells.
Anti-D (IgM)	• Specificity: Specific for Rh(D) antigen. • Titre: Immediate spin= 1:64-1:128 After Incubation= 1:128-1:256 • Avidity= 5-10 Sec
Anti- D (IgG)	• Specificity: Specific for weak D/D^u & Anti IgG coated cells • Titre: Immediate spin= -- After Incubation= 1:32-1:64 • Avidity= 60 Sec

34. Anti A1 Lectin and Anti-H Lectin

Parameter	Quality requirements
Appearance	No turbidity, precipitate, particles or gel formation by visual inspection.
Specificity	Clear cut reaction with red cells having corresponding antigen(s); and no reaction with negative control. Specific for A,B & AB antigen respectively.
Avidity	Macroscopic agglutination with 50% red cells suspension in homologous serum/normal saline using the slide test; 3-4 seconds with A1 cells at R.T; Avidity = 3-4 seconds No reaction with Bombay oh group.
Reactivity	No immune hemolysis, rouleaux formation or Prozone.
Potency	Undiluted serum should give ++++/C reactions with 40% corresponding red cell suspension.

ALBUMIN (BSA) It is usually used as

1. 22% albumin as an enhancer of agglutination. .

Table 1.6 Quality control of 22% bovine serum albumin (BSA)

Parameter	Quality requirement	Frequency of control
Appearance	No precipitate, particles or gel formation by visual inspection.	Each day
Purity	> 98% albumin, as determied by electrophoresis.	Each new lot
Reactivity	No agglutination of unsensitized red cells; no hemolytic activity; no prozone phenomenon.	Each new lot

36. BLOOD TRANSPORTAION BOXES

1. Purpose of Equipments: To carry whole blood from individual donors to Blood Bank or from Blood Bank to point of use.

2. Capacity: 8-10 filled Blood Bags with 350/450 ml blood.

3. Maximum Ice Melting Rate: More than 15 hrs cold life per kg of ice melted at 43°C

4. Cold Packs: To conform to specification E5/IP1 or IP2.Sufficient ice packs for freezing at +20°C are provided to surround the sides. one (1) set of appropriate sizes to be provided with the blood transportation box.

5. Means of Handling: To be suspended from the shoulder or held in one hand and handles on both sides of the box should be available.

6. Inner Box: For the purpose of packing filled blood bags. Should have provision to be separated from ice-packs.

7. Hold-Over time/Cold Life without opening: Internal Temperature of box should not exceed +10°C for atleast 100-108 hrs at 0- +45°C .

8. Lid Type and Fittings: Hinge Type.

REAGENTS

Reagents	Purpose	Specifications
1. Elisa Test Kits for 4th gen HCV ELISA Kit	Kit needs to be able to detect both antibody (core, NS3 and NS4) and antigen (Capsid) against Hepatitis C virus	1. Monoclonal Abs against capsid proteins, and recombinant protein or antigens or synthetic peptides for Ns3, NS4 and Capsid needs to be coated on the solid phase. 2. KIEs needs to have separate positive control for Antigen and Antibody. 3. Kit needs to have 2 separate conjugates for Antigen as well as Antibody detection. 4. Reagents needs to be colour coded with OD norms for reagents addition verification on Automation as well as manual procedure due to colour change on addition of Samples/reagents in the wells. 5. Sample volume needs to be ≤ 50 µl without any predilution step. 6. Total Incubation time of assay needs to be ≤ 2.5 hrs.

		7. Kit needs to have sensitivity of 100% 8. Kit needs to have specificity of ≥ 99.5% for both antigen as well as antibody without compromising the assay sensitivity. 9. Kit needs to be CE approved and Certificate of Analysis should be provided for each batch of the product. 10. Kit needs to be programmable & compatible for automated systems & manual systems. 11. Supplier needs to provide the Certificate of Analysis from NIB for each supplied batch. 12. Supplier needs to be able to provide confirmatory kit for further analysis of reactive cases on demand. 13. Strip of microplate needs to be numbered and microplate frame needs to have name of the assay for easy identification and differentiation. 14. Reagents in the kit box need to have barcode label with information of lot no and expiry to manage the traceability in automation.
2. HBsAg ELISA Kit	Kit needs to detect surface antigen of Hepatitis B Virus.	1. Kit needs to be based on one step sandwich Elisa 2. Kit needs to be able to detect all known major subtypes - adr, adw, ayr, ayw as well as most of the mutants like (supported by publications). 3. Kit needs to have minimum analytical sensitivity of 0.060 ng/ml or 0.05 IU/ml for WHO Standard. 4. Kit needs to have sensitivity of 100% 5. Specificity of the Kit needs to be more than 99.4%. 6. Kit needs to have combination of monoclonal & polyclonal antibodies on solid phase and in the conjugate to enable best coverage of all the subtypes. 7. Kit needs to have colour coded reagents with OD norms for reagents addition verification on automation as well as manual procedure. 8. Kit needs to be programmable & compatible for automated systems. 9. Kit needs to be CE approved and Certificate of Analysis needs to be provided for each batch of the product 10. Sample volume needs to be ≤ 100 µl without any predilution step. 11. Supplier needs to provide the Certificate of Analysis from NIB for each supplied batch. 12. Supplier needs to be able to provide neutralization kit for confirmation of reactive cases on demand. 13. Total incubation time of the assay needs to be ≤ 2 Hrs. 14. Strip of microplate needs to be numbered and microplate frame needs to have name of the assay for easy identification and differentiation. 15. Reagents in the kit box need to have barcode label with information of lot no and expiry to manage the traceability in automation.
3. 4th Gen HIV ELISA Kit	Kit needs to detect antibodies against HIV 1+2 and p24 Ag against HIV-1	1. Kit needs to be based on Sandwich Elisa with monoclonal Abs against p24 Ag and gp160 and gp36 recombinant proteins on the solid phase. 2. Kit needs to detect all the three classes of antibodies to HIV i.e. IgM, IgG and IgA simultaneously providing highest early sero-conversion sensitivity. 3. The analytical Sensitivity of p-24 Ag detection needs to be ≤ 25 pg/ml or 1.0 IU/ml of WHO Standard. 4. Kit sensitivity needs to be 100%. 5. Kit specificity needs to be 99.5 % for both Antigen as well as Antibody Without compromising the assay Sensitivity. 6. Kit needs to have colour coded reagents with OD norms for reagents addition verification on automation as well as

		manual procedure. 7. Sample volume need to be ≤ 100 µl without any predilution step. 8. Kits needs to have reactive and non-reactive controls with separate positive Control for Antigen and Antibody. 9. Kit needs to be CE approved and Certificate of Analysis needs to be provided for each batch of the product 10. Total Incubation needs to be ≤ 2 hrs 11. Kit needs to be programmable & Compatible for automated system as well os manual. 12. Supplier needs to provide the Certificate of Analysis from NIB for each Supplied batch. 13. Supplier needs to be able to provide antibody confirmatory kit for further analysis of reactive cases on demand. 14. Strip of microplate needs to be numbered and microplate frame needs to have name of the assay for easy identification and differentiation. 15. Reagents in the kit box need to have barcode label with information of lot no and expiry to manage the traceability in automation.
4. Third generation ELISA for the detection of antibodies to Syphilis .	Kit needs to detect total antibodies against Treponema pallidum in human serum and plasma.	1. Principle: Enzyme Linked Immunosorbent Assay (ELISA) 2. Kit needs to have specificity of more than 99.0% without compromising the assay sensitivity. 3. The well needs to be coated with recombinant Treponema pallidum antigens like- 15Kd, 17Kd, 47 Kd. 4. The kit needs to be based on sandwich principle. 5. Kit needs to have colour coded reagents with OD norms for reagents addition verification on automation as well as manual procedure. 6. Kit needs to detect all the three classes of antibodies to Treponema pallidum i.e. IgM, IgG and IgA to pick up all stage of infection. 7. Total incubation time needs not to be more than 90 minutes. 8. Sample volume needs not to be more than 75 ul and sample addition needs to be without any predilution step. 9. Kit needs to be programmable & compatible for automated systems as well as manual system. 10. Kit needs to have analytical sensitivity to equal or better than 1 mIU/ml with 1st WHO international standard (NIBSC code 05/132) 11. Strip of microplate needs to be numbered and microplate frame needs to have name of the assay for easy identification and differentiation. 12. Reagents in the kit box need to have barcode label with information of lot no and expiry to manage the traceability in automation. 13.Positive control: Inactivated and stabilized human serum reactive for Treponema pallidum antibodies, non reactive for HIV, HCV and HBsAg with preservatives. 14.Negative control: Inactivated and stabilized human serum non reactive for Treponema pallidum HIV, HBsAg and HCV. 15. Conjugate: Treponema pallidum antigens-HRP conjugate (25X): 16. Conjugate diluent: Buffered solution containing stabilizing proteins and preservatives. 17. Substrate: Solution containing Tetramethyl benzidine (TMB) and hydrogen peroxide. Ready to Use. 18. Wash Buffer: Buffer containing surfactants . 19. Stop solution:. Ready to use 20. Test duration: 90 minutes

		21. Storage/Stability: 2-8°C, 24months • **Presentation Pack** Microwell strips (1 x 8 wells/strip) 96 tests
5. Rapid Test for Malaria Pv/Pf	Application: For the rapid detection pf P.falciparum specific histidine rich protein-2 (pf.HRP-2) and P.vivax pLDH in whole blood.	1. Principle: based on antigen –antibody reaction specific toHRP11 & pLDH of Plasmodium species. 2. Sensitivity: 100% correlation with microscopy 3. Specificity 100% to P.falciperum HRP-2 and P. vivax specitic pLDH 4. Reagents: • Membrane assembly predispensed with Agglutinating sera for Pf. HRP-2 colloidal gold Conjugate • Agglutinating sera for P.vivax specific pLDH colloidal gold conjugate and rabbit globulin colloidal gold conjugate • Agglutinating sera for Pf. HRp-2 at the 'Pf region • Agglutinating sera for P.vivax specific pLDH at the 'Pv' region • Agglutinating sera for rabbit globulin at the 'Control' region • Clearing Buffer • Positive and Negative controls to be provided. • Test duration: Twenty minutes assay • Storage / Stability: 1-40°C, 24 months • **Presentation Pack** • Individually pouched device with sample applicator pipette/dropper. • User manual. • Tests 50& 25 tests

52. TECHNICAL BID: **Annexure – II**

Item No	Name of the Item	Make & Model Quoted	Indian / Imported/ Country of origin	Catalogues YES/NO	Demonstration YES/NO	Compliance Certificate Yes/No	Deviation to specification if any with reason	Warranty Period (from Bidder)
1	Deep Freezer -40°C							
2	Blood Bank Refrigerator							
3	Deep Freezer -80°C							
4	Platelet Incubator & Platelet Agitator							
5	Semi Automated Coagulometer							
6	Plasma Thawing Bath							
7	Dielectric Tube Sealer							
8	Blood Collection Monitor							
9	Pre Vacuum Autoclave							
10	Manual Plasma Expresser							
11	Refrigerated Water Bath (Cryobath)							
12	Elisa Reader and Washer							
13	Table Top Centrifuge							
14	Haemoglobinometer							
15	Incubator							
16	Water Bath							
17	Refrigerated Component Centrifuge							
18	Cell Counter (Automated Hematology Analyzer)							
19	Laminar Airflow Bench (Bio-Safety Cabinet)							
20	Donor Couch							
21	Sterile Connecting Device							
22	Micropipettes(Set)							
23	Micropipettes(Single Piece Adjustable)							

24	Leukocyte removal filter for red cells							
25	Hand Sealer with Tube roller & cutter							
26	Hot Air Oven							
27	Sphygmomanometer (Standing Type)							
28	Binocular Microscope							
29	Quality Control of ABO reagent (anti-A, anti-B, and anti-AB)							
30	Acceptable quality of anti-globulin reagent							
31	Acceptable Titer and Avidity of ABO reagents							
32	Acceptable Titer and Avidity of ABO reagents (continued)							
33	Quality Acceptable of Rh anti sera (Anti-D Ig M &IgG ,AntiC,c,E,e)							
34	Anti A1 Lectin and Anti-H Lectin							
35	Bovine Serum Albumin (BSA)							
36	Blood transportation Boxes							
List of Reagents								
1	Elisa Test Kits for 4th gen ELISA Kit							
2	HBsAg ELISA Kit							
3	4th Gen HIV ELISA Kit							
4	Third generation ELISA for the detection of antibodies to Syphilis .							
5	Rapid Test for Malaria Pv/Pf							

FINANCIAL BID **Annexure – III/A**

Item No	Name of the Item	Unit	Basic Price /Unit (in Rs) Per unit in figure) up to destination (A)	Tax rate per unit up to destination (B)	Any other charges up to destination to be clearly mention here and to be specify (C)	Total Cost/Unit (A+B+C)	Combined rate (INR) (D)
1	2	3	4	5	6	7	8
Equipments:							NA
1	Deep Freezer -40°C	Each					NA
2	Blood Bank Refrigerator	Each					NA
3	Deep Freezer -80°C	Each					NA
4	Platelet Incubator & Platelet Agitator	Each					NA
5	Semi Automated Coagulometer	Each					NA
6	Plasma Thawing Bath	Each					NA
7	Dielectric Tube Sealer	Each					NA
8	Blood Collection Monitor	Each					NA
9	Pre Vacuum Autoclave	Each					NA
10	Manual Plasma Expresser	Each					NA
11	Refrigerated Water Bath (Cryobath)	Each					NA
12	Elisa Reader and Washer	Each					NA
13	Table Top Centrifuge	Each					NA
14	Haemoglobinometer	Each					NA
15	Incubator	Each					NA
16	Water Bath	Each					NA
17	Refrigerated Component Centrifuge	Each					NA
18	Cell Counter (Automated Hematology Analyzer)	Each					NA
19	Laminar Airflow Bench (Bio-Safety Cabinet)	Each					NA
20	Donor Couch	Each					NA

21	Sterile Connecting Device	Each					NA
22	Micropipettes(Set)	Each					NA
23	Micropipettes(Single Piece Adjustable)	Each					NA
24	Leukocyte removal filter for red cells	Each					NA
25	Hand Sealer with Tube roller & cutter	Each					NA
26	Hot Air Oven	Each					NA
27	Sphygmomanometer (Standing Type)	Each					NA
28	Binocular Microscope	Each					NA
29	Quality Control of ABO reagent (anti-A, anti-B, and anti-AB)	Each					NA
30	Acceptable quality of anti-globulin reagent	Each					NA
31	Acceptable Titer and Avidity of ABO reagents	Each					NA
32	Acceptable Titer and Avidity of ABO reagents (continued)	Each					NA
33	Quality Acceptable of Rh anti sera (Anti-D Ig M &IgG ,AntiC,c,E,e)	Each					NA
34	Blood transportation Boxes	Each					NA
List of Reagents		Each					
1	Elisa Test Kits for 4th gen ELISA Kit						
2	HBsAg ELISA Kit	Each					
3	4th Gen HIV ELISA Kit	Each					
4	Third generation ELISA for the detection of antibodies to Syphilis	Each					
5	Rapid Test for Malaria Pv/Pf	Each					
6	Bovine Serum Albumin (BSA)	Each					
7	Anti A1 Lectin and Anti-H Lectin	Each					

Note :

1. The rates should be inclusive of everything viz. Freight, Packing, Forwarding, Insurance, Transportation,loading/unloading, Octroi, GST up to destination as specified in page no.4 clause 3(a) under Term of delivery and free of Cost Consumables or Accessories required to be supplied by the Tenderer with Equipments as per requirement of consumables items indicated in the Annexure-I Technical Specification of Equipment against each equipment for make operational equipment at the Client site needs to be supplied on free of cost by the Bidder.
2. *The Excise Duty/Custom Duty, Custom Clearance Charges, Agency Commission etc. wherever applicable, should be indicated separately in the respective column in the above Financial Bid. Non- indication will denote that nothing will be charge as Custom Duty Custom Clearance/Agency Charge/Excise Duty etc.
3. The Rates quoted against the items on the Tender shall be without cutting, tampering and a Transparent Tapeshould be applied on the Quoted Rates.
4. Rates Quoted should be typed and free from Fluiding, Cutting and Overwriting. No hand written quotations will be accepted.
5. **For Reagents,** The Bidder with the lowest bid rate in column 8 (combined rate) will be awarded with the contract.
6. **For equipments** etc., the bidder with the lowest bid rate in column 7 will be awarded with the contract
7. The procurement of the equipments listed above are subject to requirement and fund availability and bidder shall have no objections whatsoever.

d

Name(s) & Signature of Authorized person of the Tenderer with Designation & Office Seal

Name of the Firm .....

Date.....

Place.....

CMC – CHARGES Post warranty Period **Annexure – III/B**

Item No.	Name of the Equipments	Rates of CMC					Total CMC Cost for a number of CMC period	TAXES (IF ANY)	Total CMC cost inclusive of Tax amount
		1st yr	2nd yr	3rd yr	4th yr	5th yr			
1	Deep Freezer -40°C								
2	Blood Bank Refrigerator								
3	Deep Freezer -80°C								
4	Platelet Incubator & Platelet Agitator								
5	Semi Automated Coagulometer								
6	Plasma Thawing Bath								
7	Dielectric Tube Sealer								
8	Blood Collection Monitor								
9	Pre Vacuum Autoclave								
10	Manual Plasma Expresser								
11	Refrigerated Water Bath (Cryobath)								
12	Elisa Reader and Washer								
13	Table Top Centrifuge								
14	Haemoglobinometer								
15	Incubator								
16	Water Bath								
17	Refrigerated Component Centrifuge								
18	Cell Counter (Automated Hematology Analyzer)								
19	Laminar Airflow Bench (Bio-Safety Cabinet)								
20	Donor Couch								
21	Sterile Connecting Device								
22	Micropipettes(Set)								
23	Micropipettes(Single Piece Adjustable)								
24	Leukocyte removal filter for red cells								

25	Hand Sealer with Tube roller & cutter								
26	Hot Air Oven								
27	Sphygmomanometer (Standing Type)								
28	Binocular Microscope								

Name(s) & Signature of Authorized person of the Tenderer with Designation & Office Seal

Name of the Firm .....

Date.....

Place.....

ANEXURE-IV

LETTER OF UNDERTAKING

To,

The Mission Director
National Health Mission
Shillong, Meghalaya

Tender No:
Tender Date:
For:

Sir / Madam,

1. I, Shri _____ on behalf of _____ having its registered office at _____ and its branch office at _____ do hereby declare to comply with all the Terms and Conditions as specified in the NIT. The Rates quoted byme / us are valid and binding on me / us for acceptance for a period of one year minimum from the date of award ofcontract to us.
2. We agree to the conditions of the tender under which the Earnest Money Deposit shall be forfeited by us.
3. The tender inviting authority has the right to accept or reject any or all the Tenders without assigning anyreason thereof.
4. We understand all the Terms and Conditions of the Contract and bind myself / ourselves to abide by them.
5. I hereby furnish the following details as specified by the NIT:

FIRM DETAILS	Firm Name	
	Proprietorship / Entrepreneurship / Holding Company, Partnership Firm	
	Name of Proprietor / Director / CEO / Others	
	Address	
	Telephone Number	
	Fax Number	
	Mobile Number	
	Email Id	
	Bank Name	
BANK DETAILS	Address	
	Account Number	
	IFSC Code	
	NEFT Code	

6. We hereby declare that as per the attached Affidavit, there is no vigilance / CBI or Court Case pending /Contemplated against us at the moment.
7. All information provided is True & Accurate. If at any time it is found that any information provided is provenfalse, I agree to the Cancellation / Termination of the Tender / Agreement leading up to blacklisting of thesaid firm under the Government of Meghalaya for a period of three years.

SIGNATURE
NAME & ADDRESS OF BIDDER
DATE

Annexure-V

BID SECURITRY FORM

Whereas ..... (hereinafter called "the Bidder") has submitted its bid dated.....for the supply of ..... vide Tender No.....dated..... KNOW ALL MEN by these presents that WE .....having our office at .....(hereinafter called "the Bidder") are bound unto NationalHealth Mission (hereinafter called "the Purchaser") the sum of Rs..... vide DD no..... for which payment will and truly to be made of the said Purchaser, the Bidders binds itself, its successors and assigns by thesepresent.

THE CONDITIONS of the obligation are:

1. If the Bidder withdraws his bid during the period of bid validity specified by the Bidder on the Bid form OR
2. If the Bidder, having been notified of the acceptance of his bid by the Purchaser during the period of bid validity
   a) fails or refuses to execute the Contract, if required; or
   b) fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without thepurchaser having to substantiate its demand, provided that in its demand, the purchaser will note that the amountclaimed by it is due to it owning to the occurrence of one or both of the two conditions, specifying the occurredcondition or conditions.
This guarantee will remain in force as to the bidders of the Bid Document up to and including Ninety (90) days fromdate of opening the Tender and any demand in respect thereof should reach the Bidder not later than date to bespecified.

Signature of the Bidder.
Name
Signed in Capacity of
Full address of Office
Tel No. of Office

***

Annexure-VI

PERFORMANCE SECURITY BOND FORM

..... (Insert: Bank's Name and Address of Issuing Branch or Office)

Beneficiary: ..... ***(Insert: name and Address of Purchaser or*** National Health Mission,here in after called the NHM,)

Date: .....

PERFORMANCE GUARANTEEE No: .....

We have been informed that ***(insert: name of Supplier)*** has entered into Contract No. ***(Insert: reference no of thecontract)*** dated ..... With you, for the supply of ***(insert: description of goods).***

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Supplier, we ***(insert: name of bank)*** hereby irrevocably undertake to pay you a sum or sums notexceeding in total an amount of ***(insert: amount in figures)*** (.....) ***(insert: amount in words)*** upon receipt by us ofyour first demand in writing accompanied by a written statement stating that the supplier is in breach of itsobligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sumspecified therein.

This guarantee shall expire no later than the ..... Day of ....., 2..... , **and any demand for payment under itmust be received by us at this office on or before that date.

** The guarantor agrees to extension of this guarantee for a further period in response to the purchaser's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

Dated: _____

For_____
(Indicating the name of the Bank)

N.B. This guarantee should be issued on non-judicial stamped paper, stamped in accordance with the stamp act

Annexure VII

ANNUAL TURNOVER STATEMENT OF THE BIDDER

a) Name of the firm_____

b) Address_____

c) Annual turnover for the last three years_____
(In Indian Rupees)

Financial Year	**Turnover (Rs. in Lakh)**	**Trading account, Profit and loss account and Balance Sheet authenticated by Chartered Accountant**
2018-2019		Attached/Not Attached
2019-2020		Attached/Not Attached
2020-2021		Attached/Not Attached

Seal & Signature of Chartered
Accountant / Auditor
Date:

N.B. This statement should be issued on a Charter Account's letter head

ANNEXURE-VIII

Checklist

Sl No	Particulars	Yes/No	Page No.
1	Sealed Envelope		
2	Ownership Details (Partnership deed / Letter of ownership / Memorandum of Association)		
3	Attested / Notarized Copy of Certificate of Registration of GST registration		
4	Attested Copy of Trading License issued by KHADC / GHADC / JHADC for Non Tribal Firm.		
5	Up to date Income Tax Certificate or similar valid documents (where applicable) for Non Tribal Firms		
6	Attested Copy of the Schedule Caste / Schedule Tribe Certificate for Tribal Firms		
7	Attested Copy of Up to date Meghalaya Sales Tax Clearance Certificate (in case applicable)		
8	Attested Copy of Up to date Professional Tax Clearance Certificate issued by KHADC/JHADC/GHADC		
9	Attested Copy of Permanent Account Number (PAN) Card of the firm or of the person in whose name the Proprietorship, Partnership, Firm etc is registered under.		
10	Medical equipments Customer feedback or any supply order similar equipments/Goods from Central/ State Govt. Dept. / PSU or Private Company		
11	Court Fee Stamp (Rs. 25/-)		
12	Attested copy of a Cancelled Cheque of the Firm clearly indicating Bank Name, Branch, Account Number, IFSC.		
13	An Affidavit on a Non Judicial Stamp Paper of Rs. 10/-, attested by a Notary Public (In Original) that there is no vigilance / CBI Case or arbitration cases pending with the Government of Meghalaya against the Form/Supplier that the Proprietor /Director/Members of the Board of Directors of the Bidder and the Principal Manufacturer on whose behalf they have quoted has never been blacklisted by any Institution (Government or Public).		
14	Self Attested copy of the Tender Document purchased from the department or Downloaded from the website.		
15	Standards and safety certificate i. As per relevant quality standard ii. Manufacturer ISO certificate		
16	Security Bid (EMD) in the form of a Crossed Demand Draft issued by a Schedule Bank / Commercial Bank drawn in favor of Mission Director, NHM, Meghalaya payable at Shillong (Refundable) carrying no form of interest on it.		
17	Valid Authorization letters (Tender specific) from the OEMs (in case of trading partners) for Supply & Participation in Tender.		
18	Company/Firm Registration Certificate		
19	Detail Specification Annexure-I		
20	Technical bid Annexure-II		
21	Financial Bid Format Annexure-III		
22	Letter of Undertaking Annexure –IV		
23	Bid Security Annexure –V		
24	Performance Security-VI		
25	Annual Turnover-VII		
26	Deleted		
7	Deleted		
28	Compliance Certificates		
29	Any other as specified in the document		

***Note:(√ or X) in 'Yes/No' column respectively.**

SIGNATURE
NAME & ADDRESS OF BIDDER
DATE

NATIONAL HEALTH MISSION
Government of Meghalaya

No. DHS/MCH& FW/NHM/RCH/65/2021 Dated Shillong the

NOTICE INVITING TENDER

National Health Mission (NHM), Meghalaya is inviting Tender from the interested firms for **Supply and Installation Of Blood Bank Equipments, Instruments and Consumables** . The details of specification, Terms and conditions, etc. can be downloaded from http://nrhmmeghalaya.nic.in.

Date for downloading/obtaining the Tender Documents: 05th/May/2022

Last date for submission of NIT Document: 25th/May/2022 up to 11:00am

Tender opening date (Technical & Financial Bid): 25th/May/2022 at 1:00pm

Any changes or any further notifications in respect to the above Tender Document shall be made available only at the above mentioned website. Hence respective bidders are advised to visit the website regularly for the above purpose.

For any query Contact: Procurement Officer
Contact no: +917005662189

Sd/-
Mission Director, NHM
Meghalaya, Shillong.