GOVERNMENT OF TRIPURA
DIRECTORATE OF HEALTH SERVICES.

No.F.5 (2-4)/Store/DHS/2016-2017(Vol-I) Dated, Agartala, the ---------2016.

NOTICE INVITING TENDER

Sealed Tender are invited by the undersigned on behalf of the Governor of Tripura
from the reputed and experienced manufacturer/ authorized Distributor for the supply of Blood Component Separation Facility Units and Blood Bank for the year 2016-2017. The tender form with detailed description of the items and terms and conditions may be available from the office of the undersigned on any working day during the office hours from 11.00 hours to 16.00 hours, free of cost upto20-05-2016 and also available through the website www.health.tripura.gov.in. The undersigned will not be responsible for any postal delay.

The sealed tender would be received at the office of the undersigned up to 16.00 hours of 28-05-2016 by Speed Post / Registered Post / Courier service only and will be opened on next working day, if possible, in the office of the undersigned.

Director of Health Services,
Government of Tripura

GOVERNMENT OF TRIPURA
DIRECTORATE OF HEALTH SERVICES

No. F. 5 (2-4)-Store/DHS/2016-2017(Vol-I) Dated, Agartala the --------- 2016.

NOTICE INVITING TENDER

Tenders in sealed cover tender are hereby invited by the Director of Health Services, Government of Tripura, Agartala on behalf of the Governor of Tripura from resourceful, experienced, reliable and benefited licensed manufacture or their authorised distributor/ supplier for supply of Blood Component Separation Facility Units and Blood Bank for the year 2016-2017. The list with specification and approximate yearly requirement is enclosed with the tender form.
The tender will remain valid upto 31-03-2018. The Director of Health Services, Government of Tripura reserves the right to extend the rate for 2nd year to the approved supplier and on the basis of satisfactory performance and execution of supply orders in time and in terms of quality.
TERMS AND CONDITIONS

1.. Checked list:- The tenderers should be submitted following documents with technical bid:-

[
Sl.No. Name of documents. Page
1. EMD with DD Number & name of the Banks
2. List of the item with specification for which rate is quoted
3. Self attested copy of PAN card
4. Self attested copy of VAT registration certificate
5. No conviction/no pending conviction certificate attested/issued by notary
for preceding 3(three) years on rupees one hundred non judicial (notary)
.

6. Authorization certificate. If any.
7. Valid manufacturer license / Importers license
8 Upto date valid Drugs Licence.
9 Up to date Good Manufacturing Practice (GMP) certificate of the
manufacturer.
10. Experience certificate/ documents of supply order from the concerned
institutions where the agency supplied the items during last 5(Five) year
11. Quality Assurance Certificate like ISI, BIS, ISO, or any other approved
standard of manufacturer
12. Undertaking stating that all information furnished with the tender are
true & correct and the agency will execute the full supply of the ordered
quantity and they will abide by the terms & conditions of N.I.T., if their
quoted rate is approved.

Contd......P/- 2.

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2. Tender will be received by Speed Post/Registered Post/Courier Services only in sealed cover addressed to “Director of Health Services, Government of Tripura, Pundit Nehru Complex,

Gurkhabasti, P. O. Kunjabon, Agartala - 799 006” upto 16.00 hours of 28-05-2016. Tender received after the aforesaid date and hours shall be rejected. The Director of Health Services shall not remain responsible for postal delay. Tenderer is requested to provide detailed address along with phone and fax number and S.T.D. Code No. for communication.
3. On the top left side of the sealed tender inquiry number and date, due date of received
and address of tenderer should be mentioned. Tender forms will be issued on application upto 16.00 hours of 20-02-2016 free of cost. Tender are likely to be opened on next working day of last date of receipt, if possible. Tenderer or their representative may present at the time of opening of the tenders.
4. The interested bidders shall submit the bids in two parts, namely “Financial Bid” and
“Technical Bid”. The 2(two) Bids should be put in 2(two) separate sealed envelopes, indicating on the cover as to which one is the Technical Bid and which one is the financial Bid. The 2(two) envelopes shall, thereafter be placed inside a large sealed cover and the same may be submitted. The Technical Bid shall contain all details regarding the item offered by the bidder, compliance of terms and conditions submission of documents etc, in other words, everything expect the rate offered. The “Financial shall contain the rate offered by the bidder. While processing the bid, the Technical Bids will be opened first and the eligible bidders meeting requirement will be short-listed. Thereafter, financial bids of only short listed bidders will be opened for consideration.
5. List of Blood Component Separation Facility Units and Blood Bank with detailed
specification and name of manufacture, quoted by the bidder, is to be enclosed in the Technical bid.
6. The manufacturers having Marketing Agency at Agartala, Tripura will be preferred during
consideration of rate & firm by a constituted committee.
7. Blood Component Separation Facility Units and Blood Bank must be supplied directly by
the manufacturers itself or by its authorised distributors and should obtain sales tax clearance before delivery.
8. The supply order must be completed within 60(sixty) days from the date of issue of
order. A penalty @ 1% on the total value shall be charged for every week or part of week of delay beyond stipulated date of supply. However relaxation will be entertained only in special circumstance (Natural calamities, war or any order situation beyond human control). An authorised service provider of the supplier should be present during execution of supply order at store
9. 5% of the value or ordered quantity will have to be deposited as security money by
demand draft from any Nationalised Bank by the firm within 20(twenty) days time from the date issue of supply order.

10. The security money will be released after completion of full supply within the stipulated
period or it may be kept for the next supply order whichever is applicable.

Contd.....P/- 3.

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11. The Income tax/Sales Tax will be deducted from the bill as per guideline of the
Government, if applicable.

12. The Government will not consider any enhancement of rate within the validity period of
contract except imposition of any levy or increase in existing levy. Such request will lead to cancellation of the order.

13. Payment of successful tenderer shall be made by bill basis only after completion of
supply of the items as ordered. No advance payment shall be ent4ertained.

14. The rate should be typed and quoted both in figure and words clearly. The rate of both
C.S.T. and VAT should be mentioned separately and clearly in Financial Bid. Rate should be quoted in Indian currency only.

15. Tender should mention the quantity supplied in each packet as per Government policy.

16. Yearly approximate requirement is incorporated in the list of items which is likely to be
increased or decreased as per requirement. The yearly supply of order will be issued once or in phased manner as per requirement.

17. According to present Govt. Policy, Health & Family Welfare Department, Govt. of Tripura
will procure 50% of total annual requirement of Blood Component Separation Facility Units and Blood Bank through this tender.

18. When tender are submitted by authorised distributor/supplier, the name of the
manufacturer shall be mentioned against each item or which rate is quoted and more than one manufacturer rate should be quoted separately.

19. During execution of the supply orders, the supplier has to provide the Test
Report/Certificate of Analysis of Ab. Gauze and Ab. Bandage Cloth of the manufacturer.

20. State Drug Control Administration, Agartala will collect the sample of Blood Component
Separation Facility Units and Blood Bank from the Medical Store. Supply will be done from Store and payment will be made after receipt of test report from State Drug Testing Laboratory (SDTL), Agartala.
21. The Earnest Money Deposit (EMD) to an amount of Rs.30,000/-(Rupees thirty
thousand) only shall be furnished in one of the following forms.
i) Account Payee Demand Draft
ii) Fixed Deposit Receipt
iii) Bankers Cheque.

Contd.....P/- 4

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22. The E.M.D. shall be drawn on any scheduled commercial Bank in India in favour of
Director of Health Services, Govt. of Tripura. The Earnest money shall be valid for a
period of 45 (forty five) days beyond the validity period of tender. E.M.D. will be

released after validity period of contract in case of successful tenderer and that of unsuccessful tenderer will be released after finalisation of tender.

23. Price quoted should be met F. O. R. Door delivery at Central Medical Store,
Shyamalibazar/GBP/I.G.M/Cancer Hospital and other please in Tripura.

24. No insurance charge is admissible and successful tenderer will responsible for any
breakage and loss in transit or way to destination.

25. Any default or breach of contract and non-execution of supply order shall in addition lead
to forfeiture of earnest/security deposit of successful tenderers beside to such action as
may be considered appropriate by the Director of Health Services, Government of Tripura including black listing/delisting the tenderers for future purpose.

26. If any item supplied is found to be not standard quality, the quantity of “not of standard
quality item(s)” supplied should be taken back and replaced by fresh stock at own cost of supplier.

27. The Director of Health Services, Government of Tripura, Agartala reserves the right to
accept or reject any tender without assigning any reason thereof and tender may be accept or reject in part or in whole.

28. In case of legal dispute the jurisdiction will be the Tripura High Court, Agartala Bench.

29. 5% security deposit against value of ordered quantity of items and fresh deposit at call
are relaxed for public sector undertaking subject to production of documents with the tender.

30. The Director of Health Services, Govt. of Tripura, Agartala reserves the right to
unilaterally terminate contract or cancel the acceptance or the rate or supply order at any
time without notice before expiry or the period for which rate as now invited.

Director of Health Services
Govt. of Tripura: Agartala.

Equipments for blood component separation facility units
1.Refrigerator Centrifuge / Cryo Centrifuge 6000 i (6 Buckets) with Voltage Stabilizer:- It separates different cellular components as per their specific gravity by centrifuging at different centrifugal force in “g’ for different time.
Specification:-
• Power:- AC 220/240 volt, 50 Hz single phase AC
• Operation: - Suitable for operation from (-) 20 0c to 40 0c at 90% relative humidity. Fitted
with castor wheels with locking facility, can be moved in the blood bank laboratory.
• Line Voltage Corrector:-Input voltage – 160 to 260 volt
Output voltage – 220 to 240 volt, Make Logicstst

• Digital display of Temperature, Speed, Time:- Temperature – o2 digits
Speed: - 04 digits
Time: - 04 digits
• Microprocessor controlled system to make operation automatic.
• Swing bucket blood bank rotator:- wind shielded swing out blood bank rotator with
metal buckets 12 X 800 ml. Four removable oval plastic cups suitable for 12 single/double/triple/quadruple blood bags as well as tarier weights & balancing rubber plate.
• Maximum speed micro processor can trolled rotor speed within 10 rpm of set value. 9
different acceleration & 9 different deceleration profiles available.
• Programmable time: - It is 1 minute to 99 hours with minimum resolution of 1.0 minute.
• Rotor imbalance detection: Automatically shuts down the instrument if rotor load is out
of balance and a message will come on the display panel.
• Stainless chamber – Corrosion resistant with provision of both drains and condensed
water collection container.
2. Laminar Flow Bench With Capacity Voltage Stabilizer & Spare parts:-
It provides product protection within the working area which is confined by removable clear glass side panels & stainless steel work surface.
Specification:-
• Power:- 230 volt AC, 50 Hz, 300 watts
• Work Area Dimensions:– L X W X H:1220 X 610 X 560mm
• Filters (HEPA):- Aluminum framed high effacing particulate Air Filter with minimum efficiency of 99.99% at 0.3 micron.
• Construction: - G.I powder coated.
• Air Flow:- 90 FPM + 10 FPM
• Motor / Blower Assembly: - Direct drive, continuous duty ¼ Hp with sealed bearings mounted on FRP casing to reduce noise & vibration.
• Complete with:- Pre-filter, Hepa filter, S.S.Top Front Door, UV Lamp, Manometer, Glass shields, castor wheels etc.
3. Plasma Expresser (Electronics):-
Separate plasma from whole blood without contamination of cells.
Specification:-
• Power:- AC-DC power adaptor 100-240 volt AC, 50-60 Hz
• Sensor:- Infra-red beam interrupt opto sensor
• Clamp Closing Time:- Less than 1 second
• Flow rate:- 150-180 ml/min
• Controls: - Power, Clamp up, Clamp Clown, Start.
• Indication Lamp: - Power, Clamp down, Start.
• Alarm:- On detection of separation
• Standard:- CE mark
• Manufacturing Standard: - ISO 9001-2008
1. Plasma Thawing Bath,370c:-
Used for plasma thawing (FFP) before issue of blood components stored in (-) 400c. Specification:-
• Power Supply:- 230 +/- 10% volt single phase AC
• Programmable temperature range:- 370c to 560c
• Display:- 4 X 7 segment LED
• Capacity:- 12 regular plasma bags
• Operating temperature:- 370c
• Manufacturing standard:- ISO 9001-2008, EN ISO 13485:2012

• Certification:- CE Marked
2. Cryobath 40c:-
For preparation of cryoprecipitate components of blood plasma stored in 800c minus temp.
Specification:-
• Power supply:- 230 +/- 10% volt single phase AC
• Operating Temperature:- 3.70c to 4.30c
• Programmable Temperature Range:- 30c to 560c3.70c to 4.30c
• Capacity:- 12 regular FFP filled bag
• Time taken for one process:- 2 hour for plane bags stand at -400c
• Voltage Stabilizer:-2 KVA ext. Stabilizer
• Castor Wheels: - Lockable 2 nos.
Non-lockable – 2 nos. for easy movement
• Manufacturing Standard:- ISO 9001-2008, EN ISO 13485:2012
• Standard & Certification:- CE
3. Platelet Agitation with Incubator:-
A) Platelet Agitator:-

B) Specification:-
• Power supply:- 230 +/- 10% volt, 50 Hz
• Rate of Motion:- 60 +/- 5 cycles/minutes
• Alarm:- Audible intermittent beeps for power failure
• Displacement:- 36 +/- 3 mm
• Capacity:- 24 bags(4 Tray)
• Standard:- CE mark
• Manufacturing Standard:- ISO 9001-2008, EN ISO 13485:2012
C) Platelets Incubator:-
It ensures uniform temperature maintenance with smooth agitation of storage of platelets units.
Specification:-
• Power supply:- 230 +/- 10% volt AC, 50 Hz
• Chamber Temperature:- 22 +/- 20c
• Stabilizer:- 1 kv built in
• Operation:- Continuous
• Compressor:- Hermetically Sealed
• Cabinet Material:- Outer Cabinet 20 Swg GI Sheet
Inner Cabinet 24 Swg Stainless Steel
• Condensate Evaporator:- Built in
• Temperature Screening Method: - Encapsulated digital sensor dipped in 0.25% glycerin
sale.

• Chart:- 7 days, Accuracy +/- 10c, Duration – 7 days
• Method of Recording:- Ink pen on paper
• Battery Backup:- 2 Hrs
• Display:- 4 X 7 segment LED
• Standard with approval:- CE mark
• Manufacturing Standard:- ISO 9001-2008, EN ISO 13485:2012
4. Dielectric Tube Sealer:-
To separate scientifically & efficiently blood bag tube.
Specification:-
• Power Supply:- 100-240 volt AC, 50 Hz
• RF Output Power:- 20 w (Radio Frequency Sealing)

• Tube Detection:- Automatic
• Sealing Time: - 1-3 Sec, no risk of contamination, haemolysis of blood.
• Working Temperature:- 5-40 0c
• Handle:- Provision for easy handling in camp & blood banks, weight – 5.25 Kg
• Safety Standard (Compliance):- EN61010-1
• Manufacturing Standard: - ISO 9001-2008(TUV), EN ISO 13485:2012
5. Compo Scale:-
It is a weighing scale for measurement & separation of blood components processing. Specification:-
• Power supply:- 230 +/- 10% volt AC, 50 Hz
• Weighing range:- up to 2.5 kg
• Zero set provision:- Automatic / Manual
• Display:- 16 X 1 line LED
• Key Board:- Weight/volume conversion, Volume setting up/down, Component selection
up/down
• Indication:- For zero set – LED
For gm/ml - LED
Indication on LCD when set weight/volume is achieved
• Weight:- 2.5 Kg
• Dimension:- 24 X 18.5 X 5 cm
• Standard with approval:- CE mark
• Manufacturing Standard:- ISO 9001-2008, EN ISO 13485:2012
6. Automatic Component Extractor (TACE-II) with 2KVA online UPS and battery
brakup:-
It is a highly flexible automatic blood component extractor for the standardized processing of centrifuged blood according to good manufacturing practice.
Specification:-
• Power:- 100-240 volt AC, 50-60 Hz
• Fuse:- 2 X 2 AT
• Weight:- 32 kg
• Inlet pressure:-4-6 bar
• High Frequency Generator:- Output: maximum 150 w/50 ohm
Frequency: 40.68 MHz
• Accessories:- Barcode reader + support
ToMEs Hardware
Wi-Fi Module
Router
Wireless Router
Air Compressor 220-240 volt, 100-120 volt
Filter Holder Hard
Filter Holder Soft

• Compliance with European Directives:- 2004/108/EC EN 61326
2006/42/EC EN 61010

7. Sterile Connecting Device(TSDC II):-
For accomplishing quick & safe tubing connection that maintain a functionally closed system without a chance of contamination in preparation of blood component etc. Specification:-

• Power:- AC 100-240 volt +/- 10%, 50-60 Hz
• Operating Condition:- 100c to 400c
10% to 80% relative humidity, non-condensing
• Tubing Material:- Polyvinyl Chloride
• Tubing Size:- O.D -3.9 to 4.5 mm
I.D – 2.9-3.1mm
• Wafers:- T.S.C.D wafers
• Weight:- Approximate 7 kg, Easily Portable
• Information Panel: - Back Light LCD, provides status and operational prompts.
8. Digital Haemoglobinometer:-
Quick Hb% tests of blood supply before blood donor selection.
Specification:-
• Photo meter: - Dual wave length photo meter of 570 and 880nm.
• Sample Volume: - 10 micro ltr.
• Result:- Displayed within one minute
• Instrument reading:- 0-25 gm/L
• Linearity:- 0.3-30 gm/L
• Precision:- + 1.5%
9. Digital pH Meter:-
Specification:-
•Power Supply:- 230VAC+ 10%,50Hz
•pH Range:- 0-14 pH
•Resolution:- 0.01 pH
•Temperature Range:- 0.0 to 1000c (Manual Compensation) •Display:- 31/2 Digit LED Display
•Supplied with combination Glass pH Electrode (0-700c) •Standard Buffer Tablets
•Electrode Stand with Clamp
•Dust Cover
•Power Cord
•Operational & Instruction Manual
•Manufacturer Test Certificate & Warranty Card

10. Automated Cell Counter/Automated Hematology Analyzer:-

Specification:-
• Parameters:- WBC, RBC, HGB, HTC, MCV, MCH, MCHC PLT, LYM#, LYM%, MXD#,
MXD%, NEUT#, NEUT%, RDW-SD, RDW-CV, PWD*, MPV, P-LCR*
• Histogram:- WBC (3Diff), RBC, PLT
• Detection Principles:- WBC: Electric impedance method
RBC/PLT: Hydrodynamic focusing DC detection method HGB: Non-Cyanide hemoglobin analysis method
• Analysis Time:- Approx. 148 sec./sample
• Sample Volume:- Approx. 15 uL for Whole blood Mode
Approx. 20 uL for Pre-diluted Mode
• Data Storage:- 20 samples with histogram including QC data
• Dimensions (WxHxD, mm):- 185 X 350 X 460
• Weight(Kg):- 14
• Output:- Internal Printer, Serial Port(RS-232C)
LAN (TCP/IP)
• Power Supply:- 100-240 V (50/60 Hz)

• Power Consumption:- 150 VA or less
• Option:- Handheld barcode reader
11. Deep Freezer minus 800c:-
For the storage of component (FFP) of plasma within the prescribed temperature (- 800c) with rapid freezing power, within one hour.

Specification:-
• Power Supply:- 230 +/- 10% VAC, 50Hz single phase AC
• Voltage Stabilizer (Line Voltage Corrector):- 4 KVA Ext. Stabilizer
(Input 170-270 V, 50Hz) Single Phase
• Operation Temperature: - 220c – 300c (ambient temp.)
• Inner Chamber Volume: - 400 ltr.
• Capacity:- 400 bag, 250 ml plasma
• Number of Compartment:- 4 with 80 bag each
• Wheels:- 4 castor wheels
Lockable type in front 2 wheels
• Refrigerator:- R404a(CFC Free)
• Compressor:- Hermetically sealed imported compressor
• Temperature Sensing: - RTD sensor placed in a stainless steel bracket.
• Alarms and Indications:- Primary compressor on – LED indication
High/Low temp. – Audio-visual
Door Open – Audio-Visual
Power On - Visual
Power Fail - Visual

• Chart:- 7 day duration, Chart resolution – 30c
• Method of Recording:- Ink pen on paper
• Manufacturing Standard:- ISO 9001-2008, EN ISO 13485:2012 with CE Mark
approval.
12. Deep Freezer minus 400c:-
For the storage of component (FFP) of plasma within the prescribed temperature (- 400c) with rapid freezing power, within one hour.
Specification:-
• Power Supply:- 230 +/- 10% VAC, 50Hz single phase AC
• Voltage Stabilizer (Line Voltage Corrector):- 4 KVA Ext. Stabilizer
(Input 170-270 V, 50Hz) Single Phase
• Operation Temperature: - 220c – 300c (ambient temp.)
• Inner Chamber Volume: - 300 ltr.
• Capacity:- 320 bag, 250 ml plasma
• Number of Compartment:- 4 with 80 bag each
• Wheels:- 4 castor wheels
Lockable type in front 2 wheels
• Refrigerator:- R404a(CFC Free)
• Compressor:- Hermetically sealed imported compressor
• Temperature Sensing: - RTD sensor placed in a stainless steel bracket.
• Alarms and Indications:- Primary compressor on – LED indication
High/Low temp. – Audio-visual
Door Open – Audio-Visual
Power On - Visual
Power Fail - Visual

• Chart:- 7 day duration, Chart resolution – 30c
• Method of Recording:- Ink pen on paper

• Manufacturing Standard:- ISO 9001-2008, EN ISO 13485:2012 with CE Mark approval.
13. Blood Bank Refrigerator (300 ltr. Glass Door)
Requirement should have the following facilities:
i) 2-6 o C in all compartments with a fan for circulating air.
ii) Temperature charts for monitoring & recording temperature continuously.
iii) Alarm system with auditable signal with battery back-up.

Specification:-
• Power supply: - 170 – 270 V, 50 Hz, single phase AC, Built in stabilizer 1 KVA.
• Temperature Maintained: - Between +2 0c and +6 0c with 2 hour battery backup.
• Volume (Capacity):- 300 ltr. metallic body with glass door,
Capacity – 168 bags (350 ml), 144 bags (450 ml).
• Recording chart with Digital Temperature sensor 0-40 0c.
• Display:- 4 X 7 segment LED (Red)
• Fitted with castor wheels for easy movements.
• Compressor: Hermetically sealed compressor.
• Manufacturing Standard:- ISO 9001:2008, EN ISO 13458:2012
• Door: 3 door extension inner acrylic 3 pane heated glass.
• Alarm & Indication: Temperature High, Temperature Low, Door Open, Power Failure,
Sensor Failure.
• Recording Paper: - Recording is made in ink on a weekly circular paper.
• Temperature Sensing Method: - Digital sensor display in 0.25% glycerin solution kept in
plastic bottle.

14. 2KVA online UPS and battery backup for Automatic Component Extractor (TACE-II).
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Technical Specification of Blood Bank Equipments
1. Donor Couch (Blood Collecting Bed):
Ensure the collection process of blood safe, convenient & comfortable.

Specification:-
• Power supply: - 230 +/- 10% volt AC, 50 Hz.
• Lifting Capacity:- 135 Kg
• Movement/Position: - Any intermediate position between donation and vasovagal position with adjustment of seat height.
• Arm Rest:-Both swivel able and height adjustment, quick fold arm rest.
• Maneuverability: - Provided with castor wheels.
• Classification:- Protection against electrical shock, class-I
• Accessories: - Blood collecting Monitor Tray, B. P. apparatus Tray, Accessories and
Telescopic IV Stand.
• Dimensions: Length – 100 cm, Back Rest:- 90 cm, width:- 67 +/- 2 cm

Height of Seat – 51 +/- 2 cm, Height of Leg Rest: - 80 +/- 2 cm
• Working Temperature:- 5 to 40 OC
• Interface:- For connecting BCM
• Donor Comfort: - Easy adjustment of seat height & a quick fold arm-rest feature.
• Manufacturing Standard: ISO 9001:2008(TUV)
2. Blood Bank Refrigerator (300 ltr. Glass Door)
Requirement should have the following facilities:
iv) 2-6 o C in all compartments with a fan for circulating air.
v) Temperature charts for monitoring & recording temperature continuously.
vi) Alarm system with auditable signal with battery back-up.

Specification:-
• Power supply: - 170 – 270 V, 50 Hz, single phase AC, Built in stabilizer 1 KVA.
• Temperature Maintained: - Between +2 0c and +6 0c with 2 hour battery backup.
• Volume (Capacity):- 300 ltr. metallic body with glass door,
Capacity – 168 bags (350 ml), 144 bags (450 ml).
• Recording chart with Digital Temperature sensor 0-40 0c.
• Display:- 4 X 7 segment LED (Red)
• Fitted with castor wheels for easy movements.
• Compressor: Hermetically sealed compressor.
• Manufacturing Standard:- ISO 9001:2008, EN ISO 13458:2012
• Door: 3 door extension inner acrylic 3 pane heated glass.
• Alarm & Indication: Temperature High, Temperature Low, Door Open, Power Failure,
Sensor Failure.
• Recording Paper: - Recording is made in ink on a weekly circular paper.
• Temperature Sensing Method: - Digital sensor display in 0.25% glycerin solution kept
in plastic bottle.
3. BCM (Blood Collection Monitor):-
Ensure collection of correct volume of blood with constant agitation.

Specification:-
• Input Voltage:- 100-250 Volt AC, 50/60 Hz
• Power:- 12 W
• Operation: - Continuous operation with intermittent loading.
• Oscillation:- 12 +/- rpm
• Volume Setting Ranger: - 50 ml to 500 ml automatic storage & recall of set volume.
• Alarm /Indication: - LCD, LED indication and audible alarm when flow rate goes below
20 ml/min or above 180 ml/min and also at the end of collection.
• Time Measurement: - Time of collection is indicated at the end of every collection.
• Manufacturing Standard:- ISO 9001, EN ISO 13458:2012
4. Blood Weighing Machine:-
Ensure exact amount of collection of blood in the Voluntary Blood Donation Camps.

Specification:-
• Power:- 100 – 240 Volt AC, 50 Hz
• Backup: - Battery backup with charging AC adaptor 9 Volt.
• Weighing Capacity:- 0-3000 gm
• Auto shut off
• Auto zero tracking

• Large square ABS bowl weighing pan(310 X 230 mm)
• Large LCD (6 digits 15 mm high) indication
• Operating Temperature:- 0 to 45 OC
5. Portable Tube Sealer:-
Minimum size & light weight convenient for transportation to camp use for separation of blood bags after collection of blood.
Specification:-
• Power Supply:- Ni-MH battery pack Volt, 4.5 Ah
• Battery Charger: - 100-240 Volt AC Input, 15 Volt DC/400 mA Output.
• No. of seals per charging:- Approx 1500 continuous seal
• Diameter of the tube: - up to 6mm can be sealed.
• Weight:- 2.25 Kg
• Sealing time: - Less than 1.5 Sec.
• Manufacturing Standard: - ISO 9001-2008, EN ISO 13485:2012.
6. Elisa Washer:-
Automatic Elisa Plate/Strip washer is used for washing of single strips of 8 wells or full plate of 12 wells in Elisa tests of blood screening of HIV/HBV/HCV/Malaria antigen test.

Specification:-
• Power:- 115-230 Volt + 10% 50-60 Hz
• Enclosure:- ABS Fire Retardant

• Operating Conclusion:- + 18 0c to 35 0c
• Manifold:- 8 way manifold
• Dispensing Volume: - 300 to 400 micro lt. in steps of 50 micro lt.
• Aspirating: - Continuous through diaphragm pump without over flowing.
• Waste Bottle: - Capacity 2 ltr. with audible alarm when bottle is completely filled in.
• Wash Bottle: - Capacity 2 ltr.
• Rinse Bottle: - Capacity 2 ltr.
• Memory: - 8 kb non volatile RAM battery backup, supporting 35 open channel.
• Washing Method: - Long wash, short wash.
• Incubator: - For two Elisa Plate at 37 0C.
• Timer: - As per individual programme.
• Manufacturing Standard: - ISO 9001-2000, EN ISO 13485:2003 CE Marked.
7. Elisa Reader:
Automatic plate ELISA Test Analysers for the blood screening tests – HIV, HBV, HCV & Malaria Parasite Antigen Tests.

Specification:-
• Power:- Wattage – 50 watts,
Voltage – 115-230 volts + 10%, 50-60 Hz
• Machine Interface: - Touch Panel/Key pad.
• Linear Measurement Range:- 0.000 to 3.000 Absorbance units (A)
• Photometric Accuracy:- + 2% or 0.005 from 0-1.5 A
+ 3% from 1.5 A to 3.0 A
• Drift:- <0.005A/hour
• Photometric Linearity:- 2.5 A
• Optical Measurement:- 8 Channel
• Filters:- Type – Narrow band interference
Wave Length – 405 nm, 450 nm, 630 nm & two optical.

• Half Bandwidth:- 10 nm + 2nm
• Selection:- Automatic by stepper Motor
• Light Source:- Tungsten halogen lamp
• Warm up time:- 90 Seconds(built in)
• Display:- 6’’ Graphic LCD, Negative blue STN
• Curve Plotting: - Graphical Representation on printer.
• Plate Carrier Movement:- Through the stepper motor
• Printer:- Built in Thermal Printer
• Memory:- 64 kb non volatile RAM Battery back up
• Analyser Mode:- Absorbance cut-off
Multi Standard % absorbance.
• Enclosure:- ABS Fire Retardant
• Manufacturing Standard: - ISO 9001-2000, EN ISO 13485:2003 CE Marked.
8. Tube Sealer:-
To separate scientifically & efficiently blood bag tube.
Specification:-
• Power Supply:- 100-240 volt AC, 50 Hz
• RF Output Power:- 20 w (Radio Frequency Sealing)
• Tube Detection:- Automatic
• Sealing Time: - 1-3 Sec, no risk of contamination, haemolysis of blood.
• Working Temperature:- 5-40 0c
• Handle:- Provision for easy handling in camp & blood banks, weight – 5.25 Kg
• Safety Standard (Compliance):- EN61010-1
• Manufacturing Standard: - ISO 9001-2008(TUV), EN ISO 13485:2012
9. Plasma Expresser (Electronics):-
Separate plasma from whole blood without contamination of cells.
Specification:-
• Power:- AC-DC power adaptor 100-240 volt AC, 50-60 Hz
• Sensor:- Infra-red beam interrupt op to sensor
• Clamp Closing Time:- Less than 1 second
• Flow rate:- 150-180 ml/min
• Controls: - Power, Clamp up, Clamp Clown, Start.
• Indication Lamp: - Power, Clamp down, Start.
• Alarm:- On detection of separation
• Standard:- CE mark
• Manufacturing Standard: - ISO 9001-2008
10. Incubator (37 OC).
11. Desktop Centrifuge
12. Water Bath (37 OC).
13. Hot Air Oven
14. Auto Clave.
15. Compound Microscope.
16. Domestic Refrigerator with temperature Digital indication 165ltr.
17. V.D.R.L. Shaker.
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