

Tender

For

equipments required for Department of Transfusion
Medicine & Blood Bank

At

All India Institute of Medical Sciences, Jodhpur

NIT Issue Date : September 02, 2013

Pre-Bid Meeting : Sep 09, 2013 at 04:00 PM.

Last Date of Submission : Sep 23, 2013 at 03:00 PM.



All India Institute of Medical Sciences, Jodhpur

Basni Phase - II, Jodhpur – 342005, Rajasthan

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Tender – Equipments for Department of Transfusion Medicine & Blood Bank
All India Institute of Medical Sciences (AIIMS), Jodhpur, Rajasthan, an apex healthcare institute being established by Parliament of India under aegis of Ministry of Health & Family Welfare, Government of India, invites sealed tenders for supply & installation of the following items at the institute. You are requested to quote your best offer along with the complete details of specifications, terms & conditions.

ANNEXURE 'A'

S.No.	NIT No.	Item Description	Quantity	EMD (in Rs.)
1.	Admin/General/116/2013-AIIMS.JDH	Sterile connection Device	1	20,000
2.	Admin/General/117/2013-AIIMS.JDH	Deep Freezer – 40 Degree C	1	11,000
3.	Admin/General/118/2013-AIIMS.JDH	Blood Bank Refrigerator 600L/320 bag for storing screened Blood	1	6,400
4.	Admin/General/119/2013-AIIMS.JDH	Platlet Agitator with Incubator (96 bag)	1	6,000
5.	Admin/General/120/2013-AIIMS.JDH	Gel Microcolumn card centrifuge	1	5,000
6.	Admin/General/121/2013-AIIMS.JDH	Dielectric tube sealer (portable)	1	3,600
7.	Admin/General/122/2013-AIIMS.JDH	Refrigerated Transport box	1	3,500
8.	Admin/General/123/2013-AIIMS.JDH	Cryo bath	1	4,000

(Refer Specifications Details as per Annexure-B')

Quotation should be sealed and superscribed with tender number and address to:

“Administrative Officer
All India Institute of Medical Sciences, Jodhpur
Basni, Phase-II
Jodhpur-342005, Rajasthan”.

The sealed quotations should reach the Institute, latest by September 23, 2013 at 03:00 PM and it will be opened on same day at 05:00 PM in the Project Cell, Resident Complex, AIIMS, Jodhpur of the Institute in the presence of the bidder(s) or their authorized representative(s), who will present at the scheduled date and time.

Terms & Conditions:

- 1. Earnest Money Deposit:** The bidder shall be required to submit refundable amount as Earnest Money Deposit (EMD) and a non-refundable tender fee of Rs. 1000.00 for each NIT by way of demand drafts only as mentioned in Annexure 'A'. The demand drafts shall be drawn in favour of “**All India Institute of Medical Sciences, Jodhpur**”. The demand drafts for earnest money deposit must be enclosed in the envelope containing the technical bid.

The EMD of the successful bidder shall be returned after the successful completion of contract / order and for unsuccessful bidder(s) it would be returned after award of the contract. Bid(s) received without demand drafts of EMD shall be liable for rejection.

The firms who are registered with National Small Industries Corporation (NSIC) / OR Small Scale Industrial (SSI) are exempted to submit the EMD (Copy of registration must be provided alongwith).

2. Preparation and Submission of Tender :

The tender should be submitted in two parts i.e. Technical Bid and Financial Bid. The Technical Bid and the Financial Bid should be sealed by the bidder in two separate covers "**Technical Bid for Tender for Supply of**" and "**Financial Bid for Tender for Supply of**". Both Sealed Envelopes should be kept in a main/ bigger envelope superscribed as "**Tender for Supply of**"

3. Rate: Rates should be quoted in Indian Rupees (INR) on DOOR Delivery Basis at AIIMS, Jodhpur, Rajasthan, Inclusive of all the Charges, with break-ups as:

- Basic Cost.
- VAT /CST as applicable.
- Total Cost (F.O.R at AIIMS Jodhpur).

4. Validity: The quoted rates must be valid for a period for 120 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.

In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

5. Delivery & Installation: All the goods ordered shall be delivered & installed within 30 days from the date of issue of purchase order. All the aspects of safe delivery, installation and commissioning shall be the exclusive responsibility of the supplier.

If the supplier fails to delivered, installation and commissioning of the goods on or before the stipulated date, then a penalty at the rate of 2% per week of the total order value shall be levied subject to maximum of 10% of the total order value. The goods should be manufactured after adoption of latest technology.

The successful tenderer will also provide required training for supplied items at AIIMS, Jodhpur.

6. Guarantee / Warrantee Period: For the equipment value upto Rs. 5 Lakh

The Tenderers must quote for 2 years comprehensive warranty (Including all Spares, Accessories and Labour) from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. Also the bidders are requested to submit their quote (Rates) for subsequent 3 years Comprehensive Maintenance Contract (CMC) (Including All Spares, Accessories and Labour). Failure to comply this condition will entail the rejection of the bids. The price comparison shall be taking into account on basic price and post warranty CMC.

Guarantee / Warrantee Period: For the equipment value above Rs. 5 Lakh

The Tenderers must quote for 5 years comprehensive warranty (Including all Spares, Accessories and Labour) from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. Also the bidders are requested to submit their quote (Rates) for subsequent 5 years Comprehensive Maintenance Contract (CMC) (Including All Spares, Accessories and Labour).

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Failure to comply this condition will entail the rejection of the bids. The price comparison shall be taking into account on basic price and post warranty CMC.

7. Signing of tender :

The tenderer should sign and affix his firm's stamp at each page of the tender and all its annexure as the acceptance of the offer made by tenderer will be deemed as a contract and no separate formal contract will be drawn. NO PAGE SHOULD BE REMOVED/ DETACHED FROM THIS NOTICE INVITING TENDER.

8. Opening of Tender:

The tenderer is at liberty to present either him or authorize not more than one representative to be present at the opening of the tender. The representative present at the opening of the tender on behalf of the tenderer should bring with him a letter of authority from the tenderer and proof of identification.

9. Sample :

- i. AIIMS Jodhpur reserves the right to ask the tenderers for submitting the sample of each item for which rates have been quoted, Technically Qualified Bidders may be asked to submit samples along with their quoted items nos. and their firm name without indicating any prices before opening of Financial Bid to AIIMS, Jodhpur for Inspection.
- ii. The sample must confirm to specification given in Chapter-VI of the tender form.
- iii. Failure to submit sample on specified date & time will result in rejection of the tender.

10. Quantity :

The quantity of item given in the tender is tentative, which may be increased or decreased as per the institute's requirement.

11. Uptime guarantee: The firm should provide uptime guarantee of 95%.

12. Downtime penalty Clause:

- a) During the comprehensive warranty period, the guarantee uptime of 95% of 365 days will be ensured. In case the down time exceeds the 5% limit penalty of extension of guaranty period by two days for each additional day of down time will be enforced. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least FIVE YEARS after handling over the unit to the Institute. If accessories / other attachment of the system are procured from the third party, then the vendor must produce cost of accessory / other attachment and the CMC from the third party separately along with the main offer and the third party will have to sign the CMC with the Institute if required.
- b) The principals or their authorized service providers are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

13. Performance Security: The supplier shall require to submit the performance security in the form of irrevocable Bank Guarantee (BG) / or Fixed Deposit Receipt (FDR) issued by any Nationalised Bank for an amount equal to the 10% of the order value and should be kept valid for a period of 60 days beyond completion of all the contractual obligation including CMC period.

14. Right of acceptance:

AIIMS, Jodhpur reserve the right to accept or reject any or all tenders /quotations without assigning any reason there of and also does not bind itself to accept the lowest quotation or any tender.

Any failure on the part of the tenderer to observe the prescribed procedure and any attempt to canvass for the work will prejudice the tenderer's quotation or any tender.

15. Payment Term:

- 90% payment of the total order value shall be released after the successful installation/ commissioning of the ordered goods against the submission of the test report.
- Balance 10% of the order value shall be released after the submission of the performance security.

16. Right to call upon information regarding status of work:

The AIIMS, Jodhpur will have the right to call upon information regarding status of work/ job at any point of time.

17. Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.

18. Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.

19. After due evaluation of the bid(s) Institute will award the contract to the lowest evaluated responsive tenderer.

20. Conditional bid will be treated as unresponsive and it may be rejected.

21. The Institute reserves the right to accept in part or in full or reject any or more quotation(s) without assigning any reasons or cancel the tendering process and reject all quotations at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

22. Applicable Law:

- The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.
- Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Jodhpur, Rajasthan, India only.
- The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jodhpur. The decision of the Arbitrator shall be final and binding on both the parties.
- Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.

"PRE –BID Meeting" with the intending bidders shall be held on 09th Sep 2013 from 04:00 P.M. onwards at AIIMS, Jodhpur.

Annexure-B

1. Sterile Connecting Device

Purpose of Equipment:

- Sterile Connecting Device is able to heat and cut two tubes and switch the connectivity of the two halves and weld them back, and do the cutting and welding in such a manner that it can be considered as sterile as a closed process.

Quality Standard:

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

Operational requirements:

- Should ensure sterile connection between tubing to enable transfer of fluid/ blood from one container/ bag to another by welding the tubes between them effectively as a closed system.
- Should be compatible with all standard tubing with an external diameter ranging from 3.9-4.5 mm & internal diameter of 2.9-3.1 mm.
- Should have in built sensor to monitor the temperature to ensure optimal quality and strength of weld.
- Should be capable of welding Wet – Wet / Wet – Dry / Dry – Dry tubes
- Total process time should be minimum (approx 20 to 30 seconds).
- Requirement for tube length to be welding/docking should be as small as possible
- LED indicators to display the whole process with alarms.
- should ensure the complete sterility
- Should be attachable to leukocyte filters and should also be usable for plasma and platelet pooling
- There should be no particles or chemical residue created by welding process
- To be operational on 220 to 240 volts at 50 Hz. Single phase AC.
- One Set of full boxes consumables if any (eg wafers) should be provided with instrument and cost of replacement consumables should be quoted and supply should be readily available with the vendor till the CMC period.

Additional requirements:

- All equipment should specify qualifications for design, installation, operation and performance.
- Validation and calibration reports should have traceability to applicable national and international standards.
- Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer and surge protector with the charging set.
- Warranty for 3 years and CMC/AMC for Five years with spare parts availability.
- The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
- Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- Performance, efficiency, other factors as applicable should be furnished.
- Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
- Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- Should provide a set of equipments for calibration and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.

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

2. Specifications for Blood Bank Plasma Freezer, -40°C:

1. Purpose of Equipment	<ul style="list-style-type: none"> • To Freeze or store Plasma. • Must be designed specifically for blood bank use. Commercial or modified commercial freezers for other purpose are not acceptable.
2. Type of Equipment	<ul style="list-style-type: none"> • Approved standard electrical Blood Bank plasma freezer that uses a compressor circulating CFC-free refrigerant. • Upright type
3. Quality Standard	<ul style="list-style-type: none"> • Manufacturing must be compliant with ISO 13485, and ISO 9001:2008. • Should be compliant with European CE Class IIA and/or US FDA • Equipment must meet electrical safety specifications of IEC 61010-1
4. Capacity	<ul style="list-style-type: none"> • At least 300 standard plasma bags.
5. Construction	<ul style="list-style-type: none"> • Outside C. R. (Corrosion Resistant) Sheet at least 1 mm thick • Inside stainless steel of at least 22 G. • Insulation polyurethane foam >80mm thick, foaming agent CFC free • Should be mounted on lockable caster wheels
6. Drawers	<ul style="list-style-type: none"> • At least four or more in number
7. Door	<ul style="list-style-type: none"> • Separate inner doors to prevent cold loss • Automatic/Magnetic closing of at least inner doors. • Heating device in front to avoid condensation • Opening angle limited (eg <135°) • Door open/ajar audio and visual alarm • Door lock should be available
8. Electrical characteristics	<ul style="list-style-type: none"> • Compatible with Input 240V 50 Hz Single phase Ac • Should have an integrated voltage stabilizer and external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz). • Minimum compressor starting voltage should be 22% below normal voltage
9. Internal Temperature	<ul style="list-style-type: none"> • Should be able to maintain internal temperature not warmer than -30°C • Whatever the load, setting accuracy less than or equal to 1°C • Automatic defrosting if present, temperature should not go outside safe range.
10. External Ambient Temperature:	<ul style="list-style-type: none"> • Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +30 °C
11. Hold-Over Time	<ul style="list-style-type: none"> • A full load of plasma packs at -36 °C takes at least 1 hr to rise to above -20 °C • A full load of plasma packs at -36 °C takes at least 32 hrs to rise to above -5 °C

<p>12. Cooling Down Time.</p>	<ul style="list-style-type: none"> • A full load of plasma packs at +25°C takes a maximum of 5 hrs for all the packs to reach below -5 °C • A full load of plasma packs at +25 °C takes a maximum of 30 hrs for all the packs to reach below -20 °C
<p>13. Temperature monitoring, thermograph and related alarms</p>	<ul style="list-style-type: none"> • Digital temperature (LED) display with 0.1 °C graduation. • Microprocessor controlled primary temperature control • Integrated Visual AND Audible Temperature alarm systems, • There should be a method to test the alarm system • Alarm history: temperature maximum and minimum, average temperature during alarm period, time of duration of alarm • Provision to be connected to a remote monitoring system and remote alarm. • The temperature record should be electronically logged (that can be retrieved eg by USB port) and also documented on a physical thermograph; preferably with a 7-day graphic chart recorder with supply of free charts for full period of warranty. • Must have Battery backup for temperature recordings which is especially needed during power failure/fluctuations • Additional Battery backup for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm for.
<p>14. Desirable</p>	<ul style="list-style-type: none"> • At room temperature of 25°C should be able to maintain at ideal compressor running time of <60-70%.

Additional requirements:

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

3. Specifications for Blood Bank Refrigerator /Blood Storage Cabinet:

1. Purpose of Equipment	<ul style="list-style-type: none"> • A refrigerator for storing whole blood or red cell packs in a blood bank. • Must be designed specifically for blood bank use. Commercial or modified commercial refrigerators for other purpose are not acceptable.
2. Type of Equipment	<ul style="list-style-type: none"> • Approved standard electrical Blood bank refrigerator that uses a compressor circulating CFC-free refrigerant.
3. Quality Standard	<ul style="list-style-type: none"> • Manufacturing should be compliant with ISO 13485, and ISO 9001:2008. • Should be compliant with CE Class IIA and/or US FDA • Equipment must meet electrical safety specifications of IEC 61010-1.
4. Capacity	<ul style="list-style-type: none"> • At least 300 standard blood bags.
5. Construction	<ul style="list-style-type: none"> • Outside C. R. (Corrosion Resistant) Sheet at least 1 mm thick • Inside stainless steel of at least 22 G. • Insulation >50 mm thick, foaming agent CFC free
6. Drawers	<ul style="list-style-type: none"> • Stainless steel, scratch resistant • Roll out type. • At least four or more in number
7. Door	<ul style="list-style-type: none"> • Glass door with full visibility of units without opening door • Automatic/Magnetic closing • Door opening audio and visual alarm • Door lock should be available.
8. Electrical characteristics	<ul style="list-style-type: none"> • Compatible with Input voltage: 240V 50 Hz Single phase Ac • Should have an integrated voltage stabilizer and external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz). • Minimum compressor starting voltage should be 22% below normal voltage. • At room temperature of 25°C should be able to maintain at ideal compressor running time of 27%.
9. Internal Temperature	<ul style="list-style-type: none"> • Blood Bank Refrigerator should have inside temperature range of 2°C - 6°C • User parameter settings: Set point, High alarm point, low alarm point, buzzer off time, C/F unit display choice. • Whatever the load, setting accuracy less than or equal to 0.5°C (preferably 0.1°C). • Should ensure frost free performance thereby avoiding either freezing or heating. If defrosting function used, temperature should not go outside range specified above.
10. External Ambient Temperature:	<ul style="list-style-type: none"> • Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +30 °C
11. Hold-Over Time	<ul style="list-style-type: none"> • A full load of blood packs at +4 °C (±1 °C) should take more than 1.5 hours to rise to above +6 °C if power off
12. Cooling Down Time.	<ul style="list-style-type: none"> • A full load of blood packs at +25 °C should not take more

	than 13 hrs for all the packs to reach below +6 °C
13. Temperature monitoring, thermograph and related alarms	<ul style="list-style-type: none"> Protected digital RTD Sensor, should preferably be dipped into in a product simulation bottle. Microprocessor controlled primary temperature control with user defined parameters Digital temperature (LED) display with at least 0.5 °C resolution of graduation. Integrated Visual AND Audible Temperature alarm systems, Provision to be connected to a remote monitoring system and remote alarm. The temperature record should be electronically logged (USB accessible data logger) and also documented on a physical thermograph; preferably with a 7-day, ink-less, pressure-sensitive circular chart recorder. Must have Battery backup for temperature recordings which is especially needed during power failure/fluctuations Additional Battery backup for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.
14. Air circulation	<ul style="list-style-type: none"> The temperature inside should be kept uniform in all shelves by Forced air circulation through fans. The fans shut off when door is opened
15. Lighting	<ul style="list-style-type: none"> All shelves should have sufficient illumination so that labels on units can be easily read. Should have light bulbs/tubes that can be changed without removing the drawers.

Additional requirements:

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

4. Specifications for Blood Bank Platelet agitator cum incubator:

<p>1. Purpose of Equipment</p>	<ul style="list-style-type: none"> • To continuously agitate platelet concentrate in an even suspension in a temperature controlled environment +22 °C ±2 °C in standard platelet bags (random unit or apheresis). • Must be designed specifically for blood bank use. Commercial or modified commercial incubators for other purpose are not acceptable.
<p>2. Type of Equipment</p>	<ul style="list-style-type: none"> • Flatbed agitator fitted inside a temperature controlled incubator that uses CFC-free refrigerant and CFC free insulation material.
<p>3. Quality Standard</p>	<ul style="list-style-type: none"> • Manufacturing should be compliant with ISO 13485, and/or ISO 9001:2008. • Should be compliant with European CE Class IIA and/or US FDA • Equipment must meet electrical safety specifications of IEC 61010-1
<p>4. Capacity</p>	<ul style="list-style-type: none"> • At least 96 standard random platelet unit bags.
<p>5. Construction</p>	<ul style="list-style-type: none"> • Outside C. R. (Corrosion Resistant) sheet preferably coated with bacteria resistant material • Inside stainless steel. • Insulation foaming agent CFC free
<p>6. Drawers and agitator</p>	<ul style="list-style-type: none"> • Nonslip corrosion resistant drawers coated with bacteria resistant material • Drawers perforated to ensure good air circulation • The agitator holding the shelves is suspended in such a way as to ensure minimum noise for the life of the agitator. • Gentle side to side agitation at 1.5 inch (3.6–4 cm) and 60–70 strokes/min. • Heavy duty ball bearing gear motor for noiseless and continuous operation for 24 hours a day 365 days a year • Auto-pause of agitator on opening door • Push button switch to pause agitator
<p>7. Door</p>	<ul style="list-style-type: none"> • Glass door with full visibility of units without opening door • Door lock should be available
<p>8. Electrical characteristics</p>	<ul style="list-style-type: none"> • Compatible with Input 240V 50 Hz Single phase Ac • Should have an integrated voltage stabilizer or external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).
<p>9. Internal Temperature</p>	<ul style="list-style-type: none"> • Platelet agitator should have inside temperature range of 20°C - 24°C • Whatever the load, setting accuracy less than or equal to 0.5°C (preferably 0.1°C). • Should ensure frost free performance thereby avoiding either freezing or heating. If defrosting function used, temperature should not go outside range specified above.

<p>10. Temperature monitoring, thermograph and related alarms</p>	<ul style="list-style-type: none"> • At least 1 temperature sensor. • Digital temperature (LED) display with 0.1 °C graduation. • Integrated Visual AND Audible alarm systems for temperature, motion failure, sensor failure, agitator off, power failure • Provision to be connected to a remote monitoring system and remote alarm. • The temperature record should be electronically logged (that can be retrieved eg by USB port) and also documented on a physical thermograph; Preferably with a 7-day, graphic chart recorder with supply of free charts for full period of warranty. • Must have Battery backup for temperature recordings which is especially needed during power failure/fluctuations • Additional Battery backup for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.
<p>11. Air circulation</p>	<ul style="list-style-type: none"> • The temperature inside should be kept uniform in all shelves by Forced air circulation through fans.

Additional requirements:

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

5. Specifications for Immuno-hematologic gel microcolumn card centrifuge

Purpose of Equipment:

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

Quality Standard:

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

Capacity, Construction and Functioning

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

Lid:

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

Electrical characteristics:

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

Additional requirements:

- All equipment should specify qualifications for design, installation, operation and performance.
- Validation and calibration reports should have traceability to applicable national and international standards.
- Complete with comprehensive set of spare parts, and a suitable capacity voltage stabilizer and Suitable UPS with maintenance free batteries for minimum one-hour back-up for each equipment should be supplied with the system.
- Warranty for 2 years and CMC/AMC for Three years with spare parts availability.
- The make, rating, model, description, specifications, price quantity of each item should be furnished separately.
- Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- Performance, efficiency, other factors as applicable should be furnished.
- Demonstration and continued comprehensive training for lab staff and support services till familiarity with the system.
- Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.

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- Should provide a set of equipments for calibration (eg tachometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
- Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

6. Dielectric Tube Sealer, Handheld

Purpose of Equipment:

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

Quality Standard:

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

Operational requirements:

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

Additional requirements:

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

7. Refrigerated Blood Component Transport Box

Purpose of Equipment:

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

Quality Standard:

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

Operational requirements:

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

Additional requirements:

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

8. Cryo-Bath

Purpose:

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

Operational Requirements:

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

Quality standards

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

Additional requirements:

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

Annexure-C

**Inviting of sealed quotations for supply and installation of Equipments for
Microbiology Department of AIIMS, Jodhpur**

TECHNICAL BID

Name of Firm/Contractor/Supplier	
Complete Address & Telephone No.	
Name of Proprietor/Partner/Managing Director/Director.	
Phone & Mobile No.	
Name and address of service centre near by Jodhpur.	
Whether the firm is a registered firm Yes/No (attached copy of certificate)	
PAN No. (enclose the attested copy of PAN Card)	
Service Tax No. (enclose the attested copy of Service Tax Certificate)	
VAT No. (enclose the attested copy of VAT Certificate)	
Whether the firm has enclosed the Tender Fees as per Annexure 'A'	
Whether the firm has enclosed the Bank Draft/Pay Order/Banker's cheque as Earnest Money Deposit as per Annexure 'A'	
Whether the Firm/Agency has signed each and every page of Tender/NIT	
Please provide full list of consumables.	
Any other information, if necessary	

Authorized signatory of the bidder with seal.

Annexure-D

Financial Bid

(To be submitted on the letterhead of the company / firm separately for each item)

A.

S.No.	Item Description	Quantity	Rate	Vat/ Tax	Amount

B.

CMC Charges as applicable (excluding Service Tax)	
1 st Year	
2 nd Year	
3 rd Year	
4 th Year	
5 th Year	

1. I/We have gone through the terms & conditions as stipulated in the tender enquiry document and confirm to accept and abide the same.
2. No other charges would be payable by the Institute.

(Authorized signatory of the bidder with seal)