

State Health Society, NRHM
Directorate of Health Services
Campal, Panaji, Goa

RE-TENDER NOTICE

Tenders invited for purchase of Machinery and Equipment

Details are available with NRHM Secretariat, Family Welfare Bureau, DHS, Campal Panaji
and website www.dhsgoa.gov.in

Director of Health Services and
Vice Chair, SHS, Goa.

Price Rs.1000/-

No. DHS/ NRHM/Mach.Equip/2011-12/
State Health Society, Goa
National Rural Health Mission ,
Directorate of Health Services,
Campal, Panaji, Goa.

Date: /04/2011

TENDER DOCUMENT

TECHNICAL BID/FINANCIAL BID TO BE SENT SEPARATELY

- 1) Sealed Tenders are hereby invited by the Director of Health Services on behalf of the State Health Society, Goa NRHM up to 26/04/2011 at 1.00 p.m., for supply of Machinery & Equipment and other items, as in Annexure attached.
- 2) The Tender form with Terms and Conditions and list of the items, can be purchased from NRHM Secretariat, Family Welfare Bureau, Directorate of Health Services, Campal, Panaji, Goa on payment of Rs. 1000/- per set (Not refundable) during working hours upto 25/04/2011.
- 3) Sealed Tender should be super scribed "Tender for supply of Machinery & Equipment due on 26/04/2011. "Tender should either be deposited in the Tender Box kept in the office by Tendering Authority, or his authorized representative or sent by Registered Post A/D. The closing date will be up to 26 /04/2011 at 1.00 p.m. Late tenders (i.e. tenders received after specified closing time will not be considered). Quotation sent through courier should be so dispatched that it reaches this office before closing time and no explanation will be entertained for reasons, such as delay in flight etc. The Technical Bid will be opened on 26/04/2011 at 3.00 p.m. in the presence of the Tenderers or their authorized representative, if any, and members of the Purchase Committee, constituted for the purpose.
- 4) The Tender should be submitted as per the model attached in the Suppliers Letter Head and each sheet should carry the name of the Supplier and signature of the Tenderer.
- 5) The Tender should be neatly typed. Over writing / correction / erasures will not be considered.

- 6) The Offer should be firm. Conditional offer will not be considered.
- 7) The rate should be quoted F.O.R. Destination mentioned.
- 8) The rates quoted should remain valid for a period of six months from the date of opening of Tender offers.
- 9) The delivery of the goods should be made within a period of two weeks from the receipt of the firm order, failing which, the order will be treated as cancelled without further notice and Earnest Money Deposit and Security Deposit will be forfeited in the favour of the Government.
- 10) The supplier may insure the goods at his own cost to safeguard the delivery of such goods dispatched by him to consignee, as SHS (NRHM) will not be responsible for the damage or pilferage of goods during transit.
- 11) The Director of Health Services (NRHM), Goa reserves the right to accept the supply made by the supplier after the expiry of the stipulated delivery period in genuine cases.
- 12) All applications for the Refund of Earnest Money and the Security Deposits furnished with the Tender should be made only to the Director of Health Services, State Health Society, Goa (NRHM), Panaji-Goa with the No. and Date of the D.D. and Enquiry No.
- 13) Tenderers who do not agree with the above Terms and Conditions may not submit their Tenders.
- 14) If the Tenderer requires interpretation of any clause the decision of the Director of Health Services NRHM, Goa should be taken as final.
- 15) Tender forms are non transferable.
- 16) The nationality of the Tenderer should be specifically mentioned in the Tender.
- 17) A hands on working demonstration may be required before opening envelope no. 2 Unsatisfactory performance at demonstration will disqualify the tenderer. In exceptional cases the technical committee will have the power to waive the demonstration.

18) The Tenderer should install the equipment in the concerned department, give the demonstration and train the staff free of cost.

19) **Price:**

The Tenderer shall note the scope of work viz. supply, Installation & Commissioning of Machinery & Equipment, with delivery at site and shall furnish detailed price of the machines and accessories as per schedules attached (I to IV).

20) **The Tenderer**

Should note that the scope of the work comprises supply, installation & commissioning of the mentioned machinery and equipment, electrification, including installation of safety equipment (voltage stabilizer externally installed to protect the machine from fluctuations in the electric current).

21) **Completion Period**

The entire work of supply, Installation and Commissioning of the Generators ordered shall be completed in all respects within two weeks or earlier from the date of placement of the order, failing which, the successful tenderer will be liable to penalty of one fourth percent of the total value of the Order for each day of delay, subject to the maximum of 10% of the total value of the Order. The DHS/ NRHM reserves the right to make risk purchase from the next highest Tenderer in case the successful Tenderer fails to execute the order to the satisfaction of the DHS/ NRHM within the time limit specified in the order, in which case, the first successful tenderer shall be liable to liquidate damages, to compensate for the losses including price difference.

The DHS/ NRHM reserve the right to waive the penalty / risk purchase in genuine and deserving cases.

22) The Tenderer should state whether the equipment and its accessories offered is:

- a. Manufactured by them in India.
- b. Machine parts imported and assembled by them in India.
- c. In either case, the tenderer should furnish the following details:-
 1. Full address of the factory where the machine is manufactured or assembled.
 2. The description of the equipment installed for the purpose.

3. Name, Age & Qualifications and experience of the persons employed for the purpose.
 4. The documentary evidence by the way of license, registration certificate or any other document issued by a competent authority in state Government or Government of India authorizing the tenderer or the principal to manufacture or assemble the machine as the case may be.
 5. Name & Address of the hospital/Diagnostic centre where the quoted machine has been supplied
- 23) The tenderer shall indicate whether they have got facilitation for undertaking major repairs of the machines and if so the following details may be furnished.
- i) Full address of the place where repairs would be undertaken.
 - ii) Description of the machinery installed for the purpose.
 - iii) Name, age, qualification and experience of the persons employed for the purpose.
- 24) The tenderer shall note that the machinery remains in working condition throughout 24 hrs and accordingly quote their down time. They should indicate in details fully supported by facts and figures in what way and how they are going to keep the down time to the minimum.

25) GUARANTEE / WARRANTY PERIOD :

- i) The successful Tenderer shall guarantee the equipment which they will install at the location specified etc. for trouble free performance for the period of one (1) year from the date of commissioning satisfactorily. Any defects noticed during guarantee / warranty period shall be rectified free of costs including free replacement of parts having manufacturing defects and or faulty workmanship.
- ii) The Tenderer shall clearly indicate the number of visits both “Demand” (Emergency) and “Routine” for servicing / Check up which they will undertake for replacement of spares etc. free of cost during guarantee / warranty period.
- iii) The Tenderer shall certify that they will undertake / enter into a Service Contract for a periodical check up / servicing and Repairs of the equipment supplied, installed and commissioned by them for its full life span and also indicate the number of routine and on demand visits per year during service contract.

- iv) The tenderer shall indicate the terms conditions and also value of 10(Ten) years contract (after sales service) for a period commencing from the date of the expiry of the guarantee /warranty period.

26) UPDATING OF THE MACHINE:

The tenderer shall specify life span of the equipment which they quote and undertake to incorporate further development to update the equipment as an when required. The difference in price of the replaced parts will be paid by the Directorate at manufactures price.

27) UNDERTAKING FROM MANUFACTURES / PRINCIPALS:

The Tenderer shall furnish along with the tender an undertaking from their principal / manufacturer of the equipment that in the event their association / relations with their Principal / manufacture either by the way of sole agency / exclusive distributorship or their representative is terminated or discontinued for one reason or the other by the manufacture / principal or the tenderer themselves during the life span of the equipment, then they would take over / assume or make arrangement to take over / assume to the full satisfaction of the DHS/ NRHM, the commitments and other obligations which the Tenderers have made to the DHS/ NRHM.

28) SALES TAX, EXCISE DUTY AND OTHER LEVIES:

- i) The rates at which Sales tax, Excise duty etc, will be charged, should be specified clearly, failing which, no claim for sales tax etc will be entertained at a future date.
- ii) If reimbursement of the excise duty is intended as extra over quoted price, the Tenderer must specifically say so. In the absence of any such stipulation, it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
- iii) If a Tenderer chooses to quote a price inclusive of excise duty and does not confirm that the excise duty so included is firm and final, they should clearly indicate the rate of excise duty and quantum of excise duty included in the price. Failing to do so, may result in ignoring of such offers summarily.

- iv) If a Tenderer is exempted from payment of excise duty up to any value of supplies from them, they should clearly state that no excise duty would be charged by them up to the limit of exemption which they may have. If any concession is available in regard to rate / quantum of central excise duty, it should be brought out clearly. Stipulation like excise duty is present but not applicable but the same will be charged if it becomes leviable later on, will not be accepted unless in such cases it is clearly stated by a Tenderer that the excise duty will not be charged by them even if the same becomes applicable, later on. In respect of the tenderers who fail to comply with this requirement their quoted prices shall be loaded with the quantum of excise duty which is normally applicable on the time in question for the purpose of comparing their prices with other tenders.
- v) Any change in excise duty upward /downward as the result of the statutory variations in excise taking place within contract terms shall be allowed to the extent of actual quantum excise duty paid by the supplier. Similarly, incase of downward revision of excise duty the actual quantum of reduction of excise duty shall be reimbursed to the purchaser by supplier. All such adjustments shall include all relief's, exemptions, rebates, concessions etc; if any, obtained by the supplier.
- vi) The Tenderer should indicate the fact in offer, specifying whether central excise duty is included in price or not.
- vii) The contractor upon acceptance of Tender should get himself under Goa Value Added Tax Act, 2005 and Goa Tax on Entry of Goods Act, 2000 and true copies of the certificates of such valid registrations should be filed with this office before issue of work order, which will form part of the agreement.

29) INSURANCE:

This being Government institution equipment will not be insured by us. They have to be insured by the successful tenderer at their own cost to ensure reaching of the equipment dispatched by them at the destination.

30) **TERMS OF PAYMENT:**

In Indian Rupees / Cheque.

Director of Health Services
For State Health Society, Goa
NRHM

.....
(Signature of the Tenderer)

Full Name and Address of the person signing in block letters.

TECHNICAL BID ENVELOPE

This envelope should be clearly marked with Tender no.....
dtd..... (Technical Bid) containing the following documents :-

- 1) An Earnest Money Deposit should be sent along with the tender. The amount should be calculated @ two and half percent of the total value of the Offer/ Quotation. The deposit should be in the form of Bank Draft at State Bank of India or any other Scheduled Banks, in favour of State Health Society, Goa payable at Panaji. Any Deposit sent earlier for another tender will not be considered, even if the supplies in respect of the said deposit are completed. No cheques will be accepted. The firms which are registered with DGS& D should also send Earnest Money Deposit. If any exemption on this behalf is required, they should produce an attested certificate from DGS & D that they are registered for supply of the category of the items covered under the above tender opening and still continue to be registered with them till date. The successful Tenderer will also have to send the Security Deposit of two and half percent of the items being ordered in addition to two and half percent of the earnest money deposit sent along with the tender, which will be converted into Security Deposit for due performance of the contract / supply Order. This security will be refunded only after the completion of warranty period. If the successful tenderer does pay the security deposit and does not sign the contract within the time fixed by the DHS/ NRHM, order will be treated as cancelled and Earnest Money Deposit forfeited in favour of State Health Society, Goa, NRHM.
- 2) Small Scale Industrial Units registered under Directorate of Industries and Mines, Panaji, should produce a copy of registration for exemption from the deposit and they are entitled for price preference up to 15% . The National small Industries Cooperation Ltd, a Government of India undertaking is also entitled for the said benefits in the terms of the Government of India, Ministry of Industry (Department of Industrial Development) New Delhi letter No. SSI(I) – (25) (2) dated 31/01/78. All other SSI units will be treated at par with other firms.
- 3) The Stockist / Distributor who supplies the equipment Sets on behalf of the Manufacturer should furnish Authority letter for this particular Tender, to quote the items on their behalf.
- 4) After sales Services: The details of network of services centres in the State of Goa with complete address, phone no, fax no, e-mail ID, to be attached.

5) ISO/ISI/CE certificate : - Relevant certificates from ISO or ISI or CE for quality of the goods are essential and should be attached.

6) Information in the following format should be submitted for items quoted:

Model	Tender Specification as asked in the Tender form	Equivalent specifications quoted by the Tenderer, with the name and address of the manufacturer	Whether the Tender quoted by the Supplier is as per the Specifications asked for. Indicate clearly – Yes/ No	If the tender quoted is not as per – specification then variation / deviation should be clearly indicated.
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7) Name and Addresses of the Government or Private Institutions to whom such Generators have been supplied especially in Goa, Karnataka & Maharashtra State may be indicated.

8) The tenderer upon acceptance of the tender should get himself registered under Goa Value Added Tax Act 2005 and Goa Tax on Entry of Goods Act 2000 and true copies of certificate of such valid registration should be filed to this office.

Director of Health Services and
Vice Chair, SHS, Goa

FINANCIAL BID (ENVELOPE 2)

The second envelope should be clearly marked as Envelope no 2 along with Tender and should be quoted for as per the Schedules I to VI attached

1. Should contain any/all documents including any price.
2. The Price should be quoted in Indian Rupees only.
3. The rates for which, the Sales Tax /Excise duty etc will be charged should be specifically mentioned, failing which no claims for sales tax will be entertained at a future date.
4. The rates quoted should remain valid for minimum period of six months from the date of opening of Tender offers.
5. The Charges of AMC after the stipulated warranty period is over should be quoted showing yearly charges up to three years period. The AMC charges will be taken into consideration for grading the Tender offer.
6. Prices of the spare parts/consumables required for the machine to be quoted separately.

Director of Health Services and
Vice Chair, SHS, Goa.

ANNEXURE – B

(TENDERER SHOULD FURNISH SPECIFIC ANSWERS TO ALL THE QUESTIONS GIVEN BELOW : TENDERERS MAY PLEASE NOTE THAT IF THE ANSWERS FURNISHED ARE NOT CLEAR AND / OR EVASIVE, THE TENDER WILL BE LIABLE TO BE IGNORED)

1. Tender No Due opening on
2. Offer is open for acceptance till
3. Whether the items offered fully confirm to the technical particulars and specification / drawings, specified by the purchase in the schedule to tender, if not mention here details of deviations.
4. Brand of items offered.
5. Name and address of the manufacture:
6. Station of manufacture:
7. Please confirm that you have offered packing:
8. What is your permanent Income Tax Account Number : & TIN NO
9. a) Are you registered with DGS & D for the item quoted, if so, indicate whether there is any monitory limit of registration
b) In case you are registered with NSIC under Single point Registration Scheme for the item quoted, confirm whether you have attached a photocopy of the registration certificate indicating the items for which you are registered.
10.) a) If you are not registered either with NSIC or with DGS & D, please state whether you are registered with Directorate of Industries of State Government Concerned.
11. Please furnish your performance statement.

12. Business name and constitution of the firm. Is the firm registered under:
- i. The Indian Companies Act, 1956
 - ii. The Indian Partnership Act, 1932
(please give full names and address)
 - iii. Any Act, if not, who are the owners
(Please give full names and address)
13. Whether the tendering firm is /are:
- i. Manufacture
 - ii. Manufacture's authorized agents.
 - iii. Manufacture's stock of the stores tendered for.

N.B.: If manufactures, agents, please enclose with
Tender the copy of the Manufactures authorization

14. For partnership firms state whether they are registered or not registered under Indian Partnership Act, 1932. Should the answer to this question by a partnership firm be in the affirmative, please state further:-
- a) Whether by the partnership agreement, Authority to refer disputes concerning the Business of the partnership to arbitration has been conferred on the partner who has Signed the tender.
 - b) If the answer to (a) is in the negative, whether there is any general power of attorney executed by all the partners of the firm authorizing the partner who has signed the tender to refer dispute concerning business of the partnership to arbitration.
 - c) If the answer to either (a) or (b) is in the affirmative copy of the partnership agreement and the general power of attorney may be furnished along with the tender, where authority to refer disputes to arbitration has not been given to the partner signing the tender, the tenders must be signed by every partner of the firm.

(Signature of the Tenderer)

SCHEDULE -I

PRICE BID FORMAT FOR EQUIPMENT

SR.NO.	NAME OF THE EQUIPMENT ITS SPECIFICATION	QUANTITY	UNIT PRICE	TOTAL
1	2	3	4	5

SIGNATURE OF TENDERER

SCHEDULE –II

**PRICE BID FORMAT FOR ACCESSORIES BOTH ESSENTIAL AND
OPTIONAL (ITEMWISE)**

SR.NO.	ITS SPECIFICATION (ESSENTIAL & OPTINAL)	QUANTITY	UNIT PRICE	TOTAL
1	2	3	4	5

SIGNATURE OF TENDERER

SCHEDULE –III

**PRICE BID FORMAT FOR ESSENTIAL SPARES AND CONSUMABLES
FOR 2 YEARS (ITEM WISE)**

SR.NO.	NAME OF ITEMS & ITS SPECIFICATIONS	QUANTITY	UNIT PRICE	TOTAL
1	2	3	4	5

SIGNATURE OF TENDERER

SCHEDULE –IV

**PRICE BID FORMAT FOR RECOMMENDED SPARES AND
CONSUMABLES FOR TWO YEARS (ITEM WISE)**

SR.NO.	NAME OF THE EQUIPMENT / MACHINE ITS SPECIFICATIONS	QUANTITY	UNIT PRICE	TOTAL
1	2	3	4	5

SIGNATURE OF TENDERER

SCHEDULE -V

INSTALLATION AND COMMISSIONING CHARGES IF ANY (ITEMWISE)

SR.NO.	NAME OF THE EQUIPMENT INSTALLATION AND COMMISSIONING CHARGES IF ANY	QUANTITY	UNIT PRICE	TOTAL
1	2	3	4	5

SIGNATURE OF TENDERER

SCHEDULE -VI

ELECTRICAL, MECHANICAL WORKS ETC

SR.NO.	DESCRIPTION OF WORK	AMOUNT
1	2	3

N.B. For civil works the tenderer should quote lump sum. Works other than Civil the Tenderer shall quote item wise.

SIGNATURE OF TENDERER

ANNEXURE X

Technical Specification / Configuration of the equipment

1. Blood Bank Refrigerator Capacity 50-60 standard blood bags

1. Capacity : It should be able to accommodate 50-60 standard blood bags of each 450 ml capacity.
2. Temperature ratings : 2 °C to 6 °C with setting accuracy $\pm 1^{\circ}\text{C}$
3. Should have provision for air circulation
4. Digital temperature display and audio visual alarm system
5. Technical data : Input voltage 220/ 240 volts, 50 cycle, single phase, AC.
6. Weight : To be indicated by the bidder
7. Construction : Outside C.R. Sheet at least 1 mm thick and inside stainless steel of at least 22 G. It should have 2-3 rolled out type drawers of stainless steel of 22 G.
8. A line voltage corrector of appropriate rating will form part of standard configuration.
9. Warranty : The warranty for 2 years from the date of installation followed by comprehensive annual maintenance contract including spare parts for subsequent four years.

II. Binocular Microscope

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

1. Objective - Achromatic, spring loaded – 4 x (NA 0.1); 10x (NA 0.25); 40x (NA 0.35); 100x (NA 1.25) (Oil immersion) – one pair each.
2. Eye pieces – 5 x, 10 x – one pair each.
3. Inbuilt arrangement of illumination halogen lamps fitted directly under field lenses (Koehler's system).

4. Transformer and other electricals fitted inside the base with extra mirror attachment.
5. Condenser – Bright field Abbe’s NA1.25 and dark NA 1.25.
6. Nosepiece – Quadruple, revolving smooth ball bearing
7. Power supply – 220/ 240 volts, 50 cycles, single phase.
8. Inclination angle- to be declared by the bidder.
9. Spare Halogen Lamps- 6 Nos. to be supplied with each microscope
10. Technical Literature – The firm shall positively submit printed illustrated technical literature / leaflet indicating the model quoted by them. If quoted model is a modified version of their any standard product that also be indicated in the offer.
11. Warranty – The warranty and maintenance contract should be for a period of at least 3 years along with spare parts.

III. Cold Chain Boxes – As per UIP specification

(Insulated)

(8-15 bags for FRUs)

Size : To take 8-15 blood bags.

IV . Bench Top Centrifuge

1. Capacity : 16 -24 up to 15 ml.
2. Built in time : (1 minute \pm 5 seconds) and speed regulator, \pm 20 rpm with suitable speed indication and lid lock system.
3. RPM : 500 to 5000 rpm.
4. Power supply – 200 / 240 volts, single phase, 50 cycle plus minus 12 AC
5. A line voltage corrector of suitable rating should from part of the configuration as per IS:9815/89 or latest amended.
6. Installation, commissioning and trail run will be the responsibility of the supplier.

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

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

V. Blood Bag Tube Sealer Basic Model

VI. 1.5 tons A/C with stabilizer.

VII. Generator for blood bank exclusively (automatic) – 15 KVA 3 phase silent generator with automatic main failure panel with installation (formation earthpits, earthing, calculating, changeover termination, transporting and unloading, electric formation, testing and commissioning) . To run blood bank refrigerator, binocular microscope \, bench top centrifuge, blood bank tube sealer, 1.5 A/C with stabilizer.

DHS

Annexure Y

Schedule indicating quantity Requirement

Sr.No.		Requirements	Price per unit
1.	Blood Bank Refrigerator	2 nos.	
2.	Deep Freezer	1 nos.	
3.	Insulated Carrier Boxes with Ice Packs	2 nos.	
4.	Microscope	2 nos.	
5.	Bench Top Centrifuge	2 nos.	
6.	Backup generator	1 nos.	
7.	1.5 A/C with stabilizer	1 nos.	
8.	Blood Bank Tube sealer	1 nos.	

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ANNEXURE

TECHNICAL SPECIFICATIONS OF THE ITEMS

Sr No	Item	Detailed Technical Specifications		Quantity Required
1.	Deep Freezer	Type	Vertical / Horizontal	3 Nos.
		Temperature	-20°C to -40°C	
		Temp Control	Microprocessor based	
		Chart recorder	7 days chart recorder	
		Method of recording	Ink pen on paper	
		Display	LCD	
		Internal dimensions	400 x 400 x 550 min	
		Internal Volume	170 litres min - 265 lts	
		Internal body material	SS 304 Grade min	
		External body material	Powder Coated CRCA Steel	
		Number of drawers	2/3 non corrosive	
		Power failure alarm	Audio Visual alarm	
		Voltage Stabiliser	External type (3KVA or more)	
		Wheels	Front and back Castor type	
		Manufacturing Standard	ISO 9001-2000	
2.	Incubator	Type	Double walled unit	
		Inner chamber material	SS 304 Grade	
		External body material	Powder coated	
		Temp range	Upto 70°C	
		Control accuracy	± 0.5°C	
		Temp control	Microprocessor based	
		Volume	≥ 90 litres	
		No of baskets	2 minimum	
		Display	LED	
		Controller	Digital temp controller cum indicator	
3.	Centrifuge	Type	Medium capacity Bench – top	
		Max speed	5000 rpm	
		Induction motor	Brushless induction motor	
		Rotor	Angle Rotor for 12 x 15 ml	
		Adaptor	For 12 x 75 mm tubes	
		Timer	1-99 mins & Hold position	
4.	Reagent Storage Refrigerator	Reagent Storage Refrigerator	≥ 300 litre capacity, double door with 1.5 KVA Stabilizer	

		<p>Double walled with inner chamber made of S.S. and outer of thick PCR sheet fully enamel painted. Temperature range from ambient to -80 °c is achieved by hermetically sealed compressor. The gap between the inner and outer wall is filled with high grade mineral glass wool to avoid thermal loss. Body is mounted on a sturdy angle iron frame and is mounted on caster wheels. Unit is fitted with solid state Digital temperature indicator-cum controller. G Horizontal chest type models are supplied in as single compartment. Whereas vertical models supplied with three stainless steel stering shelves.</p> <p>Capacity : 4 cuft Chest type : 53000 Vertical : 66000 Optional accessories: Automatic voltage Stabilizers 4 KVA</p>	
2.	Refrigerator	310 L capacity, 2 doors along with voltage stabilizer.1.5KV	3 Nos.

3.	INCUBATOR BACTERIOLOGICAL (Laboratory type)	Double walled. Outside made of G.I. Finished with powder coating. The gap between two walls filled with glass wool. Electrically operated on 230VAC Temp Range 37 °c to 60 °c (+1 °c)controlled by thermostat. Supplied with G.I.wire mesh. Inner chamber size 60x60x60(cms), Stainless steel chamber with ribs for adjusting perforated shelves to	3 Nos.
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		<p>convenient height and having the following</p> <p>A. Forced air circulation fan</p> <p>B. Digital Temp indicator cum controller.</p> <p>C. Microprocessor Based Digital Temp. Controller.</p> <p>Microprocessor based programmable Timer.</p>	
4.	Centrifuge	<p>Stepless speed regulated with Zess start switch 0-120 minutes timer, digital meter, cut out gauge, etc.</p> <p>Maximum speed 20000 RPM</p> <p>Maximum capacity 400 ml</p> <p>42mm x 460 mm x 465 mm</p> <p>230 volts</p>	3 Nos.

Director of Health Services and
Vice Chair , SHS Goa.

ANNEXURE

TECHNICAL SPECIFICATIONS OF THE ITEMS

Sr No	Item	Detailed Technical Specifications		Quantity Required
1.	Reagent Storage Refrigerator	Reagent Storage Refrigerator	≥ 300 litre capacity, double door with 1.5 KVA Stabilizer	3 nos
2.	Centrifuge	Type	Medium capacity Bench – top	3 nos
		Max speed	5000 rpm	
		Induction motor	Brushless induction motor	
		Rotor	Angle Rotor for 12 x 15 ml	
		Adaptor	For 12 x 75 mm tubes	
		Timer	1-99 mins & Hold position	
3.	Deep Freezer	Type	Vertical / Horizontal	3 nos
		Temperature	-20°C to -40°C	
		Temp Control	Microprocessor based	
		Chart recorder	7 days chart recorder	
		Method of recording	Ink pen on paper	
		Display	LCD	
		Internal dimensions	400 x 400 x 550 min	
		Internal Volume	170 litres min - 265 lts	
		Internal body material	SS 304 Grade min	
		External body material	Powder Coated CRCA Steel	
		Number of drawers	2/3 non corrosive	
		Power failure alarm	Audio Visual alarm	
		Voltage Stabiliser	External type (3KVA or more)	
		Wheels	Front and back Castor type	
Manufacturing Standard	ISO 9001-2000			
4.	Incubator	Type	Double walled unit	3 nos
		Inner chamber material	SS 304 Grade	
		External body material	Powder coated	
		Temp range	Upto 70°C	
		Control accuracy	± 0.5°C	
		Temp control	Microprocessor based	
		Volume	≥ 90 litres	
		No of baskets	2 minimum	
		Display	LED	
		Controller	Digital temp controller cum indicator	
5.	Online UPS (Backup)	Type	Pure Sine Wave type / online UPS	3 nos
		Capacity	2 KVA	