

## **SELCO Foundation – Call for Vendors**

## The Supply and Installation of Medical Equipments SELCO Foundation – Procurement Officer

690, 15<sup>th</sup> Cross Rd, Jeewan Griha Colony, 2<sup>nd</sup> Phase, J P Nagar, Bengaluru, Karnataka 560078 procurement@selcofoundation.org

SELCO Foundation hereby invites bids for the Supply and Installation of Medical Equipment for public health centres in the state of Meghalaya, Manipur and Nagaland during the year 2022-2023.

The Tender Estimated value is Approximately ₹4.25 Crores (Rupees Four Crores and Twenty-Five Lakhs only)

The detailed tender document which can be downloaded from 17-06-2022. Bids, as per the terms and conditions should be submitted to the undersigned, at the abovementioned address by 5 pm on or before 02-07-2022.

**Chief Executive Officer – SELCO Foundation** 



# **SELCO FOUNDATION**

TENDER NOTIFICATION

FOR

## THE SUPPLY AND INSTALLATION OF ENERGY EFFICIENT MEDICAL EQUIPMENT IN THE PUBLIC HEALTH CENTRES IN THE STATE OF MEGHALAYA, MANIPUR AND NAGALAND

## **TENDER DOCUMENT**

Address for Communication

SELCO Foundation #690, 15<sup>th</sup> Cross Rd, J P Nagar – 2<sup>nd</sup> Phase Bangalore, Karnataka – 560078 Telephone: 080-26493145 e-mail: procurement@selcofoundation.or

## DISCLAIMER

#### NIT No: 03/2022-23

This tender by SELCO Foundation is for selection of vendors for the work of supply and installation of Energy Efficient Medical Equipment in the public health centres of Meghalaya, Manipur and Nagaland state.

#### NOTE:

- 1. Though adequate care has been taken while preparing the Notice Inviting Tender (NIT) document, the Organisations shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Organisations within seven (7) days from the date of notification of Request for solution (RfS)/ Issue of the RfS documents, it shall be considered that the RfS document is complete in all respects and has been received by the Organisations.
- 2. SELCO Foundation has the right to award the works under this tender to single or multiple vendors and in multiple tranches based on the lowest quote ascertained through this tender.
- 3. The installation of energy efficient medical equipment at the said Health centres is subject to receiving the approval for installation from the local health authorities.
- 4. SELCO Foundation reserves the right to cancel/ withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision
- 5. SELCO Foundation reserves the right to modify, amend or supplement this document.
- 6. While this RfS has been prepared in good faith, neither SELCO Foundation nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of the information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RfS, even if any loss or damage is caused by any act or omission on their part..

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## **SELCO FOUNDATION**

#### #690 15th Cross J P Nagar 2nd Phase Bangalore - 560078 Telephone: 080-26493145 e-mail: procurement@selcofoundation.org

Medical Equipment Tender: 03/2022-2023 Dated: 17-06-2022

## NOTICE INVITATION TENDER

**Chief Executive Officer of SELCO Foundation, Karnataka State, India** hereby invites bids for supply and installation of Energy Efficient Medical Equipment in the public health centres in the state of Meghalaya, Manipur and Nagaland.

| 1. | Tender Ref No.   | 03/2022-2023                   |
|----|--|--------------------------------|
| 2. | Last date & time for the bid submission                                    | 02-07-2022, 5 PM               |
| 3. | Opening date of first cover (technical bid) & second cover (financial bid) | 04-07-2022, 5 PM               |
| 4. | Venue of acceptance and opening of tenders.                                | SELCO Foundation,<br>Bangalore |

Interested and eligible Organisations may furnish the Technical & Commercial Bids for supply and installation of Energy Efficient Medical Equipment to the below-mentioned address:

Procurement Officer - Tender NO 03/2022-2023 #690 15th Cross J P Nagar 2nd Phase Bangalore - 560078 Telephone: 080-26493145 e-mail: procurement@selcofoundation.org

Any further information or clarification may obtain either in person or through phone during office hours from the office of the SELCO Foundation Ph: 080-2649 3145 or through the email – procurement@selcofoundation.org

sd/-Chief Executive Officer SELCO Foundation

## **INSTRUCTION TO ORGANISATION**

#### **Eligibility to Organisations:**

- I. The organization should be in operation for the last 3 years in the field of supply, installation and maintenance of medical equipment.
- II. The organisation should submit the following document along with the Tender.

a. Registration Certificate issued by the competent authority.

b. Valid manufacturing license issued by the competent authority or authorized Dealer Certificate whichever is applicable.

c. List of the Authorized Distributor or Representative in the North East Region/Eastern Region who shall conduct the business responsibility of the Manufacturer (if tender submitted by the manufacturer).

d. Company Profile relevant to the item supply along with Product literature/Specifications.

e. Valid ISO/FDA / CE / relevant certificate of the Original Equipment Manufacturer.

f. (i) At least 3 similar contracts completed during the last 5 years (ii) Should have manufactured or marketed the specific goods covered in the bid documents for at least 3 years. (iv) The Organisations shall provide proof of experience with & knowledge of modes of packaging distribution and transportation of such items under monsoon conditions.

h. Up to date Professional Tax/GST/Income Tax/GST Clearance certificate.

- III. Organisation should submit the valid PAN card.
- IV. The organisation should submit the self-declaration certificate to declare that the organization is not blacklisted.
- V. The organisation should be able to provide excellent service. It is expected that complaints will be attended to within 72 hrs of lodging. The company should provide a list of service centres or contact points in the state of Meghalaya, Manipur and Nagaland
- VI. Declaration by the organisation that they will be able to execute the order before 31<sup>st</sup>
   October 2022

VII. The organisation should submit the documents to establish that the organisation has implemented projects of cumulative worth 2 Crore or more in the last three years.

### Cost of bidding:

The Organisations shall bear all costs associated with the preparation and submission of Bid to the Chief Executive Officer, SELCO Foundation hereinafter referred to as "the Purchaser" will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

#### The technical proposal shall contain:

- I. Particulars of the Firm as per Annexure 3
- II. Checklist of Documents to be submitted in First Envelope as per Annexure 4
- III. The Organisations has to submit an acceptance letter of guarantee for 5 years for the total performance of the medical equipment
- IV. The Organisations has to provide the nearest local service centre details, preferably the following locations (Shillong, Imphal, Dimapur/Kohima and Guwahati)
- V. The Organisations has to sign all the pages of the documents as a token of acceptance of all terms and conditions.

#### The financial bid shall contain:

The rate quoted for supply and installation. The rate quoted should include all taxes levied by the State & Central Govt. Packing, and forwarding charges including transportation, loading & unloading and installation.

#### Price schedule:

The Organisations shall complete the price schedule as per **Annexure 6** - **PRICE SCHEDULE** furnished in the Bidding Documents, indicating the total cost towards supply and installation. The SELCO Foundation will not pay any extra charges over and above the rate quoted by the Organisations.

#### **Fixed price:**

Prices quoted by the Organisations are firm and final and binding and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as nonresponsive and rejected. The quotation will remain valid for a period of 12 months from the date of opening the second envelope (financial bid).

#### Period of Validity of Bids:

Bids shall remain valid for a period of 12 months from the date of opening of the Second Envelope (Financial Bid). A Bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

#### Format and Signing of Bid:

The Organisations **shall give a set of hard copies of all the documents** on the sealed cover. The Bids could be submitted by hand or post/courier to the below-mentioned address Procurement Officer - Tender No 03/2022-2023 SELCO Foundation, #690, 15th Cross, 2nd Phase, JP Nagar, Bengaluru- 78, Email id: procurement@selcofoundation.org

#### Deadline for Submission of Bids:

Bids must be received by the Purchaser not later than the time and date specified in the Invitation for Bids. The Purchaser may, at its discretion, extend this deadline for submission of the bid by amending the bid Documents in which case all rights and obligations of the Purchaser and Organisations previously subject to the deadline will thereafter be subject to the deadline as extended.

#### **Tender Opening:**

The Technical & Financial bids will be opened on the same day itself or later separately. The financial bids (Second Cover), of only technically qualified Organisations, will be opened. The Organisations Names, Bid Modifications, or Withdrawals, bid prices, Discounts and the presence or absence of the requisite details as the Purchaser, at its discretion, may consider appropriate will be recorded by the Purchasing Committee of SECLO Foundation. No Bid shall be rejected at bid opening, except for late bids, which will be rejected.

## **Clarification of Bids:**

During evaluation of Bids, the purchaser may, at its discretion, ask the Organisations for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substances of the Bid shall be sought, offered or permitted

### **Preliminary Examination:**

The purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

Arithmetical errors will be rectified on the following basis. If there is a discrepancy between words and figures, the lowest of the two shall prevail and the bid shall stand corrected to that effect. The purchaser may waive any minor infirmity or non- conformity or irregularity in a bid, which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Organisations.

### Acceptance or rejection of bids:

- **CEO**, SELCO Foundation reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability or any obligation to inform the affected Organisations or Organisations of the grounds for the said action.
- Any Bid with incomplete information is liable for rejection.

### **Terms and Conditions of the Contract**

1. **Duration**: The agreement will be valid for 5 years (60 months) from the date of completion of the installation and commissioning of the Project. The maintenance and

service will commence from the date of completion of installation of the project and will be effective for a period of 5 (five) years. The end date of this agreement will be sixty (60) months after the date mentioned in supply, installation and commissioning reports that will be subsequently annexed to this agreement and will form an integral part of this agreement.

- 2. **Prices:** Prices provided by the Contractor, and accepted by the Foundation shall be considered as final and firm and will not be subject to escalation due to any variations in the prices of materials, labour and/or any other reasons which may occur while the order is being carried out (except any increase in costs due to a change in applicable taxes or other such regulations which shall be passed on to the Foundation). The Project Costs are inclusive of taxes, transport, installation and 5 years maintenance service which will include minimum two visits to the sites per year. The costs mentioned here do not include replacement of spares while servicing.
- 3. Payment Terms: The above cost will be paid in 4 installments. The 1st installment of 30% will be paid along with the WO the 2nd installment of 20% will be released after the delivery of 50% of the materials at the Health Centers/ local godown and submission of material delivery note duly signed by the Health Centre authority /Foundation representative; the 3rd installment of 20% will be released after the delivery of 100% of the materials at the Health Centers/local godown and submission of material delivery note duly signed by the Health Centre authority /Foundation representative; and the 4th installment of 30% will be on receipt of bank guarantee, completion certificate and hand over letter from the Health Centre authority and certification of satisfactory working condition of the medical equipment by Heath Centre authority and Foundation representative. Any taxes and charges such as TDS that will have to be deducted from the WO amount as per the rules in force at the time of release of payment will be done by the Foundation and the Contractor will be paid only the net amount. The Contractor should submit the progress report to the Associate Director – Scale Programs, SELCO Foundation who will approve the invoice for payments based on the project performance and completion. The Contractor shall furnish a bank guarantee valid for the term of this Agreement, i.e., 5 years for a total AMC cost or 5% of the project cost whichever is higher, before the release of 4th installment towards the service and maintenance of medical equipment.
- 4. **Insurance:** Insurance shall be arranged by the Contractor till the products are supplied to the end point and installation is completed. Arrangement of transport, warehouse for stocking and safekeeping of the material till the handover is within the contractor's scope of work and Foundation will not be responsible for any missing item or damage that is incurred before the system is handed over to the respective Health centre representative. The contractor will ensure insurance coverage and damage to service staff by way of any accidents during the course of this engagement with the Foundation for providing the services covered under this agreement.

- 5. Inspection, Checking, Testing: The products covered by the Work Order shall be subject to inspection within a reasonable time after arrival at the place of delivery. Besides, the Foundation is also entitled to do a preliminary inspection at the manufacturing site of the Contractor by giving prior notice. The Contractor shall provide free access to the Foundation during normal working hours at Contractor's or its sub-Contractor's works and place at their disposal, internal test reports, material/component test certificates, approved drawings. Even if inspections and tests are fully carried out, Contractor shall not be absolved to any degree from their responsibilities to ensure that products supplied, comply strictly with requirements of the Work Order at the time of delivery, inspection on arrival at site, installation and commissioning and warranty/guarantee period. In any case, the products supplied must be strictly in accordance with the Work Order failing which the Foundation shall have the right to reject goods and hold the Contractor liable for non-performance of contract.
- 6. **Packing:** The products shall be dispatched by the Contractor adequately packed in appropriate packing which should be suitable for inland carriage and ensure complete safety of goods from any kind of damage during transport and subsequent storage at the health centre.
- 7. Assembly, Installation, after sales service and training: The Contractor shall be fully responsible for the assembly of the product at the destination site and completeness of the Project as per the Work Order. The Contractor shall provide necessary "After Sales Service" at site for a period of 5 years as agreed upon by the Parties. Any Complaints on the system will be resolved within 5 to 10 working days of reporting. Installation will be done as per the standards agreed upon. Active contact number will be displayed at the site for registering any complaints on the performance of the product. The Contractor will submit a plan of servicing to the foundation before the release of final payment. The contractor will arrange a minimum of two (2) visits per year to the site for maintenance for a period of five (5) years and submit a report to the Foundation on the servicing with a functioning status of each site.
- 8. **Delivery terms**: The delivery of the said products will be to the Health Sub centres as per the list provided by the Foundation in writing and agreed by Contractor. The time and delivery date as agreed between the Foundation and Contractor shall be the essence of the contract. No variation shall be permitted, except with prior authorization in writing from the Foundation.

Late delivery (LD) clause with corresponding penalty clause will be applicable at 2% per week beyond a period of one month. Delivery Schedule and terms will be as per the WO.

9. **Risk Purchase on Default:** In case of default on the part of the Contractor to supply all the products or part thereof covered by the contract as per the standard/specifications within the contractual delivery period stipulated in the contract, the Foundation shall have the right to purchase such products or other of similar description at the risk and

cost of the Contractor. Contractor shall be liable to pay the cost of such purchase products and also the penalty under clause 8 above for resultant delay.

- 10. **Delay due to force majeure :** If any time during the continuance of the Agreement the performance in whole or part by either party on any obligation under the contract shall be prevented or delayed by reason of any war, hostility, explosions, epidemics, quarantine restrictions, or other acts of God, then provided, notice of the happening of any such event is given by either party to the other within fifteen (15) days from the date of occurrence thereof, neither party shall be reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. Force Majeure conditions shall not affect the payment obligations of the Foundation which shall be made as per clause 3 of this Agreement.
- 11. **Rejection, Removal of Rejected Goods and Replacement:** In case the testing and inspection at any stage by inspectors reveal that the product, material and workmanship do not comply with the agreed specifications and requirements, the same shall be removed by the Contractor at his/its own expenses and risk within 15 to 20 working days of information of rejection by the Foundation. The Foundation shall be at liberty to dispose of such rejected goods in such manner as they may think appropriate, in the event the Contractor fails to remove the rejected goods within the period as aforesaid. All expenses incurred by the Foundation for such disposal shall be to the account of the Contractor. The freight paid by the Contractor to the inward journey of the rejected material shall be reimbursed by the Contractor. The Contractor to the roundation before the rejected materials are removed by the Contractor. The Contractor will have to proceed with the replacement of that product or part of product without claiming any extra payment if so, required by the Foundation, within 2 weeks of notification.
- 12. Warranty: The Contractor shall warrant that every material/product to be supplied shall be in accordance with the specifications agreed upon by both parties. The items should be consistent with the established, recognized or stipulated standards for material of the type usually used for the purpose and in full conformity with the specifications and drawings or samples, if any, outlined by the Foundation in the tender documents and agreed upon by the Contractor by the virtue of acceptance of the WO by the contractor. Products offered must withstand normal operating conditions. The warranty shall continue not withstanding inspection, payment, acceptance of tendered product and shall expire except in respect of complaints notified to Contractor prior to such date within 60 months from the date of commissioning. The warrant will be according to manufacturer's warranty policies.
- 13. **Performance Guarantee**: The Contractor shall guarantee that any/all material used in execution of the Work Order shall be in strict compliance with characteristics requirements and specifications agreed upon. The Contractor shall guarantee that all

material and products shall be repaired or replaced, as the case may be, at his own expense in case the same have been found to be defective in respect of material, workmanship for smooth and rated operation within a period of 60 months from the date of commissioning. Acceptance by the Foundation of any product and materials or their replacement will not relieve the Contractor of his/its responsibility concerning the above guarantee. In case of any legal case against the Foundation by any ultimate user of the product with respect to the performance of the system (during the warranty period), the Contractor should support the Foundation with required and relevant technical testing and reports supporting the performance of the product and to defend that the non-performance of the product is not because of any manufacturing defect.

The warranty replacements during the first year will be made within 15 to 20 working days from the date of receipt of the Complaint at the site.

14. **Indemnity:** The Contractor shall at all times indemnify the Foundation against all claims which may be made in respect of stores for infringement of any right protected by patent, registration of design or trade mark. Provided always that in the event of any claim in respect of alleged breach of patent, registered designs or trade mark being made against the Foundation, the Foundation shall notify the Contractor of the same and the Contractor shall at his own expense either settle any such dispute or conduct any litigation that may arise there from.

#### 3. Other Clauses:

- a. The Contractor will treat all information given under this agreement as information with proprietary value and will not disclose the same to competitors or any outsiders. Contractor will not at any time, except under legal process, divulge any trade or business secret relating to the Foundation or any customer or agent of the Foundation, which may become known by virtue of the position as Contractor, save in so far as such disclosure shall be necessary in the interest and for the benefit of the said Foundation and will be true and faithful to the Foundation in all dealings and transactions whatsoever relating to the said Project.
- b. Either party may terminate this contract forthwith in the event of any fraud or misconduct on part of the other party; the Foundation may terminate this contract in the event of delay in supply/ installation of the products by the Contractor beyond 15 days from what is stipulated in the WO or the Contractor may terminate in the event of 3 consecutive delays of 15 days from what is agreed to between the parties in making payment to the Contractor. Any notice to be given hereunder shall be sufficiently given to the other party if forwarded by registered post or by Courier Service to the registered address of the other party. Upon the termination of this contract, the Contractor shall refund the entire amount paid by the Foundation. The

Contractor shall deliver all deeds, documents and paper in his possession relating to the business of the Foundation.

- c. Both the Foundation and the Contractor fully and freely intend to create an independent Contractor relationship under this Agreement. Nothing herein shall be deemed to establish a partnership, joint venture, association or employment relationship between the parties. Both parties agree that the Contractor has sole and exclusive control over the manner and means employed in performing their activities under this Agreement in matters that are not specifically discussed and agreed upon between the parties to this Agreement.
- d. The Foundation represents and warrants that (a) it has the full right and authority to enter into this Agreement, and no consent or authorization not obtained prior to the Effective Date is necessary to be obtained, (b) the Foundation is a charitable trust registered under the laws of India and is authorized to do business to the extent necessary to fulfill its obligations hereunder.
- e. Except as specifically set forth in this Agreement, neither party makes any representation or warranty of any kind, express or implied, including without limitation any warranty of merchantability, any warranty of fitness for a particular purpose or use, any warranty of non-infringement, or any other statutory warranty. Each party expressly disclaims any and all implied warranties.
- f. This agreement shall not be amended or renewed, except in writing mutually agreed by both parties. The project shall be fully completed as agreed in the above-mentioned terms and conditions.
- g. Notwithstanding anything else to the contrary: -
  - (1) Contractor's total aggregate liability under this Agreement shall not in any case exceed 100% of the value of this Agreement;
  - (2) neither party shall be liable for any indirect, consequential, special, remote, exemplary, punitive or speculative losses or any losses or damages for loss of profits or business even if such party has been advised of the possibility of such costs or damages; and
  - (3) the Contractor shall have no liability for matters outside of its own scope of works.
- h. This Agreement along with the WO contains the entire terms of agreement between the Parties and supersedes any previous oral or written understandings, commitments or agreements pertaining to the subject matter. This Agreement may not be amended, assigned nor any obligation waived, except by in writing signed by both Parties.
- i. In the event that any or any part of the provisions contained in this Agreement is determined to be invalid, unlawful or unenforceable to any extent, such provision shall

be severed from the remaining provisions which shall continue to be valid and enforceable to the fullest extent permitted by law.

- **j.** The Foundation shall not either directly or indirectly assign, transfer, charge or in any manner make, offer or purport to assign, transfer or charge this Agreement or any rights herein or any part thereof without the previous consent in writing of the Contractor.
- K. Governing Law and Arbitration: The Parties agree that this Agreement shall be governed and construed in accordance with the laws of India. The Parties hereto agree that they shall use all reasonable efforts to resolve between themselves any disputes, controversy or claim arising out of or relating to this Agreement. If the Parties fail to resolve the matter within the 30 days of occurrence of any despite, such dispute, controversy or claim shall be settled by binding arbitration under the Indian Arbitration and Conciliation Act, 1996. There shall be one arbitrator mutually appointed by the Parties. The place of arbitration shall be Bangalore and the arbitration proceedings shall be in English. The courts at Bangalore alone shall have the jurisdiction to entertain and, or try any dispute arising out of or in connection with or in relation to the terms of this Agreement.

#### ANNEXURE 1: TECHNICAL SPECIFICATIONS

#### 1. Radiant Warmer

|                 | Specifications up to: 2000 mm (Height) X 900mm (Width) X 1100 mm         |
|-----------------|--|
|                 | (Length).  |
|                 | It should be microcontroller based radiant warmer with manual and        |
|                 | servo options.   |
|                 | It should have a facility to display skin set, skin observed temperature |
|                 | in degree C and heat power separately.                                   |
|                 | Should have user friendly touch panel control.                           |
|                 | It should have ceramic or quartz infrared or calrod heater.              |
| Technical       | It should have audio-visual alarm facility for overheating beyond set    |
| characteristics | temperature range.   |
|                 | It should have alarm facility for patient temperature less than or       |
|                 | greater than the required temperature i.e. above or below the set        |
|                 | range. Machine should sense the skin probe failure and cut off the       |
|                 | heater.  |
|                 | Warmer head should be rotatable in different direction, so as to allow   |
|                 | taking X-ray.  |
|                 | It should have alarm for probe failure, power failure, system failure    |
|                 | and heater failure.  |
| 1               |  |

| Observation light of 90 to 100foot candles or 1000 Lux (colour           |
|--|
| temperature range 3700K to 5100K) should be provided for inspection.     |
| The desired temperature range from 25 to 40 degree C and settable        |
| temperature can be from 32 to 38°C.                                      |
| It should have separate bassinet trolley, bed should be tiltable and     |
| have provision for x-ray cassette holder, Mattress foam density should   |
| be minimum 25 kg/cm3, transparent collapsible side walls easily          |
| detachable for cleaning. Mattress size should be minimum 20"X30".        |
| Should have a Feather Touch operation with large digital display and     |
| comprehensive alarms. Control Panel should be liquid proof and allow     |
| easy and hygienic disinfection.  |
| Manual Mode can adjust Heater Output 10 -100 %, with 10%                 |
| increment, an auditory and visual alarm shall be given at least every 15 |
| min.   |
| In manual mode, heater cut off / switch off, if the maximum irradiance   |
| at any point of the mattress area exceeds a total irradiance level of 10 |
| mW/ cm2 (between 10 to 30 minutes).                                      |
| Bed should be about 80 - 100 cms from the Floor and 80-90cms from        |
| the heat source.   |
| Should have lockable castor wheels.                                      |
| Green indicator light shall be provided to indicate that warmer is ready |
| for normal use.  |
| Markings on the bassinet and X-Ray cassette holder is mandatory to       |
| enable proper positioning of the baby while doing the X-Ray. At          |
| present we do not have this feature, but can be incorporated)            |
| The size of the drop-down sides should be such that it is 5" above the   |
| mattress surface and should be at least 6mm thick; clear and             |
| transparent.   |
| If there is more than 60% heater output for 10 minutes it should cut     |
| off with alarm.  |
| For the purpose of cable management there should be at least two         |
| number of tubing ports (edges covered by silicon rings) on the side      |
| walls. The height of the side walls should be minimum 110mm over the     |
| mattress.  |
| X-Ray cassette tray should be at least 750X350mm and should adopt        |
| up to 20mm thick X-Ray cassette.   |
| The bay bed should be crevice free for ease of cleaning, infection       |
| control.   |
| i ne mattress used should be of biocompatible material.                  |
| Skin temperature probe should be small in size not more than 10mm        |
| diameter and 3-4mm thick to fix the probe firmly on the infant. Baby     |

|             | contact material should be biocompatible as per ISO 10993 standard     |  |
|-------------|--|--|
|             | requirement. It should be insulated on one side and have well          |  |
|             | conducting non-rusting, non-reacting metallic surface on the other     |  |
|             | side. Probe wire should be pliable, thin and soft. The attachment site |  |
|             | of the probe with the wire should also be pliable and non-stiff.       |  |
| Dimensions  | Specifications up to: 2000 mm (Height) X 900mm (Width) X 1100 mm       |  |
| (metric)    | (Length).  |  |
| Power       | Maximum 650 Watt   |  |
| consumption |  |  |
| Warranty    | 1 year   |  |

## 2. Suction Apparatus

|                  | 0-700 mm Hg ± 10 regulable, flutter free vacuum control knob,         |  |
|------------------|---|--|
|                  | 25ltrs/min, tight fitting jar cap, vacuum capacity; 18 litres/min,    |  |
|                  | maximum depression: -75kPa (-563mmHg).                                |  |
| Tachnical        | Wide mouthed 2 x 2 Ltrs. (Polycarbonate) with self-sealing bungs and  |  |
| abarastaristics  | mechanical over flow safety device.                                   |  |
| Characteristics  | Should have a noiseless Operation                                     |  |
|                  | Should provide filter to absorb moisture and water particles entering |  |
|                  | into the rotor.   |  |
|                  | Should be well-designed, cabinet made of Stainless Steel 304 Grade.   |  |
| Dimensions       | Max: 42 x 20 x 68 cmc   |  |
| (metric)         |   |  |
| Weight (lbs, kg) | Max: 27Kg   |  |
| Power            | 200 Wett er Belew   |  |
| consumption      | 200 Watt of Below   |  |
| Certificates     | Should be FDA / CE approved product                                   |  |
| Warranty         | 1 Year  |  |
|                  |   |  |

## 3. Examination Light /Spotlight (Labour Room)

| Technical<br>characteristics | 1.Colour temperature to be between 3,000 and 5,000 K; shadowless.   |
|------------------------------|---|
|                              | 2.Maximum illumination level at 1m distance to be between 40,000-   |
|                              | 60,000 lux.   |
|                              | 3. Colour rendering index to be 93 or greater   |
|                              | 4. Minimum bulb life required 1,000 hours (incandescent type) or  |
|                              | 20,000 hrs (LED type).  |
|                              | 5. Field diameter required    16cm, field depth required     50cm.  |
|                              | 6. Focal length required     65 cm.   |
|                              | 7. Heat to light ratio to be $\leq 6 \text{ mW/m2}$ . lx.   |
| Technical<br>characteristics | <ul> <li>2.Maximum illumination level at 1m distance to be between 40,000-60,000 lux.</li> <li>3. Colour rendering index to be 93 or greater</li> <li>4. Minimum bulb life required 1,000 hours (incandescent type) or</li> <li>20,000 hrs (LED type).</li> <li>5. Field diameter required    16cm, field depth required     50cm.</li> <li>6. Focal length required     65 cm.</li> <li>7. Heat to light ratio to be ≤ 6 mW/m2. lx.</li> </ul> |

| 8. Brightness control to allow full adjustment from zero to maximum  |
|--|
| illumination.  |
| 9. Bulb voltage and type to be clearly labelled on external body.    |
| 10. Replacement bulbs to be locally available.                       |
| 11. Front panel to include power switch and battery state indicator. |
| 12. Automatic switching to battery power in the event of power       |
| failure.   |
| 13. Should maintain cool temp and the heat disbursed through a       |
| exhaust fan.   |
| 30 Watt or below   |
|  |
| 1 Year   |
|  |

## 4. Microscope

|                 | 1.Body-Single mould sturdy stand   |
|-----------------|--|
|                 | 2.Inclined Binocular body 30 °, 360º rotatable head                      |
|                 | 3.Objectives-Parfocal, antifungus coated 4x, 10x, 40x and 100x (oil      |
|                 | immersion) with semi planner achromatic correction. Objective should     |
|                 | be well centred even if their position on turret is changed.             |
|                 | 4. Stage - Double plate rackless horizontal mechanical stage preferably  |
|                 | 100 x 140 mm with fine vernier graduations designed with convenient      |
| Tachnical       | coaxial adjustment for slide manipulation preferably through 30 x 70     |
| charactoristics | mm double slide holder.  |
| Characteristics | 5. Illuminator-Built-in LED light source with white light with intensity |
|                 | control and LED life preferably more than 10, 000 Hrs.                   |
|                 | 6. Finish-A durable textured acid resistant finish.                      |
|                 | 7. Nose piece: Backward tilted revolving nose piece suitable to          |
|                 | accommodate four objectives with click stop and rubber grip.             |
|                 | 8. Focussing: Coaxial coarse and fine focussing knob, capable of         |
|                 | smooth, fine focussing movement sensitivity; minimum: 300 microns;       |
|                 | focussing stop for slide safety  |
| Power           | 10 Watt er below   |
| consumption     |  |
| Certificate     | Should be FDA / CE approved product                                      |
| Warranty        | 1 Year   |

#### 5. Centrifuge

|                 | 1. Speed: Maximum Range 3000 to 6000 RPM.                              |
|-----------------|--|
|                 | 2. Reciprocating Centrifugal force (RCF): 1500 to 3000.                |
|                 | 3. Minimum Capacity: 240 ml.   |
|                 | 4. Auto Lid interlock to prevent opening while running centrifuge with |
|                 | emergency lidlock release.   |
| Technical       | 5. Motor imbalance detector feature - desirable.                       |
| characteristics | 6. Microprocessor with digital display.                                |
|                 | 7. Dynamic break for quick declaration.                                |
|                 | 8. Stainless steel Chamber easy to clean.                              |
|                 | 9. Hinges to prevent door falling.                                     |
|                 | 10. Rotor Sizes: 16 x 15ml. 12. Rotors should be autoclavable          |
|                 |  |
| Power           | 200 Wett er belew  |
| consumption     | 200 Watt of below  |
| Certificate     | Should be FDA / CE approved product                                    |
| Warranty        | 1 Year   |
|                 |  |

## 6. Gynae Examination table/ Labour Table

| Warranty | 1 Year |
|----------|--------|
|----------|--------|

## 7.Instrument Trolley

| Technical<br>characteristics | <ul> <li>1.SS Sheet at the top for the placement of instruments.</li> <li>2.Over dimension 775mm L* 531mm W * 915mm H.</li> <li>3.Top Shelf and Bottom Shelf are SS sheet, Supporting Legs and Horizontal Bars are S.S Tube.</li> <li>4.Castors - Plastic injection moulded castors 125mm. Load Capacity 10 kg.</li> </ul> |
|------------------------------|--|
| Warranty                     | 1 Year   |

## 8. Foot Step

| Technical       | 1.Size should be 665mm L *485mm W*393mm H.<br>2. Antimicropial and thermosetting epoxy polyester powder coating. |
|-----------------|--|
| characteristics | 3.Load capacity 135 kg   |
| Warranty        | 1 Year   |

## 9. Gynaecology Set/Delivery Kit (Sub Centre)

| SI. No | Equipment                                      | Quantity |
|--------|--|----------|
| 1      | Instrument Tray                                | 2        |
| 2      | Kidney Tray                                    | 1        |
| 3      | SS Bowl 1                                      |          |
| 4      | Artery Forcep Straight and Curved 6 and 8 Inch | 4        |
| 5      | BP Handle                                      | 2        |
| 6      | Scissor Straight and Curved 8 Inch             | 2        |
| 7      | Sims Speculum SML                              | 3        |
| 8      | Sponge Holding Forceps                         | 1        |
| 9      | Chetal Forceps                                 | 1        |
| 10     | Utrin Sound                                    | 1        |
| 11     | Vaginal Wall Retractor 1                       |          |

| 12       | Needle Holder 6 and 8 Inch              | 2 |
|----------|---|---|
| 13       | Episotamy Scissors                      | 1 |
| 14       | Umblical Cord Cutting Scissor           | 1 |
| 15       | Deseting Forceps Non Tooth/ Tooth/Plain | 3 |
| 16       | Kellis Pad                              | 1 |
| 17       | Rubber Sheet                            | 1 |
| 18       | Kocher Artery Forcep Straight Curved    | 2 |
| 19       | Loop hook                               | 1 |
| Warranty | 1 Year                                  |   |

## 10. Gynaecology Set/Delivery Kit (Primary Health Centre and Community Health Centre)

| SI. No | Equipment                                      | Quantity |
|--------|--|----------|
| 1      | Instrument Tray                                | 2        |
| 2      | Kidney Tray                                    | 1        |
| 3      | SS Bowl  | 1        |
| 4      | Artery Forcep Straight and Curved 6 and 8 Inch | 4        |
| 5      | Allice Forceps 6 and 8 Inch                    | 2        |
| 6      | BP Handle                                      | 2        |
| 7      | Scissor Straight and Curved 8 Inch             | 2        |
| 8      | Sims Speculum SML                              | 3        |
| 11     | Sponge Holding Forceps                         | 1        |
| 12     | Valsalum Forceps                               | 1        |
| 13     | Chetal Forceps                                 | 1        |
| 14     | Utrin Sound                                    | 1        |
| 15     | Vaginal Wall Retractor                         | 1        |
| 17     | Utrine Curreat                                 | 1        |
| 18     | Dailetar Set 1                                 |          |
| 19     | Mosquto Forceps Straight and Curved 2          |          |
| 20     | Needle Holder 6 and 8 Inch2                    |          |
| 21     | Episotamy Scissors 1                           |          |

| 22       | Umblical Cord Cutting Scissor           | 1 |
|----------|---|---|
| 23       | Deseting Forceps Non-Tooth/ Tooth/Plain | 3 |
| 24       | Towel Cup                               | 2 |
| 26       | Kellis Pad                              | 1 |
| 27       | Rubber Sheet                            | 1 |
| 29       | Kocher Artery Forcep Straight Curved    | 2 |
| 31       | Babcock Forceps 6 and 8                 | 2 |
| 32       | Loop hook                               | 1 |
| Warranty | 1 Year                                  |   |

## 11. ECG Machine – 12 Channel

| 1.  | 1. Technical Characteristics                                     |  |  |
|-----|--|--|--|
| 1.1 | Technical Characteristics  | <ul> <li>a. Simultaneous 6 Channel ECG recording with 12 lead simultaneous acquisition.</li> <li>b. Should have a digital display of 6 channel ECG and should have three modes (Automatic, Manual and Rhythm).</li> <li>c. Heart rate measurement range to be at least 30 bpm to 250 bpm, with accuracy better than + or - 5 bpm.</li> <li>d. Heart rate trend display of at least previous 24 hours.</li> <li>e. Arrhythmia detection facility required, minimum gradation of 1 bpm.</li> </ul> |  |
| 1.2 | User's Interface   | Manual, English Menu.  |  |
| 1.3 | Settings   | Audio-visual alarms required: high and low heart rate<br>(operator variable settings), cardiac arrhythmia,<br>sensor/wire disconnected, low battery.   |  |
| 1.4 | Software and/ or standard of communication (where ever required) | In built   |  |
| 2.  | 2. Physical Characteristics                                      |  |  |
| 2.1 | Weight   | Less than 5 Kilograms.   |  |
| 2.2 | Configuration  | Case is to be hard and splash proof.   |  |
| 2.3 | Mobility & Portability   | Supplied in protective case for clean storage and safe transportation.   |  |
| 3.  | Energy Source  |  |  |
| 3.1 | Power requirements   | 220 to 240V, 50Hz  |  |
| 3.2 | Battery Operated   | Battery powered, silence able alarm for power failure.   |  |

|     |                                | Battery charger to be integral to main power supply,      |
|-----|--------------------------------|---|
|     |                                | and to charge battery during mains power operation of     |
|     |                                | unit.   |
|     |                                | Internal, replaceable, rechargeable battery to allow      |
|     |                                | operation for at least one hour in the event of power     |
|     |                                | failure or for the purpose of utilization during outreach |
|     |                                | clinics.  |
| 3.3 | Protection                     | Voltage corrector/stabilizer to allow operation at+ or –  |
|     |                                | 30% of local rated voltage.                               |
| 3.4 | Power Consumption              | Energy efficient ones are preferred.                      |
| 3.5 | Other requirements             | Mains cable to be at least 3 meters in length.            |
| 4.  | Accessories, Spare parts, Cons | umables.  |
| 4.1 | Accessories (mandatory,        | 12 lead ECG cable.  |
|     | standard, optional).           |   |
| 4.2 | Spare parts (main ones).       | Two sets of spare fuses ( if non-resettable fuses used)   |
| 4.3 | Consumables / reagents         | 5 tubes of electrode gel.                                 |
|     | (open, closed systems).        |   |
| 5.  | Standards and Safety.          |   |
| 5.1 | Certificates, Performance and  | a. The medical device should be US                        |
|     | safety standards.              | FDA/CE/BIS/CDSCO/AERB approved (US                        |
|     |                                | FDA/CE requirements will be applicable only               |
|     |                                | when the Indian standards on medical devices              |
|     |                                | laid by organization like BIS/CDSCO/AERB is not           |
|     |                                | available).   |
|     |                                | b. Manufacturer should have ISO 13485                     |
|     |                                | certification for quality standards                       |
|     |                                | c Electrical safety conforms to the standards for         |
|     |                                | electrical safety IEC 60601-1 General                     |
|     |                                | requirements (or equivalent PIS standard)                 |
|     |                                | d History of advarsa avants and actions                   |
|     |                                | u. History of adverse events and actions                  |
|     |                                | (Recally Field Safety correction etc.) taken by           |
|     |                                | manufacturer on the product should be made                |
|     |                                | available to procurer. Such information (as and           |
|     |                                | when happen) after commission of product                  |
|     |                                | should be continued to be provided to                     |
|     |                                | purchaser till manufacturing of same type of              |
|     |                                | product is curtailed.                                     |
| 6.  | Training and Installation      |   |
| 6.4 |                                |   |
| 6.1 |                                | Availability of 5 Amp / 15 Amp (Indian type)              |
|     |                                | electrical socket   |
| 6.2 | Requirements for sign-off      | Supplier to perform installation, safety and              |
|     |                                | operation checks before handover.                         |
|     |                                |   |
| 6.3 | Training of staff              | Training of users in operation and basic                  |
|     |                                | maintenance shall be provided. Advanced                   |

|     |   | maintenance tasks required shall be documented.  |  |
|-----|---|--|--|
| 7.  | Warranty and Maintenance.                         |  |  |
| 7.1 | Warranty  | 3 Years, including all spare parts and accessories.  |  |
| 8.  | Documentation.                                    |  |  |
| 8.1 | Operating manuals, set<br>manuals & other manuals | <ul> <li>Should provide a hard and a soft copy of:</li> <li>a. User, technical and maintenance manuals<br/>should be supplied in English/Hindi/Regional<br/>language along with machine diagrams.</li> <li>b. List of equipment and procedures required for<br/>local calibration and routine maintenance.</li> <li>c. Service and operation manuals.</li> <li>d. Advance maintenance tasks documentation.</li> <li>e. Certificate of calibration and inspection.</li> </ul> |  |
| 9.  | 9. Other terms                                    |  |  |
| 9.1 | Service support contact information.              | Contact details of manufacturer, supplier and local<br>service agent to be provided.<br>Any contract (AMC/CMC/ad-hoc) to be declared by the<br>manufacturer.   |  |

## 12. Nebulizer (Compressor Type)

| 1.                          | Technical Characteristics  |  |
|-----------------------------|--|--|
| 1.1                         | Technical Characteristics  | <ul> <li>a. Should be non-heating, light weight, portable, compact and easy to use.</li> <li>b. Should have 3 speed nebulization rate control (minimum, medium and maximum)</li> <li>c. Should have a nebulization capacity of 0.3 ml/min.</li> <li>d. Should provide silent operation.</li> <li>e. Should have a built in timer and shuts off after 10 minutes of use.</li> </ul> |
| 1.2                         | User's Interface   | Manual, English Menu.  |
| 1.3                         | Settings   | Audio-visual alarms required: high and low heart rate<br>(operator variable settings), cardiac arrhythmia,<br>sensor/wire disconnected, low battery.   |
| 1.4                         | Software and/ or standard of communication (where ever required) | In built   |
| 2. Physical Characteristics |  |  |
| 2.1                         | Weight   | Lighter weight is preferable.  |
| 2.2                         | Noise (in dBA)   | <50 dB.  |

| 2.3                      | Heat Dissipation               | Should maintain nominal temperature and the heat                      |
|--------------------------|--------------------------------|---|
|                          |                                | should be disbursed through a cooling mechanism.                      |
| 2.4                      | Mobility & Portability         | Supplied in protective case for clean storage and safe transportation |
| 3.                       | Energy Source                  |   |
| 2.1                      | Rower requirements             | 220 to 240V 50Hz  |
| 2.2                      | Power requirements             | Drefer battery exercised but not limited to it                        |
| 2.2                      | Battery Operated               | Voltage corrector/ctabilizer to allow operation at+ or                |
| 5.5                      | FIOLECTION                     | 30% of local rated voltage  |
| 3.4                      | Power Consumption              | Energy efficient ones are preferred.                                  |
| 4.                       | Accessories, Spare parts, Cons | umables and Disinfection.   |
|                          |                                |   |
| 4.1                      | Accessories (mandatory,        | Should be provided with a complete nebulization kit of                |
|                          | standard, optional).           | 10 Nos. including adult and child mask and medication                 |
|                          | Spare parts (main ones).       | cup – 5 Nos., Air Tube, 5 pieces replacement filters,                 |
|                          | Consumables / reagents         | mouthpiece, adult mask, child mask, carrying bag and                  |
|                          | (open, closed systems).        | instruction manual.   |
| 4.2                      | Disinfection                   | a. Parts of the device that are designed to come                      |
|                          |                                | into contact with the patient or the operator                         |
|                          |                                | should either be capable of easy disinfection or                      |
|                          |                                | be protected by a single use/disposable cover.                        |
| 5. Standards and Safety. |                                |   |
| <b>Г</b> 1               | Cortificator Dorformance and   | a The medical device should be US                                     |
| 5.1                      | cafoty standards               |   |
|                          | salety stalluarus.             | FDA/CE/BIS/CDSCO/AERB approved (US                                    |
|                          |                                | FDA/CE requirements will be applicable only                           |
|                          |                                | when the Indian standards on medical devices                          |
|                          |                                | laid by organization like BIS/CDSCO/AERB is not                       |
|                          |                                | available).   |
|                          |                                | f. Manufacturer should have ISO 13485                                 |
|                          |                                | certification for quality standards.                                  |
|                          |                                | g. Electrical safety conforms to the standards for                    |
|                          |                                | electrical safety IEC 60601-1 General                                 |
|                          |                                | requirements (or equivalent BIS standard).                            |
|                          |                                | h. History of adverse events and actions                              |
|                          |                                | (Recall/Field safety correction etc.) taken by                        |
|                          |                                | manufacturer on the product should be made                            |
|                          |                                | available to procurer. Such information (as and                       |
|                          |                                | when happen) after commission of product                              |
|                          |                                | should be continued to be provided to                                 |
|                          |                                | purchaser till manufacturing of same type of                          |
|                          |                                | product is curtailed.   |
|                          |                                |   |
| 6.                       | Training and Installation      |   |
| 6.1                      | Electrical Socket              | Availability of 5 Amp / 15 Amp (Indian type)                          |
|                          |                                | electrical socket   |
|                          |                                |   |

| 6.2 | Requirements for sign-off | Supplier to perform installation, safety and        |
|-----|---------------------------|---|
|     |                           | operation checks before handover.                   |
| 6.3 | Training of staff         | Training of users in operation and basic            |
|     |                           | maintenance shall be provided. Advanced             |
|     |                           | maintenance tasks required shall be                 |
|     |                           | documented.   |
| 7.  | Warranty and Maintenance. |   |
| 7.1 | Warranty                  | 3 Years, including all spare parts and accessories. |
| 8.  | Documentation.            |   |
| 8.1 | Operating manuals, set    | Should provide a hard and a soft copy of:           |
|     | manuals & other manuals   | f. User, technical and maintenance manuals          |
|     |                           | should be supplied in English/Hindi/Regional        |
|     |                           | language along with machine diagrams.               |
|     |                           | g. List of equipment and procedures required for    |
|     |                           | local calibration and routine maintenance.          |
|     |                           | h. Service and operation manuals.                   |
|     |                           | i. Advance maintenance tasks documentation.         |
|     |                           | j. Certificate of calibration and inspection.       |
| 9.  | Other terms               |   |
| 9.1 | Service support contact   | Contact details of manufacturer, supplier and local |
|     | information.              | service agent to be provided.                       |
|     |                           | Any contract (AMC/CMC/ad-hoc) to be declared by the |
|     |                           | manufacturer.                                       |

## 13. Autoclave HP Vertical (Single Bin)

| 1.  | 1. Technical Characteristics |    |  |
|-----|------------------------------|----|--|
| 1.1 | Technical Characteristics    | a) | High Grade strong stainless steel, Triple walled construction.               |
|     |                              | b) | Positive radial self-locking safety doors.                                   |
|     |                              | c) | Hydrostatically tested to withstand 2.5 times the working pressure.          |
|     |                              | d) | Sealed with Neoprene/Silicon long-lasting and durable gasket.                |
|     |                              | e) | Digital display for Jacket and Chamber pressure and temperature.             |
|     |                              | f) | Outer jacket insulated to prevent heat loss;<br>with a high grade insulation |
|     |                              | g) | material   |
|     |                              | h) | Mounted on 304 stainless steel frame with ground levelling flanges.          |
|     |                              | i) | Temperature and pressure cut-off device.                                     |
|     |                              | j) | Auto cut-off at low water level  |

|            |                                | k) Rust-proof 304 grade stainless steel.              |
|------------|--------------------------------|---|
|            |                                | I) Cylindrical construction.                          |
|            |                                | m) Equipment should have separate steam release       |
|            |                                | valve and drainage system.                            |
|            |                                | n) Minimum of two safety valves with auto-            |
|            |                                | release at 16 and 20.                                 |
|            |                                |   |
| 1.2        | User's Interface               | Manual.   |
| 1.3        | Settings                       | Audio-visual alarms required: high and low heart rate |
|            |                                | (operator variable settings), cardiac arrhythmia,     |
|            | Dhusiaal Charastaristics       | sensor/wire disconnected, low battery.                |
| Ζ.         | Physical Characteristics       |   |
| 2.1        | Weight                         | NA  |
| 2.2        | Capacity                       | 10 Litres   |
| 3.         | Energy Source                  |   |
|            |                                |   |
| 3.1        | Power requirements             | 220 to 240V. Input – Single/3-Phase.                  |
| 3.2        | Pressure gauge                 |   |
| 5.5<br>2.4 | Storilizing prossure           | 13 to 20 psi.<br>1.2 $Kgf/cm^2$ (15 psi) at 121°C     |
| 2.5        | Power Consumption              | Lipto 1kW Energy efficient ones are preferred         |
| 3.5        | Protection                     | Equipped with both a safety valve and steam release   |
| 5.0        |                                | valve.  |
| 4.         | Accessories, Spare parts, Cons | umables and Disinfection.                             |
| 4.1        | Accessories (mandatory,        | a. Automatic Pressure Control Switch -2 no.           |
|            | standard, optional).           | b. Automatic Water Cut-off Device -2 no.              |
|            | Spare parts (main ones).       | c. Micro Processor PID Controller with Timer &        |
|            | Consumables / reagents         | Auto Stop Facility                                    |
|            | (open, closed systems).        | d. Digital Pressure Indicator-2 no.                   |
|            |                                | e. Perforate basket (rust-free stainless steel)       |
|            |                                | f. Cord-plug-4 no.                                    |
|            |                                | g. Biological and chemical indicators-1 set.          |
|            |                                |   |
|            | Standards and Safaty           |   |
| 5.         | Standards and Safety.          |   |
| 5.1        | Certificates, Performance and  | a. Should be FDA/CE/BIS approved product.             |
|            | safety standards.              | b. Manufacturer and Supplier should have ISO          |
|            |                                | 13485 certification for quality standards.            |
|            |                                | c. Electrical safety conforms to the standards for    |
|            |                                | electrical safety IEC 60601-General                   |
|            |                                | requirements (or equivalent BIS Standard)             |
|            |                                | d. Shall meet internationally recognised for          |
|            |                                | Electromagnetic Compatibility(EMC) for electro        |
|            |                                | medical equipment: 61326-1.                           |
|            |                                | e. Certified to be compliant with IEC 61010-1,IEC     |
|            |                                | 61010-2-40 for safety.                                |

| 6.  | Training and Installation                         |  |
|-----|---|--|
| 6.1 | Electrical Socket                                 | Availability of 5 Amp / 15 Amp (Indian type)<br>electrical socket  |
| 6.2 | Training of staff                                 | Training of users in operation and basic<br>maintenance shall be provided. Advanced<br>maintenance tasks required shall be<br>documented.  |
| 7.  | Warranty and Maintenance.                         |  |
| 7.1 | Warranty  | 3 Years, including all spare parts and accessories.  |
| 7.2 | Maintenance tasks                                 | a. Maintenance and manual detailing complete maintenance schedule.   |
| 8.  | Documentation.                                    |  |
| 8.1 | Operating manuals, set<br>manuals & other manuals | Should provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams. |
| 9.  | Other terms                                       |  |
| 9.1 | Service support contact information.              | Contact details of manufacturer, supplier and local service agent to be provided.<br>Any contract (AMC/CMC/ad-hoc) to be declared by the manufacturer.                           |

#### 14. Automated External Defibrillator

| 1.  | Technical Characteristics |  |
|-----|---------------------------|--|
| 1.1 | Technical Characteristics | <ul> <li>a. Unit should be lightweight compact and portable.</li> <li>b. Unit should have facility for Automatic External Defibrillation and manual defibrillation.</li> <li>c. Should be able to deliver shock from 50-200 joules in biphasic mode via metal chest pads.</li> <li>d. Should have design protection to avoid passage of current to the user.</li> <li>e. The whole system should have an inbuilt recorder; TELEMETRY NOT RECOMMENDED.</li> <li>f. Additional option of hand cranked power generation is preferable.</li> </ul> |
| 1.2 | User's Interface          | The monitor should have a TFT colour display with a three-channel display.   |
| 1.3 | Settings                  | Manual and automatic.  |

| communication (where ever required)         10. Physical Characteristics         2.1       Weight       Less than 10 Kilograms. Lighter weight preferred.         2.2       Noise (In dBA), heat       <60dBA; adjustable heart rate alarm as well as paddles & ECG cable disconnection alarms.         2.3       Mobility & Portability       Should be designed for portability and withstand vibrations from rough terrain.         11. Energy Source       3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories (mandatory, standard, optional).       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles         5.1       Certificates, Performance and safety.       ECG cable, Recording paper rolls, Disposable pads.         6.1.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented.         1.1       Warranty and Maintenance.   | 1.4                       | Software and/ or standard of   | In built   |
|--|---------------------------|--------------------------------|--|
| required)         10. Physical Characteristics         2.1       Weight       Less than 10 Kilograms. Lighter weight preferred.         2.2       Noise (In dBA), heat       <60dBA; adjustable heart rate alarm as well as paddles & ECG cable disconnection alarms.         2.3       Mobility & Portability       Should be designed for portability and withstand vibrations from rough terrain.         11. Energy Source       3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input Ac.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories (mandatory, standard, optional).       Chest paddles         4.1       Accessories (mandatory, copic cable, Recording paper rolls, Disposable pads. (open, closed systems).         13. Standards and Safety.       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         14.       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-8-E006; IEC 60601-1-8-E000; IEC 60601-1-8-E000; IEC 60601-1-8-E000;  |                           | communication (where ever      |  |
| 10. Physical Characteristics         2.1       Weight       Less than 10 Kilograms. Lighter weight preferred.         2.2       Noise (In dBA), heat       <60dBA; adjustable heart rate alarm as well as paddles & ECG cable disconnection alarms.         2.3       Mobility & Portability       Should be designed for portability and withstand vibrations from rough terrain.         11. Energy Source       20 to 240V, 50Hz         3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories (mandatory, standard, optional).       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles         5.1       Certificates, Performance and safety.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-SE-Ed 1.0-2011; IEC/TRF 60601-1-SE-Ed 1.0-2011; IEC/TRF 60601-1-SE Ed 4.0-2010; ISO 13485.         14. Training and Installation       Supplier to perform installation, safety and operation checks before handover.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of   |                           | required)                      |  |
| 2.1       Weight       Less than 10 Kilograms. Lighter weight preferred.         2.2       Noise (in dBA), heat       <600BA; adjustable heart rate alarm as well as paddles         8.ECG cable disconnection alarms.       2.3         Mobility & Portability       Should be designed for portability and withstand vibrations from rough terrain.         11. Energy Source       3.1         Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         13. Standards and Safety.       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         13. Standards and Safety.       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         14. Training and Installation       Supplier to perform installation, safety and operation checks before handover.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be document  | 10.                       | Physical Characteristics       |  |
| 2.2       Noise (In dBA), heat<br>dissipation       <600dBA; adjustable heart rate alarm as well as paddles<br>& ECG cable disconnection alarms.         2.3       Mobility & Portability       Should be designed for portability and withstand<br>vibrations from rough terrain.         11.       Energy Source       3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours<br>or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones<br>are preferred.         12.       Accessories, Spare parts, Consumables.         4.1       Accessories (mandatory,<br>standard, optional).       ECG cable, Recording paper rolls, Disposable pads.<br>(open, closed systems).         13.       Standards and Safety.       5.1         2.       Certificates, Performance and<br>safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8:2006; IEC<br>60601-1-5ER-Ed 1.0-2011;<br>IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14.       Training and Installation       6.1       Requirements for sign-off         5       Supplier to perform installation, safety and operation<br>checks before handover.       Certificate of calibration and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.   | 2.1                       | Weight                         | Less than 10 Kilograms. Lighter weight preferred.      |
| dissipation       & ECG cable disconnection alarms.         2.3       Mobility & Portability       Should be designed for portability and withstand vibrations from rough terrain.         11. Energy Source       3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories (mandatory, standard, optional).       Chest paddles         4.1       Accessories (mandatory, standard, optional).       EECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         13. Standards and Safety.       5.1       Certificates, Performance and safety standards.         5.1       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-8-E04.0-2010; ISO 13485.         14. Training and Installation       5.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Mainte  | 2.2                       | Noise (In dBA), heat           | <60dBA; adjustable heart rate alarm as well as paddles |
| 2.3       Mobility & Portability       Should be designed for portability and withstand vibrations from rough terrain.         11. Energy Source       3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, 10-2007; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-8-2007; IEC 60601-1-8-2006;   |                           | dissipation                    | & ECG cable disconnection alarms.                      |
| vibrations from rough terrain.         11. Energy Source         3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       Accessories (mandatory, standard, optional).         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8:548; EC/TRF 60601-1-8:Ed 1.0-2011; IEC/TRF 60601-1-8:Ed 1.0-2010; ISO 13485.         14. Training and Installation       FDA, CE; IEC-60601-1-8:Ed 4.0-2010; ISO 13485.         14. Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       3 Years.   | 2.3                       | Mobility & Portability         | Should be designed for portability and withstand       |
| 11. Energy Source         3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable. Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable. Colocol:1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8-Ed 1.0-2011; IEC/TRF 60601-1-8-Ed 1.0-2010; ISO 13485.         14. Training and Installation       FDA, CE; IEC-60601-1-8-Ed 1.0-2010; ISO 13485.         14. Training of staff       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be documented.         Certificate of calibration and inspection from the factory.       Certificate of calibrat  |                           |                                | vibrations from rough terrain.                         |
| 3.1       Power requirements       220 to 240V, 50Hz         3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         13. Standards       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8:E04 0-2010; ISO 13485.         14. Training and Installation       ftttt roll is opera  | 11.                       | Energy Source                  |  |
| 3.2       Battery Operated       Rechargeable battery backup of approximately 5 hours or battery less hand cranked ones.         3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       Accessories (mandatory, standard, optional).       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         5.1       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provide. Advanced maintenance tasks required shall be documented.         15. Warranty and Maintenance.       Image of calibration and inspection from the factory.         16. Documentation.       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. List of enument and corcedures required for</li> </ul>  | 3.1                       | Power requirements             | 220 to 240V, 50Hz                                      |
| or battery less hand cranked ones.         3.3       Protection         4       or - 10% of input AC.         3.4       Power Consumption         Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.         4.1       Accessories (mandatory, standard, optional).         4.2       Consumables / reagents (open, closed systems).         13. Standards and Safety.         5.1       Certificates, Performance and safety standards.         FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provide. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams. b. List of enument and orocedures required for</li> </ul>  | 3.2                       | Battery Operated               | Rechargeable battery backup of approximately 5 hours   |
| 3.3       Protection       + or - 10% of input AC.         3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.1       Accessories (mandatory, standard, optional).       Chest paddles       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         13. Standards and Safety.       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         14. Training and Installation       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8:Ed 1.0-2011; IEC/TRF 60601-1-8:Ed 4.0-2010; ISO 13485.         14. Training and Installation       Supplier to perform installation, safety and operation checks before handover.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       Should provide a hard and a soft copy of:  |                           |                                | or battery less hand cranked ones.                     |
| 3.4       Power Consumption       Should not be more than 160 W. Energy efficient ones are preferred.         12. Accessories, Spare parts, Consumables.       1         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         13. Standards and Safety.       5.1       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. Lit of equipment and procedures required for</li> </ul>  | 3.3                       | Protection                     | + or – 10% of input AC.                                |
| are preferred.         12. Accessories, Spare parts, Consumables.         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         13. Standards and Safety.       ECG cable, Recording paper rolls, Disposable pads. (open, closed systems).         5.1       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       FDA, CE; IEC-60601-1-8 Ed4.0-2010; ISO 13485.         14. Training of Installation       Supplier to perform installation, safety and operation checks before handover.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       Years.         7.1       Warranty       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams. In User, technical and maintenance manuals should be supplied in English/Hindi/Regional langu</li></ul>   | 3.4                       | Power Consumption              | Should not be more than 160 W. Energy efficient ones   |
| 12. Accessories, Spare parts, Consumables.         4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         13. Standards and Safety.       ECG cable, Recording paper rolls, Disposable pads.         5.1       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       FOA, CE; IEC-60601-1-8 Ed4.0-2010; ISO 13485.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       Years.         7.1       Warranty       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. List of equipment and procedure reservers required for</li> </ul>   |                           |                                | are preferred.   |
| 4.1       Accessories (mandatory, standard, optional).       Chest paddles         4.2       Consumables / reagents (open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         13. Standards and Safety.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       FDA, CE; IEC-60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       Supplier to perform installation, safety and operation checks before handover.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. List of equipment and procedures required for</li> </ul>   | 12.                       | Accessories, Spare parts, Cons | sumables.  |
| standard, optional).       ECG cable, Recording paper rolls, Disposable pads.         4.2       Consumables / reagents<br>(open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         13. Standards and Safety.       5.1       Certificates, Performance and<br>safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC<br>60601-1-SER-Ed 1.0-2011;<br>IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       6.1       Requirements for sign-off       Supplier to perform installation, safety and operation<br>checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.         15. Warranty and Maintenance.       3 Years.         7.1       Warranty       3 Years.         8.1       Operating manuals, set<br>manuals & other manuals       Should provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.<br>b. List of equipment and procedures required for  | 4.1                       | Accessories (mandatory,        | Chest paddles  |
| 4.2       Consumables / reagents<br>(open, closed systems).       ECG cable, Recording paper rolls, Disposable pads.         13. Standards and Safety.       5.1       Certificates, Performance and<br>safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC<br>60601-1-SER-Ed 1.0-2011;<br>IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       6.1       Requirements for sign-off       Supplier to perform installation, safety and operation<br>checks before handover.         6.1       Training of staff       Training of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.         15.       Warranty and Maintenance.       3 Years.         7.1       Warranty       3 Years.         16.       Documentation.       Should provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.<br>b. List of equipment and procedures required for   |                           | standard, optional).           |  |
| (open, closed systems).         13. Standards and Safety.         5.1       Certificates, Performance and safety standards.         FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation         6.1       Requirements for sign-off         Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff         Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       3 Years.         6.1       Operating manuals, set manuals & other manuals         a build provide a hard and a soft copy of:       a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.  | 4.2                       | Consumables / reagents         | ECG cable, Recording paper rolls, Disposable pads.     |
| 13. Standards and Safety.         5.1       Certificates, Performance and safety standards.       FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation       IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       3 Years.         6.1       Operating manuals, set manuals & other manuals       Should provide a hard and a soft copy of: a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams. List of enument and procedures required for  |                           | open, closed systems).         |  |
| 5.1Certificates, Performance and<br>safety standards.FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC<br>60601-1-SER-Ed 1.0-2011;<br>IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.14.Training and Installation6.1Requirements for sign-offSupplier to perform installation, safety and operation<br>checks before handover.6.2Training of staffTraining of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.15.Warranty3 Years.16.Documentation.8.1Operating manuals, set<br>manuals & other manuals<br>h User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.<br>h User of equipment and procedures required for  | 13. Standards and Safety. |                                |  |
| safety standards.60601-1-SER-Ed 1.0-2011;<br>IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.14. Training and InstallationSupplier to perform installation, safety and operation<br>checks before handover.6.1Requirements for sign-offSupplier to perform installation, safety and operation<br>checks before handover.6.2Training of staffTraining of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.15. Warranty and Maintenance.3 Years.6.1Operating manuals, set<br>manuals & other manuals<br>should provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.<br>b. List of equipment and procedures required for  | 5.1                       | Certificates, Performance and  | FDA, CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC   |
| IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.         14. Training and Installation         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       7.1       Warranty       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams. b. List of equipment and procedures required for   |                           | safety standards.              | 60601-1-SER-Ed 1.0-2011;                               |
| 14. Training and Installation         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams. b. List of equipment and procedures required for   |                           |                                | IEC/TRF 60601-1-8 Ed4.0-2010; ISO 13485.               |
| 14. Training and installation         6.1       Requirements for sign-off       Supplier to perform installation, safety and operation checks before handover.         6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams. b. List of equipment and procedures required for   |                           | <b>.</b>                       |  |
| 6.1Requirements for sign-offSupplier to perform installation, safety and operation<br>checks before handover.6.2Training of staffTraining of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.15.Warranty and Maintenance.7.1Warranty3 Years.16.Documentation.8.1Operating manuals, set<br>manuals & other manuals<br>other manualsShould provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.   | 14.                       | Iraining and Installation      |  |
| 6.2       Training of staff       Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented. Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.       7.1       Warranty       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.         b       List of equipment and procedures required for  | 6.1                       | Requirements for sign-off      | Supplier to perform installation, safety and operation |
| 6.2Training of staffTraining of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.15. Warranty and Maintenance.3 Years.7.1Warranty3 Years.16. Documentation.Should provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.<br>b. List of equipment and procedures required for   |                           |                                | checks before handover.                                |
| shall be provided. Advanced maintenance tasks         required shall be documented.         Certificate of calibration and inspection from the<br>factory.         15. Warranty and Maintenance.         7.1       Warranty         3 Years.         16. Documentation.         8.1       Operating manuals, set<br>manuals & other manuals         Should provide a hard and a soft copy of:<br>a. User, technical and maintenance manuals<br>should be supplied in English/Hindi/Regional<br>language along with machine diagrams.   | 6.2                       | Training of staff              | Training of users in operation and basic maintenance   |
| required shall be documented.         Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.         7.1       Warranty         3 Years.         16. Documentation.         8.1       Operating manuals, set manuals & other manuals         Should provide a hard and a soft copy of:         a.       User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.         b.       List of equipment and procedures required for   |                           |                                | shall be provided. Advanced maintenance tasks          |
| Certificate of calibration and inspection from the factory.         15. Warranty and Maintenance.         7.1       Warranty       3 Years.         16. Documentation.       Should provide a hard and a soft copy of: a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.         b.       List of equipment and procedures required for  |                           |                                | required shall be documented.                          |
| factory.         15. Warranty and Maintenance.         7.1       Warranty         3 Years.         16. Documentation.         8.1       Operating manuals, set manuals & other manuals         Should provide a hard and a soft copy of:         a.       User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.         b.       List of equipment and procedures required for  |                           |                                | Certificate of calibration and inspection from the     |
| 15. Warranty and Maintenance.         7.1       Warranty       3 Years.         16. Documentation.       3 Years.         8.1       Operating manuals, set manuals & other manuals       Should provide a hard and a soft copy of: <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. List of equipment and procedures required for</li> </ul>   |                           |                                | factory.   |
| 7.1       Warranty       3 Years.         16. Documentation.       Should provide a hard and a soft copy of:         8.1       Operating manuals, set manuals & other manuals       Should provide a hard and a soft copy of:         a.       User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.         b.       List of equipment and procedures required for   | 15                        | Warranty and Maintenance       |  |
| 7.1       Warranty       3 Years.         16. Documentation.       Image: Second secon | 15.                       |                                |  |
| <ul> <li>16. Documentation.</li> <li>8.1 Operating manuals, set manuals &amp; other manuals</li> <li>Should provide a hard and a soft copy of:         <ul> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. List of equipment and procedures required for</li> </ul> </li> </ul>   | 7.1                       | Warranty                       | 3 Years.   |
| <ul> <li>8.1 Operating manuals, set<br/>manuals &amp; other manuals</li> <li>Should provide a hard and a soft copy of:         <ul> <li>User, technical and maintenance manuals<br/>should be supplied in English/Hindi/Regional<br/>language along with machine diagrams.</li> <li>List of equipment and procedures required for</li> </ul> </li> </ul>   | 16.                       | Documentation.                 | 1  |
| manuals & other manuals       a. User, technical and maintenance manuals         should be supplied in English/Hindi/Regional         language along with machine diagrams.         b       List of equipment and procedures required for  | 8.1                       | Operating manuals, set         | Should provide a hard and a soft copy of:              |
| should be supplied in English/Hindi/Regional<br>language along with machine diagrams.  |                           | manuals & other manuals        | a. User, technical and maintenance manuals             |
| language along with machine diagrams.  |                           |                                | should be supplied in English/Hindi/Regional           |
| h List of equipment and procedures required for  |                           |                                | language along with machine diagrams.                  |
| b. List of equipment and procedures required for   |                           |                                | b. List of equipment and procedures required for       |
| local calibration and routine maintenance.   |                           |                                | local calibration and routine maintenance.             |

|     |                                      | c. Service and operation manuals.  |
|-----|--------------------------------------|--|
|     |                                      | d. Advance maintenance tasks documentation.  |
|     |                                      | e. Certificate of calibration and inspection.  |
| 8.2 | Other documentation                  | List of important spares and accessories with their part numbers and cost to be provided.  |
| 17. | Other terms                          |  |
| 9.1 | Service support contact information. | Contact details of manufacturer, supplier and local<br>service agent to be provided.<br>Any contract (AMC/CMC/ad-hoc) to be declared by the<br>manufacturer. |

#### 15. Portable Ultrasound Machine

|     | 1. Technical Characteris  | stics   |
|-----|---------------------------|---|
| 1.1 | Technical Characteristics | <ul> <li>Ultrasound scanner with integrated trolley with probe, soft touch alphanumeric key board with track ball:</li> <li>a. With panel switches &amp; control's easily operable.</li> <li>b. Integrated high resolution Monitor (17").</li> <li>c. Probes &amp; Gel holder-conveniently placed (2 each).</li> <li>Following transducers are to be supplied:</li> <li>a. A.2.0-5.0 MHz Multi frequency Convex</li> </ul>  |
|     |                           | Transducer-One.   |
|     |                           | <ul> <li>b. B-5.0-12.0 MHz Multi frequency Linear<br/>Transducer-One.</li> <li>c. C-5.0-8.0 MHz or more Endo Cavitory probe-<br/>One. (+/- 1 MHz to be allowed for each): <ul> <li>All probes should be electronic transducers<br/>and multi-frequency preferably three<br/>frequencies and should give aperture &amp;<br/>depths of scanning.</li> <li>Controls for Depth, gain compensation,<br/>body markers with transducers position.</li> <li>Real-time continuous dynamic focus.</li> <li>Auto annotation facility anywhere on<br/>image.</li> <li>Image display in B, B/M&amp;M Model(2B&amp;2D).</li> <li>Zoom facility minimum five times or more.</li> <li>Shades of grey 256 h. Inbuilt cine memory.<br/>43 Technical Specification RADIOLOGY</li> <li>Unite should be capable of measuring BPD,<br/>CRL, FL &amp; AC and other GA parameters.</li> <li>Facility for image magnification, inversion,<br/>changing, scan, direction, freeze facility.</li> </ul> </li> </ul> |

|     |                               | Frame rate minimum 50 FPS, hard disk                                |
|-----|-------------------------------|---|
|     |                               | capacity of 200GB or more.  |
|     |                               | Calliper with trackball for the                                     |
|     |                               | measurement of distances circumferences,                            |
|     |                               | area volume etc. should be possible to                              |
|     |                               | make different measurement on single                                |
|     |                               | image.  |
|     |                               | <ul> <li>Alphanumeric key board, p.Panel Switches</li> </ul>        |
|     |                               | & Foot Controls.  |
|     |                               | <ul> <li>Patient reports for Obs/Gynae including</li> </ul>         |
|     |                               | fetal growth trend, including Histogram                             |
|     |                               | facility for Tissue texture & Trend graph for                       |
|     |                               | IUGR cases. Urology and orthopedics.                                |
|     |                               | <ul> <li>Give the gain adjustable/Range &amp; its steps.</li> </ul> |
|     |                               | Calculations needed. Velocity. Heart rate                           |
|     |                               | Volume addl. modes.   |
|     |                               | Dicom 3.0 compatible  |
|     |                               | Review of stored images is desirable                                |
|     |                               | Channels: 1000 or more  |
|     |                               | Depth: 25 to 30 cm  |
|     |                               | <ul> <li>Dynamic range: 170dB &amp; above.</li> </ul>               |
|     |                               | <ul> <li>Cine loop preview for minimum 60 secs or</li> </ul>        |
|     |                               | more  |
|     |                               | <ul> <li>Minimum 2 active ports should be there.</li> </ul>         |
|     |                               |   |
| 1.2 | User's Interface              | Manual  |
| 1.3 | Software and/ or standard of  | in built  |
|     | required)                     |   |
|     | 2. Physical Characteristics   | S   |
|     |                               |   |
| 2.1 | Weight                        | Less than 8 Kilograms. Lighter weight preferred.                    |
| 2.2 | Mobility & Portability        | Portable  |
|     | 3. Energy Source              |   |
| 3.1 | Power requirements            | 220 to 240V, 50Hz   |
| 3.2 | Battery Operated              | NA  |
| 3.3 | Power Consumption             | Energy efficient ones are preferred.                                |
|     | 4. Accessories, Spare part    | ts, Consumables.  |
| 4.1 | Accessories (mandatory,       | The system should be supplied with the following                    |
|     | standard, optional).          | accessories:  |
|     | Consumables / reagents        | a. B & W thermal printer with 50 rolls.                             |
|     | (open, closed systems).       | b. Two KVA online suitable UPS.                                     |
|     | 5. Standards and Safety       |   |
|     |                               |   |
| 5.1 | Certificates, Performance and | a. Should be FDA/CE/BIS approved product.                           |
|     | satety standards.             | b. Manufacturer and Supplier should have ISO                        |
|     |                               | 13485 certification for quality standards.                          |

|     |   | <ul> <li>c. Electrical safety conforms to the standards for<br/>electrical safety IEC 60601- General<br/>requirements (or equivalent BIS Standard).</li> <li>d. Shall meet internationally recognised for<br/>Electromagnetic Compatibility(EMI/EMC) for<br/>electro medical equipment: 61326-1.</li> <li>e. Certified to be compliant with IEC 61010-1. IEC</li> </ul>  |
|-----|---|--|
|     |   | 61010-2-40 for safety.   |
| 5.2 | Local and/or international                        | Manufacturer / supplier should have ISO 13485 certificate for quality standard.  |
|     | 6. Training and Installation                      | n  |
| 6.1 | Pre-installation requirements:                    | <ul> <li>a. Availability of 5-amp socket.</li> <li>b. Safety and operation check before hand over.</li> <li>c. Machine to be installed only when PNDT registration is obtained by health care facility.</li> </ul>   |
| 6.2 | Requirements for sign-off                         | Certificate of calibration and inspection from the manufacturer  |
| 6.3 | Training of staff                                 | Training of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.<br>Certificate of calibration and inspection from the<br>factory.   |
|     | 7. Warranty and Mainten                           | ance.  |
| 7.1 | Warranty  | 3 Years.   |
| 7.2 | Maintenance tasks                                 | CMC 5 Years, 2 maintenance visits annually.  |
| 7.3 | Service contract clauses,                         | The spare price list of all spares and accessories   |
|     | including prices.                                 | (including minor) required   |
|     |   | guarantee/warranty period  |
|     |   | should be attached.  |
|     | 8. Documentation.                                 |  |
| 8.1 | Operating manuals, set<br>manuals & other manuals | <ul> <li>Should provide a hard and a soft copy of:</li> <li>a. User, technical and maintenance manuals should be supplied in English/Hindi/Regional language along with machine diagrams.</li> <li>b. List of equipment and procedures required for local calibration and routine maintenance.</li> <li>c. Service and operation manuals.</li> <li>d. Advance maintenance tasks documentation.</li> <li>e. Certificate of calibration and inspection.</li> </ul> |
| 8.2 | Other documentation                               | List of important spares and accessories with their part numbers and cost to be provided.  |

| b. Other terms |                                      |  |
|----------------|--------------------------------------|--|
| 9.1            | Service support contact information. | Contact details of manufacturer, supplier and local<br>service agent to be provided.<br>Any contract (AMC/CMC/ad-hoc) to be declared by the<br>manufacturer. |

#### 16. Multipara Monitor

| 1.  | 1. Technical Characteristics                                     |  |  |
|-----|--|--|--|
| 1.1 | Technical Characteristics  | <ol> <li>Should have facility for printing ECG at 25mm/sec<br/>and 50mm/sec speed.</li> <li>Should have facility for charging from both 12V DC &amp;<br/>220V AC.</li> <li>Should be supplied with.</li> <li>Pulse oximeter probe.</li> <li>ECG cable -12 lead.</li> <li>Temperature probe.</li> <li>NIBP (non-invasive blood pressure) probe All probes<br/>should be supplied</li> <li>a pairs, should be re-usable and should include adult,<br/>pediatric &amp; neonatal size cuff/leads.</li> <li>Capable of saving data for min 24 hrs.</li> <li>Rates for consumables should be offered in price bid.</li> <li>Optional item to be quoted: invasive blood pressure-<br/>monitoring module complete with reusable transducer.</li> </ol> |  |
| 1.2 | User's Interface   | Manual (touch screen or remote operated not mandatory).  |  |
| 1.3 | Settings   | User operated 1mV ECG test marker function required.   |  |
| 1.4 | Software and/ or standard of communication (where ever required) | Audio Visual alarms required: high and low levels for<br>each parameter (operator variable settings), sensor /<br>wire / probe disconnected, low battery.  |  |
| 2.  | Physical Characteristics   |  |  |
| 2.1 | Dimensions (metric)  | Screen size minimum 8.4"   |  |
| 2.2 | Weight   | Less than 6 Kilograms.   |  |
| 2.3 | Configuration  | Case is to be hard and splash proof. Display must allow<br>easy viewing in all ambient light levels.<br>Cable connectors to be designed so as fit correct socket<br>only.  |  |
| 2.4 | Mobility & Portability   | Supplied in protective case for clean storage and safe transportation.   |  |
| 3.  | Energy Source  |  |  |
| 3.1 | Power requirements   | 220 to 240V, 50Hz  |  |
| 3.2 | Battery Operated   | Battery charger to be integral to mains power supply,  |  |
|     |  | and to charge battery during mains power operation of  |  |
|     |  | unit. Battery powered, silence able alarm for power  |  |
|     |  | failure. Internal, replaceable, rechargeable battery   |  |

|     |                                | allows operation for at least one hour in the event of   |
|-----|--------------------------------|--|
|     |                                | power failure.   |
| 3.3 | Tolerance (to variations,      | Voltage corrector/stabilizer to allow operation at+ or – |
|     | shutdowns)                     | 30% of local rated voltage.                              |
| 3.4 | Protection                     | Electrical protection provided by fuses in both live and |
|     |                                | neutral supply lines.                                    |
| 3.5 | Power Consumption              | Less than 120W. Energy efficient ones are preferred.     |
|     | Other requirements             | Mains cable.   |
| 4.  | Accessories, Spare parts, Cons | sumables.  |
| 4.1 | Accessories (mandatory,        | 2 pairs, 12 lead ECG cable. 5 packs of 100 disposable    |
|     | standard, optional).           | ECG connection electrodes.                               |
|     |                                | Two sets of reusable SpO2 probes including adult,        |
|     |                                | paediatric & neonatal probes.                            |
|     |                                | Two sets of NIBP cuffs of each size. Two external skin   |
|     |                                | temperature probes.                                      |
| 5.  | Standards and Safety.          | ,  |
| 5.1 | Certificates, Performance and  | FDA / CE; IEC-60601-1-2:2007; IEC 60601-1-8-2006; IEC    |
|     | safety standards.              | 60601-1-SER-Ed 1.0-2011; IEC/TRF 60601-1-8 Ed4.0-        |
|     |                                | 2010; ISO 13485; ISO 80601-2-56-2009 (Thermometer);      |
|     |                                | ISO 80601-2-61-2011 (SpO <sub>2</sub> )                  |
|     |                                |  |
| 6.  | Training and Installation      |  |
| 6.1 | Requirements for sign-off      | Supplier to perform installation, safety and operation   |
|     |                                | checks before handover. Local clinical staff to affirm   |
|     |                                | completion of installation.                              |
| 6.2 | Training of shaff              | Turining of upper in expension and basis                 |
| 6.2 | Training of staff              | I raining of users in operation and basic                |
|     |                                | maintenance shall be provided. Advanced                  |
|     |                                | maintenance tasks required shall be                      |
|     |                                | documented.  |
| 7.  | Warranty and Maintenance.      |  |
| 71  | Marrantu                       | 2. Voors   |
| 7.1 | Narranty                       | s fears.   |
| 8.  | Documentation.                 |  |
| 8.1 | Operating manuals, service     | Advanced maintenance tasks required shall be             |
|     | manuals & other manuals        | documented.  |
|     |                                | User, technical and maintenance manuals to be            |
|     |                                | supplied in English/Hindi/Local language.                |
|     |                                | List to be provided of equipment and procedures          |
|     |                                | required for local calibration and routine maintenance.  |
| 9.  | Other terms                    |  |
| 9.1 | Service support contact        | Contact details of manufacturer, supplier and local      |
|     | information.                   | service agent to be provided.                            |
|     |                                |  |

## 17. Fully Automated Biochemistry Analyser

|     | Fully Automated Biochemistry Analyser |   |  |
|-----|---------------------------------------|---|--|
| 1.  | Technical Characteristics             |   |  |
|     | Task sized. Change stariation         | 4. Fully subsystem in a dama second shows interview   |  |
| 1.1 |                                       | The equipment should be capable all Routine STAT and special Biochemical tests including specific protein,  |  |
|     |                                       | applications.   |  |
|     |                                       | 2. Throughput: 400 tests/hour, up to 200t/hour with ISE.  |  |
|     |                                       | 3. Must have direct ISE Unit for Na, K and Cl Measurement.  |  |
|     |                                       | 4. ISE Electrode should last for 6 months.  |  |
|     |                                       | 5. Must be open Ended system with bare code reading (optional).   |  |
|     |                                       | <ul> <li>6. System should have 12 Wavelengths 340 to 700 nm.</li> <li>7. System should be supplied with PC, windows based interface and Bidirectional</li> </ul>  |  |
|     |                                       | 8. Minimum reaction volume of 150 $\mu$ l built in/stand  |  |
|     |                                       | <ul> <li>9. Must have built in Cooled Reagent Compartment<br/>with minimum 350 ml with sample volume 2- 70 ml.</li> <li>10. Auto diagnosis of machine errors with message and<br/>correction steps.</li> </ul>  |  |
|     |                                       | 11. Must have on board capacity for permanent and numbered cuvettes.  |  |
|     |                                       | <ol> <li>Separate reagent probe for R1 and R2 and sample.</li> <li>Laundry System with minimum 5 step washing.</li> <li>Sample dead volume maximum100 μl in sample cup and maximum 50 μl in Paediatric cups.</li> <li>Should have external and internal probe cleaning facility.</li> </ol> |  |
|     |                                       | 16. calibration should be Linear factor, 2 point/point to point/multi point and Exponential with maximum 8 calibrators per test.  |  |
|     |                                       | 17. Sample type should include Serum, plasma, Urine,<br>CSF, body fluids and Supernatant with at least 70<br>sample positions for routine and STAT Test.  |  |
|     |                                       | 18. Should have Light Source with minimum 1000 hrs<br>life cycle with bar code facility with option for bar code  |  |
|     |                                       | on/off.   |  |
|     |                                       | 19. Should have 10, 000 Patient Result Storage  |  |
|     |                                       | 20. Online QC Tracking with Levy and Jennings Chart   |  |
|     |                                       | 21. The Equipment should be EDA/European CE/RIS   |  |
|     |                                       | certified.  |  |
| 1.2 | User's Interface                      | Built-in / Automatic  |  |

| 1.3 | Software and/ or standard of   | Audio Visual alarms required: high and low levels for    |
|-----|--------------------------------|--|
|     | communication (where ever      | each parameter (operator variable settings), sensor /    |
|     | required)                      | wire / probe disconnected, low battery.                  |
| 2.  | Physical Characteristics       |  |
| 2.1 | Heat Dissipation               | Heat Dissipation: Should maintain nominal                |
|     |                                | temperature and the heat should be disbursed through     |
|     |                                | an cooling mechanism.                                    |
| 2.2 | Mobility & Portability         | Stationary lab installation.                             |
| 3.  | Energy Source                  |  |
| 3.1 | Power requirements             | 220 to 240V, 50Hz  |
| 3.2 | Battery Operated               | No   |
| 3.3 | Tolerance (to variations,      | Voltage corrector/stabilizer to allow operation at+ or – |
|     | shutdowns)                     | 10% of local rated voltage.                              |
| 3.4 | Protection                     | Electrical protection provided by fuses in both live and |
| 2.5 |                                | neutral supply lines.                                    |
| 3.5 | Power Consumption              | Energy efficient ones are preferred.                     |
| 4.  | Accessories, Spare parts, Cons | sumables.  |
| 4.1 | Accessories (mandatory,        | 1. Suitable Water plant/Purification System on RO or     |
|     | standard, optional).           | any latest technology.                                   |
|     |                                | 2. External printer.                                     |
|     |                                | 3. UPS on line pure sine wave for back up of system      |
|     |                                | with PC and IT peripherals for half hour.                |
|     |                                | 4. Open System.  |
|     |                                | 5. One light source.                                     |
| 5.  | Standards and Safety.          |  |
|     |                                |  |
| 5.1 | Certificates, Performance and  | 1. Should be FDA/CE/BIS approved product.                |
|     | safety standards.              | 2. Manufacturer and supplier should have ISO             |
|     |                                | standards  |
|     |                                | 3 Shall meet internationally recognised for              |
|     |                                | Electromagnetic Compatibility                            |
|     |                                | (FMC) for electro medical equipment: 61326-1             |
|     |                                | 4. Certified to be compliant with IEC 61010-1. IEC       |
|     |                                | 61010-2-281  |
|     |                                |  |
| 5.2 | Local and/ or International    | Manufacturer/supplier should have ISO 13485              |
|     |                                | certificate for quality standard.                        |
| 6.  | Training and Installation      |  |
| 6.1 | Requirements for sign-off      | Supplier to perform installation, safety and operation   |
|     |                                | checks before handover. Local clinical staff to affirm   |
|     |                                | completion of installation.                              |
|     |                                | Certification of calibration and inspection from the     |
|     |                                | manufacturer.  |
|     |                                |  |

| 6.2 | Training of staff          | Training of users in operation and basic maintenance    |
|-----|----------------------------|---|
|     |                            | shall be provided. Advanced maintenance tasks           |
|     |                            | required shall be documented.                           |
| 7   | Marranty and Maintonanco   |   |
| /.  | warranty and Maintenance.  |   |
| 7.1 | Warranty                   | 3 Years.  |
| 8.  | Documentation.             |   |
| 8.1 | Operating manuals, service | Should provide 2 sets (hardcopy and soft-copy) of:      |
|     | manuals & other manuals    | a. User, technical and maintenance manuals to be        |
|     |                            | supplied in English / Hindi language along with machine |
|     |                            | diagrams.   |
|     |                            | b. List of equipment and procedures required for local  |
|     |                            | calibration and routine maintenance.                    |
|     |                            | c. Service and operation manuals (original and copy) to |
|     |                            | be provided.  |
|     |                            | d. Advanced maintenance tasks documentation.            |
|     |                            | e. Certificate of calibration and inspection.           |
| 9   | Other terms                |   |
| 5.  |                            |   |
| 9.1 | Service support contact    | Contact details of manufacturer, supplier and local     |
|     | information.               | service agent to be provided.                           |
|     |                            | Any Contract (AMC/CMC/ad-hoc) to be declared by the     |
|     |                            | manufacturer.   |

## 18. Automated 5-Part Differential Hematology Analyser

| 1. | Technical Characteristics                           |  |
|----|---|--|
| 1. | Technical Characteristics Technical Characteristics | <ol> <li>Five-part differential.</li> <li>24 parameters, all different WBC's should be<br/>measured directly.</li> <li>Advanced, integrated self-cleaning system.</li> <li>On-screen patient results trending.</li> <li>Stores 5, 000 test results with histograms and<br/>scattergrams.</li> <li>Integrates with common practice management<br/>systems.</li> <li>Integrates with common practice management<br/>systems.</li> <li>maximum sample required 100 μL sample size<br/>permits whole blood analysis from venous collections.</li> <li>Parameters Total Leukocytes (White Blood Cells) and<br/>Differential (in absolute numbers and %) for:<br/>Neutrophils, Lymphocytes, Monocytes, Eosinophils,<br/>Basophils.</li> <li>Sample Material Capillary or venous (EDTA) whole<br/>blood.</li> </ol> |
|    |   | <ul><li>10) Linearity of all parameters.</li><li>11) Measuring Time Within 60 Sec.</li></ul>   |

|   |                               | 12) System must have throughput of atleast 60 samples    |
|---|-------------------------------|--|
|   |                               | per hour in all discrete modes.                          |
|   |                               | 13) Manual mode.   |
|   |                               | 14) Stat mode.   |
|   |                               | 15) Pre-diluted mode and whole blood mode.               |
| 1.2                                       | User's Interface              | Printer, keyboard, barcode reader, PC, optional.         |
| 1.3                                       | Software and/ or standard of  | NA   |
|   | communication (where ever     |  |
|   | required)                     |  |
| 2.  | Physical Characteristics      |  |
| 2.1                                       | Heat Dissipation              | Heat Dissipation: Should maintain nominal                |
|   |                               | temperature and the heat should be disbursed through     |
|   |                               | an cooling mechanism.                                    |
| 2.2                                       | Mobility & Portability        | Stationary lab installation.                             |
| 3.  | Energy Source                 |  |
| 3.1                                       | Power requirements            | 220 to 240V, 50Hz. Recharging unit: Input voltage-       |
|   |                               | single/3-phase.  |
| 3.2                                       | Battery Operated              | No   |
| 3.3                                       | Operating temperature         | Analyser: 4-50°C   |
|   |                               | Capillary samples from finger stick: 18-25°C             |
| 3.4                                       | Tolerance (to variations,     | Voltage corrector/stabilizer to allow operation at+ or – |
|   | shutdowns)                    | 10% of local rated voltage.                              |
| 3.5                                       | Protection                    | Electrical protection provided by fuses in both live and |
|   |                               | neutral supply lines.                                    |
| 3.6                                       | Power Consumption             | Less than 500 VA. Energy efficient ones are preferred.   |
| 4. Accessories, Spare parts, Consumables. |                               |  |
| 4.1                                       | Accessories (mandatory,       | 1. 2D-Barcode Scanner.                                   |
|   | standard, optional).          | 2. Reagents: All the reagents required for 1000 tests    |
|   |                               | should be supplied with the equipment along with one     |
|   |                               | set of tri level control.                                |
|   |                               | 3. Closed System rates to be closed for all test.        |
|   |                               | 4. Online UPS System for 30 minutes back up.             |
| 5.  | Standards and Safety.         |  |
| 5.1                                       | Certificates, Performance and | 1. Should be FDA/CE/BIS approved product.                |
|   | safety standards.             | 2. Manufacturer and Supplier should have ISO             |
|   |                               | 13485/US(FDA)/EU(CE) certification for quality           |
|   |                               | standards.   |
|   |                               | 3. Shall meet internationally recognised for             |
|   |                               | Electromagnetic Compatibility(EMC) for electromedical    |
|   |                               | equipment: 61326-1.                                      |
|   |                               | 4. Certified to be compliant with IEC 61010-1, IEC       |
|   |                               | 61010-2-281, 61010-2-101 for safety.                     |
| 5.2                                       | Local and/ or International   | Manufacturer/supplier should have ISO 13485              |
|   |                               | certificate for quality standard.                        |
| 6.  | Training and Installation     |  |

| 6.1 | Requirements for sign-off | Supplier to perform installation, safety and operation<br>checks before handover. Local clinical staff to affirm<br>completion of installation.<br>Certification of calibration and inspection from the<br>manufacturer. |
|-----|---------------------------|--|
| 6.2 | Training of staff         | Training of users in operation and basic maintenance<br>shall be provided. Advanced maintenance tasks<br>required shall be documented.   |

#### 7. Warranty and Maintenance.

| 7.1 | Warranty  | 3 Years.   |
|-----|---|--|
| 8.  | Documentation.  |  |
| 8.1 | Operating manuals, service<br>manuals & other manuals | <ul> <li>Should provide 2 sets (hardcopy and soft-copy) of:</li> <li>a. User, technical and maintenance manuals to be</li> <li>supplied in English / Hindi language along with machine</li> <li>diagrams.</li> <li>b. List of equipment and procedures required for local</li> <li>calibration and routine maintenance.</li> <li>c. Service and operation manuals (original and copy) to</li> <li>be provided.</li> <li>d. Advanced maintenance tasks documentation.</li> <li>e. Certificate of calibration and inspection.</li> </ul> |
| 8.2 | Other accompanying document                           | List of important spares and accessories, with their part numbers and cost.  |
| 9.  | Other terms   |  |
| 9.1 | Service support contact information.                  | Contact details of manufacturer, supplier and local service agent to be provided.<br>Any Contract (AMC/CMC/ad-hoc) to be declared by the manufacturer.   |

### **19. Portable Vaccine Carrier – Active**

| 1 | Technical Characteristics |    |  |
|---|---------------------------|----|--|
| S | Technical Characteristics | f. | Net vaccine storage should be between 1.2 to     |
|   |                           |    | 2.0 litres.                                      |
|   |                           | g. | Construction: Internal: Stainless steel 304      |
|   |                           |    | grade and external corrosion resistant.          |
|   |                           | h. | Solid door with lock and handle.                 |
|   |                           | i. | Compression cycled, CFC free (refrigeration      |
|   |                           |    | and insulation).                                 |
|   |                           | j. | If used, all system tubing (suction, freezer and |
|   |                           |    | condensing tube) should be of minimum            |
|   |                           |    | 99.97% pure copper coil.                         |

|     |                              | k. Temperature of vaccines to remain between +2                   |
|-----|------------------------------|---|
|     |                              | to + 8 degrees centigrade during continuous                       |
|     |                              | availability of energy at ambient temperature                     |
|     |                              | +5 to +45 degrees centigrade. The temperature                     |
|     |                              | difference between any two points in the                          |
|     |                              | cabinet should not be more than +2 degrees                        |
|     |                              | centigrade once stabilized  |
|     |                              | $\int \Omega n / \Omega ff$ switch and nower indicators should be |
|     |                              | available   |
|     |                              | m A microprocessor based control unit should be                   |
|     |                              | n. A microprocessor based control unit should be                  |
|     |                              | following fosturos:   |
|     |                              | ionowing reactives.   |
|     |                              | a. 3-digit digital display (to one decimal                        |
|     |                              | point) of cabinet temperature.                                    |
|     |                              | b. Power on LED/LCD indicator.                                    |
|     |                              | c. Audio (minimum 65 dBA and visual                               |
|     |                              | alarms against the violation of                                   |
|     |                              | temperatures ranges (less than +2°C                               |
|     |                              | and more than +8°C. Additional SMS                                |
|     |                              | alert would be added advantage.                                   |
|     |                              | d. Min and Max cabin temperature digital                          |
|     |                              | display of last 24 hrs. and breaches                              |
|     |                              | during last 24 hrs.   |
|     |                              | e. The unit should be sealed protected                            |
|     |                              | from dust, moisture or water falling                              |
|     |                              | over it.  |
|     |                              | f. Accuracy of digital controller + or – 0.5                      |
|     |                              | degree centigrade.  |
|     |                              | n. No hazardous chemical gases should be                          |
|     |                              | produces during the use of the equipment.                         |
|     |                              | o Battery back (to maintain +2 to +8 degrees                      |
|     |                              | centigrade) should be at least 12 hours at a                      |
|     |                              | temperature of $40$ to $44^{\circ}$ C and 95% humidity            |
|     |                              |   |
| 1.2 | User's Interface             | Manual, English Menu.   |
| 1.3 | Settings                     | Audio (minimum 65 dBA and visual alarms against the               |
|     |                              | violation of temperatures ranges (less than +2°C and              |
|     |                              | more than +8°C. Additional SMS alert would be added               |
|     |                              | advantage.  |
|     |                              |   |
| 1.4 | Software and/ or standard of | In built  |
|     | communication (where ever    |   |
| 40  | requirea)                    |   |
| 18. | Physical Unaracteristics     |   |
| 2.1 | Weight                       | Less than 6.5 Kilograms. Lighter weight preferred.                |
| 2.2 | Configuration                | Case is to be hard and splash proof. IP55 rating                  |
|     |                              | necessary.  |

| 2.3  | Mobility & Portability         | Supplied in protective case for clean storage and safe    |
|--|--------------------------------|---|
|  |                                | transportation. Ideally a backpack.                       |
| 19. Energy Source  |                                |   |
| 3.1  | Power requirements             | 110 to 220V, 50Hz.  |
| 3.2  | Battery Operated               | Battery powered, silence able alarm for power failure.    |
|  |                                | Battery charger to be integral to main power supply,      |
|  |                                | and to charge battery during mains power operation of     |
|  |                                | unit.   |
|  |                                | Internal, replaceable, rechargeable battery to allow      |
|  |                                | operation for at least 12 hours in the event of power     |
|  |                                | failure or for the purpose of utilization during outreach |
|  |                                | clinics.  |
|  |                                | The battery should be charged from 0 to 100% within       |
|  | Destaution                     | 4.5 hours.  |
| 3.3  | Protection                     | Voltage corrector/stabilizer to allow operation at+ or –  |
| 2.4  | Device Construction            | 30% of local rated voltage.                               |
| 3.4  | Power Consumption              | Energy efficient ones are preferred.                      |
| 3.5  | Other requirements             | Mains cable to be at least 3 meters in length.            |
| 20.  | Accessories, Spare parts, Cons | sumables.   |
| 4.1  | Accessories (mandatory,        | Any accessories provided (vaccine carrying stand etc.)    |
|  | standard, optional).           | must be explicitly mentioned and included in the          |
|  |                                | quote.  |
| 4.2   Spare parts (main ones). I wo sets of spare fuses ( if non-resettable fuses us |                                | Two sets of spare fuses ( If non-resettable fuses used)   |
| 21.  | Standards and Safety.          |   |
| 5.1  | Certificates, Performance and  | i. The product must be FDA/CE approved. Any               |
|  | safety standards.              | other approved standards must be explicitly               |
|  |                                | mentioned.  |
|  |                                | i. Should meet WHO/UNICEF standard                        |
|  |                                | WHO/POS/E03/RE03.1. (Similar to Ice Lined                 |
|  |                                | Refrigerator)   |
|  |                                | k Test and inspection as per WHO procedure                |
|  |                                | reference WHO/POS/E03/RE03-VP 1 testing                   |
|  |                                | should be carried out from WHO certified                  |
|  |                                |   |
|  |                                | Conjos of cortifications to be provided while             |
|  |                                | 1. Copies of certifications to be provided write          |
|  |                                |   |
|  |                                | m. IEC 60601 (Highest Medical Device Standard)            |
|  |                                | n. ISO 13485:2016 (Quality standard for Medical           |
|  |                                | Device Manufacturer).                                     |
|  |                                |   |
| 22.  | Iraining and Installation      |   |
| 6.1  | Electrical Socket              | Availability of 5 Amp / 15 Amp (Indian type)              |
|  |                                | electrical socket.  |
| 6.2  | Requirements for sign-off      | Supplier to perform installation, safety and              |
|  |                                | operation checks before handover                          |
|  | l                              |   |

|     |                            | The supplier should provide strong and              |
|-----|----------------------------|---|
|     |                            | sufficient packing to ensure safe arrival of        |
|     |                            | goods at the destination free from loss or          |
|     |                            | damage.   |
|     |                            | Safety measures and precautions to be               |
|     |                            | explicitly mentioned on the device where            |
|     |                            | necessary.  |
|     |                            | List of spare parts and accessories with their      |
|     |                            | part number and costing to be provided.             |
| 6.3 | Training of staff          | Training of users in operation and basic            |
|     |                            | maintenance shall be provided. Advanced             |
|     |                            | maintenance tasks required shall be                 |
|     |                            | documented.   |
| 23. | . Warranty and Maintenance | •   |
| 7.1 | Warranty                   | 3 Years, including all spare parts and accessories. |
| 24. | Documentation.             |   |
| 8.1 | Operating manuals, set     | Should provide a hard and a soft copy of:           |
|     | manuals & other manuals    | f. User, technical and maintenance manuals          |
|     |                            | should be supplied in English/Hindi/Regional        |
|     |                            | language along with machine diagrams.               |
|     |                            | g. List of equipment and procedures required for    |
|     |                            | local calibration and routine maintenance.          |
|     |                            | h. Service and operation manuals.                   |
|     |                            | i. Advance maintenance tasks documentation.         |
|     |                            | j. Certificate of calibration and inspection.       |
| 25  | . Other terms              |   |
| 9.1 | Service support contact    | Contact details of manufacturer, supplier and local |
|     | information.               | service agent to be provided.                       |
|     |                            | Any contract (AMC/CMC/ad-hoc) to be declared by the |
|     |                            | manufacturer.                                       |

#### ANNEXURE 2

#### List of health centres for supply and Installation of Medical Equipment

Indicative list of Health Centres is attached. However, the sites are subject to change further to the site survey. SELCO Foundation will have the complete right on the selection of health Centres.

| SI.No | Name of the Centre | Type of centre | District        | state     |
|-------|--------------------|----------------|-----------------|-----------|
| 1     | Chiading SC        | Subcentre      | East Garo Hills | Meghalaya |
| 2     | Koksi Nengsat SC   | Subcentre      | East Garo Hills | Meghalaya |
| 3     | Nengkra SC         | Subcentre      | East Garo Hills | Meghalaya |
| 4     | Rongbinggre SC     | Subcentre      | East Garo Hills | Meghalaya |
| 5     | Dawagre SC         | Subcentre      | East Garo Hills | Meghalaya |
| 6     | Bolkinggre SC      | Subcentre      | East Garo Hills | Meghalaya |
| 7     | Dolwari SC         | Subcentre      | East Garo Hills | Meghalaya |
| 8     | Mandalgre SC       | Subcentre      | East Garo Hills | Meghalaya |
| 9     | Tombolgre SC       | Subcentre      | East Garo Hills | Meghalaya |
| 10    | Jamge SC           | Subcentre      | East Garo Hills | Meghalaya |
| 11    | Norek SC           | Subcentre      | East Garo Hills | Meghalaya |
| 12    | Simseng Bongga SC  | Subcentre      | East Garo Hills | Meghalaya |
| 13    | Dambo Rongdeng SC  | Subcentre      | East Garo Hills | Meghalaya |
| 14    | Gitokgre SC        | Subcentre      | East Garo Hills | Meghalaya |
| 15    | Sampalgre SC       | Subcentre      | East Garo Hills | Meghalaya |
| 16    | Asil SC            | Subcentre      | East Garo Hills | Meghalaya |
| 17    | Samin Indikim SC   | Subcentre      | East Garo Hills | Meghalaya |

| 18 | Bansamgre PHC                | Primary health centre   | East Garo Hills | Meghalaya |
|----|------------------------------|-------------------------|-----------------|-----------|
| 19 | Songsak PHC                  | Primary health centre   | East Garo Hills | Meghalaya |
| 20 | Mangsang PHC                 | Primary health centre   | East Garo Hills | Meghalaya |
| 21 | Rongrong PHC                 | Primary health centre   | East Garo Hills | Meghalaya |
| 22 | Dobu PHC                     | Primary health centre   | East Garo Hills | Meghalaya |
| 23 | Samanda PHC                  | Primary health centre   | East Garo Hills | Meghalaya |
| 24 | Nengmandalgre PHC            | Primary health centre   | East Garo Hills | Meghalaya |
| 25 | Dagal PHC                    | Primary health centre   | East Garo Hills | Meghalaya |
| 26 | Rongjeng CHC                 | Community health centre | East Garo Hills | Meghalaya |
| 27 | Umsong SC                    | Subcentre               | Ri-Bhoi         | Meghalaya |
| 28 | Umtrew SC                    | Subcentre               | Ri-Bhoi         | Meghalaya |
| 29 | Kyrdem Kulai SC              | Subcentre               | Ri-Bhoi         | Meghalaya |
| 30 | Umsawlum SC                  | Subcentre               | Ri-Bhoi         | Meghalaya |
| 31 | Mawlein SC                   | Subcentre               | Ri-Bhoi         | Meghalaya |
| 32 | Mawrong SC                   | Subcentre               | Ri-Bhoi         | Meghalaya |
| 33 | Sohphoh SC                   | Subcentre               | Ri-Bhoi         | Meghalaya |
| 34 | Pillangkata SC               | Subcentre               | Ri-Bhoi         | Meghalaya |
| 35 | Amjong SC                    | Subcentre               | Ri-Bhoi         | Meghalaya |
| 36 | Baridua SC                   | Subcentre               | Ri-Bhoi         | Meghalaya |
| 37 | Mawdem SC                    | Subcentre               | Ri-Bhoi         | Meghalaya |
| 38 | Narang SC                    | Subcentre               | Ri-Bhoi         | Meghalaya |
| 39 | Kynjoin Umran Sub-<br>Centre | Subcentre               | Ri-Bhoi         | Meghalaya |
| 40 | Mawlang Sub-Centre           | Subcentre               | Ri-Bhoi         | Meghalaya |
| 41 | Mawlyndep Sub-Centre         | Subcentre               | Ri-Bhoi         | Meghalaya |

| 42 | Umroi Sub-Centre      | Subcentre               | Ri-Bhoi | Meghalaya |
|----|-----------------------|-------------------------|---------|-----------|
| 43 | Sonidan Sub-Centre    | Subcentre               | Ri-Bhoi | Meghalaya |
| 44 | Mawbsein Sub-Centre   | Subcentre               | Ri-Bhoi | Meghalaya |
| 45 | Umsohphria Sub-Centre | Subcentre               | Ri-Bhoi | Meghalaya |
| 46 | Tasku Sub-Centre      | Subcentre               | Ri-Bhoi | Meghalaya |
| 47 | Killing Sub-Centre    | Subcentre               | Ri-Bhoi | Meghalaya |
| 48 | Pahambir Sub-Centre   | Subcentre               | Ri-Bhoi | Meghalaya |
| 49 | Umling Sub-Centre     | Subcentre               | Ri-Bhoi | Meghalaya |
| 50 | Marmain Sub-Centre    | Subcentre               | Ri-Bhoi | Meghalaya |
| 51 | Umshaken Sub-Centre   | Subcentre               | Ri-Bhoi | Meghalaya |
| 52 | Umden PHC             | Primary health centre   | Ri-Bhoi | Meghalaya |
| 53 | Marngar PHC           | Primary health centre   | Ri-Bhoi | Meghalaya |
| 54 | Byrnihat PHC          | Primary health centre   | Ri-Bhoi | Meghalaya |
| 55 | Warmansaw PHC         | Primary health centre   | Ri-Bhoi | Meghalaya |
| 56 | Mawhati PHC           | Primary health centre   | Ri-Bhoi | Meghalaya |
| 57 | Umtrai PHC            | Primary health centre   | Ri-Bhoi | Meghalaya |
| 58 | Kyrdem PHC            | Primary health centre   | Ri-Bhoi | Meghalaya |
| 59 | Mawlaisnai PHC        | Primary health centre   | Ri-Bhoi | Meghalaya |
| 60 | Patharkhmah CHC       | Community health centre | Ri-Bhoi | Meghalaya |
| 61 | Umsning CHC           | Community health centre | Ri-Bhoi | Meghalaya |
| 62 | Bhoirymbong CHC       | Community health centre | Ri-Bhoi | Meghalaya |
| 63 | Aboi CHC              | Community health centre | Mon     | Nagaland  |
| 64 | CHC Tobu              | Community health centre | Mon     | Nagaland  |
| 65 | Wakching CHC          | Community health centre | Mon     | Nagaland  |
| 66 | Tizit CHC             | Community health centre | Mon     | Nagaland  |

| 67 | Angphang PHC        | Primary health centre      | Mon | Nagaland |
|----|---------------------|----------------------------|-----|----------|
| 68 | Chenmoho PHC        | Primary health centre      | Mon | Nagaland |
| 69 | Chen PHC            | Primary health centre      | Mon | Nagaland |
| 70 | Changlangshu PHC    | Primary health centre      | Mon | Nagaland |
| 71 | Monyakshu PHC       | Primary health centre      | Mon | Nagaland |
| 72 | Pessao PHC          | Primary health centre      | Mon | Nagaland |
| 73 | Mopong PHC          | Primary health centre      | Mon | Nagaland |
| 74 | Naginimora PHC      | Primary health centre      | Mon | Nagaland |
| 75 | Wanching PHC        | Primary health centre      | Mon | Nagaland |
| 76 | Phomching PHC       | Primary health centre      | Mon | Nagaland |
| 77 | Tang PHC            | Primary health centre      | Mon | Nagaland |
| 78 | Oting PHC           | Primary health centre      | Mon | Nagaland |
| 79 | Shangnyu PHC        | Primary health centre      | Mon | Nagaland |
| 80 | Yongkhao PHC        | Primary health centre      | Mon | Nagaland |
| 81 | Chingkhao PHC       | Primary health centre      | Mon | Nagaland |
| 82 | Changlang HWC       | Health and wellness centre | Mon | Nagaland |
| 83 | Jakphang HWC        | Health and wellness centre | Mon | Nagaland |
| 84 | Аорао HWC           | Health and wellness centre | Mon | Nagaland |
| 85 | Choaha Chingnyu HWC | Health and wellness centre | Mon | Nagaland |
| 86 | Chenloisho HWC      | Health and wellness centre | Mon | Nagaland |
| 87 | Longching HWC       | Health and wellness centre | Mon | Nagaland |

| 88  | Chinglong HWC     | Health and wellness centre | Mon | Nagaland |
|-----|-------------------|----------------------------|-----|----------|
| 89  | Ngangching HWC    | Health and wellness centre | Mon | Nagaland |
| 90  | Wangti HWC        | Health and wellness centre | Mon | Nagaland |
| 91  | Mohung HWC        | Health and wellness centre | Mon | Nagaland |
| 92  | Sowa HWC          | Health and wellness centre | Mon | Nagaland |
| 93  | Chenwetnyu HWC    | Health and wellness centre | Mon | Nagaland |
| 94  | Tamkoang HWC      | Health and wellness centre | Mon | Nagaland |
| 95  | Yakshu HWC        | Health and wellness centre | Mon | Nagaland |
| 96  | Ukha HWC          | Health and wellness centre | Mon | Nagaland |
| 97  | Yonghong HWC      | Health and wellness centre | Mon | Nagaland |
| 98  | Lapa HWC          | Health and wellness centre | Mon | Nagaland |
| 99  | Tizit Village HWC | Health and wellness centre | Mon | Nagaland |
| 100 | Yannu HWC         | Health and wellness centre | Mon | Nagaland |
| 101 | Chingdang HWC     | Health and wellness centre | Mon | Nagaland |
| 102 | Kongan HWC        | Health and wellness centre | Mon | Nagaland |
| 103 | Longwa HWC        | Health and wellness centre | Mon | Nagaland |

| 104 | S.Chingnyu HWC       | Health and wellness centre   | Mon           | Nagaland |
|-----|----------------------|------------------------------|---------------|----------|
| 105 | Sheanghah Tangten SC | Subcentre                    | Mon           | Nagaland |
| 106 | Sheanghah Wamsa Sc   | Subcentre                    | Mon           | Nagaland |
| 107 | Totok Chingnyu       | Subcentre                    | Mon           | Nagaland |
| 108 | PHC Saikot           | Primary health centre        | Churachandpur | Manipur  |
| 109 | PHC Zezaw            | Primary health centre        | Churachandpur | Manipur  |
| 110 | PHC Behiang          | Primary health centre        | Churachandpur | Manipur  |
| 111 | PHC Sinzawl          | Primary health centre        | Churachandpur | Manipur  |
| 112 | PHC Henglep          | Primary health centre        | Churachandpur | Manipur  |
| 113 | PHC Sagang           | Primary health centre        | Churachandpur | Manipur  |
| 114 | CHC Singngat         | Community health centre      | Churachandpur | Manipur  |
| 115 | HWC Tarao Laimanal   | Health and wellness centre   | Chandel       | Manipur  |
| 116 | HWC Khudei Khunou    | Health and wellness centre   | Chandel       | Manipur  |
| 117 | HWC Leingangching    | Health and wellness centre   | Chandel       | Manipur  |
| 118 | HWC Larong           | Health and wellness centre   | Chandel       | Manipur  |
| 119 | HWC Paraolon         | Health and wellness centre   | Chandel       | Manipur  |
| 120 | PHC Sajik Tampak     | Primary health centre        | Chandel       | Manipur  |
| 121 | PHC Khengjoi         | Primary health centre        | Chandel       | Manipur  |
| 122 | PHSC Sehlon          | Primary health sub<br>centre | Chandel       | Manipur  |
| 123 | PHSC Songiang        | Primary health sub<br>centre | Chandel       | Manipur  |

| 124 | PHSC Jangoulen            | Primary health sub<br>centre | Chandel    | Manipur |
|-----|---------------------------|------------------------------|------------|---------|
| 125 | PHSC New Somtal           | Primary health sub centre    | Chandel    | Manipur |
| 126 | PHSC Saibol joupi         | Primary health sub<br>centre | Chandel    | Manipur |
| 127 | PHSC Namtiram             | Primary health sub<br>centre | Tamenglong | Manipur |
| 128 | PHSC Atengba              | Primary health sub centre    | Tamenglong | Manipur |
| 129 | PHSC Lenglong             | Primary health sub centre    | Tamenglong | Manipur |
| 130 | PHSC Khundong<br>Kunhaiba | Primary health sub centre    | Tamenglong | Manipur |
| 131 | PHSC Nungkao              | Primary health sub<br>centre | Tamenglong | Manipur |
| 132 | PHSC Akhui HWC            | Primary health sub<br>centre | Tamenglong | Manipur |
| 133 | PHSC Dailong HWC          | Primary health sub centre    | Tamenglong | Manipur |
| 134 | PHSC Taningjam            | Primary health sub centre    | Tamenglong | Manipur |
| 135 | PHSC Aben                 | Primary health sub centre    | Tamenglong | Manipur |
| 136 | PHSC Longchai             | Primary health sub centre    | Tamenglong | Manipur |
| 137 | PHSC Chaton               | Primary health sub<br>centre | Tamenglong | Manipur |
| 138 | PHSC Kabonram HWC         | Primary health sub<br>centre | Tamenglong | Manipur |
| 139 | PHSC New Kaiphundai       | Primary health sub<br>centre | Tamenglong | Manipur |

| 140 | PHSC Phaitol   | Primary health sub<br>centre | Tamenglong | Manipur |
|-----|----------------|------------------------------|------------|---------|
| 141 | PHSC Wairangba | Primary health sub<br>centre | Tamenglong | Manipur |
| 142 | PHSC Irenglong | Primary health sub<br>centre | Tamenglong | Manipur |
| 143 | PHSC Sonaram   | Primary health sub<br>centre | Tamenglong | Manipur |

## Region wise number of equipment

| SI. No | Medical Equipments                    | Nagaland | Manipur | Meghalaya |
|--------|---------------------------------------|----------|---------|-----------|
| 1      | Labour table                          | 34       | 26      | 37        |
| 2      | Trolley                               | 49       | 57      | 42        |
| 3      | Foot Step                             | 49       | 29      | 42        |
| 4      | Delivery kit (PHC and CHC)            | 42       | 8       | 3         |
| 5      | Delivery kit (Sub Center)             | 26       | 381     | 34        |
| 6      | Examination Light/Lamp                | 49       | 33      | 49        |
| 7      | Microscope                            | 0        | 5       | 1         |
| 8      | Centrifuge                            | 6        | 5       | 4         |
| 9      | Radiant Warmer                        | 44       | 19      | 53        |
| 10     | Suction apparatus                     | 49       | 29      | 49        |
| 11     | Potable vaccine carrier               | 0        | 0       | 42        |
| 12     | Fully automated Biochemistry analyser | 4        | 0       | 0         |
| 13     | Fully automated Hematology analyser   | 4        | 0       | 0         |
| 14     | ECG (12 Leads)                        | 4        | 0       | 0         |

| 15 | CBC Machine   | 6  | 0 | 0 |
|----|---|----|---|---|
| 16 | Multipara monitor with provision of invasive parameter measurements | 4  | 0 | 0 |
| 17 | AED (Automated External Defribillator)                              | 4  | 0 | 0 |
| 18 | USG (Portable)  | 4  | 0 | 0 |
| 19 | Autoclave   | 17 | 0 | 0 |
| 20 | Nebuliser machine   | 22 | 0 | 0 |

#### **ANNEXURE 3**

#### DETAILS OF THE ORGANISATION

| 1  | Name and address of the organisation (With pin code)  |  |
|----|---|--|
| 2  | Year of starting the organization & registration<br>number (photocopy of registration certificate or any other<br>relevant document to be enclosed) |  |
| 3  | Name and Contact number of the Proprietor or Point of Contact   |  |
| 4  | Status of organisation- Proprietorship / Partnership/ Pvt<br>Ltd / Limited/others   |  |
| 5  | GSTIN and PAN No. of Income Tax Dept. (Copies of certificates to be enclosed)   |  |
| 6  | Photocopy of the last filed Income Tax (IT) returns for last 2 years  |  |
| 7  | Copy of GST returns for the last 2 years  |  |
| 8  | Audit reports for the last 2 years (Certified copy of   |  |
|    | Chartered Account' report Balance Sheet and P&L account to be enclosed)   |  |
| 9  | Documents to prove cumulative business of Rs 2 Cr in the last 3 years   |  |
| 10 | Experience of Supplier/supplier relating to supply of solar energy-<br>based solutions (supporting certificates to be enclosed)                     |  |
| 11 | Particulars of Physical Infrastructure and total strength of staff<br>available in the organization relating to Supplier/supply/testing<br>etc.,    |  |
| 12 | Organisation Bank address   |  |
| 13 | Evidences of existence (GST Registration) of local office in State of<br>Odisha Preferably closer to the project districts                          |  |

#### **ANNEXURE 4 – CONFIRMATION ON ENCLOSURES**

| SI.No. | Description   | Whether the<br>Document is<br>enclosed or not | Page No. From<br>and to |
|--------|---|---|-------------------------|
| 1      | Details of Organization as per Anexure –3   | YES/NO  |                         |
| 2      | Copies showing the legal status, places of registration and principal place of business of the firm                           | YES/NO  |                         |
| 3      | Copies of audited financial statements for the last 2 financial years   | YES/NO  |                         |
| 4      | Copies of GST registration and GST returns filled in the last 2 financial years   | YES/NO  |                         |
| 5      | Copies of income tax registration and income tax returns filled in the last 2 financial years                                 | YES/NO  |                         |
| 6      | Acceptance to give 5 years guarantee for trouble free operation and maintenance.  | YES/NO  |                         |
| 7      | Evidences of existence (GST Registration) of<br>local office in State of Odisha Preferably closer<br>to the project districts | YES/NO  |                         |
| 8      | Letter of declaration to confirm that the<br>Organisations has not been black listed by any<br>entity or institution          | YES/NO  |                         |
| 9      | Organisation bank details   | YES/NO  |                         |
| 10     | Signed, sealed copies of Annexure 1, 2, 3, 4,5 and 6  | YES/NO  |                         |
| 11     | ISO/CE/FDA/relevant certificates of the equipment quoted  |   |                         |

### ANNEXURE 5- SCHEDULE OF TENDER

Regarding Supply and installation

| SI.No. | Scheduled activity                | Within days (No.of<br>days) | Accepted Schedule by date |
|--------|-----------------------------------|-----------------------------|---------------------------|
| 1.     | Supply starts after WO            | 45 days                     |                           |
| 2.     | Supply ends                       | 75 Days                     |                           |
| 3      | Installations begins              | 45 Days                     |                           |
| 4.     | Installation of all the equipment | 90 days                     |                           |

#### **ANNEXURE 6- PRICE SCHEDULE**

#### PARTICULARS TO BE SUBMITTED IN THE FINANCIAL BID (SECOND COVER).

#### PRICE SCHDULE FOR THE SUPPLY AND INSTALLATION OF MEDICAL EQUIPMENTS IN THE PUBLIC HEALTH CENTRES IN THE STATE OF MEGHALAYA, MANIPUR AND NAGALAND

#### Rates quoted by the Organisations:

- a. The rates should be mentioned item wise clearly both in words and figures Item-wise details of rates quoted.
- b. Rates should be inclusive of GST.
- c. Rates should be inclusive of AMC from Year 2 to 5 but separately mentioned.
- d. Rates should include an average transportation cost for supply of solution category in the region of operation of the Organisations.

#### On site AMC/Unit Price in Rs/unit of Quote for Medical No of SI.No energy efficient cost up to 5 years (in Equipment Equipment medical equipment RS) 1 Labour table 97 2 Trolley 148 3 Foot Step 120 Delivery kit (PHC 4 53 and CHC) Delivery kit (Sub 5 441 Center) Examination 6 131 Light/Lamp 7 Microscope 6 8 Centrifuge 15 9 Radiant Warmer 116 10 Suction apparatus 127 Portable vaccine 11 42 carrier Fully automated 12 Biochemistry 4 analyser

#### Table 1: Cost of Solar BoM

| 13 | Fully automated<br>Hematology<br>analyser                                    | 4  |  |
|----|--|----|--|
| 14 | ECG (12 Leads)   | 4  |  |
| 15 | CBC Machine  | 6  |  |
| 16 | Multipara monitor<br>with provision of<br>invasive parameter<br>measurements | 4  |  |
| 17 | AED (Automated<br>External<br>Defibrillator)                                 | 4  |  |
| 18 | USG (Portable)   | 4  |  |
| 19 | Autoclave  | 17 |  |
| 20 | Nebuliser machine  | 22 |  |

#### CONDITIONS:

If our tender is accepted, we hereby undertake to abide as per the stipulated Terms and Conditions to supplier and supply, installation and maintenance of solar energy-based solutions.

We agree to abide by this tender and if the work is awarded to us, in executing the above contract we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of corruption act 1988".

We understand that you are not bound to determine the price based on the lowest offer that Foundation may receive.

We accept that all disputes between parties will be adjudicated by a competent court in Bangalore, India.

I, \_\_\_\_\_\_ (Name of signatory) on behalf of the Organisations \_\_\_\_\_\_ (Name of the Organisations), hereby certify that I have noted the technical specifications of solutions mentioned in Annexure 1, the prices quoted above are as per the details specified and in compliance with Annexure 1.

Dated this..... day of.....2022

Signature (Name and Address of the Tender with seal) (In the capacity of..... Duly authorized to sign the Tender for and on behalf of\_\_\_\_\_)