

**Tender Notice for Supply of Medical Equipment to Dickoya Hospital  
constructed by the Government of India, Hatton, Sri Lanka**

**Terms and Conditions**

High Commission of India invites sealed quotations (Bid Reference: Col/Com/228/4/2010-Equip/RT) under the two bid system (technical and financial) from eligible bidders for supply and Installation of Medical equipment to District Hospital in Hatton.

2. Interested bidders can purchase the Tender document from Project Officer (Development Cooperation), High Commission of India, 36-38, Galle Road, Colombo-03, between 09 May 2016 and 26 May 2016 against payment of SLR 2,000 (equivalent INR 1000) per package (non-refundable) in cash. These documents can also be seen from [www.hcicolombo.org](http://www.hcicolombo.org).

3. The technical bid (Original & Duplicate) and the financial bid (Original & Duplicate) documents should be sealed by the bidder in separate covers duly superscribed and these four sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed and marked "**Tender for Supply, Delivery and Installation of Medical Equipment to Dickoya Hospital, Hatton, Sri Lanka (Re-tendering)**". The technical bids will be opened in presence of authorized representatives of bidders **at 1530 hrs on 27 May 2016** in the High Commission of India, Colombo, Sri Lanka. Sealed quotations may be submitted under the two bid system (technical and financial) by manufacturers or authorized dealers/sales agents of items mentioned in **Annexure A** (as per listed specifications) based in Sri Lanka or India.

4. Bidders requiring any clarification on any issue of the Tender document may take up with the Technical Evaluation Committee (TEC) during the Pre-Bid meeting at 1500 Hrs on 16 May 2016 in the High Commission of India, 36-38, Galle Road, Colombo-03.

5. A certificate guaranteeing that adequate amount of spare parts will be available for **at least seven years** including warranty period may be provided along with the technical bid.

6. Bids may be submitted to **Project Officer (Development Cooperation), High Commission of India, 36-38, Galle Road, Colombo 3** on or before **1500 hrs on 27 May 2016** and acknowledgement obtained.

7. Bidders are required to bid for entire items in a package. Bidder who have not quoted for any item in a package will be disqualified.
8. **OPENING OF BIDS:** The sealed quotations (technical bids) will be opened in presence of authorized representatives of bidders at **1530 hrs on 27 May 2016** in the High Commission of India. After scrutiny of technical bids by the TEC, financial bids of only those bidders who qualify the technical evaluation will be opened at a time and date to be intimated later.
9. **EARNEST MONEY DEPOSIT (EMD):** Technical bids should contain EMD (May please refer clause 13) in the form of a DD/Guarantee drawn in favour of High Commission of India, Colombo. Alternatively, a standard bid guarantee (format as in **Annexure D**) issued by a commercial bank approved by the Central Bank of Sri Lanka, in favour of the High Commission of India, Colombo of this amount may be provided. The Bid Guarantee of all unsuccessful bidders will be released after the tender is finalized. The Bid Guarantee should be valid for **a minimum period of 195 days** from the date of opening of tenders. Bidders are requested to intimate the concerned Bank Guarantee issuing authority to send a confirmation to the High Commission of India at [dc.colombo@mea.gov.in](mailto:dc.colombo@mea.gov.in) with the following information
- I. Date of issue
  - II. Bond number
  - III. Value
  - IV. To whom the bond is issued"
10. **Documents establishing goods conformity to tender specification.**
- I. The bidder shall provide in its bid the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by the purchaser in the tender documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the tender documents to establish technical responsiveness of the goods and services offered in its tender.
  - II. If a bidder furnishes wrong and/or misleading data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.
11. **Minor Infirmary/Irregularity/Non-Conformity:** If during the preliminary examination, the TEC find any minor infirmity and/or irregularity and/or non-conformity in a tender, the High Commission of India may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the bidders. Wherever necessary, the purchaser will convey its observation on such 'minor' issues to the bidders asking them to respond by a

specified date. If the bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be rejected.

**12. Alteration and Withdrawal of Tender**

- i. Bids are not permitted to alter / modify after the prescribed.
- ii. No bids should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a bidder withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the bidder in its tender.

**13. PACKAGES FOR BIDDING:** Bidders may bid for one or more of the following packages (Details in **Annexure A**). The EMD payments may be made accordingly.

<b>Package</b>	<b>EMD in Sri Lankan Rupees</b>	<b>EMD in Indian Rupees</b>
<b>One</b>	664,080/-	332,040/-
<b>Two</b>	63,460/-	31,730/-
<b>Three</b>	86,160/-	43,080/-
<b>Four</b>	43,450/-	21,725/-
<b>Five</b>	32,340/-	16,170/-
<b>Six</b>	47,510/-	23,755/-
<b>Seven</b>	31,500/-	15,750/-
<b>Eight</b>	30,400/-	15,200/-
<b>Nine</b>	30,000/-	15,000/-
<b>Ten</b>	44,750/-	22,375/-
<b>Eleven</b>	76,000/-	38,000/-
<b>Twelve</b>	40,000/-	20,000/-
<b>Thirteen</b>	96,000/-	48,000/-
<b>Fourteen</b>	62,900/-	31,450/-
<b>Fifteen</b>	36,610/-	18,305/-
<b>Sixteen</b>	254,000/-	127,000/-
<b>Seventeen</b>	32,000/-	16,000/-

**14. VALIDITY AND CURRENCY OF BIDS:** All bids shall hold good for acceptance for a minimum period of **150 days** from the date of closing of tender. The price quoted in the Price Schedule Form (at **Annexure B**) should be in Sri Lankan Rupees for local bidder and in Indian Rupees for Indian bidder and written clearly in ink or typewritten. The total amount of the bid should be given in words as well as in figures.

**15. PRICE QUOTATIONS:** The price (in SLR) as quoted in the Price Schedule Form (**Annexure B**) should be as of point of delivery, Installation and Training. The price both exclusive and inclusive of all taxes, duties and levies

etc must be quoted and the taxes, duties and levies etc. as applicable may be quoted separately. The VAT registration number should be indicated, if registered for VAT. If the bidder is not registered for payment of VAT, a certificate to that effect, obtained from the Commissioner General of Inland Revenue, should be annexed to the tender.

16. The bidder should provide the following:

**With the Technical Bid:**

- (i) Self-attested photo-copy of registration of the company/firm/ proprietorship with the concerned Sri Lankan / Indian authorities.
- (ii) Annual Report (where statutorily required to be filed), and Audited Financial Reports for the last 3 years.
- (iii) Details of experience in the field of supplying similar items to Government or companies in Sri Lanka or in India
- (iv) Manufacturer's authorization letter authorizing the bidder to supply the goods.
- (v) Documentary evidence to establish conformity of the goods to the technical specifications in the bidding documents along with the Technical Specification Form (**Annexure A**).
- (vi) Documents and information as required in the Manufacturers Authorization Form (**Annexure C**)
- (vii) All equipment offered should be established brands with a previous history of supply in Sri Lanka or India. Bidders should either be ISO 9001 certified Medical Equipment companies registered with the Ministry of Health, Government of Sri Lanka or with relevant authorities of Government of India. A certified copy of such registration should be submitted with the technical bid.
- (viii) The bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods during the warranty period.
- (ix) EMD as mentioned in clause 9 above

**With the Financial Bid:**

- (i) Price quotation in the Price Schedule Forms (as in **Annexure B**)
- (ii) The price should be quoted only in Sri Lankan Rupees.

17. Any alteration or deletions in the bid should be authenticated by the full signature of the bidder.

18. **WARRANTY:** The Supplier shall provide on-site standard warranty as given by the manufacturer or minimum of one year. In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period as originally agreed. Suppliers shall ensure the availability of after sales service for a period of **at least seven years** including warranty period. The warranty period shall be **as specified in the technical specifications**. Supplier shall also carry sufficient inventories to assure ex-stock supply of consumables and spares in Sri Lanka. **All charges with regard to the supply of spare parts, labour, travel, per diem and accommodation to supplier's staff etc. shall be borne by the supplier during the period of warranty. No additional expenditure for services rendered during the above period will be paid.**

19. **PERFORMANCE GUARANTEE:** The successful bidders shall submit, within **fourteen** days after the award of tender, a Performance Guarantee provided by a commercial bank or an insurance agency approved by the Central Bank of Sri Lanka, of an amount equal to ten percent (10%) of the value of order, drawn in favour of the High Commission of India, Colombo for the due execution of the contract within the specified period. The Performance Guarantee should be valid for a period of **150 days** from the date of award. If the Performance Guarantee is not submitted within **14 days** of the letter of award, the award will be cancelled and the Guarantee will be forfeited. The EMD of the bidder, whose tender is accepted, will be discharged when the said bidder's Performance Guarantee has been accepted. Bidders are requested to intimate the concerned Bank Guarantee issuing authority to send a confirmation to the High Commission of India at [dc.colombo@mea.gov.in](mailto:dc.colombo@mea.gov.in) with the following information

- I. Date of issue
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- III. Value
- IV. To whom the bond is issued"

20. **DELIVERY:** The successful bidder must complete delivery, as stipulated above, of the items **within a period of 90 days** from the issue of **Purchase Order**. Payment will be done only after successful supply and installation of equipment at Dickoya hospital. Breakage, if any, in transit during the supply period shall be the responsibility of the supplier and should be replaced free of cost. If the successful bidder fails to hand over within the stipulated period, liquidated damages @ 0.5% of the tender amount shall be levied for a delay of each calendar week or part thereof, subject to a maximum of 10%.

21. **MODE OF PAYMENT:** Payments will be released only after the items as tendered are handed over/delivered and installed at Dickoya Hospital, Hatton,

Sri Lanka in perfect working condition and physical verification of the supplies, as also technical verification has been carried out by a competent team authorized by the Government of Sri Lanka/ High Commission of India. Upon completion of delivery, the items will be inspected and defect, shortcomings or non-conformity to specifications, if any, will be brought to the notice of the Bidder who should take immediate action to rectify those **within 14 days**.

22. **RETENTION MONEY:** Retention money to the extent of 5% of the invoice amount will be retained up to the warranty period.

23. Any dispute or difference regarding the interpretation of the provisions of the Agreement/Contract shall be resolved amicably between the parties. If the dispute is not resolved through mutual consultations within a period of six months, either party may refer the dispute to arbitration in accordance with the Arbitration & Conciliation Act 1996 of India as amended from time to time. The number of arbitrators shall be one and that the place of arbitration shall be New Delhi, India. In such a situation the applicable law will be the law of India. The language of the Tribunal shall be English. The cost shall be borne by the parties equally unless otherwise determined by the Arbitral Tribunal.

24. **ACCEPTANCE OF TENDERS:** The High Commission of India reserves the right to accept or reject any or all of the tenders in full or in part of the bid without assigning any reasons or incurring any liability thereof.

## Annexure A : Specification for Supplies

### Annexure A : Specification for Supplies

#### Package ONE

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	<b>The most appropriate answer</b>	<b>Required Number</b>
1	Baby basinet	<p>Size of Basket – 75 to 77 x 40 x 42 cms Height of the Bassinet from floor to basket top 103-105 cms.</p> <p>Strong CR ERW steel stand on four rubber stumps with hanging basket with removable mosquito net of aluminum rod.</p> <p>Epoxy created at least 50 micron</p>		4
2	Open care system	<p>1 Description of Function 1.1 Required for care of new born and infants</p> <p>2 Operational Requirements 2.1 Complete system with cart and oxygenation facility is required.</p> <p>3 Technical Specifications 3.1 Essential parts : Cart &amp; bassinet Warming system with controls &amp; alarms. Examination light Storage space- 2 sliding drawers below bassinet 2 platforms of the size 9” x 12” capable of holding up to 5 Kgms of equipments. Cart: Should swivel on 4 wheels of at least 5” dia- with foot operated., 2 front lockable wheels. Dimensions:- Height : 180-200 cms, Width : 60-70 cms, Depth : 100-120 cms.</p>		5

	<p>Working level : 95-110 cms and adjustable.</p> <p>Bassinets : 1 fixed and 3 movable transparent side walls :Portion above X-Ray cassette holder radiolucent. Mattress- Width : 55 – 60 cms, Length : 65- 70 cms, Thickness : Minimum 4 cms  Material : Soft, Comfortable, easy to clean, radiolucent.  Bassinets tilt in steps of 6 – 8 degrees, Trendelenburg or reverse Trendelenburg  Warmer module swivel : 45-65 degrees on either side  Warming systems- Modes :Manual &amp; skin. Manual mode :Adjustable in steps from zero to 100</p> <p>Skin mode - Method : Flexible, unbreakable skin temperature probe Set point range : 34 – 38 degrees C. Skin temp variability at Temperature equilibrium :+ 0.2 degrees C  Skin temperature display- Accuracy : + 0.2 degrees C. Type : digital LED with 0.1 degree resolution. Correlation of displayed And actual skin temp : difference <math>\pm</math> 0.2 degrees C.  Silence/ Reset switch : To silence the alarm &amp; reset set point.</p> <p>Alarms  Probe failure  Heat failure  High and low temperature  Power failure  System failure  Examination light : Illuminance 100 foot candles at mattress center  Storage space : 2 drawers, preferably covered and sliding</p> <p>Pulse oximeter : to measure oxygen saturation and heart rate resistant to motion artifact. Able to pick up signals in low perfusion states (<u>Price to be quoted separately</u>).</p> <p>CPAP system : Flow driven (<u>Price to be quoted separately</u>).  With air oxygen blender and FiO<sub>2</sub> control, with heated humidifier, airway pressure display 0-</p>		
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		<p>15 cm H<sub>2</sub>O, With bonnet, cap and nasal prongs (10 of each size) for babies 600 gm-4000 gms, with reusable circuits, with 1 reusable flow generator Power requirements : 220/240 V AC, 50/60 Hz,</p> <p>Accessories I.V. line pole with pivot bracket : should be able to accommodate 2 fluid bottles Monitor shelves : 2 in number Should support upto approx. 20 kgs per shelf or upto 25 kgs total on single side Standard X- Ray cassette holder : sliding holder located just below undersurface of Bassinet, with markings to help placement of cassette</p> <p>Patient Probes : 4 reusable temperature probes 4 reusable oxygen saturation probes 2 patient extension cables for the saturation probes</p> <p>4 System Configuration Accessories, spares and consumables 4.1 System as specified- 4.2 All consumables required for installation and standardization of system to be given free of cost.</p> <p>5 Environmental factors 5.1 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%. 5.2 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%.</p> <p>6 Power Supply 6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug 6.2 UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.</p> <p>7 Standards, Safety and Training 7.1 Should be FDA/CE or BIS approved product</p>		
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		<p>7.2 Shall comply with electrical safety requirements as per IEC or BIS regulations.</p> <p>7.3 Comprehensive warranty &amp; CMC after warranty. CMC would include all electronic and mechanical items including PCBs and heater elements. It should provide every year per unit four re-usable temperature probes, four oxygen saturation monitor probes, 20 Flow generator, and CPAP circuit.</p> <p>7.4 Comprehensive training for lab staff and support services till familiarity with the system.</p> <p>8 Documentation</p> <p>8.1 User/Technical/Maintenance manuals to be supplied in English.</p> <p>8.2 Certificate of calibration and inspection.</p> <p>8.3 List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.</p> <p>8.4 List of important spare parts and accessories with their part number and costing.</p> <p>8.5 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.</p> <p>The job description of the hospital technician and company service engineer should be clearly spelt out.</p>		
3	Phototherapy unit	<ol style="list-style-type: none"> <li>1. Dimensions of the chamber should be at least 6 feet x 3 feet x 3feet.</li> <li>2. Phototherapy chamber of 18 UVA+18 NB UVB tubes designed for providing even irradiation of the body in the treatment area.</li> <li>3. UV chokes must be provided to provide long life to the tube light and cooling fans for effective cooling of the unit.</li> <li>4. integrated dosimeter system for easy calculation of irradiation levels.</li> <li>5. The equipment have CE or FDA or ISI certification.</li> <li>6. Advanced micro computerized electronic LCD/TFT Controller which allows setting of joules/time for UVA and milli Joules/time for NB UVB tubes.</li> <li>7. Automatic computation of irradiation time from joules/time for NB UVB tubes.</li> <li>8. Dose limit can be preset and cumulative dose is displayed instntaneously with provision of storage of data. Provision of 'software backup' is preferable.</li> <li>9. Variation in irradiation is taken care by built in UVA/NB UVB sensors which should be able to detect all irradiation completely and uniformly.</li> </ol>		2

		<p>10. Switches the system 'off' automatically with warming alarm at the end of set irradiation time.</p> <p>11. Built in memory system that helps to avoid error in treatment.</p> <p>12. Body to be of a metal which is rust free so as to ensure long rust free life of the unit.</p> <p>13. Automated and/or mechanical safety mechanism to prevent excess irradiation to the patients so as to avoid/prevent burns etc.</p> <p>14. Electrical leakage circuit tripper/breaker in each panel to ensure maximum safety of the patient.</p> <p>15. Open top unit to ensure maximum ventilation and prevent claustrophobia.</p> <p>16. Mechanism to provide information to the patient regarding duration of treatment and time left for exposure during their treatment.</p> <p>17. Computer for patient data management with software and interface for the phototherapy chamber which is RS-232 compatible.</p> <p>18. To be supplied with suitable stabilizer.</p> <p>19. Black UV Goggles and Eye pads cover (3 pairs each for adult and 3 pair for children ) as protective+.</p>		
4	Baby warmer unit	<ul style="list-style-type: none"> <li>· Infant warmer to be used in neonatology.</li> <li>· The unit should conform all relevant international, national and local standards.</li> </ul> <p><b>Specifications</b></p> <ul style="list-style-type: none"> <li>· Temperature control:</li> <li>· Range 30-38° C</li> <li>· Skin range 25 – 42 °</li> <li>· Increment 0.1°</li> <li>· Display Digital</li> <li>· Control Unit (to be supplied with.)</li> <li>· Automatic heat control type</li> <li>· Set point mechanism</li> <li>· Heater Indicator.</li> </ul> <p>Alarms (Audible and Visual)</p> <ul style="list-style-type: none"> <li>· High air temperature</li> </ul>		2

		<ul style="list-style-type: none"> <li>· Sensor disconnect</li> <li>· Power Failure</li> <li>· Alarm in manual mode: every 15 minutes with automatic shutoff</li> </ul> <p><b>The warmer should includes:</b></p> <ul style="list-style-type: none"> <li>· Self- check features</li> <li>· Breaks for casters</li> <li>· Skin sensor</li> <li>· Supplemental humidity</li> <li>· Protection against breaks and bursts of radiant and light source</li> <li>· Spares and accessories</li> <li>· Service and users manuals</li> </ul> <p><b>Accessories:</b></p> <ul style="list-style-type: none"> <li>· No. of hand ports 6</li> <li>· No. of tubing ports 6</li> <li>· No. of oxygen inlet port 1</li> <li>· Backup thermostat</li> <li>· Examination Light 50 W Halogen</li> <li>· Radiant heat source Quartz tube 600w</li> <li>· Phototherapy lights</li> <li>· Resuscitation equipment packages</li> <li>· X-Ray cassette holder</li> </ul>		
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## Annexure A : Specification for Supplies

### Package Two :

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Infant weighing machine	<ul style="list-style-type: none"> <li>• Capable of weighing 0-20 Kg with a count of 50 gms with 0 adjustment</li> <li>• Infant weighing pan should be stable with smooth surface.</li> <li>• Epoxy coated</li> </ul>		1
2	Infant meter	<ul style="list-style-type: none"> <li>• Infant meter for measuring length of Baby</li> <li>• Material Acrylic</li> <li>• Sleek broad acrylic base with one sliding side.</li> <li>• Marking for direct reading in centimeters for 0 to 90 cms.</li> <li>• Folding sides for easy storage.</li> </ul>		1
3	Infant Incubator	<p>1 Description of Function</p> <p>1.1 An infant incubator provides a closed, controlled environment that warms an infant by circulating heated air over the skin. The heat is then absorbed into the body by tissue conduction and blood convection. Ideally, both the skin and core temperatures should be maintained with only minor variations.</p> <p>2 Operational Requirements</p> <p>2.1 High quality with humidity and servo controlled double walled with cabinet incubator.</p> <p>2.2 Microprocessor controlled, easy access control panel with feather touch switches</p> <p>2.3 With a facility to elevate base to offer adjustable range</p> <p>2.4 Facility with both servo control as well as air temperature control and servo humidifier</p> <p>2.5 Accommodates shelves and IV poles.</p> <p>2.6 The quality of the material used should very high and crystal transparent</p> <p>2.7 Super quality microprocessor based control system - self test functions are performed</p> <p>2.8 System required complete with Oxygen port with tubing and Gel Mattress.</p>		1

	<p>3 Technical Specifications</p> <p>3.1 Continuous bed tilt up to 8° on either sides</p> <p>3.2 Head end raise facility with auto lock.</p> <p>3.3 Both visual and audible alarms for</p> <p>(i) Patient and control and high / low temperature alarm.</p> <p>(ii) Air circulation / probe / system / power failure alarm.</p> <p>(iii) Humidity control alarm.</p> <p>3.4 Facility to take x-ray and weight without removing baby.</p> <p>3.5 Facility to display and trends of temperature information on compatible monitors with other physiological parameter</p> <p>3.6 Height 140 cm + 5 cm, depth at least 60 mm , width at least 90 mm. Mattress to hood distance 40 cm working level – 90 to 100 cm.</p> <p>Iris port for tubing, probes, leads.</p> <p>4cm thick gel mattress, easily cleanable.</p> <p>With at least 4” diameter caster wheel with swivel in all directions and with front lockable wheels. Two shelves cabinet with door. Weight 90-100 kg.</p> <p>3.7 Patient control (Servo) mode – 35 deg-37 deg C. and Air Control (Manual mode)- 20 deg C to 39 deg C.</p> <p>3.8 Air velocity less than 10 cm/sec with inner wall.</p> <p>3.9 Temperature variability less than +/-0.2 deg C. and Temperature resolution 0.1 deg C</p> <p>3.10 Average oxygen input concentration range 5-15 liters/min or 25-70%.</p> <p>3.11 Humidification adjustable electronically with digital display. Standard: 10-80% dependent on nursery environment and incubator temperature setting.</p> <p>3.12 Double wall canopy with Six hand ports with elbow operated flaps with separate ports for tubing.</p> <p>3.13 CO2 flushing, according to IEC 601-2-19 / 105.1 Maximum CO2 concentration inside incubator 0.2%</p> <p>3.14 Servo control for Oxygen with integrated monitoring</p> <p>3.15 Air filter :- 0.3 micron</p> <p>3.16 Built in weighing scale with sensitivity of + 1 gm</p> <p>3.17 Mattress should be radiolucent</p> <p>3.18 Provision for X ray cassette holders</p> <p>3.19 2 drawer storage facility and two platforms for keeping monitors , able to bear at least 5 kg weight each.</p>		
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		<p>4 System Configuration Accessories, spares and consumables  4.1 System as specified  4.2 Two sets of extra non disposable temperature sensors and humidification sensors.</p> <p>5 Environmental factors  5.1 Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.  5.2 The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%.  5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%.</p> <p>6 Power Supply  6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug  6.2 Suitable UPS with 30 Min Backup for complete system</p> <p>7 Standards, Safety and Training  7.1 Should be FDA/CE or BIS approved product  7.2 Electrical safety conforms to standards for electrical safety IEC-60601-2-19:Medical Electrical Equipment part 2 Particular Requirements of Safety of Baby Incubator.  7.3 CMC should provide 4 non disposable temperature sensors and sensors for humidity control every year per incubator.</p> <p>8 Documentations to be provided  8.1 User/Technical/Maintenance manuals to be supplied in English.  8.2 Certificate of calibration and inspection.  8.3 List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.  8.4 List of important spares and accessories with their part number and costing.  8.5 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company service engineer should be clearly spelt out.</p>		
4	Pediatric	The Ventilator should be portable, compact and light weight with display and control		

Portable Incubator	it should be compact with an approximate Package size of 1100mm×650mm×1100mm in order to accommodate the ventilator in Ambulances and / or for inter or intra hospital transfer of patients.		
	It should be able to work on 230 VAC, 50 Hz main power as well as 12 V and 24V DC battery		
	it should have both Air mode and Baby mode controlled by micro-computer		
	It should have Double wall hood with side doors and necessary access ports		
	The infant bed can be pulled out easily		
	The height of whole unit should be adjustable and minimum Inclination of bassinet should be around 0~5° C		
	unit should have facility for Oxygen cylinder and Oxygen supply system		
	it should have LED observe light with adjustable brightness		
	It should be supplied with Ambulance type big trolley		
	Sensor precision should be ≤ 0.3° C		
	Noise level: ≤ 55dB(A)		
	<b>Minimum controlled parameters</b>		
	Air Temperature control range: 25° C~37° C		
	Humidity 30-90%		
	skin temperature range : 34-38		
	<b>Minimum displayed parameters</b>		
	skin and air set temperatures		
	skin and air real temperatures		
	Humidity		
	Heater power		
alarms with codes			
<b>Minimum Audible and visible alarms</b>			
Over-temp alarm: When the temperature ≤ 38° C;			
Temperature Deviation alarm for skin temperature ≤ 0.5 ° C			



	<p>Lower and lower Deviation alarm for air temperature <math>\leq 2.0^{\circ}</math> C</p> <p>Sensor alarm for sensor disconnection, open circuit, short circuit or put on the wrong place;</p> <p>Fan failure alarm for fan block, low speed <math>\leq 1000</math>rpm or stop working</p> <p>Power failure alarm</p> <p>System failure</p> <p>Alarm sound can be cancelled except for the power failure alarm and the system alarm.</p>		
	<p><b>General requirements</b></p> <p>Bidder should provide additional 2 air sensors and 2 skin sensors</p> <p>List of essential spares, accessories, expendables and consumables expected to be used during operating cycle should be provided and quoted separately. Prices so quoted to be frozen for 3 years</p> <p>The product must be CDDA registered and Manufacturer ISO certified for quality standards.</p> <p>Bidders must support compliance to the given specifications with manufacturer's necessary documents including original product brochures.</p> <p>Each unit must carry at least two year comprehensive warranty effective from the date of commissioning. The supplier must ensure a 95% uptime during this period.</p> <p>A sample unit must be demonstrated for evaluation within 3 weeks after bid closing.</p> <p>Bidders must enclose a list of current local users of the model on offer.</p> <p>Bidders must provide documentary evidence on their technical capacity (trained staff, testing equipment for calibration &amp; maintenance support as per manufacturer service/technical manuals) to carry out installation and service.</p> <p>Bidders must quote for a comprehensive service contract (excluding consumables) for 5 years effective after expiration of the warranty period. Rates quoted will be considered for arriving at the lowest cost during evaluation.</p> <p>User/Technical/Maintenance manuals to be supplied.</p>		

**Annexure A : Specification for Supplies**

**Package Three:**

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	The most appropriate answer	<b>Required Number</b>
1	Suction machine (Heavy duty)	<p><b>Description of Function</b> To extract fluid from the body during surgery or emergency treatment</p> <p><b>Operational Requirements</b> Shall have high vacuum suction capacity The machine should be portable on castors/mobile trolley</p> <p><b>Technical Specifications</b> Heavy duty and noiseless with piston/cylinder technology. Auto cut-off for preventing entry of fluid in pump To facilitate maintenance the cover of machine should be easy to open from the top &amp; sides. The suction machine should be capable of producing vacuum up to -90K Pascal, which should be adjustable and monitored by vacuum gauge of suitable range. The suction capacity should be 15 litres or more per minute and can be regulated.</p> <p>It could have two bottle of 4-5 liters capacity with synthetic rubber lids. The bottle shall be fitted with the arrangement to prevent overflow of fluid.</p> <p>ON/OFF Switch and Power indicator.</p> <p>Body material: Base, top &amp; Panel made of rust proof and corrosion resistant moulded ABS; Jar/Bottle material; Autoclavable polycarbonate.</p> <p>Optional inbuilt maintenance free battery. Battery backup upto 60 minutes on full charge.</p> <p><b>System Configuration Accessories, spares and consumables</b> System as specified</p>		2

	<p>3 core lead of 2 meter along with one 3 pins 15 amp. Plug -01  Power cable -3 core lead of 5 meter along with one 3 pins 15 amp. Plug -01</p> <p>The following spares machine are also required:-  Bottles 2 Nos.  Lids 2 Nos.  Rubber Seals 2 Nos.  Blades 2 Nos.  Suction tubing set 1 No.</p> <p><b>Environmental Factors</b>  The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%</p> <p>The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%.</p> <p><b>Power Supply</b>  Power input to be 220-240 VAC, 50Hz fitted with Indian plug  A fuse or a resettable circuit breaker of appropriate capacity should be incorporated for protection of motor.  Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied.</p> <p><b>Standards &amp; Safety</b>  Should be FDA, CE, UL or BIS approved product.</p> <p>Electrical safety conforms to standards for electrical safety IEC 60601-1 General Requirements (or equivalent BIS Standards).</p> <p>Shall meet internationally recognized standard for Electro Magnetic Compatibility (EMC) for electromedical equipment: IEC-60601-1-2: latest edition or equivalent BIS) or should comply with 89/366/EEC; EMC-directive as amended.</p> <p><b>Training</b>  Comprehensive training for staff of user department and support services</p>		
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		till familiarity with the system.		
2	Head light with light source	Fiber-optic head light with 3.5mm cable, light adjustable, light weight, head band supplied with suitable xenon light source. 4 port turret.		1
3	Vacuum extractor	<p>To be used for vacuum delivery.</p> <p>Vacuum extractor must be easy to use (to assemble and to clean) and safe. Vacuum extractor should be totally disassembled, easy to clean and sterilize (all parts must be autoclaved at 121°C).</p> <p>All parts should be manufactured from high-strength, long-life materials and require no special maintenance or storage conditions.</p> <p>Vacuum extractor must be in conformity with council Directive 93/42/EFC on Medical Devices and have CE marking.</p> <p>Vacuum Extractor should be supplied as complete set in a box with:</p> <p>: curratage extractor kit</p> <p>3different sizes:</p> <p>40mm opening diameter.</p> <p>50mm opening diameter.</p> <p>60mm opening diameter.</p> <p>3soft vacuum extractor cups "SILC-CUP" complete,</p> <p>3 different sizes:</p> <p>40mm opening diameter.</p> <p>50mm diameter.</p> <p>60mm opening diameter.</p> <p>should be supplied with pneumatic foot switch and tubing should be not less than 5 meters.</p>		1
4	Spot light for gynae exam.	<p>Floor stand. Flaxible fiber-optic, transmit cool illumination.</p> <p>Provide homogeneous light bright spot of variable size.</p> <p>Height adjustable</p>		2
5	Air Mattress	<p>Alternating pressure every 10 minutes. Whisper quiet with adjustable pressure settings. Low pressure/Normal pressure indicator lights. Patented CPR release. Convoluted safety foam base with water proof covering to eliminate contamination. Low friction/ shear water proof top cover. Maximum patient weight 150 kg or more. Inflated dimensions approximately 35"Wx80"Lx8"H.</p>		2

6	CTG (Cardiotocograph)	<p>Cardiotocograph antenatal (NST) and intra partum fetal monitor.  Fetal monitor for three functions  a.Fetal Heart rate recording  b.Toco-recording (For intrauterine pressure recording)  c.Maternally sensed fetal movement recording.</p> <ul style="list-style-type: none"> <li>· Twin monitoring facility required.</li> <li>· Colour coded transducers, plugs and sockets.</li> <li>· Very compact and light weight.</li> <li>· Detachable printer</li> <li>· 1.5 MHZ multi crystal directional pulse Doppler. FHR detection with low ultrasound energy exposure to fetus.</li> <li>· Optimize, fully screened and water proof FHR transducer the transducer and belt clip are designed for ease of use</li> <li>· Built in transducer storage.</li> <li>· Manual or automatic Toco-Zero light weight flat faced with guarding type toco dynamo meter. It has the same belt clip and belt in, as the transducer</li> <li>· Display should be LED to display FHR and other informations.</li> <li>· should be able to print in a4 size Z fold paper</li> <li>· Actogram – Automatic movement signal can be printed on the chart record as a graph or as any event marks</li> <li>· True dual channel twins print out</li> <li>· Purpose designed trolley/cart</li> <li>· Displays twin fetal heart rates in separate displays.</li> <li>· Automatic fetal movement detection</li> </ul> <p>Should be supplied with 2kva online UPS</p> <ul style="list-style-type: none"> <li>· Built in network capacity.</li> </ul>		1
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## Annexure A : Specification for Supplies

### Package Four

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Vaginal speculum Dual	CUSCO'S Speculum Ref IS:5906 1.Material : SS (Ref IS6603, 1972) 2.Sizes : Large 110x37mm Medium 90 x 36 mm Small 80 x 24 mm Max. opening of blade 45 deg (one each)  2.Handle thickness 2.5mm 3.Blade size should be appropriate, confirming to sizes mentioned above. 4.Workmanship: All surfaces shall be free from burrs, pits, cracks. Edges shall be smoothly rounded off & shall not be sharp. 5.Polished bright.		3
2	Dressing Drums	<ul style="list-style-type: none"> <li>• Material Stainless Steel (S.S.)</li> <li>• S.S. thickness 0.5mm</li> <li>• Body, lid built 1mm</li> <li>• Hasp 3mm</li> <li>• Hinge Wire 4 to 5m</li> <li>• Handle 0.9m</li> <li>• Chain 2.8 to 3.57</li> <li>• Clamp 275m x 132 m</li> <li style="padding-left: 20px;">(20)</li> <li>• Size 300 x 250mm (10)</li> <li>• The hose shall rest on:               <ul style="list-style-type: none"> <li>i. Three / more rest without shake / play</li> <li>ii. The lid shall have a snap fit on the body</li> </ul> </li> </ul>		6

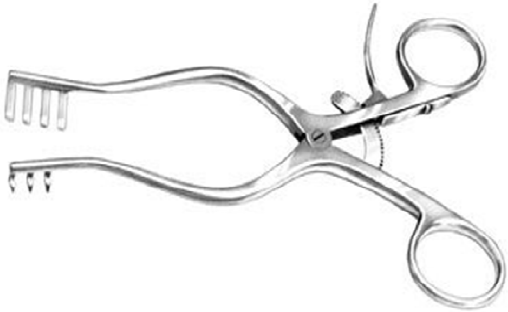
		<p>iii. The hinges shall have the swivel of the lid and the movements shall be such as to make the lid come back to its position of closing without any side pressure being applied.</p> <p>iv. The hasps shall engage with disengage from the stable position.</p> <p>v. The belts shall fit snugly and bear uniformly on the surface of Drum without any pockets or undue rubbing at any place.</p> <p>vi. The clip when clamped shall keep the belt in a fair tension and shall not recoil. It shall enable the belt to slide around the body easily in its open position.</p> <p>vii. The sets of perforation on body shall have 39 holes of 2.4 diameter</p>		
3	Obstetric forceps – Wringles	Obstetric forceps – Wringles		2
4	Obstetric forceps – Ferguson	Obstetric forceps – Ferguson		1
5	Bowel SS for placenta	<p>Bowel SS for Placenta</p> <p>Size : 16”</p> <p>Surface: Well polished without any cracks &amp; wrinkles. Should not rock when kept on a level surface.</p>		2
6	Basin SS on stand	<p>Steel tubular frame 1” diameter, SWG 16 with iron rod attached to the ring for towel.</p> <p>Size of basin – 16”</p> <p>Height approx. 85-90cm</p> <p>Epoxy coating 50 microns white colour</p> <p>Three legs base interconnected with steel rods. Legs to be provided with three 50cm Nylon swiveling castors.</p>		2
7	Sim’s speculum	<p>1. Material : SS (Ref IS6603, 1972)</p> <p>2. Sizes : Large 72x34/80x38mm</p> <p>Medium 70x32/75x35mm</p>		4

		<p>Small 65x26/72x30mm  Max. opening of blade 45 deg (one each)</p> <p>2.Handle thickness 2.5mm  3.Blade size should be appropriate, confirming to sizes mentioned above.  4.Workmanship: All surfaces shall be free from burrs, pits, cracks. Edges shall be smoothly rounded off &amp; shall not be sharp.  5.Polished bright.</p>		
8	Craniotomy set	<p>Material Stainless Steel  Braun Decapitation Hook (32.5) cms  Dubious decapitation Hook  (Embyotomy Scissors)  Ternier Basiohite (cephalotibe) 44.0  Smellie perforator 27 cms</p>		1



**Annexure A : Specification for Supplies**

**Package Five**


Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Mastoid retractor	<p>it should be designed for use in nuerological surgical procedures</p> <p>it should be of Self-retaining type with 3 x 4 blunt prongs.</p> <p>it should have a sturdy construction and be made of quality stainless steel</p> <p>prongs should be approximately 14mm long .</p> <p>Inside spread should be around 80mm.</p> <hr/> <p>Overall length should be about 162mm</p> <hr/>  <hr/> <p>Product should be made in accordance with medical standards.</p> <hr/> <p><b>Bidder should provide product catalogue with the offer.</b></p>		

2	Proctoscope standard	<p>Proctoscope is used for visual inspection of the rectum in the diagnosis of hemorrhoids, carcinoma and polyp of anal canal or rectum</p> <p>It should be made of rust free material and designed ergonomically for comfortable use</p> <p>it should be non disposable</p> <p>It should have a hollow channel through which other instruments can be inserted for surgical proceedings</p> <p>it should be ergonomically designed to enhance the patient comfortability in use</p> <p>overall length should be about 130mm</p> <hr/> <p>Product should be made in accordance with medical standards.</p> <hr/> <p>Bidder should provide product catalogue with the offer.</p>			
3	Proctoscope with side opening	<p>Proctoscope is used for visual inspection of the rectum in the diagnosis of hemorrhoids, carcinoma and polyp of anal canal or rectum</p> <hr/> <p>It should be made of rust free material and designed ergonomically for comfortable use</p> <p>it should be non disposable</p> <p>It should have a hollow channel through which other instruments can be inserted for surgical proceedings</p> <p>It should have a side opening lengthwise to enable surgeon to view and treat any hemorrhoids, carcinoma and polyp</p> <p>it should be ergonomically designed to enhance the patient comfortability in use</p>			

		overall length should be about 130mm			
		Product should be made in accordance with medical standards.			
		Bidder should provide product catalogue with the offer.			
4	Fistula Probe	Fistula probe are used for examination of tublur structures and their treatment			
		bidder should supply a Set of stainless steel fistula probes with following approximate dimensions			
		1 straight - 165mm			
		2 slightly curved - 165mm			
		3 curved -172mm			
		4 fully curved -165mm			
		5. short hook- 175mm			
		Product should be made in accordance with medical standards.			
		Bidder should provide product catalogue with the offer.			
5	Bone nibblers	Bone nibbler should be specifically designed to trim small and large pieces of bones, edges of the bones, spicules, spines.			
		bidder should supply a Set of following stainless steel bone nibblers with approximatly 200mm -270mm in length			
		1 straight single Action Bone Nibbler			
		2 angular single Action Bone Nibblers			

		3 curved single Action Bone Nibblers		
		4 straight double Action Bone Nibbler		
		5. angular double Action Bone Nibbler		
		bone nibblers should have a spring mechanisim between handles		
		Product should be made in accordance with medical standards.		
		Bidder should provide product catalogue with the offer.		
6	Bone cutter	Bone cutters should be specifically designed to cut small and large pieces of bones, edges of the bones, spicules, spines in orthopedic surgery.		
		bidder should supply a Set of following bone cutters with tip length of approximately 7"		
		1 straight single Action Bone cutter		
		2 double Action Bone cutter		
		Bone cutter should have a sharp and tough blade of Tungston Carbite and whole construction should be made of anti rust high quality strong material		
		bone nibblers should have a spring mechanisim between handles		
		Product should be made in accordance with medical standards.		
		Bidder should provide product catalogue with the offer.		
7	Amputation saw	amputation saw should be able to be used in the decortcating and cutting of bones and bone related tissue in orthopedic surgery.		
		it Should be hand held and battery power oscilating type		
		Operating speed should be approximately 14500 cycle / min		
		Blade stroke should have approximately 4.5 degrees arc		
		it should operate on a duty cycle with 2 minutes on 1 minutes off		

		<p>It should be autoclavable</p> <p>it should be silent and be operated with variable speeds</p> <p>it should have attachments for complete range of sawing, reaming and drillings.</p>			
		<p>Product should be made in accordance with medical standards.</p> <p>bidder should provide at least 2 year of comprehensive warranty</p> <p>Bidder should provide original product catalogue with the offer.</p>			
8	Kelly retractors	<p>kelly retractor should be designed to be used in deep pelvic surgery such as rectal dissection</p> <p>A curved right angled hooked blade should be fitted with a long extension and a comfortable handle</p> <p>Overall dimension should be around 10" (25.4 cm)</p> <p>It should be made of Heavy duty stainless steel</p>			
		<p>Product should be made in accordance with medical standards.</p> <p>Bidder should provide product catalogue with the offer.</p>			
9	Park retractors	<p>Parks anal retractor should basically includes a frame, a pair of small lateral blades, pair of large lateral blades, center blade</p> <p>it should have following features</p> <p>Self-retaining</p> <p>blades -able to swive</p> <p>material used- stainless steel</p> <p>light weight and easy to carry</p>			

		 <p data-bbox="520 753 1346 781">Product should be made in accordance with medical standards.</p> <p data-bbox="520 792 1346 820">Bidder should provide product catalogue with the offer.</p>			
10	Catch forceps	<p data-bbox="520 829 1276 906">Kochers forcep is specifically designed to catch the bleeder in deep tissues and crush the bleeder that results in clogging.</p> <p data-bbox="520 917 1276 945">It should have following features</p> <p data-bbox="520 966 1276 1031">Tooth on one of its blade should have sufficient serrations to grip the structure firmly</p> <p data-bbox="520 1042 1276 1107">its ratchet mechanism should lock the instrument securing the structure picked up by the forceps.</p> <p data-bbox="520 1118 1276 1146">it should be made of high-quality stainless steel</p> <p data-bbox="520 1193 1276 1221">bidder should provide both straight and curved forceps.</p> <p data-bbox="520 1274 1276 1302">Product should be made in accordance with medical standards.</p> <p data-bbox="520 1315 1276 1343">Bidder should provide product catalogue with the offer.</p>			

11	Sucker Nozzle (Lagge, Standard) 2 each	The units shall function on main power supply of 230 + _ 10% 50 Hz		
		The unit shall be noise free, light weight and shall have reliable carrying handle		
		The body of the unit shall be constructed of a strong corrosion resistant material and shall the pump be enclosed in robust plastic housing		
		The unit shall consist of jar of a capacity of a least 1 L with a self sealing rubber seal		
		The jar shall be transparent & sterilisable. Shall have an over flow protection mechanism		
		Shall be incorporate with 10 disposable bacterial filters and 10 suction nozzles		
		The pump shall be piston type		
		The unit shall be capable to evacuate to a vacuum pressure of not less than 90 kpa and the flow rate not less than 70 liters /min		
		There shall be main ON /OFF switch with illuminator, and vacuum indicator with dual scale graduated in kPa, mmHg		
		Product should be made in accordance with medical standards.		
		bidder should provide at least 2 year of comprehensive warranty		
Bidder should provide original product catalogue with the offer.				
12	Doctors stool	Dental operator's stool with backrest movement and hand rest. On swivel castors.		1

## Annexure A : Specification for Supplies

### Package Six

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Diagnostic Set (Stethoscope, Blood Pressure Apparatus, Thermometer, Hammer, Tuning fork, Tape etc.)	Set complete of good durable quality material. Consisting of:  (Adult & Ped Stethoscope Littman Type, Blood Pressure Apparatus Aneroid Type-Ref.IS7652, Infant Weighing Machine, Thermometer, Patella Hammer (Taylor Type design), Tuning fork (standard 108, 75Db), Tape with clearly visible markings, SS Tongue Depressor, Torch(2-cell).		22
2	Weighing Machine	<ul style="list-style-type: none"> <li>• Portable-Adult</li> <li>• Scale in Kg with 0 adjustment. Weight up to 200kg.</li> <li>• Shell of Steel 1mm thick</li> <li>• Approx size: 300 mm L x 300mm W.</li> <li>• Epoxy coated</li> </ul>		22
3	X-ray View Box (Single)	<ul style="list-style-type: none"> <li>• Single film</li> <li>• Good quality imported Perspex sheet, uniform and bright illumination.</li> <li>• Electrical Fluorescent 1/2 tubes fittings with uniform illumination.</li> <li>• Shock proof body.</li> <li>• Heavy duty X-Ray clips (1/2).</li> <li>• On / Off switch with indicator light</li> <li>• Confirm to standard electrical safety norms.</li> </ul>		22
4	Foetoscope (Ultrasound) & Foetoscope (Pinnard)	<b>Foetoscope (Ultrasound) 1no.</b> Pocket make Digital FITR display upto 240-250 / minute Sound Volume adjustable Power: By Battery		1 each



		<p><b>Foetoscope (Pinard's Pattern) REF. IS 6565-1no.</b></p> <ul style="list-style-type: none"> <li>• Material Aluminum complying IS: 21, 1959</li> <li>• Shape (i) Diameter Ear end Outer 55mm Inner 50mm  Distal Inner 14mm Outer 60mm  (ii) Length 145 mm</li> <li>• Workmanship: The surfaces of the Foetoscope shall be free from scales, burrs, pits. Edges shall be smooth rounded off and shall not be sharp.</li> <li>• Shall have perfectly symmetrical dimensions around the central axis. Rims of fetal end and ear end shall be in one plane, the stethoscope shall anodized in accordance with grade AC5 of IS: 1868, 1968. It shall be tested as IS: 6565, 1972.</li> </ul>		
5	Multipara Monitor	<p><b>Parameters to be monitored:</b></p> <p>1.1 ECG (3/5 lead)</p> <p>1.2 NIBP 0 to 300 mmHg <math>\pm</math> 4 or better</p> <p>1.3 SPO<sub>2</sub> - 1 to 100% <math>\pm</math> 2 digits or better</p> <p>1.4 Temperature (single site) - 0 to 45<sup>o</sup>C <math>\pm</math> 0.2 or better</p> <p>1.5 Respiration 3 to 150 breaths/minute <math>\pm</math> 2 or better</p> <p><b>Display Screen</b></p> <p>2.1 Built in active TFT color display 10.4 inch at least</p> <p>2.2 Minimum resolution 800 X 600</p> <p>2.3 Minimum no. of traces 10</p> <p>2.4 Simultaneous display 2 X ECG, 1 X SPO<sub>2</sub>, 1 X Respiration</p>		

	<p>2.5 Numerical information displayed in large digits against respective waveforms</p>		
	<p><b>ECG</b></p>		
	<p>ECG (3/5 lead)</p>		
	<ul style="list-style-type: none"> <li>- Should have QRS detection</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have facility for multi lead arrhythmia detection, analysis and review</li> </ul>		
	<ul style="list-style-type: none"> <li>- Heart rate range 15 to 350 bpm; Accuracy <math>\pm</math> 2 bpm or better</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have facility for ST segment analysis</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have facility for pacemaker detection.</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have visual &amp; audible alarms for lead off, asystole ,adjustable high/low limits for heart rate etc.</li> </ul>		
	<p><b>Pulse Oxymetry -</b></p>		
	<p>Measurement range: 1 to 100%, Accuracy <math>\pm</math> 2 % in 70 - 100% range</p>		
	<p>It should have preferably Masimo or any similar proven motion proof SPO2 technology to reduce false alarms and provide pulse saturation values at low perfusion conditions. Perfusion index should be displayed</p>		
	<p><b>NIBP</b></p>		
	<p>Systolic pressure range: Adult 40 to 270 mmHg &amp; Paediatric 40 to 200mmHg</p>		
	<p>Diastolic pressure range: Adult 10 to 210 mmHg &amp; paediatric 10 to 135 mmHg</p>		
	<p>Mean pressure range: Adult 20 to 230 mmHG &amp; Paediatric 20 to 15 mmHg</p>		
	<ul style="list-style-type: none"> <li>- Should have cuff loose &amp; occluded alarms</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have the possibility to programme in manual, periodic &amp; automatic modes.</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have over pressure protection</li> </ul>		
	<ul style="list-style-type: none"> <li>- Should have leak test &amp; pressure auto calibration</li> </ul>		

		<b>Respiration</b>	
		Measurement range: 0 to 120 rpm	
		Accuracy: ± 2% or better	
		Should have apnea alarm with alarm time ranging from 10 sec to 40 sec.	
		<b>Must have features &amp; facilities</b>	
		Trend graphing & listing up to 72 hrs & 24 hour full disclosure.	
		Defibrillator overload protection.	
		Advisory & critical warning alarms in continuously audible & visual form.	
		User interface touch screen/trim knob.	
		Possibility to programme NIBP in manual, periodic & automatic modes.	
		Prominently visible alarm light.	
		Should mention any advanced features if includes in the machine	
		<b>Power supply</b>	
		The unit shall function on 100 to 240 VAC @ 50Hz.	
		Must have an internally rechargeable Li - ion battery with about 4 hrs back up	
		<b>General Requirements</b>	
		All monitors must have adult and paediatric capability	
		Unit should be user friendly with easy trouble shooting guides	
		All Monitors must be supplied with following accessories as standard	
		(I) 3 Lead ECG lead set with connecting cable	
		(ii) Adult SPO2 sensor with connecting cable	
		(iii) Paediatric SPO2 sensor (reusable)	

		(iv) Temperature probe		
		(v) NIBP cuff set in 3 sizes with adult & paediatric & neonates hose.		
		The product must be CDDA registered and Manufacturer ISO certified for quality standards and conforms to IEC 60601 series for safety standards.		
		Following accessories (one/ one set per Monitor) must be supplied as spare.		
		[i] 3 lead ECG lead set with connecting cable		
		[ii] Adult SPO2 sensor with connecting cable		
		[iii] Paediatric sensor re usable		
		[iv] NIBP cuff set in 3 sizes		
		[v] NIBP hose adult & paediatric		
		All the accessories (standard & spare separately) to be given must be clearly mentioned with quantities in the proforma invoice.		
		Each System must carry at least two year comprehensive warranty effective from the date of commissioning.		
		The supplier must ensure a 95% uptime during this period.		
		Each Unit must be installed and commissioned by the Supplier.		
		Unit cost of a roller stand to be quoted separately.		
		A sample unit must be demonstrated for evaluation within 2 weeks after bid closing.		
		Bidders must support compliance to the given specifications with manufacturer's original brochures.		
		Bidders must enclose a list of current local users of the model on offer.		
		Bidders must provide documentary evidence on their technical capacity (trained staff, testing equipment for calibration & maintenance support as per manufacturer service/technical manuals) to carry out installation and service.		
		User/Technical/Maintenance manuals to be supplied.		

## Annexure A : Specification for Supplies

### Package Seven

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Slit lamp with tonometer	Magnifications: 5x, 8x, 12x, 20x, 32x Field of view : Ø 46, Ø 29.5, Ø18.4, Ø11.5, Ø 7.5 mm in diameter. Eyepiece magnification: 10x high-eyepoint eyepieces, + 8D compensation Width of slit image : 0 – 14 mm, continuously adjustable Length of slit image: in steps: 0.3 / 2.5 / 3.5 / 7 / 10 / 14, Triple Slit Slit rotation : + 90°, continuous Angle of incidence: 0° Horizontal Filters : Swing in blue, green (red-free), Heat absorbing filter and swing in screen for diffuse illumination Free working distance: 66mm Exit prism/patient's eye Vertical Movement : 36 mm Lateral Movement : 107 mm Depth movement : 113 mm Horizontal fine movement : 14 mm Vertical travel of chin rest : 76 mm Illumination: 6 V, 20 W halogen bulb Brightness: Continuously adjustable Instrument table: motorized control Accessories required:- Goldman Applanation Tonometer The product should be CE certified/USA FDA approved		2
2	Lensometer	<ol style="list-style-type: none"> <li>1. Auto focus /Auto alignment/Auto centring</li> <li>2. PD measurement : 20.0 to 49.5 mm (monocular), single vision, PD , progressive lens for vision PD</li> <li>3. Measurement Range :pectacle Lens : -25 to +25 D</li> </ol>		1

		<ol style="list-style-type: none"> <li>4. Contact lenses : -25 to +25 D (BC= 6.0 to 9.0) (0.01/0.06/0.12/0.25 D increment)</li> <li>5. Axis : 0 to 180<sup>o</sup> (1<sup>o</sup> increments)</li> <li>6. Wavelength / Measuring point : 535 nm (green)/ 108 with nosepiece.</li> <li>7. Dimension : 220 (W) x 252 (D) x 430 (H) mm/ 5.0 Kg</li> <li>8. Measuring Time v: 0.06 second ± 10% (minimum)</li> <li>9. Measurable transmittance : 10% and over (20% and over for ± 15 to ± 20D)</li> <li>10. Making System : Ink cartridge type</li> <li>11. Display : 5.7 inch color full graphic TFT-LCD, 640 x 480 dots with LED backlight.</li> <li>12. Printer : Thermal line printer with auto cutter (paper width : 58 mm)</li> <li>13. Able to detect power of progressive lenses</li> <li>14. Able to detect UV absorption capacity of lenses</li> <li>15. Printer attachment and auto save facility</li> <li>16. Power: 220- 240 V</li> <li>17. Motorized table</li> </ol>		
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**Annexure A : Specification for Supplies**

**Package Eight**

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	<b>The most appropriate answer</b>	<b>Required Number</b>
1	Ophthalmic unit (chair unit)	<p>Required Ophthalmic features:-</p> <ul style="list-style-type: none"> <li>- one fully upholstered elegant ophthalmic chair with full motorized recline facilities with full motorized up &amp; down movement for 200mm</li> <li>- one stand and console:- with illuminated soft light for examination with controls for ophthalmic chair, for recline and up &amp; down movements, back and forward movement. One foot pedal for the up and down movement is also required.</li> </ul> <p>- Required Base dimensions and Floor space</p> <p>Base Dimensions : 1420 mm x 1420 mm</p> <p>Floor Dimensions : 1420 mm x 2325 mm</p> <p>Base Dimension Floor Space required</p> <p>Base Dimensions : 1420 mm x 1420 mm</p> <p>Floor Dimensions : 1420 mm x 2325 mm</p> <p>Height 6 feet</p> <p>Length after reclining 6 feet</p> <p>Width 4.8 Ft</p> <p>Input voltage &amp; Power 110/230V</p> <p><b>Accessories required:-</b></p>		1

		<p>Examiner's chair  Trial lens set (2nos.)  Trial Frame  Auto Refractometer with all standard features with 10 paper rolls  Distance vision horizontal drum</p>		
2	Retinoscope	<p>Shall have separate control for streak width and streak rotation and also streak width should not change while rotating &amp; the entire head is rotatable .  It should have endless rotation that the streak revolves 360<sup>0</sup> without stops , enabling quick measurement of astigmatic axis.</p> <p>Used with Rechargeable battery RP-B</p> <p>The plug comes out of the handle with a press of a button</p> <p>RX head, plug-in rechargeable battery handle, spare bulb, +2D Presbyopic lens</p> <p>Bulb : 4V, 3.6 W</p> <p>Instrument Weight : 350 g</p> <p>Total Weight : 700 g</p>		1
3	Ophthalmoscope	<p>Specifications:  Lenses Range : 35D to +35D in 1 D steps and the wheel is rotatable.</p> <p>Apertures Standard Aperture, Small Aperture, Slit Aperture, Red Free Filter Aperture, Concentric Scale Aperture with all apertures.  Superior aspherical optics  Mounted in metal frame  Electrically rechargeable handle With 3 V "C" Cell battery with charger .  Dust proof housing.  Ergonomic shape  Complete set in box with spare bulbs 3 V Halogen (6 Nos.)</p>		2



		<p>Diopter of the corrective lens is indicated directly even when using high Plus or Minus powers. The indicator is illuminated from inside Instrument weight : Not more than 300 g Total weight : not more 550 g Case Size : 85 mm (D) x 245 mm (W) x 45 mm (H). The equipment offered should be brand new.</p>		
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**Annexure A : Specification for Supplies**

**Package Nine**

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	The most appropriate answer	<b>Required Number</b>
1	AB-Scan	<p>The following requirements must be met</p> <ul style="list-style-type: none"> <li>• High resolution dedicated A and B, ophthalmic Scanning unit Bscan will cross vector.</li> <li>• Ultra sound probe should be permanent oil filled &amp; compact probe with a frequency 10MHz (+/- 15%) with a scanning angle of 60<sup>0</sup> and a speed of 10 MHz</li> </ul> <p>Technical Features:</p> <p><b>A-scan</b></p> <ul style="list-style-type: none"> <li>• Three A scan Modes</li> <li>• Measurement mode : Manual , Auto, Semi Auto, Speedy</li> <li>• Complete IOL program capabilities include SRK1 SRK11 SRK. T Hollady or Binkhorest formulas.</li> <li>• Measurement value : Axial length, Anterior chamber depth, lens thickness, Vitreous body length</li> <li>• 10MHZ solid probe</li> <li>• The unit should incorporate, audio feed back for probe alignment.</li> </ul> <p><b>B-scan</b></p> <ul style="list-style-type: none"> <li>• 256 Gray Levels</li> <li>• Scanning Range : 35 mm or 50 mm from the edge of the probe (+/- 10%)</li> <li>• Display Mode : B-Scan (B+)</li> </ul> <p>Ability to display multiple B Scan images (maximum of 4 saved images)</p> <ul style="list-style-type: none"> <li>• Complete IOL calculation capability with IOL data storage.</li> <li>• B-scan sector angle 60 deree</li> </ul>		1

		<ul style="list-style-type: none"><li>• Standard Accessories Should include : Stylus, B-Scan Probe, A-Scan Probe, Foot switch, Test piece, Printer paper, power cord, Ultrasonic Gel, Dust cover, spare fuse , probe rest • Vendors may quote other optional accessories</li></ul>		
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**Annexure A : Specification for Supplies**

**Package Ten**

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	The most appropriate answer	<b>Required Number</b>
1				
2	Operating Microscope - Ophthalmology	<p>Apochromatic optics            Magnification: 5 step magnification            Focusing Range: 158 mm            Binocular tube: 45 degree inclined.            Eye pieces: 10X            Objective lens : F=175            Total magnification: 2.6 x to 15.8 x</p> <p>Illumination: Halogen illumination, Fibre light guide, 15 V 150 W as light source.            Catathemric filter, Green Filter Swing in daylight filter            Foot switch with full control on foot switch            Stand Arm section            Type: Floor stand type            Arm extension: 1045 mm            Balance arm vertical stroke: 350 mm            The product should be CE certified/USA FDA approved</p>		1

## Annexure A : Specification for Supplies

### Package Eleven

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	The most appropriate answer	<b>Required Number</b>
1	Computerized spirometer system (PFT)	<p>1 Description of Function</p> <p>1.1 Pulmonary function tests are a broad range of tests that are usually done in a health care provider's office or a specialized facility. They measure how well the lungs take in and exhale air and how efficiently they transfer oxygen into the blood.</p> <p>2 Operational Requirements</p> <p>2.1 System should be supplied complete with printer.</p> <p>3 Technical Specifications</p> <p>3.1</p> <p>1. The following tests should be performed by the PFT Equipment.</p> <p>a. It should measure FEV , FVC, PEF, SVC,FEV %, MMEF, PIF, MVV,FRC, 1 IRV, TLC, FET, ERV, IRV, PiMAX/PeMAX, Diffusion capacity.</p> <p>b. DLCO, BRONCHIAL PROVOCATION TEST</p> <p>2. Predicted value- depends upon national preference</p> <p>3. Multi window lay out</p> <p>4. Configurable print out format</p> <p>5. Real time flow volume and volume time traces</p> <p>6. Overlaying of previous test curves for comparison</p> <p>7. Open &amp; Closed flow/volume loop test technique possible</p> <p>8. Powerful search capability</p> <p>9. Storage- 1000 patients' tests including flow/volume loops and volume time curves.</p> <p>10. Should have networking support</p>		1

		<p>4 System Configuration Accessories, spares and consumables None</p> <p>5 Environmental factors 5.1 Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.or should comply with 89/366/EEC; EMC-directive. 5.2 The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%. 5.3 The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%.</p> <p>6 Power Supply 6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug 6.2 UPS of suitable rating with voltage regulation,spike protection and maintenance free batteries for 60 minutes back up</p> <p>7 Standards, Safety and Training 7.1 Should be FDA, CE, UL or BIS approved product. 7.2 Comprehensive training for lab staff and support services till familiarity with the system. 7.3 Electrical safety conforms to standards for electrical safety IEC 60601-1 (OR EQUIVALENT international/national standard)General requirement for Electrical safety of Medical Equipment.</p> <p>8 Documentation 8.1 User/Technical/Maintenance manuals to be supplied in English. 8.2 List of important spare parts and accessories with their part number and costing. 8.3 Certificate of calibration and inspection. 8.4 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company</p>		
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		<p>service engineer should be clearly spelt out.</p> <p>8.5 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.</p> <p>8.6 List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.</p>		
2	<p><b>Resuscitation Unit consisting of</b></p> <ul style="list-style-type: none"> <li>- O<sub>2</sub> therapy unit</li> <li>-Ambu Bag</li> <li>-Laryngoscope</li> <li>-Endotracheal DG Tube</li> </ul>	<p>Ambu Bag neonatal 250ml tidal volume.</p> <p>Laryngoscope Miller Type blade SS size 0,1,2 - straight</p> <p>Endotracheal Tubes size 2.5, 3.</p> <p>Compatible Macgill's Forceps</p> <p>Suction Catheter- Disposable 12nos.</p> <p>Infant feeding tube – 12no. disposable</p> <p>Oxygen Therapy Unit</p> <p>Cylinder on trolley with humidifier &amp; rotameter</p>		3

**Annexure A : Specification for Supplies**

**Package Twelve**

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	The most appropriate answer	<b>Required Number</b>
1	Portable Ultra sound Mechine	<p>1. The unit shall operate on power supply of 230V +/-10%50Hz</p> <p>2. Unit shall be Portable Ultrasound Scanner consists of following components.</p> <p>a) High resolution Television Monitor of not less than 20 Centimeters diagonal.</p> <p>b) One electronic convex probe (Transducer) of 3.5 MHz frequency with a scanning width of 50-90mm.</p> <p>3. The unit shall be associated and Inco-operated to the facilities specified below.</p> <p>a) Scanning modes of linear, convex.</p> <p>b) Display made of B-mode, M-mode and B/M mode</p> <p>c) Real time continuous wave dynamic focusing.</p> <p>d) User selective display formats of two side by side images in each display mode.</p> <p>e) Depth selection of not less than 18 cm.</p> <p>f) Measuring facility using calipers with provision for calculations of distance, area,circumference,volume,heart rate, gestational age by GS,CRL,BPD,foetal weight,etc.</p>		



		<p>4. The equipment shall be warranted for a period of not less than 24 calendar months from the date of successful commissioning on full parts and labour basis. Such a warranty shall also includes servicing and Maintenance during the period of validity. Tenderes must specify in detail the means available to implement such a warranty.</p>		
		<p>5. The unit shall be supplied with 02 sets of instruction and service manuals in English.</p>		
		<p>6. The equipment shall be constructed in such a way prevent electric and fire hazards. ISO-9002 certificate would be an added advantage.</p>		

## Annexure A : Specification for Supplies

### Package Thirteen

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	SYRINGE PUMPS	<p>1) The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system.</p> <p>2) Must Work on commonly available standard 5ml,10ml,20ml,50ml,60 ml Syringes with accuracy of minimum of +/-2% or better, with automatic syringe size recognition.</p> <p>3) <b>European CE or US-FDA approved product.</b></p> <p>4) Flow rate programmable from 0.1 to 1000 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.</p> <p>5) <b>Bolus rate should be programmable to 40 to 1000 ml/hr or more with infused volume display and one key press bolus. Reminder audio after every 1 ml delivered.</b></p> <p>6) Display of Drug directory of more than 50 drugs, customised and adjustable.</p> <p>7) Key board locking system for patient safety.</p> <p>8) Keep Vein Open (KVO) must be available at 0.1 ml or set rate User should have choice to disable KVO whenever desired.</p> <p>9) Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg.</p> <p>10) Automatic detection of syringe size &amp; proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.</p> <p>11) Manual pusher with plunger protection guard.</p> <p>12) Anti bolus system to reduce pressure on sudden release of occlusion.</p> <p>13) <b>Should have comprehensive ALARM package including: Occlusion limit</b></p>		1

		<p><b>exceed alarm.</b></p> <p><b>Near end of infusion pre-alarm &amp; alarm, Volume limit pre-alarm &amp; alarm, KVO rate flow,</b></p> <p><b>Low battery pre-alarm and alarm, AC power failure and Drive disengaged alarm.</b></p> <p><b>14)</b> Rechargeable Battery having at least 1 hours backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.</p> <p><b>15) Mounting device/ Docking Station for at least four pumps as per requirement so as to enable to power up to 4 pumps with one power cord when mounted on IV pole – Twenty nos.</b></p> <p><b>16)</b> The unit shall be capable of stored and operating continuously in ambient temperature of 10 - 50deg C and relative humidity of 15-90%</p> <p><b>17)</b> Power input to be 220-240VAC, 50Hz.</p> <p><b>18)</b> Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.</p> <p><b>19)</b> User Manual and service manual in English.</p> <p><b>20)</b> Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.</p> <p><b>21)</b> List of important spare parts and accessories with their part number and costing.</p>		
2	Digital infusion Pump	<ol style="list-style-type: none"> <li>1. The equipment should have Roller type Peristaltic pump /Volumetric pump technology for delivery of IV fluids and blood/blood products ranging between 2.5 ml to 750 ml per minute.</li> <li>2. The Equipment should have high levels of safety from air embolism by integrating atleast two ultrasonic air detection sensors.</li> <li>3. Heating process should be done by an electro magnetic induction heating system.</li> <li>4. The Equipment should have two infra –red temperature sensors for accurate delivery of fluids at 37deg.C.</li> <li>5. The equipment should have the facility to automatically purge air for removal of any</li> </ol>		10

		<p>outgassed air to prevent it from entering the patient line. No manual process should be involved.</p> <p>6. The equipment should have operator controlled Bolus infusion key for rapid response in critical situations.</p> <p>7. The equipment should have a line pressure control sensor for restriction of flow in case of line occlusion immediately and stop the delivery of fluids for patient safety.</p> <p>8. The Equipment should have a recirculate mode for pre – warming of fluids during transport.</p> <p>9. The Equipment should have an interactive on-board display system which displays information about the rate of infusion , total volume infused , real temperature of fluids, line pressure etc.</p> <p>10. The equipment should have an internal rechargeable battery backup.</p> <p>11. Consumables should be universal for all flow rates ranging between 2.5 ml to 750 ml per minute.</p>		
3	Defibrillator	<p>The unit shall consist of a bi phasic defibrillator and display vital signs including ECG, NIBP, SPO2 3 with a thermal recorder sothat it can use both as difibrilator and patient monitor.</p> <hr/> <p><b>Defibrillator</b></p> <p>Must have following features and facilities:</p> <p>(1.1) Discharge waveform type: Bi Phasic with impedance compensation.</p> <p>(1.2) Output Energy: up to 270J .</p> <p>(1.3) Accuracy: ±10% or better into 50 Ohm</p> <p>(1.4) Charging Time: about 8 seconds to maximum energy level with a fully charged battery</p> <p>(1.5) ECG synchronization (cardioversion)</p> <p>(1.6) AED with voice prompts</p> <p>(1.7) Display of energy set &amp; delivered</p> <p>(1.8) Paddle to skin contact monitoring &amp; display</p>		

	<p>(1.9) Battery level indication</p> <p>(1.10) External reusable paddles suitable for both adult &amp; paediatric use</p> <p>(1.11) Dedicated keys (1-2-3) for quick defibrillation</p> <p>[1.12] Paddle operating buttons (charging &amp; shock delivery)</p> <p>(1.12) ECG derivation via paddles &amp; 3 ECG leads</p> <p>(1.13) Facility for Defibrillator testing,</p> <p>(1.14) Facility for external cardiac pacing</p> <p><b>Monitor</b></p> <p>Must have following features and facilities:</p> <p>(2.1) Display: 3 Trace (minimum), 7 (at least) inch TFT Colour</p> <p>(2.2) ECG (3 Lead)</p> <p>(2.3) Heart rate display with pre-settable high and low alarm settings.</p> <p>(2.4) Display of alarm messages such as "lead off", "paddle loose" heartrate, SPO2 high/low etc.,</p> <p>(2.5) SPO2 Pulse Oxyimetry with waveform (Masimo or equivalent)</p> <p>(2.6) NIBP measurement</p> <p>(2.7) IBP measurement</p> <p>(2.8) ETco2 measuement</p> <p><b>Built - in Recorder</b></p> <p>Must have following features and facilities:</p> <p>(3.1) High resolution 3 channel thermal array printer</p> <p>(3.2) Automatic &amp; manual operation</p> <p>(3.3) Facility to record the waveform automatically immediately after defibrillation including discharge rhythm</p> <p>(3.4) Facility to record event summary, tabular trends, operational check etc.</p>		
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	<p><b>Operating Voltage:</b></p> <p>The unit shall function on 100 to 240 VAC @ 50Hz. and on internally rechargeable battery back up of 3 hrs or more continuous running /at least 50 discharges, when fully charged</p> <p><b>Leakage current</b></p> <p style="text-align: center;">≤ 10 μA (Patient)</p> <p style="text-align: center;">≤ 100 μA (Chasis)</p> <p>The Unit should have a carrying handle and a Gel tube holder. Unit must be splash proof (IPX3/4) &amp; shock proof.</p> <p><b>General Requirements:</b></p> <p>The Unit must conform to IEC 60601 series for safety and EMC. The product must be CDDA registered and Manufacturer should be certified for ISO quality standards. One set of complete service &amp; operational manuals in English to be delivered with the equipment. Each Unit must be installed and commissioned by the Supplier. Each System must carry at least two years comprehensive warranty effective from the date of commissioning. A sample machine must be demonstrated within 3 weeks after bid closing. Bidders must enclose a list of current local users of the model on offer. Bidders must support compliance to the given specifications with manufacturer's original brochures. Bidders must provide documentary evidence on their technical capacity (trained staff, testing equipment for calibration &amp; maintenance support as per manufacturer service/technical manuals) to carry out installation and service. User/Technical/Maintenance manuals to be supplied.</p>		
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**Annexure A : Specification for Supplies**

**Package Fourteen**

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Peadiatric portable ventilator	<p>The Ventilator should be portable, compact and light weight with minimum 10" in built touch screen display and control</p> <p>Should be compact in order to accommodate the ventilator in Ambulances and / or for inter or intra hospital transfer of patients.</p> <p>It should have an internal battery back up of minimum 4 hrs,</p> <p>It should be able to work on 12 V DC car battery (adaptor to be provided)</p> <p>It should be able to be used without external air compressors or without O2 supply (low pressure) in case of O2 failure</p> <p>Should be suitable for pediatric as well as adult patients to provide invasive as well as Non-invasive ventilation</p> <p><b>minimum Ventilation Modes:</b></p> <p>[a] Volume controlled</p> <p>[b] Pressure Controlled/support</p> <p>[c] CMV</p> <p>[d] SIMV /with pressure support</p> <p>[e] BPAP</p> <p>[g] NIV</p> <p>[f] CPAP</p> <p><b>Minimum controlled Parameters:</b></p> <p>[a] Tidal Volume                      20 - 1500mL</p>		

		[b] I:E Ratio	2:1 to 1:8 or better			
		[c] Respiratory Rate	4 - 150BPM			
		[d] PEEP	0 - 30 cmH2O			
		[e] Patient Trigger:	Flow or Pressure			
		[f] Oxygen concentration	21 - 100%			
		[g] Airway Pressure:	10 - 70 cmH2O			
		<b>Minimum monitored &amp; Displayed Parameters</b>				
		[a] Airway Pressure				
		[b] Tidal volume				
		[c] Oxygen concentration				
		[d] Breath rate				
		[e] Inspiratory & expiratory time				
		[f] Expired Minute Volume				
		[g] PEEP				
		[h] I:E Ratio				
		[i] Internal battery status				
		[j] waveforms, loops and trends				
		[k] leak amount in invasive mode				
		<b>Minimum alarm facilities</b>				
		[a] High/Low Air way pressure				
		[b] Apnea				
		[c] Oxygen failure				
		[d] Battery low				
		[e] Equipment malfunction				
		Should have advanced leak compensation facilities to minimise faulty Flow or Pressure triggering				



	<p>It should have adjustable triggering setting for pressure or flow or both in PSV, SIMV modes.</p> <p>A separate humidifier shall be quoted if not included in the unit. Features in built should be specified in the offer.</p> <p>There should be an inbuilt nebulizer with the unit</p> <p>it Should have turbine/piston technology for supplying air-oxygen mixture</p> <p>Bidder should specify any other advanced user friendly facilities in built with unit.</p>		
	<b>General Requirements</b>		
	Accessories to be provided with each machine		
	2 X Adult patient circuit (autoclavable & reusable)+ paediatric circuit		
	1 X Adult test lung & 05 nos. of filters		
	List of essential spares, accessories, expendables and consumables expected to be used in one year should be provided and quoted separately.		
	Prices so quoted to be frozen for 3 years		
	The product must be CDDA registered and Manufacturer ISO certified for quality standards.		
	Bidders must support compliance to the given specifications with manufacturer's necessary documents including original product brochures.		
	Each unit must carry at least two year comprehensive warranty effective from the date of commissioning. The supplier must ensure a 95% uptime during this period.		
	A sample unit must be demonstrated for evaluation within 3 weeks after bid closing.		
	Bidders must enclose a list of current local users of the model on offer.		
	Bidders must provide documentary evidence on their technical capacity (trained staff, testing equipment for calibration & maintenance support as per manufacturer service/technical manuals) to carry out installation and service.		

		Bidders must quote for a comprehensive service contract (excluding consumables) for 5 years effective after expiration of the warranty period. Rates quoted will be considered for arriving at the lowest cost during evaluation.		
		User/Technical/Maintenance manuals to be supplied.		
2	Aponea monitor	0.20 breath / minute with alarms and sensitivity setting for neonatal & pediatric use.		1

## Annexure A : Specification for Supplies

### Package Fifteen

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Blood gas and Na+/K analyzer	<p>A fully automated pH/Blood gas/electrolyte analyzer measuring the following parameters:-            pH, PCO<sub>2</sub>, PO<sub>2</sub>, Barometric pressure.            Na, K, Ca, Cl            Co-oximetry: ct Hb, CCO Hb, Met Hb, Sulf Hb, Haematocrit and Barometric pressure.            Sample volume should be approximate 100 µl for all parameters.            All calibration and cleaning cycles should be fully automated with user selectable calibration items.            Calibration should be performed by liquid calibration for all parameters.            The electrodes provided should be zero maintenance including the reference electrode.            The system should have on board data manager to store all patient results, QC data and calibrations.            The system should have a closed waste system and monitored continuously. Also all the system reagents should be monitored continuously.            A power fail protection for 20 min.to take all calibration and programmed data.            The analyzer should have a colour LCD screen to access all the system software and to display the patient's results. With alphanumeric key board/touch screen.            A built in thermal printer should be provided to print out patient results.            The system should work in discrete testing, ie, selectable parameter testing.            Should be supplied with consumable, reagents and QC agents for 1000 tests, as per the user requirements so that they do not expire.            Should not preferably use special gases.</p>		1

2	Electrolyte Analyzer	<ul style="list-style-type: none"> <li>• For analysis of Electrolytes in serum, plasma, urine, cerebrospinal fluid (CSF), hemolysate and whole blood.</li> <li>• System should be able to measure Na, K, Ca and should be upgradable to measure Cl (chloride) and Li (lithium) Electrodes.</li> <li>• System should be able to measure following parameters: Na, K, Ca and should be upgradable to measure Cl (chloride) and Li (lithium) Electrodes.</li> <li>• The machine should have reagent in single reagent pack for all the measurable parameters and the pack should be Bio Hazard free.</li> <li>• It can be used for blood/plasma/serum, urine, body fluids, dialysate, aqueous &amp; QC Fluids</li> <li>• Resolution should at least in 0.1 mmol/Litre</li> <li>• Sample can be fed by capillary syringe or sample tube directly</li> <li>• Sample volume should be less than 100 micro-liters.</li> <li>• Analysis time should be less than 60 seconds</li> <li>• Calibration should be fully automatic 1 and 2 point calibration. 1 point with every sample and 2 point time bound</li> <li>• Quality control memory storage, of at least 3 levels</li> <li>• Facility of flagging of abnormal results and user programmable ranges.</li> <li>• Stand by mode: user controlled and automatically controlled</li> <li>• Memory for last 20 messages.</li> <li>• Built in printer for printing the data.</li> <li>• RS.232.C (standard serial port) should be available</li> <li>• ISE Analyser-01</li> <li>• Na, K, Ca Electrodes- 01 ea</li> <li>• Li and Cl Electrodes-01 ea(OPTION) Quote price separately for these.</li> <li>• Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.</li> <li>• Thu unit shall be capable of operating in ambient temperature of 20-30</li> </ul>		1
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		<p>deg C and relative humidity of less than 70%</p> <ul style="list-style-type: none"> <li>• The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%</li> <li>• Power input to be 220-240VAC, 50Hz</li> <li>• Suitable Servo controlled Stabilizer/CVT</li> <li>• Resettable overcurrent breaker shall be fitted for protection</li> <li>• Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.</li> <li>• Certified for meeting IEC 60601-1-4 Medical electrical equipment - Part 1-4: General requirements for safety - Collateral Standard: Programmable electrical medical systems</li> <li>• Attach original manufacturer's product catalogue and specification sheet. Photocopy/ computer print will not be accepted. All technical data to be supported with original product data sheet. Please quote page number on compliance sheet as well as on technical bid corresponding to technical specifications.</li> <li>• Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450</li> <li>• Should be FDA or CE approved product</li> <li>• Certificate of calibration and inspection.</li> </ul> <p>User manual in English</p>		
3	Bilirubinometer (Transcutaneous Serum)	<ol style="list-style-type: none"> <li>1. Method of measurement –reflectance bichromatic photometry.</li> <li>2. Light source- two white light emitting diodes (LED)</li> <li>3. Detector- two photocell system</li> <li>4. Measuring gauge- 2-58 (in unit of TBI)</li> <li>5. Optical unaccuracy- &lt;10%</li> <li>6. Imprecision (CV%)-&lt;2%</li> <li>7. Correlated between TBI and laboratory values for serum bilirubin levels- more or equal to 0.92</li> </ol>		1

		8. Readout- three digits liquid crystal display 9. Measuring cycle time ~2 seconds. Between the measuring cycles the device is in a stand by mode. 10. Power source- 3 batteries of AAA (or LR03) type or equivalent		
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**Annexure A : Specification for Supplies**

**Package Sixteen**

<b>Nr</b>	<b>Equipment and Instrument</b>	<b>Specification</b>	<b>The most appropriate answer</b>	<b>Required Number</b>
1	<b>ENT Diagnostic and Treatment Unit</b>	<p>Rust free top with powder coating housing on lockable heavy duty castors.</p> <p>Transparent acrylic cover cabinet with OPD instruments Concealed powerful suction unit with foot control switch.</p> <p>Electronic temperature controlled water jet system with 0.1 deg. Seting range upto 100 deg. Cent.</p> <p>Universally adjustable Bull's Eye Lamp Foot operated, powerful spray system with micro-switching</p> <p>Solid state, fine cautery with different electrodes, with cutting &amp; coagulating system.</p> <p>Convenient heat laryngeal mirror warmer system X-ray viewing box with CFL lights Space for instruments trays Medicine bottles and gauze box stand</p> <p>Storage drawers with locking facility Space for cold light source. Sinoscope 0deg. With stand. Approximate dimensions:HxWxL-150x60x70cm</p> <p>Optional items: Operating microscope, Fibre optic Headlight.</p>		1

## Annexure A : Specification for Supplies

### Package Seventeen

Nr	Equipment and Instrument	Specification	The most appropriate answer	Required Number
1	Blood bank refrigerator	<p><b>1. Description of Function</b> Blood Bank Refrigerator is used to store blood bags under controlled temperature.</p> <p><b>2. Operational Requirements</b> System required with weekly chart recorder and digital displays.</p> <p><b>3. Technical Specifications</b> Temp range-should have adjustable temperature control range from +1 degree to +8 deg.C, factory preset at 4 degree C.</p> <p>Capacity should accommodate 350 or more unit's blood and storage internal volume should be 700 liters.</p> <p><u>Refrigerator system-</u></p> <p>a)The system should have high density CFC- free urethane foam insulation to protect cabinet from ambient temperature fluctuation.</p> <p>b)The system should have positive, forced, air circulation to maintain temperature uniformity at all shelf levels, with quick recover +/-1 deg.C.</p> <p>c)The system should have sensors for activating automatic defrost cycle to minimize the frost build up.</p> <p>d)The system should have automatic condensate removal with no requirement for separate drainage lines.</p> <p>e)Internal construction should be made up of high grade stainless steel (min 22 G)</p> <p>G) External construction Corrosion resistant sheet at least 1mm thickness.</p> <p><u>Internal Temp Control</u></p> <p>a)System should have temperature control range from +1 degree C to +8 degree</p>		2



		<p>C.  b)Temperature control resolution should be better than 0.1 degree C.  c)Cooling down time of max of 150 min on half load.  External ambient temp should perform in ambient temp up to +43 deg.C.  Should have connectivity to computer and data logger.  Door System should lockable double glass doors for better safety.</p> <p><u>Safety System:</u>  a)System should have large and clear Digital displays for the set/run parameters.  b)The system should have weekly chart recorder temperature changes  c)The system should have key operated set point for the added security.</p> <p><u>Alarms.</u>  a)System should have audible/visual warnings for over-temperature under temperature and power failure with visual status reports on critical functions.  b)System should have battery backup and connections for remote alarm contacts.  c)Should have connectivity to computer and data logger.</p> <p>Should have adjustments for uneven bases. The adjustments should be easy to use like rotating a screw at the legs in the base.  Scratch resistant internal lining of the cabinet (stainless steel or aluminium).</p> <p><b>4. System Configuration Accessories, spares and consumables</b>  System as specified</p> <p>Quote pricing for the following essential spares; (01 each) Compressor;  Evaporator; Evaporator fan motor; Condenser fan motor; Filter drier; Condensate heater; Service valve; Control unit; Transformer; Thermostat; Lamp; Contactor;  Relay; Relay base; Door switch; Door gasket.</p> <p><b>5. Environmental factors</b>  The unit shall be capable of being stored continuously in ambient temperature f 0-50 deg C  and relative humidity of 15-90%. The unit shall be capable of operating</p>		
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		<p>continuously in ambient temperature of 5 to 45 deg C and relative humidity of 15-90%</p> <p><b>6. Power Supply</b> Power input to be 220-240VAC, 50Hz</p> <p>Voltage corrector/ stabilizer of appropriate ratings meeting ISI Specifications . (Input 160-260V and output 220-240 V and 50Hz).</p> <p>Suitable Automatic Voltage regulator/stabilizer meeting ISI Specifications should be supplied. Broad specifications are: Automatic Type Input 150-280V, Output 220V +/-7%, 50Hz, Single phase, AC with automatic 2-4 sec Cut off and 6-9 minutes restart delay. Quick start arrangements for by passing the start delay. Suitable MCB on input voltmeter and indicators on Front Panel. Input Power Cable with 15 A Plug and six way output terminal strip for two outlets.</p> <p><b>7. Standards and Safety</b> Should be FDA, CE, UL or BIS approved product.</p> <p>Should comply with WHO/ UNICEF Specification Reference: BTS/RF.1</p> <p>Test and inspections as per WHO Procedure reference: Laboratory Test Procedure: Standard Test Procedure: BTS/ Proc/ 3. Should comply with International Electromagnetic Compliance standards like IEC or EMC Directives. Electrical safety conforms to standards for electrical safety IEC-60601/IS13450.</p> <p><b>8. Documentation</b> -User/ Technical/ Maintenance manuals to be supplied in English. -Certificate of calibration and inspection from factory.</p>		
2	Eliza reader	<p><b>Description of Function</b></p> <ul style="list-style-type: none"> <li>ELISA Reader is required to Read the Color Density known as OD(Optical Density) in ELISA (Enzyme Linked Immuno-Sorbent Assay.)Plates.</li> </ul>		1

		<p><b>Operational Requirements</b></p> <ul style="list-style-type: none"> <li>• ELISA Reader complete with Printer is required.</li> </ul> <p><b>Technical Specifications</b></p> <ul style="list-style-type: none"> <li>• Should have 8-12 measuring channel &amp; reference channel</li> <li>• Should have wave length range of 400- 750 nm with 6 filter 340, 405. 450, 492, 540, 620nm with provision for fitting any additional filters</li> <li>• Should have an absorption range of 0-4.000A</li> <li>• Should have a resolution of 0.001A</li> <li>• Should read within 6-8 seconds</li> <li>• The control panel should have soft colored touch screen display/easy to use multifunctional keyboard .Results should be readable on screen or be printed out using on board printer.</li> <li>• Should have external &amp; internal programmable time &amp; speed shaking</li> <li>• Should be able to read all types of plates</li> <li>• Should have a single halogen lamp with save features as light source</li> <li>• Should allow user defined programmes, 30 or more.</li> <li>• RS232/USB output for Printer, PC connectivity and Data acquisition should be there</li> <li>• Should have data memory of 300 plates.</li> <li>• Should have external printer, capable of printing complete results &amp; graphs etc. from Elisa system</li> </ul> <p><b>System Configuration Accessories, spares and consumables</b></p> <ul style="list-style-type: none"> <li>• Halogen Lamps : 2</li> <li>• Thermal print paper : 10 Rolls/Z Fold</li> <li>• Dust Cover -01</li> <li>• Set of pipettes consisting of single channel variable volume color pipettes 0.5-10 ul, 5-40 ul, 40-200 ul, 200-1000 ul</li> <li>• 8 channel variable volume color multi channel pipettes 5-50 ul and 50-300</li> </ul>		
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		<p>ul.</p> <p><b>Environmental factors</b></p> <ul style="list-style-type: none"> <li>• The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%</li> <li>• The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%</li> </ul> <p><b>Power Supply</b></p> <ul style="list-style-type: none"> <li>• Power input to be 220-240VAC, 50Hz fitted with Indian plug</li> <li>• Resettable overcurrent breaker shall be fitted for protection</li> <li>• Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.( Input 160-260 V and output 220-240 V and 50 Hz)</li> <li>• Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.</li> </ul> <p><b>Standards and Safety</b></p> <ul style="list-style-type: none"> <li>• Comprehensive training for lab staff and support services till familiarity with the system.</li> <li>• Should be FDA , CE,UL or BIS approved product</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>• User/Technical/Maintenance manuals to be supplied in English.</li> <li>• Certificate of calibration and inspection from factory</li> </ul>		
3	Donation couch	<p><b>1 Description of Function</b></p> <p>1.1 Blood Donor Couch is a completely automatic enveloping, variable tilt chair and specially designed to make blood withdrawals easier,</p>		2

		<p>safe and functional, and also for other diagnostic and therapeutic areas</p>		
		<p><b>2 Operational Requirements</b></p>		
		<p>2.1 1) Provides a comfortable position for the donor.  2) Variable positioning for either arm with Comfortably wide arm-rests.  3) Arm rests have swinging out as well as up and down moving facility.  4) Reclining and upright body positions with a smooth shifting to any position.  5) Both sides should have supporting brackets.  6) If a vasovagal attack occurs the Donor's head needs to be lowered immediately and his legs lifted above his heart level so that blood can flow back to the brain and other vital organs. Electronic remote controlled facility should be provided for this function</p>		
		<p><b>3 Technical Specifications</b></p>		
		<p>3.1 Ergonomically designed comfortable chair type for donor comfort. Mattress should be comfortably cushioned with elegantly thick washable upholstery.</p>		
		<p>3.2 Seat, back rest and leg rest size designed for donor comfort. It should have step less electric remote controlled height adjustment approximately 58 – 60 cm.</p>		
		<p>3.3 Adjustable arm rests-Swivel able and lift up for donor's comfort and phlebotomist friendly</p>		
		<p>3.4 Easily tilted to head low position, electrically operated</p>		
		<p>3.5 Comfortable working level for the operator. Lifting capacity - Approx 200 kg.</p>		

		3.6 UP/DOWN control			
		<b>4 System Configuration Accessories, spares and consumables</b>			
		4.1 Donor Couch -01			
		4.2 Dust Cover -01			
		4.3 Power cable -01			
		4.4 Arm Rests(pair) -01 pair			
		4.5 Remote control -01			
		<b>5 Environmental factors</b>			
		5.1 The unit shall be capable of operating continuously in ambient temperature of 10 -40 C and relative humidity of 15-90%			
		5.2 The unit shall be capable of being stored continuously in ambient temperature of 0 -50 C and relative humidity of 15-90%			
		5.3 Shall meet IEC-60601-1-2 :200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.			
		<b>6 Power Supply</b>			
		6.1 Power input: 220-240V/ 50 Hz AC Single phase or 380-400V AC 50 Hz Three phase fitted with appropriate Indian plugs and sockets.			
		6.2 Reset table over current breaker shall be fitted for protection			
		6.3 Suitable Servo controlled Stabilizer/CVT			
		<b>7 Standards and Safety</b>			
		7.1 Should be FDA or CE approved product			

		<table border="1"> <tr> <td>7.2</td> <td>Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450</td> <td></td> <td></td> <td></td> </tr> <tr> <td>7.4</td> <td>All electrical actuators and mechanisms should be housed inside the structure making the product safer</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="5"><b>8 Documentation</b></td> </tr> <tr> <td>8.1</td> <td>User manual in English</td> <td></td> <td></td> <td></td> </tr> <tr> <td>8.2</td> <td>Service manual in English</td> <td></td> <td></td> <td></td> </tr> <tr> <td>8.3</td> <td>Certificate of Calibration and inspection from the factory</td> <td></td> <td></td> <td></td> </tr> <tr> <td>8.4</td> <td>Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.</td> <td></td> <td></td> <td></td> </tr> </table>	7.2	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450				7.4	All electrical actuators and mechanisms should be housed inside the structure making the product safer				<b>8 Documentation</b>					8.1	User manual in English				8.2	Service manual in English				8.3	Certificate of Calibration and inspection from the factory				8.4	Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.					
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4	Antisera kits, Binoculars microscope, testing plates, glass ware etc.	<p><b>A) Blood Grouping Sera/Reagents</b></p> <ul style="list-style-type: none"> <li>Antisera to blood group A, B &amp; D -10 Sets with known control sera</li> <li>Testing Plates -04 Nos.</li> <li>Lancets-200</li> </ul> <p><b>B) Reagents for serological tests for syphilis and positive sera for control. Elisa tests kits for hepatitis and HIV I &amp; II.-10each</b></p> <p><b>C) Binocular Microscope for specifications refer under Clinical Pathology</b></p> <p><b>D) Glass Ware for Blood Bank</b></p> <table border="0"> <tr> <td>Pippetes (Pasture)</td> <td>No.</td> <td>10</td> </tr> <tr> <td>Serological graduated pippetes of capacity 0.1ml, 1ml &amp; 10ml.</td> <td></td> <td>10 of each size</td> </tr> <tr> <td>Glass Tubes 6mm x 50mm</td> <td></td> <td>100</td> </tr> <tr> <td>Racks for the above test tubes</td> <td></td> <td>6</td> </tr> <tr> <td>Filter paper (Whatman)</td> <td></td> <td>12</td> </tr> <tr> <td>Glass Micro slides 75mmx25mm</td> <td></td> <td>6 boxes of 100</td> </tr> </table>	Pippetes (Pasture)	No.	10	Serological graduated pippetes of capacity 0.1ml, 1ml & 10ml.		10 of each size	Glass Tubes 6mm x 50mm		100	Racks for the above test tubes		6	Filter paper (Whatman)		12	Glass Micro slides 75mmx25mm		6 boxes of 100		1																	
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		<p>E) Serological Water Bath – Digital display of various settings of temp., timer. Temp. range from 37deg.C to 90deg.C. Size approx. 300x250x170mm. Inner-stainless steel. Outer-M.S. epoxy coated.</p> <p>F) Table top centrifuge for four tubes with 24 tubes to be supplied.</p> <p>G) Analytical balance of 10mg accuracy.</p> <p>H) VDRL shaker – With digital speed controller, timer &amp; power indicator to work on 220v, 50Hz.</p>		
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## Annexure B: Price Schedule Form

### B- 1- Package one : Price Schedule

SN	Equipment and instrument	Req. No	Rate per Unit (SLR)	Custom duty, Sales Tax or other taxes (SLR)	Total amount with Custom duty and taxes (SLR)	Total amount without Custom duty and taxes (SLR)
1	Baby basinet	4				
2	Open care system	5				
3	Phototherapy unit	2				
4	Baby warmer unit	2				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

.....

Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -

.....

Name address of the Authorized Officers: .....

.....

Telephone Number - ..... Fax Number - .....

Date ...../ ...../ 2016

**B- 2- Package Two : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Infant weighing machine	1				
2	Infant meter	1				
3	Infant Incubator	1				
4	Pediatric Portable Incubator	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
.....

Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -  
.....

Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -

Date ...../...../ 2016

**B- 3- Package Three : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Suction machine (Heavy duty)	2				
2	Head light with light source	1				
3	Vacuum extractor	1				
4	Spot light for gynae exam	2				
5	Air Mattress	2				
6	CTG (Cardiotocograph)	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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Signature of the Bidder .....

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(Common Seal of the Company)

Name & address of the Company -

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.....

.....

Name address of the Authorized Officers: .....

.....

.....

Telephone Number - .....

Fax Number -

.....

Date ...../...../ 2016

**B- 4- Package Four : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Vaginal speculum Dual	3				
2	Dressing Drums	6				
3	Obstetric forceps – Wringles	2				
4	Obstetric forceps – Ferguson	1				
5	Bowel SS for placenta	2				
6	Basin SS on stand	2				
7	Sim’s speculum	4				
8	Craniotomy set	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
.....

Signature of the Bidder .....  
.....

(Common Seal of the Company)

Name & address of the Company -  
.....

Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -  
.....

Date ...../ ...../ 2016

**B- 5- Package Five : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Mastoid retractor	1				
2	Proctoscope Standard					
3	Proctoscope with side opening					
4	Fistula Probe					
5	Bone nibblers					
6	Bone cutter					
7	Amputation saw					
8	Kelly retractors					
9	Park retractors					
10	Catch forceps					
11	Sucker Nozzle (Legge, Standards) 2 each					
12	Doctors stool					

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable) Total amount in words; Sri Lankan Rupees  
 .....

Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

.....

Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -

.....

Date ...../ ...../ 2015

**B- 6- Package Six : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Diagnostic Set (Stethoscope, Blood Pressure Apparatus, Thermometer, Hammer, Tuning fork, Tape etc.)	22				
2	Weighing Machine	22				
3	X-ray View Box (Single)	22				
4	Foetoscope (Ultrasound) & Foetoscope (Pinnard)	1 each				
5						

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

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Name address of the Authorized Officers: .....

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Telephone Number - .....

Fax Number -

.....

Date ...../...../ 2016

**B- 7- Package Seven- : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Slit lamp with tonometer	2				
2	Lensometer	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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 .....

Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

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Name address of the Authorized Officers: .....

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Telephone Number - ..... Fax Number -

.....

Date ...../ ...../ 2016

**B- 8- Package Eight : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Ophthalmic unit (chair unit)	1				
2	Retinoscope	1				
3	Ophthalmoscope	2				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
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Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -  
 .....

Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -

Date ...../ ...../ 2016



**B- 9- Package Nine : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	AB-Scan	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
 .....

Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -  
 .....

Telephone Number - ..... Fax Number -  
 .....

Date ...../ ...../ 2016

**B- 10- Package Ten : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Auto Refractometer	1				
2	Operating Microscope - Ophthalmology	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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Signature of the Bidder .....

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(Common Seal of the Company)

Name & address of the Company -

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Name address of the Authorized Officers: .....

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 .....

Telephone Number - .....

Fax Number -

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Date ...../ ...../ 2016

**B- 11 - Package Eleven: Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Computerized spirometer system (PFT)	1				
2	<b>Resuscitation Unit consisting of</b> - O <sub>2</sub> therapy unit - Ambu Bag - Laryngoscope - Endotracheal DG Tube	3				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
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Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -  
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Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -  
.....

Date ...../...../ 2016

**B- 12- Package Twelve : Price Schedule**

SN	Equipment and instrument	Req. No	Rate per Unit (SLR)	Custom duty, Sales Tax or other taxes (SLR)	Total amount with Custom duty and taxes (SLR)	Total amount without Custom duty and taxes (SLR)
1	Portable Ultra sound Machine	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
 .....  
 .....

Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -  
 .....

Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -

Date ...../ ...../ 2016

**B- 13- Package Thirteen : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	SYRINGE PUMPS	1				
2	Digital infusion Pump	10				
3	Defibrillator	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

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.....

Name address of the Authorized Officers: .....

.....

Telephone Number - .....

Fax Number -

.....

Date ...../...../ 2016

**B- 14- Package Fourteen : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Pediatric Portable Ventilator	1				
2	Apnea monitor	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

.....

Name address of the Authorized Officers: .....

.....

Telephone Number - .....

Fax Number -

.....

Date ...../...../ 2016

**B- 15- Package Fifteen : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Blood gas and Na+/K analyzer	1				
2	Electrolyte Analyzer	1				
3	Bilirubinometer (Transcutaneous Serum)	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

.....

Name address of the Authorized Officers: .....

.....

Telephone Number - .....

Fax Number -

.....

Date ...../...../ 2016

**B- 16- Package Sixteen : Price Schedule**

SN	Equipment and instrument	Req. No	Rate per Unit (SLR)	Custom duty, Sales Tax or other taxes (SLR)	Total amount with Custom duty and taxes (SLR)	Total amount without Custom duty and taxes (SLR)
1	ENT Diagnostic and Treatment Unit	1				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees  
 .....  
 .....

Signature of the Bidder .....

(Common Seal of the Company)

Name & address of the Company -  
 .....

Name address of the Authorized Officers: .....

Telephone Number - ..... Fax Number -  
 .....

Date ...../ ...../ 2016



**B- 17- Package Seventeen : Price Schedule**

<b>SN</b>	<b>Equipment and instrument</b>	<b>Req. No</b>	<b>Rate per Unit (SLR)</b>	<b>Custom duty, Sales Tax or other taxes (SLR)</b>	<b>Total amount with Custom duty and taxes (SLR)</b>	<b>Total amount without Custom duty and taxes (SLR)</b>
1	Blood bank refrigerator	2				
2	Eliza reader	1				
3	Donation couch	2				
4	Antisera kits, Binoculars microscope, testing plates, glass ware etc	2				

**(Please submit separate forms for any alternate models proposed)**

VAT registration number ..... (if applicable)

Total amount in words; Sri Lankan Rupees

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 .....

Signature of the Bidder .....

.....

(Common Seal of the Company)

Name & address of the Company -

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.....

Name address of the Authorized Officers: .....

.....

Telephone Number - .....

Fax Number -

.....

Date ...../...../ 2016

**Annexure C: Manufacturer's Authorization**

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]*

Date: .....

No.: .....

To: .....

**WHEREAS**

We....., who are official manufacturers of ..... having factories at [insert full address of Manufacturer's factories], do hereby authorize ..... to submit a bid the purpose of which is to provide the following Goods, manufactured by us ....., and to subsequently negotiate and sign the Contract.

Signed: .....

Name: .....

Title: .....

Duly authorized to sign this Authorization on behalf of: .....

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ .

## Annexure D

### BID BOND FORM

Whereas .....Hereinafter called "The TENDERER" has submitted his/their Tender dated ..... For the supply and Installation of Medical Equipment to Dickoya Hospital", as per specification schedule annexed. Know all men by these presents that we .....  
..... (Here in after called the Bank) are bound to the

..... (Here in after called THE PURCHASER) in the sum of .....for which payment well and truly to be made to the said PURCHASER The bank binds itself, its successors and assigns by these presents sealed with the common seal of the said bank this Day of 2015.

The conditions of the obligation are:- .

1. If the TENDERER withdraws his bid during the period of bid validity specified by the TENDERER on the bid form or
2. If the TENDERER having being notified of the acceptance of his bid by the PURCHASER' during the period of Bid validity
  - a. Fails or refuses to execute the CONTRACT.

Or

- b. Fails or refuses to furnish the performance bond. We undertake to pay to the PURCHASER up to the above amount upon receipt of his first written demand, without the PURCHASER having to substantiate his demand PURCHASER will state that the amount claimed by him is due to him owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This guarantee will remain in Force up- to and including 120 days after the period at BID validity, and any demand in respect thereof should reach the BANK not later than the above date.

.....  
Signature of the Bank

**Annexure E**

**PERFORMANCE BOND FORM**

**"Supply and installation of Medical equipment to Dickoya Hospital"**

Whereas hereinafter Called "The SUPPLIER" has undertaken, in pursuance of CONTRACT dated 2011 to supply and installation of Medical equipment in Dickoya Hospital.

Hereinafter called "The CONTRACT" and where as it has been by you in the said CONTRACT that the SUPPLIER shall furnish you with a "Bank. Guarantee" by a recognized Bank for the sum specified herein as security for compliance with the SUPPLIER's performance obligation in accordance with the CONTRACT and whereas we agreed to give the SUPPLIER a Guarantee.

Thereof we hereby affirm that we are guarantors and responsible to you on behalf of SUPPLIER, up to a total of and we undertake to pay you upon, your first written demand declaring the SUPPLIER to be in default under the CONTRACT and without cavil or argument any sum or sums within the limits of ..... as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein. This guarantee is valid until the ..... day of 2015..

.....  
Signature and the Seal of the Bank

..... We understand that you are not bound to accept the lowest or any tender you may receive Dated this .....day of ..... Two Thousand and Eleven.

Signature .....

.....in the capacity of ..... duly authorized to sign tenders for and on behalf of .....  
.....(Name and Address of the company)

(IN BLOCK CAPITAL LETTERS)

Name : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WITNESSES**

.....  
Address:

.....  
Signature:

.....  
Name

.....  
Address:

.....  
Signature: