ZILLA SWASTHYA SAMITI, MAYURBHANJ

CORRIGENDUM NOTICE

The last date for submission of bid for medical equipments published on dated 08/01/2021 in "The New Indian Express" and "The Dharitri" is hereby extended up to 08/02/2021 till 4 P.M and the bid will open at 11 A.M on 09/02/2021. The prospective bidders are hereby requested to take the note of any amendments in the bid from website www.mayurbhanj.nic.in.

Sd/-
C.D.M & P.H.O-cum-District Mission Director
District Health Mission, Mayurbhanj

TERMS, CONDITIONS & SPECIFICATION FOR SUPPLY AND INSTALLATION OF MEDICAL EQUIPMENTS

Chief District Medical & Public Health Officer, Mayurbhanj
(HEALTH & F.W. DEPTT., GOVT. OF ODISHA)

Bid Reference No. – C.D.M & P.H.O, Mayurbhanj – 2020 – 2021 – Medical Equipments – 01

TENDER DOCUMENT FOR SUPPLY OF MEDICAL EQUIPMENTS

DATE OF COMMENCEMENT OF TENDER	: 08/01/2021	
PRE-BID CLARIFICATION	: 12/01/2021	at 1.00 P.M
LAST DATE & TIME OF RECEIPT OF BID DOCUMENTS	: 08/02/2021	up to 4.00 P.M
DATE & TIME OF OPENING OF COVER-A (Technical Bid)	: 09/02/2021	at 11.00 A.M
DATE OF OPENING OF COVER-B (Price Bid)	: 17/02/2021	at 11.00A.M

PLACE OF OPENING OF BID DOCUMENTS: **NHM CONFERENCE HALL**
O/o. C.D.M & P.H.O Mayurbhanj

ADDRESS FOR COMMUNICATION AND RECEIPT OF BID DOCUMENTS :

O/o. C.D.M & P.H.O, MAYURBHANJ
At/Po. - BARIPADA
Dist. - MAYURBHANJ
ODISHA–7 5 7 0 0 1 .
Email: zssmayurbhanj.tender@gmail.com

OFFICE OF THE C.D.M & P.H.O MAYURBHANJ

BID DOCUMENT

The Bidders may download the Tender Documents directly from the website available at www.mayurbhanj.nic.in within 08.02.2021. The Tender cost fee of Rs.5,000/- (Non-refundable) by way of Demand Draft drawn in favour ZSS NON NRHM MAYURBHANJ should be enclosed along-with the Technical Bid. The Tender cost fee and the EMD amount should be submitted separately in separate demand drafts. In case of any bid amendment and clarification, responsibility lies with the bidders to collect the same from the website before last date of purchase of tender document and the C.D.M & P.H.O Mayurbhanj shall have no responsibility for any delay / omission on part of the bidder.

a)	Price of bid document	Rs.5,000/- (Non-refundable)
b)	E.M.D	Rs.1,00,000/- (Refundable)

The tender paper will be rejected if the bidder changes any clause or Annexure of the bid document downloaded from the website.

ABBREVIATIONS:

C.D.M & P.H.O	:	Chief District Medical & Public Health Officer
PRM MCH	:	Pandit Raghunath Murmu Medical College & Hospital
DHH	:	District Head Quarter Hospital
SDH	:	Sub-Divisional Hospital
CHC	:	Community Health Centre
PHC	:	Public Health Centre
OH	:	Other Hospital (Area Hospital)
RKS	:	Rogi Kalyan Samiti
ZSS	:	Zilla Swasthya Samiti
EMD	:	Earnest Money Deposit

IMPORTANT INSTRUCTIONS TO BE NOTED CAREFULLY BY THE TENDERERS

1.	Purchaser	Health & F.W. Department
2.	Indenter	C.D.M & P.H.O, Mayurbhanj, Superintendent PRM MCH
3.	Consignee	PRM MCH, DHH, SDH, CHC, PHC, AREA HOSPITAL etc.
4.	Delivery Period	Within 30 days from issue of the work order.
5.	Mode of Delivery	On door step delivery basis
6.	Guarantee / Warranty	As per company specification
7.	EMD	EMD as per list attached should be deposited by the bidder. The Earnest Money Deposit will be paid in the shape of demand Draft only in favour of ZSS NON NRHM MAYURBHANJ from any Nationalised / Scheduled Bank payable at Baripada.
8.	Security Deposit	Security Money should be submitted in shape of Bank Draft from a Nationalised Bank in favour of ZSS NON NRHM MAYURBHANJ, equal to the amount of 10% of the purchase order value of the items within 15 days of issue of the purchase order & will be returned back after successful supply and installation. The performance security can be adjusted against E.M.D money.
9.	Pre-qualification	Manufacturing units / Importers / Distributors are eligible to participate in the tender provided, they have (i) Valid manufacturing license / Import License. (ii) Valid ISO certificate. (iii) Valid GST registration. (iv) Valid PAN (Income Tax) (v) Product must be CE / US FDA etc certified as per Technical Specification (vi) Tenderer (Manufacturer/Importer/Distributor) should have proof of supply of 5 nos. or more of the quoted equipment(s) to any Govt. organization / Corporate Hospitals / PSU Hospitals / UN Agencies and certificate in support of that from the user in last 3 years. (vii) Tenderer have annual average turnover of Rs.5 crore or more in the last three (3) financial years (2017-18, 2018-19, 2019-20) (viii) In case of distributor - Manufacturer's authorization and power of attorney to transact business on behalf of the manufacturer as per the format at **Annexure - V**. The authorised distributor may raise bill, if specially authorised by the manufacturer. (ix) Tenderer who has been blacklisted either by the Tender inviting authority or by any state Govt. or Central Govt. organization for the quoted item is not eligible to participate in the tender during the period of blacklisting.

TERMS AND CONDITIONS FOR SUPPLY AND INSTALLATION OF MEDICAL EQUIPMENTS

- Sealed tenders will be received within 08.02.2021 up to 4.00 P.M by the C.D.M & P.H.O, MAYURBHANJ. Any tender received after the due date & time will be rejected / returned to the sender unopened. **The tenders will be received through Regd. Post / Speed Post /Courier services only. The tender inviting authority will not be held responsible for any postal delay.**
- Pre-bid meeting will be held on 12.01.2021 at 1.00 P.M in the NHM **CONFERENCE HALL O/o.C.D.M & P.H.O Mayurbhanj.**
- The bidder(s) are to submit their tenders in separate sealed covered envelops for technical bid and price bid by superscribing Cover "A" (Technical Bid) & Cover "B" (Price Bid) and both the covers should be put into a third Cover, which should be superscribed as **"Tender for the supply of Medical Equipments to the C.D.M & P.H.O, MAYURBHANJ of Odisha". Reference No. C.D.M & P.H.O (Mayurbhanj) – 2020 – 2021 – Medical Equipments – 01**
- The Sealed tenders "Cover A" (Technical Bid) submitted by the tenderers will be opened by the Purchase Committee in the NHM Conference hall at the O/o.C.D.M & P.H.O, MAYURBHANJ at 11A.M on 09.02.2021. The tenderer /authorized representative (only one for each tenderer) is allowed to be present during the opening of the tenders if they so like with valid authorization and ID proof.
- The details of the Medical Equipments with specifications are shown in **Annexure – VIII.**
- Tenders should be type written or computerized and every correction in the tender should invariably be attested with signature by the tenderer with date before submission, failing which the tender will be ineligible for further consideration.
- Rates inclusive of excise duty / customs duty, packing, forwarding, insurance, transportation charges, (door delivery) and exclusive of GST should ***be quoted for the Medical Equipment separately on door step delivery basis,*** **(Annexure – VIII)**
- The purchaser shall be responsible only after delivery, installation and due verification of medical equipment.
- The rate per unit packing shall not vary with the quantum of order placed for destination point.

- If there is difference between figures & words, words will be taken into consideration.
- In the event of the date being declared as a holiday by Govt. of Odisha, the due date of sale, submission of bids and opening of bids will be the following working day at the appointed place & time.
- The price quoted by the tenderers shall not in any case, exceed the controlled price, if any, fixed by the Central / State Government and the Maximum Retail Price (MRP). The purchaser, at his discretion, will in such case, exercise the right of revising the price at any stage so as to conform to the controlled price or MRP as the case may be.
- The rate quoted and accepted will be binding on the tenderer for a period of one year from the date of publication of the approved rate and on no account any increase in the price will be entertained till the completion of this tender period.
- No tenderer shall be allowed at any time on any ground whatsoever to claim revision of or modification in the rate quoted by him. Clerical error / typographical error, etc., committed by the tenderers in the tender forms shall not be considered after opening of tenders. Conditions such as **"SUBJECT TO AVAILABILITY" / "SUPPLIES WILL BE MADE AS AND WHEN SUPPLIES ARE RECEIVED**" etc., will not be considered under any circumstance and the tenders of those who have given such conditions shall be treated as incomplete and rejected.
- If at any time during the period of contract, the price of tendered item is reduced or brought down by any law or act of the Central or State Government or the tenderer, the tenderer shall be morally and statutorily bound to inform the C.D.M & P.H.O MAYURBHANJ, Odisha immediately about such reduction in the contracted price. The C.D.M & P.H.O, MAYURBHANJ, Odisha is empowered to unilaterally effect such reduction in rate in case the tenderer fails to notify or fails to agree for such reduction of rate.
- Approved rate with terms, conditions & the quoted price of the tender shall remain valid for a period of 12 months from the date of issue of the approved list or till the publication of the next approved list whichever is earlier.
- If the relevant documents / certificates which are required to be furnished along with the tender are written in language other than English, the tendering firm shall furnish English

version of such documents / certificates duly self-attested by the bidder with his seal and signature.

- If any information or documents furnished by the tenderer with the tender papers are found to be misleading or incorrect at any stage the tender of the relevant items in the approved list shall be cancelled and steps will be taken to blacklist the said firm for five (5) years.
- Rate should be quoted in Indian Currency, both in words and figures against each item specified in the list and the payments will be made in Indian currencies only **(Annexure-VIII).The multiple rates for any item is disallowed.**
- Both Cover-A and Cover-B should have an index and page number of all the documents submitted inside that cover.
- The GST will be charged as per the guidelines given by the Finance Deptt. from time to time.
- The agreement (**as per Annexure – VII**) will be signed between the supplier and the purchasing authority. A copy of the agreement will be kept by the purchasing authority. The agreement must be submitted before the payment is released.

The following documents should be enclosed in Cover "A" (Technical Bid) by the tenderer. All the photocopies are to be self-attested by the bidder with organization seal otherwise rejected.

TECHNICAL BID :

- Checklist with detail of the documents enclosed in **Cover "A"** (as per **Annexure - I**) with page number. The document should be serially arranged as per **Annexure - I** and should be securely tied and bound.
- Tender Paper cost of Rs.5,000/- in shape of Demand Draft.
- Earnest Money Deposit of specific value against particular items or group of items (as per list attached) in shape of Demand Draft.
- Copy of Valid Manufacturing License of the manufacturer / Import License by the Importer.
- Product must be BIS/CE/US FDA etc Certified (As per technical specification**)**
- Copy of Valid ISO certificate (As per technical specification**)**.
- Copy of Valid PAN (Income Tax) of bidder.
- Copy of valid GST registration certificate of bidder.
- Annual Turnover certificate from Chartered Accountants as per **Annexure - II**.

- Audited financial statements of last 3 consecutive years. [i.e – 2017-18, 2018-19 & 2019-20](Provisional statement of accounts shall not be considered)
- Performance Statement as per **Annexure - III**.
- Proof of supply of Medical Equipments to any Govt./PSU Hospitals duly supported by end-user certificate of successful completion. [i.e – 2017-18, 2018-19 & 2019-20]
- The declaration form in **Annexure - IV** duly signed by the tenderer before Notary Public / Executive Magistrate.
- The manufacturer's authorization in original letter head as per **Annexure –V.**
- Details name, address, telephone no., Fax, e-mail of the manufacturer / authorized distributor / franchise / contract person / office in Odisha **(Annexure - VI).**
- **(A)** The Original Tender Book with Conditions and the schedules signed by the tenderer at the bottom of each page with his official seal duly affixed.

(B) Leaflets, photographs & literatures relating to the product / item quoted and matching the specification of the tender in a tabular form.

N.B: Valid means the certificate should be valid on or beyond the date of opening of tender (Cover-A).

COVER – B (PRICE BID)

- The tender format giving the quoted rate for Medical Equipments should be sent in a separate sealed cover hereafter called **Cover "B" (Price Bid).**

  Cover –B (Price Bid) will be opened only of the tenderers who qualify in Technical Bid (Cover – A) and product those qualify in sample verification by the technical committee.
- The Price Schedule in the prescribed form (as per **Annexure – VIII**), must be submitted in Cover-B. The price of the item should be quoted inclusive of excise duty, insurance, packing, forwarding, freight (door delivery), but **exclusive of GST**, if any. The rate should be quoted for each item both in figures and words. In case of difference in words and figures, words will be taken into consideration for evaluation. The price bid format must be as per tender paper and no deviation is allowed. There is no multiple rate

allowed for any item. No addition or deletion in price bid is allowed and the bid will be summarily rejected for any such deviation.

ABSENCE OF ANY OF THE ABOVE DOCUMENT OR IN THE PRESCRIBED FORMAT LEADS TO REJECTION OF BID.

EARNEST MONEY DEPOSIT

- The Earnest Money Deposit shall be of specific value against the items or group of items as per list attached. The Earnest Money Deposit will be submitted in the shape of demand Draft only in favour of ZSS NON NRHM MAYURBHANJ, from any Nationalised / Scheduled Bank payable at BARIPADA. The EMD should be in single demand draft for all the bidding items.
- The EMD of the unsuccessful bidders will be returned back without interest after publication of the approved list and EMD of successful tenderer will be returned after submission of performance security.
- The EMD will be forfeited if the tenderer withdraws the tender or doesn't accept the approved list or doesn't supply the items within the stipulated time period.

SECURITY DEPOSIT : (Performance Security)

- The Security Money should be submitted in shape of Bank Draft from a Nationalised Bank in favour of ZSS NON NRHM MAYURBHANJ equal to the amount of 10% of the purchase order value of the item within 15 days of issue of the purchase order.
- The Security Money will be returned back to the tenderer without interest after the successful completion of supply.
- Security money will be forfeited if there is any violation of the tender terms and conditions.

PACKAGING :

- All the packaging should be primary (New). The supplier shall provide such packaging of the goods as is required to prevent their damage or deterioration during transit to their

final destination. The packaging shall be sufficient to withstand rough handling during transit and exposure to extreme temperature, salt and precipitation during transit and upon storage.

TURNKEY:

- The external power supply will be provided by the purchaser but the internal wiring and electrical fittings inside the room for installation & commissioning of the equipment and accessories if any required for installation & commissioning will be provided by the supplier without any extra cost (apart from the cost mentioned under turnkey in the Price schedule)

COMPREHENSIVE WARRANTY & CMC :

- The comprehensive warranty will remain valid for 3 years from the date of installation & commissioning of the equipment having mechanical/electrical in nature (1 year for other items). The original copy of warranty documents will be submitted to the consignee and photocopy of that to CDM&PHO, Mayurbhanj after installation.
- The warranty will cover **all the parts of the machine or item and any replacement or repair required** within the warranty period and will be provided by the supplier free of cost at the destination point (installation point). The supplier will take back the replaced parts / goods at the time of their replacement. No claim whatsoever shall be on the purchaser for the replaced parts / goods thereafter. No traveling allowances or transportation cost will be paid by the purchaser during the warranty period.
- The Supplier shall warrant that the Goods supplied under this contract are new, unused, of the most recent or current models and they incorporate all recent improvements in design and materials. The Supplier shall further warrant that all Goods supplied under this contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the place of final destination.
- **CMC**: The tenderer shall also commit to provide offer for CMC (**Labour + all spare**) for the next two (2) years after three (3) years of warranty. No extra cost will be paid

other than the CMC cost for functioning of the item during this period. The supplier will provide **two (2)** preventive maintenance in every **six months** during the period of CMC.

- The selected firm should have a service centre in Odisha.
- All the warranty certificates must be handed over to the consignee after installation.

TRANINING & OPERATIONAL MANUAL:

- The firm / supplier will provide hands on training to two doctors and two technicians in his own cost for operating / handling the medical equipments within 15 days of installation of equipment.
- The supplier / firm will provide the operational / maintenance manuals and tools (if required) of all items, equipments & turnkey to the consignee at the time of installation.

UP-TIME BALANCE :

- The Supplier (s) shall provide guarantee 95% uptime during comprehensive warranty period i.e. for 3 years from the date of installation & commissioning.

- Any uptime less than the specified period above will be compensated by the Supplier(s) by extending the warranty period. The consignee shall maintain a logbook in the format provided by the Supplier(s) which will indicate usage of the equipment every day and for calculation of up-time.

DOWNTIME PENALTY CLAUSE:

- During the Guarantee / warranty period, desired uptime of 95% of 365 days will be ensured (24 hour). If downtime exceeds 5%, penalty in the form of extended warranty, double the number of days for which the equipment goes out of service will be applied. The vendor must undertake to supply all spares for optimal upkeep of the equipment for **THREE YEARS** after installing the unit in the institute. If accessories / other attachment of the system are procured from the third party, then the vendor must produce cost of the accessory / other attachment and the CMC from the third

party separately along with the main offer and the third party will have to sign the CMC with the institute if required.

- In no case equipment should remain in non-working condition for more than 7 (seven) days from the date of complaint, beyond which a penalty will be applicable as per Rule.
- The principals or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

SPARE PARTS:

- The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warrantee period should be attached / enclosed along with the sealed tender.
- The tenderers are required to furnish the list of spares along with their cost in the financial Bid separately which will not be taken for evaluation.
- Local agents / distributors quoting on behalf of the manufacturer / importer must attach the authority letter in their favour.

LOGOGRAMS AND LABELLING :

- Tenderer for the supply of medical equipments shall give an undertaking in his tender that he will print **"Govt. of Orissa Supply - Not For Sale"** in bold letters in inedible ink on the equipment**.**

ACCEPTANCE OF TENDER AND SUPPLY CONDITIONS:

- The C.D.M & P.H.O, MAYURBHANJ, Odisha reserves the right to reject the tenders or to accept the tenders for the supply of any item tendered without assigning any reason thereof.
- The C.D.M & P.H.O, MAYURBHANJ, Odisha will be at liberty to terminate the contract either wholly or in part without assigning any reasons thereof. The tenderers will not be entitled to any compensation whatsoever for such termination.

- The supply should be started within 7 days and should be completed within 30 days from the date of issue of purchase order unless otherwise specified. If no supply is received even after 30 days or 58 days with liquidated damage from the date of issue of the purchase orders from the C.D.M & P.H.O, MAYURBHANJ, such orders will stand cancelled automatically without further notice. Penalties shall also thereafter be applied to the tenderer as specified. The approved firm shall also suffer forfeiture of the EMD and Security Deposit.
- The C.D.M & P.H.O, MAYURBHANJ, Odisha or his authorised representative (s) has the right to inspect the factory of those company who have quoted for the tender, before accepting the rate quoted by them or before releasing any purchase order (s) or at any point of time during the validity period of tender and has also the right to reject the tender or terminate / cancel the orders issued or not to reorder based on the facts brought out during such inspections.
- All the documents submitted in the tender become property of C.D.M & P.H.O, MAYURBHANJ, Odisha. No way the bidder will claim to return back the document before/after the tender except E.M.D of unsuccessful bidder and unopened bids received after due date.

EVALUATION:

- The rates of the item quoted by the tenderer who qualify technically will be evaluated after taking the following points into consideration: -
    a) Rate of Medical Equipments will be taken after inclusion of the excise duty / customs duty, transportation, insurance, packing & forwarding and excluding GST.
    b) The cost of the medical equipments (excise duty / customs duty, transportation, insurance, packing & forwarding & comprehensive warranty for three (3) years but excluding GST), cost of turnkey (cost of accessories if any for Installation & Commissioning with all taxes for turnkeys) & cost of CMC for for next two(2) years after warranty will be added and the lowest responsive bidder will be selected.

c) The circulars issued by the Finance Department, Govt. of Orissa from time to time regarding tax matters shall be taken into account for evaluation and shall be binding on the bidders.

LIQUIDATED DAMAGE :

- The C.D.M & P.H.O, MAYURBHANJ may allow extension for a maximum period of 4 (four) weeks (28 days), after the stipulated date of supply (i.e. 30 days) with a penalty of 0.5% which will be deducted from the purchase order value as "Liquidated Damage", for each week (7 days) up to a maximum 2% on the value of the goods.
- If the supplier fails to complete the supply within the extended period, i.e. 58 days after being allowed by the PURCHASER no further purchase order will be placed to the firm for the said item and the concerned firm will be blacklisted for five (5) years from the date of issue of letter for the said item.

TERMS OF PAYMENT :

- No advance payments towards cost of equipment will be made to the tenderer.
- 90% of the cost of the equipment (**excluding CMC Cost**) + 100% turnkey job + 100% tax shall be paid to the supplier on receipt of the stock entry certificate, installation and demonstration of the item from the consignee. The balance 10% of the payment of equipment will only be made after receipt of certificate on working status of the equipment from the consignee after 6 weeks of installation and commissioning of the equipment for which, the supplier has to raise two bills **(A)** one for 90% of the cost of the equipment + 100% turnkey job + 100% taxes **(B)** the other for balance 10% of the cost of the equipment.
- Payments will only be made after keeping the security deposit from the supplier, if they have not deposited the same before. Payment will only be made after handing over the Agreement, undertaking, warranty papers of equipments and turnkey jobs to the consignee and a letter to this effect should be submitted to the payment authority from the consignee.
- The payment of CMC will be made on a six monthly basis, after completion of warranty period and signing of the CMC agreement.
- No claims shall be made against the C.D.M & P.H.O, MAYURBHANJ Odisha in respect of interest on earnest money deposit or security deposit or any delayed payment or any other deposit.

- Payments through e-payment / on-line will preferably be made to the supplier in some cases transfer in shape of Draft / Pay Order will be dispatched to the supplier by Registered post with A.D or may be handed over to the authorised person of the supplier.

PENALTIES :

- If the successful tenderer fails to deposit the required security within the time specified or withdraws his tender after acceptance of his tender owing to any other reasons, he is unable to undertake the contract, his contract will be cancelled and the earnest money deposit & security deposit submitted by him along with his tender shall stand forfeited by the C.D.M & P.H.O, MAYURBHANJ by reasons of such breach, such as failure to supply / delayed supply.

- Violating the tender terms and conditions & non supply / supply of Not of Standard Quality equipment will disqualify the firm to participate in the tender for a period of 5 (five) years from the date of issue of letter and his E.M.D & security deposit will be forfeited and no further purchase order will be placed to that firm for that item.

Inspection /Testing :

- The selected supplier shall have to arrange for demonstration of the equipment at the supply point. The purchaser or its nominated representative(s) shall inspect and test the equipments at the supply point to check their conformity to the specifications and other details incorporated in the contract.

CONDITIONS APPLICABLE TO LOCAL MSEs / SSIs OF ODISHA:

The relaxation will be given only to Local MSMEs registered in Odisha with the respective DICs, Khadi, Village, Cottage & Handicraft Industries, NSIC, OSIC, MSME/SSI units as below.

- Exemption from submission of EMD, subject to submission of the valid registration certificate from the concerned authority and shall pay 25% of the prescribed security deposit.
- Only Local Micro & Small enterprises and Khadi & Village industrial units including handloom and handicrafts will enjoy a price preference of 10% over local and medium and large industries and industries outside the state.
- Any local MSEs having valid ISO / ISI certification for their product will get an additional price preference of 3%.

In the event of any dispute arising out of the tender, such disputes would be subject to the jurisdiction of the Civil Court of Dist. Mayurbhanj or High Court of Orissa.

Sl. No.	Name of Item	Aprox. Qty.	EMD Amount
MEDICAL FURNITURE			
1	LABOUR TABLE	2	**35,000.00**
2	SALINE STAND FULLY SS:	130	
3	BED SIDE LOCKER (STANDARD)	30	
4	DRESSING TROLLEY	2	
5	CRASH CART TROLLEY	6	
6	PATIENT EXAMINATION TABLE	11	
7	BEDSIDE SCREEN (THREE FOLDS)	10	
8	REVOLVING STOOL	8	
9	ICU BED MANUAL WITH BED SIDE LOCKER	5	
10	MEDICINE TROLLEY	7	
11	STRETCHER (NON FOLDING TYPE)	50	
12	WHEEL CHAIR FOLDING	50	
ENT ITEMS			
1	HEAD LIGHT	39	**25,000.00**
2	EAR SPECULA	39	
3	NASAL SPECULUM	39	
4	MOUTH MIRROR	78	
5	TONGUE DEPRESSOR	39	
6	FOREIGN BODY REMOVAL FORCEPS	39	
7	OTOSCOPE	39	
8	JOBSON HORN PROBE	39	
9	TUNING FORK	39	
10	PEAK FLOW METER	39	
DENTAL ITEMS			
1	PERIODONTAL PROBE	39	**18,000.00**
2	TOOTH MODEL	39	
3	TORCH	39	
4	TOOTH EXTRACTION FORCEPS SET(ADULT)	39	
5	DENTAL INSTRUMENT SET	39	
OPHTHALMIC ITEMS			
1	NEAR VISION CHART	39	**5,000.00**
2	COLOR VISION CHART	39	
3	SNELLEN'S CHART	39	
PHYSIOTHERAPY ITEMS			
1	SHOULDER WHEEL, OVERHEAD PULLEY, SHOULDER LADDER (SET)	39	**46,000.00**
2	WALKER	39	
3	CERVICAL TRACTION (MANUAL)	39	
4	EXERCISE BICYCLE	39	
5	LUMBER TRACTION MANUAL	39	
6	GAIT TRAINING APPARATUS/ PARALLEL BAR	39	
7	HYDRO COLLATOR UNIT	39	
8	TRACTION BED	39	

OTHER MEDICAL INSTRUMENTS			
1	OXYGEN HOOD (Neonate/Infant/Paediatric)	10	**9,000.00**
2	SUCTION CATHETOR	200	
3	MICRO PIPETTE	39	
4	IUCD KIT	6	
5	PPIUCD FORCEP	66	
6	FOOT OPERATED SUCTION MACHINE	2	
7	NEBULISER	2	
8	X-RAY-VIEW BOX(LED)	1	
9	CENTRIFUGE MACHINE	1	
10	INCUBATOR	1	
OTHER MEDICAL EQUIPMENTS			
1	VOLUMETRIC INFUSION PUMP	2	**2,000.00**
2	INTENSIVE CARE VENTILATOR	1	**26,000.00**
3	OXYGEN CONCENTRATOR	6	**4,000.00**
4	PULSE OXYMETER STAND ALONE BENCHTOP TYPE (LINE POWERED)	5	**5,000.00**
5	BOYLE'S APPARATUS	1	**5,000.00**
6	BLOOD DONOR COUCH	1	**3,000.00**
7	BLOOD COLLECTION MONITOR	1	**2,000.00**
8	PORTABLE TUBE SEALER	2	**6,000.00**
9	PORTABLE BLOOD BAG REFRIGERATOR	3	**5,000.00**
10	AUTOMATIC BIOCHEMICAL ANALYSER	1	**24,000.00**
11	C-ARM COMPATIBLE ORTHOPAEDIC OPERATION THEATRE TABLE	1	**10,000.00**
12	ECG MACHINE (12 CHANNEL)	1	**2,000.00**
13	SPIROMETER or PULMONARY FUNCTION TEST MACHINE:	1	**4,000.00**
14	OPERATION TABLE (MANUAL-HYDRAULIC)	2	**10,000.00**
15	CBC MACHINE (5 PART)	1	**18,000.00**
16	FULLY AUTOMATIC RANDOM ACCESS CHEMILUMINESCENCE IMMUNOASSAY (CLIA) ANALYSER	1	**30,000.00**
17	BIPOLAR COAGULATOR CAUTERY	1	**6,000.00**
18	ELECTROLYTE ANALYSER	3	**6,000.00**
19	BINOCULAR MICROSCOPE	39	**31,000.00**
20	LAB AUTOCLAVE	39	**24,000.00**
21	INCUBATOR	39	**16,000.00**
22	CENTRIFUGE-8 TUBES	39	**8,000.00**
23	STADIOMETER	39	**2,000.00**
24	DIGITAL BP APPARATUS	39	**2,000.00**
25	SPHYGMOMANOMETER	40	**2,000.00**
26	HUB CUTTER	239	**10,000.00**

TECHNICAL SPECIFICATION

MEDICAL FURNITURE	
1	LABOUR TABLE
2	SALINE STAND FULLY SS:
3	BED SIDE LOCKER (STANDARD)
4	DRESSING TROLLEY
5	CRASH CART TROLLEY
6	PATIENT EXAMINATION TABLE
7	BEDSIDE SCREEN (THREE FOLDS)
8	REVOLVING STOOL
9	ICU BED MANUAL WITH BED SIDE LOCKER
10	MEDICINE TROLLEY
11	STRETCHER (NON FOLDING TYPE)
12	WHEEL CHAIR FOLDING

Product Quality Standards for all the below listed hospital furniture's

- Should be CE/BIFMA/BIS approved model.
- Manufacturer should have ISO 9001 certification for quality management standards.
- Manufacturer should have ISO 14001 certification for environmental management systems.
- Manufacturer should have BS OHSAS 18001 certification for occupational health & safety management.

1. LABOUR TABLE

1) Approx. Dimensions: 75"L x 35"W x 30"H with deviation of ±10%.
2) All tubular, rectangular frames & top should be made of stainless steel of SS 304 grade.
3) Tubular frame of minimum 30mm work mounted on PVC stumps.
4) Stainless steel (304 grades) top of 18 gauge with U cut at leg end.
5) Top should be mounted on rectangular frame of 50mm* 25mm.
6) Should be complete with SS bowl.
7) A pair of knee crutches with height adjustable.
8) Complete with I.V. Rod at side.
9) Weighing bearing capacity should be minimum 130kg.

2. SALINE STAND FULLY SS:

1) Overall approx. size: height 150cm to 230 cm (with telescopic adjustable height)
2) Main Frame: Strong & Sturdy stainless steel tubular construction mounted on five pronged tubular/rectangular base fitted with five swivel rust proof castors 50mm diameter.
3) Stainless steel rod with double hooks.
4) Base, frame & body should be Stainless Steel 304 grade.
5) Should be pre-treated and epoxy coated finish.

3. BED SIDE LOCKER (STANDARD)

1) Overall Size (Approx): 40 (W) x 40 (D) x 80 (H) cms.
2) Should have an enclosed locker unit which is provided with 50 mm dia non rusting castors for mobility.
3) A stainless Steel of 20 Gauge tray top with raised borders on 3 sides forming the upper surface.
4) Drawer should be fitted with smooth slides.

5) Should be provided with shelf space for storage under the Drawer with locked Cabinet at below. Drawer and cabinet should have front door.
6) Should have one drawer & one cabinet box with self space in between.
7) The body should be made of 20 G MS CRCA sheet.
8) Two buffers shall be provided at rear side of the locker box.
9) All MS parts to be pre-treated and epoxy powder coated. 10) All SS to be of 304 Grade and 20 Gauge.

4. DRESSING TROLLEY

1) Overall approx. Size: 760mmL x 500mmW x 900mmH
2) Approximate shelf dimension 750mmL x 500mmW.
3) Tubular CRC frame mounted on four castors of minimum 100mm dia and should be made of stainless steel.
4) Two S.S. of 304 grade shelves with protective railings on three sides.
5) Should have provision for holding bowel and bucket.
6) Should be provided with heavy duty SS bowl and SS bucket of thickness 20G

5. CRASH CART TROLLEY

1) Size shall be more than 900mm L x500mm W x 1500mm H.
2) The crash cart should be made of 25mm of 18G Stainless steel tubular frame work.
3) Should have dual push handles on either side.
4) Should have S.S shelves, six colored removable bins & two polystyrene lockable storage units with three drawers each.
5) Facility to carry ECG Monitors, Defibrillators etc on open areas at top centre and bottom shelves.
6) It should have Stainless steel saline rod fixed with.
7) Two accessory mounting brackets to mount accessories anywhere without the need of pre-threaded holes.
8) Crash cart should be mounted on 125mm dia non-rusting swiveling castor wheels having two locking arrangement.
9) Should have oxygen cylinder stand on one side.

6. PATIENT EXAMINATION TABLE

1) Overall approx size: 1800 mm L x 600mm W x 700mm H (L x W x H) ±20mm
2) Two section with two fold Cushion top of 3"mm thickness made of 40density PU foam
3) Tubular construction, machine pressed double bend mild steel sheet
4) Headrest adjusted on ratchet
5) Legs fixed with rubber feet. 6) Should be provided with foot step. 7) Pre-treated and epoxy powder coated 8) Patient load bearing capacity of 135 kgs minimum

7. BEDSIDE SCREEN (THREE FOLDS)

1) 3 folding partitions - 6 feet high and 6 feet long when opened
2) Tubular frame mounted on 5cms high quality corrosion free castors with fine quality curtains.
3) Should be pre-Treated and Epoxy Powder coated.

8. REVOLVING STOOL

1) Tubular tripod based with S.S. revolving top of 18 Gauge.
2) Height adjustable from approximately 460 mm to 650 mm by accurately machined screw mechanism.
3) S.S/MS powder coated foot ring supports
4) Legs fitted with rubber PVC stumps.
5) Pre-treated and powder coated finish

9. ICU BED MANUAL with BED SIDE LOCKER

Product Quality Standards:

- Should be CE/BIFMA/BIS approved model.
- Manufacturer should have ISO 9001 certification for quality management standards.
- Manufacturer should have ISO 14001 certification for environmental management systems.
- Manufacturer should have BS OHSAS 18001 certification for occupational health & safety management.

Technical Specification:

1. It should have the overall approx. dimension of 2180 mm L x 1010 mm W.
2. Variable heights from approx. 470 mm to 700 mm. (without mattress).
3. It should be made of rectangular & tubular MS frame structure
4. The lying surface should be made of CRCA perforated sheet of 1.2 mm
5. Should have broad base, Mobile with 4 Caster wheels 125 mm dia and with dual locking facility. The bed should have multiple section (four) for various positions and patient comfort.
6. The ICU bed should have with adjustment of backrest, upper leg height and trendelenburg and reverse trendelenburg position on separate crank mechanism provided at foot end of the bed.
7. The movement should be smooth without resistance.
8. It would have all the following features as well:-

a. Detachable Polymer moulded head & foot board.
b. Detachable and collapsing type (not side folding) SS side rails for patient protection.
c. Should have heavy duty SS saline stand that can support 2-3 syringe / infusion pumps.

9. Four section quality foam mattress (PU foam of high density > 30 Kg/m3 with PVC rexine covering)
10. Should have patient chart holder.
11. Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed.
12. Should have chest drain bag holder & urine bag holder
13. Should have lifting pole with hand grips at the head end.
14. Should be Pre-treated and epoxy powder coated Finish Bed Side Locker

1. Overall Size (Approx): 40 (H) x 40 (W) x 80 (H) cms.
2. Should have an enclosed locker unit which is provided with 50 mm dia. non rusting castors for mobility.
3. Should have stainless Steel tray top with raised borders on 3 sides forming the upper surface.
4. Drawer should be fitted with smooth slides.
5. Should be provided with shelf space for storage under the Drawer with locked Cabinet at below.
6. Drawer and cabinet should have front door.
7. Should have one drawer & one cabinet box with shelf space in between.
8. The body should be made of 20 G MS CRCA sheet.
9. Two buffers shall be provided at rear side of the locker box.
10. All MS parts to be pre-treated and epoxy powder coated.
11. All Stainless steel of should be of 304 Grade and 16 Gauge.

10. MEDICINE TROLLEY

1) Frame work made from SS steel material.
2) Flat top of SS and at least 6 inch deep removable bucket at bottom.
3) Should have multiple long drawers to hold drug strips made of high quality epoxy plastic or steel material with convenient and smooth slide in and slide out motion(At least 28-32 separate drawers in about six to eight row)

4) The front of the each drawer should be half covered on which removable medicine label can be pasted and upper half open to see content inside.
5) Approx. size 750(L) x 450(W) x850(H) mm.
6) All stainless steel should 304grade/ 16 gauge.

Should be equipped with Waste bin, needle disposable container, file cassette & guard rails equipped with lock key system Swivel noiseless caster with brakes 10 cm diameter.

11. STRETCHER (NON FOLDING TYPE)

1) Patient load capacity: Minimum 150 kg
2) Adjustable 165-200cm length with automatic locking
3) Quick-release restraints for the patient immobilization
4) Should be constructed from light and sturdy aluminum
5) Should have stainless steel top
6) Dimensions: 165cm - 200cm x 45cm x 7-10 cm

12. WHEEL CHAIR FOLDING

Dimension should be 670mm W x 1120mm D x 920mm H.(Approx.)
2) Two solid rubber or PVC covered tyred bicycle wheels with break and self propelling stainless steel hoops
3) Two swivel castors, 200mm dia in front.
4) Seat and back easily removable and replaceable
5) Fine and durable upholstery for seat and back

ENT ITEMS	
1	HEAD LIGHT
2	EAR SPECULA
3	NASAL SPECULUM
4	MOUTH MIRROR
5	TONGUE DEPRESSOR
6	FOREIGN BODY REMOVAL FORCEPS
7	OTOSCOPE
8	JOBSON HORN PROBE
9	TUNING FORK
10	PEAK FLOW METER

1. HEAD LIGHT

Purpose: Coaxial luminaire provides shadow free illumination for improved efficiencies
Light weight and confortable head band options : Yes
Supply of accessory like chager,cable& batteries : Yes
Color of light : Cool day light
Brightness (Lumen): 40
Color Temperature (Degree Kelvin): 4500 degree K,
Minimum LED Life (Hours): 20000
Nature of focusing: Spot
Portable compact design with no wires- into shirt pocket: Yes
Charging time (Hours): 2-4Hours

Color rendering index (CRI): 90
Type of battery : Alkaline
Run time (Minutes): 60
ON/OFF control: Yes
MINIMUM Spot diameter (mm): 10
MAXIMUM Spot diameter (mm) : 60
Standards:
Product complies with: IEC 60601-1 and IEC60601-2-41 :Yes
Model Should be CE/BIS certified :Yes
Manufacturer should be ISO13485 certified: Yes

2. EAR SPECULA

Shape: Oval cone design
Material: Stainless Steel, antimagnetic, acid-resistant
Supply:Set of 4nos.Diameter: 3mm, 4mm,5mm& 7mm respectively.
Sterilization / Disinfection:Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer‘s name, initials or recognized trade-mark and the words 'Stainless Steel’ or letters 'ss'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved

3. NASAL SPECULUM

Type: Thudichum
Product: Nasal Specula
Profile:Set of 3(Adult sizes-4&5 &pediatric sizes-3)
Specialty: Rhinology Instruments
Material: Stainless Steel(ASI410/420)
Surface Finish: Satin
Sterilization / Disinfection: Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer‘s name, initials or recognized trade-mark and the words 'Stainless Steel’ or letters 'ss'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved

4. MOUTH MIRROR

Type Mirror With Handle
Shape of Mirror: Round
Diameter of Mirror (mm) set :18millimeter& 20millimeter
Material of housing of the mirror: Medical Grade Stainless Steel(316/ASi410)
Anti Fog Coating Yes
Thick Non-Slip Handle for perfect grip: Yes
Mirror should be With minimum 10 Cm Length of Handle: Yes
Mirror should be detachable from the handle: Yes
Extra light and handy for more fatigue-free working : Yes
GENERAL FEATURES
Product Description: Dental Mouth Mirror or Dentist's Mirror
Clinical Purpose: For allowing indirect vision by the dentist, reflecting light onto desired surfaces and retraction of soft tissues
Disposable or Reusable: Reusable
Sterile :Yes
Autoclavable: Yes

PACKAGING:Individually Packed
CERTIFICATIONS & REPORTS
Submission of Test Report from Central Govt/NABL/ILAC accredited Lab to prove the conformity to declared specification at the time of supply: YES
Product certification: Manufacturer should be ISO13485 certified
Product should be CE /IS approved
WARRANTY & MAINTENANCE

5. TONGUE DEPRESSOR

MAYO TONGUE DEPRESSOR
Types shape Flat with round ends
Stainless Steel(ASI410/420)
Surface Finish: Polish
Sterilization / Disinfection: Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer‘s name, initials or recognized trade-mark and the words 'Stainless Steel’ or letters 'ss'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved
Child Size 140mm
Adult Size 200mm

6. FOREIGN BODY REMOVAL FORCEPS

Name: Alligator
Type: Forceps
Size:5 1/2”
Surface Finish: Polish
Curvature: Straight Jaws with angled Shanks
Working Surface style: Horizontally Serrated
Material: Stainless Steel(ASI410/420)
Sterilization / Disinfection: Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer‘s name, initials or recognized trade-mark and the words 'Stainless Steel’ or letters 'ss'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved

7. OTOSCOPE

Diagnostic Otoscope rechargeable set is to be supplied in Leather / hard case preferably HIP (High Impact Plastic) with internal soft cushion material for easy portability and protection :Yes
Light source : LED bulb
Lamp Hour: 20,000 hours minimum /3 years warranty of free replacement
Number of Spare bulbs to be provided along with the otoscope:0
Speculum adapter to be provided : Yes
Number of sets of different sizes of Ear Specula to be provided along with otoscope : 2nos (One for Adult & one for pediatric)
Disposable :No,Itshould be reusable
Removable Otoscopehead : Yes
Rotatable lenses : Yes
Rechargeable handle: Yes
Provision for variable light intensity : Yes
CRI: Minimum 90

Color temperature: 4300K minimum
CONSTRUCTION/FUNCTIONAL FEATURES
Material of the device body: Medical Grade Stainless Steel/Medical grade ABS body
Instrument Head Matt-black from inside: NA
Fibre optics for Cool Light Transmission: Yes
Magnification:3x/3.5x
Wide angle viewing lens allowing instrument under Magnification: Yes
Provision of sealed system for Pneumatic otoscopy with detachable pneumatic bulb : NA
Voltage Rating of the bulb (Volts)(Min) :2.5/3/3.5
Type of rechargeable battery: Li-ion/Ni-Cd/AA
Capacity of the Battery (mAh):NA
Battery Voltage(Volts) : 2.5/3/3.5
Continuous runtime of the battery (Minutes):Minimum 60minutes
Charger to be provided along with the device: Yes
Weight (gms):200-300
STANDARD
Conformity to Standard : EU-CE/USFDA/BIS
Manufacturer Should be ISO13485 certified

8. JOBSON HORN PROBE

Jobson Horne Probe size: 5.5"
Features: double end one side screw and other side round loop.
Rust free sturdy construction for better grip.
A light-weight, flexible and strong.
Probes designed as a dual-purpose instrument with Curette loop at one end and a threaded section at the other for holding wrapped cotton wool.
Reduced patient trauma due to smooth edges.
Sterilization / Disinfection: Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer‘s name, initials or recognized trade-mark and the words 'Stainless Steel’ or letters 'SS'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved

9. TUNING FORK

Nickel-plated steel, material thickness 8 mm, Frequency: 128 Hz / 512 Hzand 1024 Hz.
Sterilization / Disinfection: Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer‘s name, initials or recognized trade-mark and the words 'Stainless Steel’ or letters 'ss'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved

Noise Maker
Bell made of brass. Minimum length -8.5cm and minimum weight -70gram. Should be child friendly.
Manufacturer should be ISO certified

10. PEAK FLOW METER

The Peak Air Peak Flow Meter is used to measure your "Peak Expiratory Flow Rate," which is simply the highest speed you can blow air from your lungs.
Type: Mechanical Peak Flow Meter
Instant readings to help track any changes in the air flow.
Dual Flow Range: Accurately measures for both adults and children.
Compact, lightweight and portable
Built-in flexible three zone management system
Easy- to- read numbers
Measurement Range 40-800 L/min
Accuracy and repeatability assurance
Washable
Standards
EN ISO 23747: 2009 compliance
CE Approved/BIS
Manufacturer should be ISO 13485 certified
WARRANTY: The product is available with 3-year warranty.
Peak Flow Meter-1, Reusable Mouthpiece-4 nos (2-Children & 2 Adults), Instruction Manual

DENTAL ITEMS	
1	PERIODONTAL PROBE
2	TOOTH MODEL
3	TORCH
4	TOOTH EXTRACTION FORCEPS SET(ADULT)
5	DENTAL INSTRUMENT SET

1. PERIODONTAL PROBE

Double ended periodontal probe. Provides accurate pocket depth measurement – and information on sub gingival calculus and other root surface unevenness
Ball end of ø 0,5 mm - Increases tactile sensitivity - Does not damage tissue or pierce pocket bottom
Sterilization / Disinfection: Completely reusable and fully autoclavable.
Each instrument shall be embossed/etched with manufacturer's name, initials or recognized trade-mark and the words 'Stainless Steel' or letters 'ss'
Manufacturer should be ISO 13485 certified
Product should be CE/BIS approved

2. TOOTH MODEL

Enlarged mouth model with toothbrush to demonstrate correct brushing and dental care.
This model is three times life size and has normal anatomy. It's great for teaching proper brushing and flossing techniques.
This teeth care demonstration model features a mouth with 32 teeth at three times life-size, for closer observation
European CE Declaration according to 2014/53/EU and European Directive on Medical Devices
Manufacturer's Quality Certification according to ISO 13485 Yes
Packing. Each model should be packed individually.

3. TORCH

Should provide even field of light
Bright and natural white light by high performance LED.
LED burns at least 20,000 hours.
Metal /ABS casing.
Easy to use with on/off switch.
Includes blade holder, batteries and nylon case.
Designed for durability, comes with a 3-year warranty including LED
Adjustable spot size from 2-5CM
Manufacturer should be ISO certified
Product should be CE/BIS approved

4. TOOTH EXTRACTION FORCEPS SET(ADULT)

GENERAL FEATURES
Product description: Dental Forceps for extraction of tooth
Purpose For dental extraction of tooth
Utility Dental surgeries of Adult
PRODUCT INFORMATION
Items in Extraction forceps set: Upper anterior, Lower anterior, Lower molar (Right),Lower molar (Left), Upper molar (Left), Upper molar (right),upper premolar, lower premolar.
anatomically-designed beaks for a sure, effective grip: Yes
Thick and non-slip handle : Yes
Longsivity and corrosion resistant material: Yes stainless steel (ASI 410/420)
Cleaning, disinfection and sterility: All instruments autoclavable
DIMENSIONS & MATERIAL
Minimum Handle length (Cm) :10
Material of all instruments :Surgical Grade Stainless steel(ASI410/420)
Rockwell hardness (HRC): 1
Tensile strength (Mpa) : 1
STANDARD
Product conformity to standard ISO 13485
Product should be CE/BIS approved
PACKING MODE
All the instruments along with user manual, warranty card, Dehumidifier, Cleaning brush, Cleaning cloth etc packed in a carrying case : Yes
Packing Each carrying case packed Individually
CERTIFICATIONS & REPORTS
Submission of Test Report on form 39 or from Central Government /NABL/ILAC accredited Lab or Manufacture's in-house Test Report to prove the conformity to declared specification at the time of supply Yes
Product conformity certificate is to be provided to the buyer at the time of supply Yes
WARRANTY
Minimum Warranty (yrs) : 3 years replacement

5. DENTAL INSTRUMENT SET

Extraction forceps & Elevators (Full set) (Adult: 2no. & Pedodontic: 1no.) High quality stainless steel, anti-magnetic, rust-resistant, acid resistant, for various types of extraction forceps with Teflon discs in the joint (maxilla and mandible – anterior, posterior & root forceps), apex elevator, warwick jam elevator, straight kooplan elevator, cryor elevator, cross bar elevator.
Instruments should be made up of stainless steel medical grade AISI 410 & 420.Test reports should be submitted in the technical bid.
Part No. and the CE Mark must be engraved/Embossed on the instrument.
Sample demonstration
Instrument should cover 2 years replacement warrantee.
All the instruments should be autoclavable.

OPHTHALMIC ITEMS	
1	NEAR VISION CHART
2	COLOR VISION CHART
3	SNELLEN'S CHART

1. NEAR VISION CHART

Name of Tool : Lea Symbols Near Vision Card/ISIHARA Near Vision Chart
Type : "16 inches/40 centimeter Lea Near vision chart"
Objective : To fulfill the criteria to be a good vision for children by measuring near visual acquity
Use : "To assess the child's functional vision at near distances"
Utility: Pre-school children of 3 to 5 years age group
PRODUCT INFORMATION AND TESTING
"Front side of the Lea symbol cards printed with proportionally spaced (log MAR) lines" :Yes
"Back side of Lea symbol card printed with 25% and 50% spacing" : Yes
"The card contains very familiar 4 symbols like circle, square, house and apple" : Yes
All optotypes should be similar legibility : Yes
Each line should have optotypes size ranging from 20/400 to 20/10 (6/120 to 6/3) equivalent : Yes
Detection of mild amblyopia is possible with closed spacing of the symbols on Lea symbol card :Yes
Test distance (cm) : 40
Response key printed on the test card : Yes
"Includes Student response or training card and instructions" : Yes
Inclusive of conditioning flash card : Yes
Can be used as wall hanging :Yes
Material of the card "Non-tear waterproof material"
Card size (cmxcm) : 20.3x25.4

PACKING
Packing (including user instructions) :Packed in a wallet
CERTIFICATIONS
Certification Available :Yes
Manufacturer Quality certification (ISO)
Product approval certificate for Clinical Use

2. COLOR VISION CHART

Individuals with color vision defect should see a different figure from individuals with normal color perception.
Makes use of the peculiarity that in red-green blindness, blue and yellow appear remarkably bright compared with red and green
Diagnostic plates: intended to determine the type of color vision defect.
International standard test chart books for color deficiency 38 plates with user manual
Book should be specially printed to measure incrementally higher color sensitivity and specificity
Manufacturer should be ISO certified

3. SNELLEN'S CHART

Snellen chart with Red/Green bar to test visual acuity.
Assessment distance 6m.
Size: 23 x 35.5 cm

PHYSIOTHERAPY ITEMS	
1	SHOULDER WHEEL, OVERHEAD PULLEY, SHOULDER LADDER (SET)
2	WALKER
3	CERVICAL TRACTION (MANUAL)
4	EXERCISE BICYCLE
5	LUMBER TRACTION MANUAL
6	GAIT TRAINING APPARATUS/ PARALLEL BAR
7	HYDRO COLLATOR UNIT
8	TRACTION BED

1. SHOULDER WHEEL, OVERHEAD PULLEY, SHOULDER LADDER (SET)

Clinical use: Used for improving mobility & strength of shoulder girdle & rotator cuff muscles in case of frozen shoulder, paresis & paralysis cases.
Technical Specification:
A.Shoulder Wheel:
It should be a wall mounted one.
The wheel for use of adult and pediatric
The motion arc can be adjustable from 10 to 38 inches by adjusting the handle.
The wheel shall be mounted on a two chrome plated height adjustable (8" to 26") rails.
The resistance can be varied by turning the resistance knob.
The manufacturer should be ISO certified
B. Over Head Pulley:
Heavy duty, medical grade, shoulders pulley exerciser for physical therapy use.
Over the door metal bracket allows easy one hand setup.
Units with a door strap require two hands, which is difficult with an injured shoulder.
Easily adjustable cord length for any height and for use in both seating and standing position.
The overhead pulley should have the provision of wall mounting.
C. Shoulder Ladder:
Wood Finger/Shoulder Ladder
32 vertical finger steps
Solid wood with heavy topcoats
Pre-drilled mounting holes
The manufacturer should be ISO certified.

2. WALKER

Product type: Frame type, foldable walker
Purpose : Walking training device for improving postural alignment while walking, overcoming musculoskeletalimpairments and for improving mobility anterior support with less energy consuming
Usage :Youth & OLD
PRODUCT INFORMATION
Posture control possible: Yes
Light weight: Yes
Wiped clean with a damp cloth: Yes
Safety mechanism provided to prevent the user from slipping while walking : Yes
Foldable for easy storage and transportation: Yes
Anterior support Yes
Forearm Supports with latex free flanged hand grips: Yes
DIMENSIONS, MATERIAL & WEIGHT
Material frame: Stainless steel tubular frame
Height of walker with standard wheels (cm) :NA
Height of walker with activity wheels (cm): NA
Distance between hand grips (cm): 34
Frame width (Cm) : 58 to 60
Frame length (cm) : 52-59
Maximum user weight (kg): 100
Frame weight (kg) : 2.5 to 3.0
PACKING MODE
All the main parts and accessories are Individually bubble wrapped and packed in a strong box to avoid transit damage Yes
CERTIFICATIONS & REPORTS
Submission of Test Report from Central Government /NABL/ILAC accredited Lab or Manufacture's in house Test Report to prove the conformity to declared specification at the time of supply Yes
Certification Available: ISO for manufacturer
Product should be CE/ BIS approved
WARRANTY: 3 years

3. CERVICAL TRACTION (MANUAL)

Cervical Traction Kitis a complete apparatus designed to provide traction to the cervical and upper dorsal vertebras.
Cervical traction Kit includes the following:
Traction Pulley Bracket
Cervical Traction Head Halter
Cervical Traction Spreader Bar
Traction Cord(Nylon rope)5meter.
Traction Weight Bag with weights

Controlled continuous traction
Easy removal and application
Reduced frictional losses

Durable and sturdy for a long life and multiple use.
Can be used in sleeping posture. Pulley is ergonomically designed to fit any bed side. Soft padded head halter provides a comfortable interface for the traction, is easy to wear and use.
Manufacturer should be ISO13485 certified
Product should be CE/BIS certified.

4. EXERCISE BICYCLE

i) Tubular steel frame on properly balanced legs with four rubber tips
ii) Fitted with one hard rubber type wheel, standard chain and a socket
iii) Seat should be adjustable
iv). Should be fitted with a ball bearing resistance roller which permits controlled movement in riding
v. LCD/LED display with speedometer.
vi. Warranty: 3 Years
Manufacturer should be ISO13485 certified
Product should be CE/BIS certified

5. LUMBER TRACTION MANUAL

It strengthening broken bones, immobilization or relieving pressure on the skeletal system.
Composition:
Universal type
Includes pelvic belt, spreader bar & 3 meter long cord.
It contains traction water and sand weight bag
traction pulley bracket
the pelvic traction bel
traction cord and 8 kg weight.
Manufacturer should be ISO 13485 certified
Product should be BIS/CE approved

6. GAIT TRAINING APPARATUS/ PARALLEL BAR

Clinical Use: It use for horizontal surface gait training, Coordination training of lower limb in various neurological conditions like paralysis, GBS, Parkinson etc.
Technical Specification
The parallel bar should be a height adjustable; plat form based one which should be very simple for easy accommodation of multiple patients of age group.
The handrails should be in single piece, circular in design stainless steel ribbed pipe of minimum diameter 1 1/2". Both the end of the handrails should be fitted with bumpers.
The Uprights should be made of heavy gauge square 1 1/2” steel tubes.
All parts should be powder coated except the handrail. The handrail should single piece stainless steel pipe. The uprights are to be fitted on a 1 1/2” thick hard plywood base water and termite resistance. Both end of this platform should be curved slope for obstruction free. The platform should be stain finish. Both the end of the plat form should have two anti-slip threads for none skidding.
Safety treads at both ends of platform should be provided for safety of the patient when take turn.
Models make it safer for patient to turn
15.3: Minimum dimension of the structure:
Length of the bar: 10feet
Width of the bar: 25” – 28"
Height adjustment of the Bar: 26" – 39"
The manufacturer should be ISO approved.

7. HYDRO COLLATOR UNIT

Clinical Use: A moist heat modality use as a superficial to medium penetration thermotherapy modality. Clinically use for chronic pain management & joint stiffness cases.
Technical Specification:
Water tank made up of Stain less steel inner & outer Cabin (20-25 Gauge thickness)
High grade thermally insulated
Static/Movable base
Top lid of stainless still, thermally insulated with Fibre handle.
Product Type:Table Top
Dimensions: NA
Tank capacity: 10- L
Temperature range: 50-90 degrees Celsius
Thermostatic temperature control (50 - 90 degree C) - Auto cut-off
Thermal cut-out temperature
Temperature accuracy: +/- 10%
Heat-up time to 90 degree Celsius: in 3 hrs.
Cool-down time from 90 degrees Celsius: 2 hrs.
Power supply
Mains power: 220-230 V, 50/60 Hz
Power consumption: 1000Watt
Safety Standard
Electrical safety class: Class 1, type B
Safety tests: Conforms to IEC 60601-1
Quality Standard:
The model should be CE/BIS approved.
The manufacturer should be ISO13485 certified
Accessories must include:
Hydro collator Moist Heat Hot Pac : Standard Size-1, Over size-1,Cervical Standard size-1, Hydro collator Knee or Shoulder HotPac-1.
Cotton Towel: 4 pieces.

8. TRACTION BED

iTraction Bed – 4 Fold
ii. Size : 6 (L) x 2.5 (W) x (H) 3 feet
iii. For horizontal cervical and lumbar traction.
Should have complete with Storage Shelf & a Flexion Stool
Manufacturer should have ISO certified.
Product should be CE/BIS Certified

OTHER MEDICAL INSTRUMENTS	
1	OXYGEN HOOD (Neonate/Infant/Paediatric)
2	SUCTION CATHETOR
3	MICRO PIPETTE
4	IUCD KIT
5	PPIUCD FORCEP
6	FOOT OPERATED SUCTION MACHINE
7	NEBULISER
8	X-RAY-VIEW BOX(LED)
9	CENTRIFUGE MACHINE
10	INCUBATOR

1. OXYGEN HOOD (Neonate/Infant/Paediatric)

PRODUCT & MANUFACTURER QUALITY STANDARDS:

- The company should be ISO 13485 certified
- Should be CE or USFDA approved

TECHNICAL SPECIFICATION:

1. Transparent Polycarbonate unbreakable single moulded.
2. Silicon rubber Neck Port adjustment enabled to minimize the wastage of oxygen.
3. Silicone rubber Neck port adjustment to ensures use in Neonate/Infant/Paediatric patients
4. Oxygen inlet Port
5.Should have outlet at the base to prevent CO2 accumulation.

PHYSICAL CHARACTERISTICS

1. Dimensions (metric)- Appropriate to comfortably fit all size babies up to 5 years of age. (Small and medium size)
2. Weight (lbs, kg)-extremely light weight
3. Mobility, portability-portable ACCESSORIES,

SPARE PARTS, CONSUMABLES:

1. Consumables / reagents (open, closed system)-tubing Note: Bidder has to quote for all three sizes of oxygen hood with respective neck port sizes in respective row of price BoQ, However combination/ addition of all the sizes will taken into consideration for financial bid evaluation.

2. SUCTION CATHETOR

Suction catheter (Plain), Size 6 Fr and 8 Fr with colour code
Length: Neonatal - 30cm, Paediatric - 40cm and Adult - 50cm. ISO Certified Poduct.

3. MICRO PIPETTE

Clinical purpose: Pipettes are most appropriate tools for drawing &dispensing of samples for users in the field of clinical diagnostics, control analysis and other areas.
Technical Specification:
Should have ergonomic design with light & smooth plunger action
Should have soft feel handle grip having both left & right hand operation
Pipette handle should have thermoplastic elastomeric to prevent transfer of body heat to pipette volume during continuous usage

Fully autoclavable: Entire pipette can be steam autoclaved at temp. Of 121 0C
Should have larger & clear 3 digit display giving smaller increment for wider selection of volume
Volume range should be of 10-100µl with increment of 1 µl
Accuracy: 0.8 to 5%
Should have locking mechanism to prevent accidental volume change during pipetting
Should have one hand eject facility
Should have in house clinical, repair and calibration facility
The tip cone should have leak free operation, smooth and light loading operation with choice of using variety of tips.
Should be compartible to universal tip types
Should be available with different color codes.
Warranty: 3years.
Quality Standards:
Should be USFDA/CE (IVD) approved product
Manufacturers should have ISO 13485 certification for quality standards
Should be applied with individual QC & calibration report according to ISO 8655

4. IUCD KIT

- Steel bowl.
- Sponge holding forcep.
- Vulsellum forcep.
- Sims vaginal speculum.
- Plain Straight Scissor.
- Vaginal wall Retractor.

5. PPIUCD FORCEP

Name of specification parameter	Range
Weight of forceps :	110 -115 g
Diameter of inner ring (J) :	11 to 15 mm (major diameter)
Diameter of inner ring (I) :	8.0 to 8.8 mm (minor diameter)
Thickness of ring :	3.5 to 4 .00 mm
Length of the clearance of forcep (D):	33 to 35 mm
Tip to box joint length (B) :	141 to145 mm
Box joint to end of grip length (C) :	177 to181 mm
Tip to end of grip length (A) :	315 to 325 mm (Overall length)
Diameter of the finger rings(G) :	27.2 - 27.5 mm (major diameter)
Diameter of the finger rings (H) :	23.1 - 23.4 mm (minor diameter)
Thickness of the finger rings :	3.5 – 3.8 mm

6. FOOT OPERATED SUCTION MACHINE

PRODUCT & MANUFACTURER QUALITY STANDARDS:

- It Should be US FDA / CE/BIS approved product,
- Manufacturer should be ISO 13485:2003 certified.

TECHNICAL SPECIFICATION:

1. Giving vacuum more than 550 mm Hg, with 200ml/stroke, oil free diaphragm pump.
2. Settings-Manual
3. User's interface-Manual
4.Mobility, portability-No
5. ENERGY SOURCE: Not Required

ACCESSORIES SPARE PARTS, CONSUMABLES:

1. Accessories & spare parts -Collection bottles, clear unbreakable jar(one set extra)
2. Consumables / reagents (open, closed system):- Microbial filter, silicon tubing (one extra set)

7. NEBULISER

Product Quality Standard:

- Should be USFDA or European CE approved product.
- CE certificate must be issued by notified body.
- Manufacturer should be ISO 13485 certified for quality standards.
- Should comply with IEC 60601 safety standard.

Description of Function:

Nebulizer is a device used to administer medication to people in forms of a liquid mist to the airways commonly used in treating cystic fibrosis, asthma, and other respiratory diseases.

Technical Specifications:

- Should be of Heavy duty compact nebulizer.
- Heavy duty ,Compact, light weight, low noise(50dB ±3dB)
- Durable long life compressor.
- Suitable for heavy duty/ institutional (hospital) use, should be able to run uninterruptedly for one hour.
- Max Pressure: 2.0 to 2.5 bars
- Operating pressure:1to1.5bars
- Normal Air Flow: 4lpm
- Should produce particle of size 1 to 5 micron.
- Mass median Diameter (MMD): 2.5 to 3µm.
- Output rate: 500gm/Min.
- Made of Heavy duty ABS body
- Power supply: Power input to be 220 to 240V AC, 50Hz fitted with Indian plug of appropriate rating

8. X-RAY-VIEW BOX(LED)

Product & Manufacturer Quality Standards:

1. Should be FDA/ CE/BIS approved product.
2. Manufacturer and Supplier should have ISO 13485 certification for quality standards.

TECHNICAL CHARACTERISTICS

1. Should be ultra-thin X ray film illuminator using light
2. It should have a thickness of 30 mm
3. It should be suitable for viewing 14''x17' film.
4. Should have position to insert 8 films in 2 rows.
5. The LED light must have a life span of more than 1,00,000 hours.
6. It should have easy insertion & removal of the film.
7. It should have homogeneous illumination more than 95% and maximum intensity of over 10,000 lux.
8. It should have an on-off switch along with digital feather touch dimmer and a button to set the intensity
9. It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.
10. It should have directly connectable to power supply without any external adapter.
11. It should have flicker free high frequency light for reduction of eye strain.
12. It should have external fuses for protection against power surge.
13. 10 step Digital dimmer facility with step up/step down intensity of 500 lux or less.
14. Should have automatic film sensor
15. Should have facility to switch on only the section where the film needs to be viewed.

Power supply: 230V, AC, 50Hz. 3 Amps, Single phase

9. CENTRIFUGE-8 TUBES

Performance Parameters
Purpose: Separating Serum from blood or for urine sedimentation
Centrifuge Design: Bench Top
Weight including Default Rotor in kg: NA
Auto cut off: Yes
Timer provided: Yes
Maximum RPM 3000-3500
Number of steps for RPM variation :In steps /Continuous
Incremental Steps of Variable RPM :300-400
Type of Motor: Brushless (without carbons)
Maximum Noise level when working at 1 meter distance in db 50
Ambient operating Temperature range in Degree centigrade Celsius and humidity range 0 to 50 degree centigrade and Relative humidity 15 to 90%
Rotor imbalance diagnostics and automatic stop if required: Yes
Facility to ensure that In case Machine is running and lid is opened with manual lock by user , machine shall stop: Yes
Maximum Timer Set range 60 minutes
Timer settings Provided :interval of 10 seconds up to 1 minute and over 1 minute up to 60 minutes in interval of 1 minute:NA
Display :LED /LCD
Speed Controller : Microprocessor controlled preprogrammed speed controller
Speed Control: Accuracy in case of set speed (Plus minus RPM)
Rotor configuration: Swing Out Rotor
Rotor Feature with reference to Autoclavability: Autoclavable Rotor @ 121 Degree Celsius,

Maximum Volume of the tube testable: 15 ml centrifuges tubes
Rotor Size: 8X15ml
Power supply :Single phase, 230 V 50 HZ AC Source
Power consumption in watts: 500Max
Length of Power cord in meters 2
The Equipment shall be installed and demonstrated before Acceptance installation and demonstration:Yes
Accessories: Spanner to tight or loose Nut of Rotor on Motor shaft head puller, spare rotor nuts ,fuse-2,
Warranty in Years 3
Material Parameters:
Assembly Material for manufacture of Medical Centrifuge: Consists of Die cast Aluminum, Aluminum sheet, Stainless Steel, CRC Steel, Plastic and Rubber
Lid Material of Medical Centrifuge : mC.R.C Steel Finish with Powder Coating or stove painting / ABS Plastic of injection molding
Body Material of Medical Centrifuge: C.R.C Steel Finish with Powder Coating or stove painting / ABS PLASTIC OF injection molding
Centrifuge Bowl material of Medical Centrifuge: 304 Quality Stainless Steel Molded
Material of Rotor : Aluminium,
Standard:
ISO13485 certification for Manufacturer: Yes
Copies of all certifications and reports to be provided to buyer on demand at time of supplies:Yes
Product should be CE/USFDA/BIS approved

10. INCUBATOR

Product Quality Standards:
• Should be USFDA / CE / BIS approved product
• Manufacturers should have ISO 13485 certification for quality standards
• Should comply with IEC 60601 towards Safety Requirements.
Technical Specification:
• Temperature range should be from 5 degree C above ambient temperature to 90degreeC with accuracy of 0.5 degree C .
• The control panel should have digital indication of chamber temp. with visual indication of heating process and ergonomically designed controlled panel.
• The inner chamber should be made from SS 304 grade or higher stainless steel with outer chamber of mild steel having duly primer coated for rust proofing and powder coated.
• The heating coil should be placed inside stainless steel chamber to provide uniform temp. inside the chamber
• The inner chamber should be provided with air circulatory system to maintain contact chamber temp.
• The inner and outer chambers should be well insulated with glass wool and should have appropriate air gap to maintain minimum air loss and maximum heat retention capacity.
• The door must be well insulated and provided with thermal resistant glass to visualize inside of chamber during heating process.
• The control panel should have alarm (audio/visual) for abnormal increment of chamber temp. than setting and door opening
• Should be provided with 2/3 detachable perforated steel rack for placement of samples.
• Chamber size should be 600x600x600(L x W x H) mm. (Approx.) Power supply: Should work with 220-240 V AC, 50Hz supply having Indian plug pins.

OTHER MEDICAL EQUIPMENTS		
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6	BLOOD DONOR COUCH	1
7	BLOOD COLLECTION MONITOR	1
8	PORTABLE TUBE SEALER	2
9	PORTABLE BLOOD BAG REFRIGERATOR	3
10	AUTOMATIC BIOCHEMICAL ANALYSER	1
11	C-ARM COMPATIBLE ORTHOPAEDIC OPERATION THEATRE TABLE	1
12	ECG MACHINE (12 CHANNEL)	1
13	SPIROMETER or PULMONARY FUNCTION TEST MACHINE:	1
14	OPERATION TABLE (MANUAL-HYDRAULIC)	2
15	CBC MACHINE (5 PART)	1
16	FULLY AUTOMATIC RANDOM ACCESS CHEMILUMINESCENCE IMMUNOASSAY (CLIA) ANALYSER	1
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1. VOLUMETRIC INFUSION PUMP

PRODUCT & MANUFACTURER QUALITY STANDARDS:

• Should be USFDA/CE (Notified as per medical device directive)
• Manufacturer should have BIS/ISO 13485 certification
• Relevant IEC-60601-Part 1 & 2, certificates by a notified agency.

CLINICAL PERFORMANCES:

Should accept all internationally produced/marketed syringes and should be able to detect it automatically
Should support the Bolus supply of drug on press of single button, as per need
Should be able to pre-set different range of Bolus supply
Preferably the unit should be of Bottom / side loaded to avoid accidental spilling of drugs and damage to the machine.

TECHNICAL SPECIFICATION:

1. Flow rate programmable range at least from 0.1 to 200 ml/hr, in steps of 0.1 ml/hr; and at least from 100 to 1200 ml/hr in steps of 1 ml/hr
2. Saves last infusion rate even when the AC power is switched off
3. Bolus rate should be programmable to approx. 500 ml, with infused volume display.
4. Selectable occlusion pressure trigger levels selectable from 300, 500 and 900 mmHg.

5. Accuracy of ±2% or better for set parameters.
6. Maximum pressure generated 20 psi
7. Pause infusion facility required
8. Self-check carried out on powering on
9. Comprehensive alarm package required including: occlusion alarm, near end of infusion pre-alarm and alarm, volume limit pre-alarm and alarm, low battery pre-alarm and alarm, AC power failure, drive disengaged
10. It should be open system
11. Settings-Single loadable
12. User's interface-Automatic
13. Software and/or standard of communication-Inbuilt

PHYSICAL CHARACTERISTICS:

1. Configuration-Tamper-resistant case made of impact resistant material. Securely mountable on Table-top, IV stand or bed fitting
2. Noise (in dBA)-Noise free
3. Mobility, portability-Yes

ENERGY SOURCE:

1. Voltage (value, AC or DC, mono-phase or tri-phase)-220V ± 10%, 50 Hz
2. Battery operated-Internal rechargeable battery having a minimum of 2 hours backup
3. Tolerance (to variations, shutdowns)-± 10%
4. Protection-Battery powered alarm for power failure or disconnection

ACCESSORIES, SPARE PARTS, CONSUMABLES

Accessories (mandatory, standard, optional)-Clamp for mounting pump on IV stand

2. INTENSIVE CARE VENTILATOR

PRODUCT & MANUFACTURER QUALITY STANDARDS:

1) USFDA and CE (Notified body as per medical device directive) from authorized third party and should have BIS/ISO 13485 certification.

2) Relevant IEC-60601-Part 1 & 2, certificates by a notified agency.

TECHNICAL SPECIFICATION:

2.1 Technical characteristics (specific to this type of device)-

1) Should have facility for Invasive and Non-Invasive ventilation;

2) Microprocessor Control suitable for Neonatal and Paediatric ventilation;

3) Should have modes of ventilation equipped with newer modes of ventilation: Assist/ Control Volume control Pressure control Pressure support SIMV with pressure support (Pressure and volume control) PEEP Inverse ratio Ventilation Non invasive ventilation-BIPAP, CPAP Apnea ventilation, user selectable, volume & pressure control; PRVC or Equivalent

4) Should have built in colour touch screen TFT/LCD display of minimum 8" for display of waveforms and monitored value. The interface should have direct access to PEEP, O2 concentration, respiration rate, volume and pressure settings. The user interface should have both direct access keys and touch panel for user settings.

5) Should have inbuilt facility for recording EtcO2;

6) Should have facility to measure and display of the following parameters: Airway Pressure (Peak & Mean) Tidal volume (Inspired & Expired) Minute volume (Inspired & Expired) Respiratory mechanics Spontaneous Minute Volume Total Frequency FiO2 dynamic Intrinsic PEEP, Total PEEP Plateau Pressure Resistance & Compliance. Use selector Alarms for all measured & monitored parameters Occlusion Pressure, Pressure Flow & Volume curves, P-V loop, Flow-Volume Loop

7) Automatic compliance and leakage compensation for circuit and ET tube;

8) Should have facility of log book, for events and alarms with date & time, trends duration at least 24hrs.

9) Should have following setting; Tidal volume (Minimum 2ml, Maximum up to 2000ml); pre-set range for neonatal modes to be provided Inspiratory pressure (upto 60cm of H2O); Respiratory rate 1 to 80 bpm; Apnea back up rate; CPAP/PEEP; Pressure support; FiO2 setting range between 21% and 100%; Pause time; Pressure and flow Trigger; Inspiratory flow up to 120Lpm; Inspiratory time 0 to 3s regulatable I:E Ratio:1:10 to 4:1
10) Oxygen cylinder/central pipeline connector/(to be supplied along with the machines) should be compatible with ventilator;
11) Servo controlled humidifier- Humidifier -Servo controlled with digital monitoring of inspired gas temperature complete with heating wire –
01 Filter paper for humidifier for 100 uses –
01 Nebuliser with capability to deliver particle size of < 3 micron Medical Air Compressor:
a) Stand-alone Medical Air compressor
b) Snap fit with the Ventilator module to provide an oil free Medical air.
c) Peak output flow should be minimum 120 LPM.
d) The medical air compressor should be USFDA or CE (Notified as per medical device directive as per Class II device) Certified
e) Air quality should comply with ISO compressed air purity class.
f) Medical Air Compressor should automatically activate in the event of wall air supply loss.
g) Replacement of internal filters should be performed without removing the compressor
h) Should have washable air filter.
2.3 User's interface-Manual and Automatic
2.4 Software and/or standard of communication (where ever required)-
1) Inbuilt software;
2) Convenient and quick USB interface;
3. PHYSICAL CHARACTERISTICS
3.1 Dimensions (metric)-NA
3.2 Weight (lbs, kg)-<50 kg including trolley
3.3-Configuration
1) Compatible hunged arm for holding the circuit;
2) Should have caster with braking system;
3.4 Noise (in dBA), heat dissipation
1) Noise of device operation max- 50dbA;
2) Should have audio visual alarm for battery low, source gas low and high/low pressure in the breathing circuit or source gas inlet;
3) Should maintain nominal Temp of the control unit and the heat should be disbursed through an cooling mechanism;
4) Alarm volume - min. 65dB
3.5 Mobility, portability-Yes
4. ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)
4.1 Power Requirements-Input voltage 220 VAC, 50Hz;
4.2 Battery operated
1) Battery powered, silenceable alarm for power failure.
2) Battery charger to be integral to mains power supply, and to charge battery during mains power operation of unit.
3) Internal, replaceable, rechargeable battery allows operation for at least one hour in the event of power failure
4.3 Tolerance (to variations, shutdowns)-Voltage corrector / stabilizer to allow operation at ± 10% of 220V AC. Use of SMPS to correct voltage
4.4 Protection
1) Electrical protection, resettable over current breakers or replaceable fuses (fitted in both live and neutral lines);

2) Leakage
4.5 Power consumption-TO be declared by the supplier
5. ACCESSORIES, SPARE PARTS, CONSUMABLES
5.1 Accessories & Spares
1) Full face mask- 5 Nos each of 0,1 and 3
2) Nasal cannulae for neonates- 5 nos
3) Reusable heated wire humidified breathing circuit of silicone material (2Nos) compatible with the servo controlled humidifier.
4) Air & oxygen hose- 1 each
5.3 Consumables
1) Should provide 1No spare internal battery;
2) Leakage adapter;
3) All other consumable required for proper functioning of the ventilator recommended by the manufacturer are to be replaced in time in free of cost during the warranty period.
4) 5nos of disposable heated wire humidified circuit with reservoir, compatible with the servo controlled humidifier supplied.

3. OXYGEN CONCENTRATOR

PRODUCT & MANUFACTURER QUALITY STANDARDS:
• Should be CE(Notified as per medical device directive) or US FDA approved.
• Manufacturer should be ISO 13485 certified
• Shall meet IEC 60601-1, IEC 60601-1-2 standard requirements
• Should comply with ISO 15001-2010.
TECHNICAL SPECIFICATION:
1. Flow rate: 0-5 LPM, Oxygen purity > 93%.
2. O2 delivery pressure: minimum: 0.03 to 0.07Mpa (4.35-10.15 PSI)
3. Atomising pellet (ml/min.) > 0.5, uninterrupted flow of oxygen,
4. Low pressure alarm, high pressure alarm and power failure alarm .The unit should have inbuilt Oxygen sensing device (OSD) to monitor the purity of produced oxygen.
5. Unit capable for supplying oxygen to two outlets simultaneously using two independent flow meters. (0-5LPM of each flow meter)
6. Should be capable of providing minimum 12 hours of continuous operation

PHYSICAL CHARACTERISTICS

1. User's interface-front panel access to reset switch
2. Noise (in dBA)- ≤50 db
3. heat dissipation-Heats dissipated using an internal exhaust, so that a maximum of 36.5 degree C is maintained
4. Mobility, portability-Yes.Provided with easy maintenance wheels for free movement.

ENERGY SOURCE:
1. Power Requirements-230 +/- 10% VAC, 50 Hz
2. Battery operated-NA
3. Tolerance (to variations, shutdowns)-fuse controlled variation, automatic switch over from AC to DC and vice versa
4. Protection-OVP, earth leakage protection
5. Power consumption-<500 Watts

ACCESSORIES, SPARE PARTS, CONSUMABLES

1. Accessories (mandatory, standard, optional)-
a. Humidifier Bottles -4nos
b. Power cord- 1no

2. Consumables / reagents (open, closed system)-
a. Nasal Cannula with extension tubing-2 nos
b. Gross particle cabinet filter
c. Compressor intake filter
d. Bacterial filter of 0.8-1.0 micron
e. Geolite crystal.

4. PULSE OXYMETER STAND ALONE BENCHTOP TYPE (LINE POWERED)

PRODUCT & MANUFACTURER QUALITY STANDARDS:
• Should be USFDA / CE (Notified Body as per medical device directive) approved product.
• Should confirm to ISO 80601-2-61-2011: Medical Electrical equipment- part 2-61: Particular requirements for the basic safety and essential performance of pulse oxymeter.
• Electrical safety conforms to standards for electrical safety IEC-60601-1, EMC safety confirms to IEC 60601-1-2 standard requirement.
• Manufacturer should have ISO 13485 certificate for quality standard.

OVERVIEW OF FUNCTIONAL REQUIREMENTS:
1. Continuously displays patient oxygen saturation in real time using an external probe on the skin.
2. Contains adjustable alarms to alert when either saturation or heart rate is low.
3. Reusable, sterilisable probes are robust and easily connected and disconnected. Operates from mains voltage or from internal rechargeable battery.

TECHNICAL SPECIFICATION :
The machine should measure all below mentioned parameter for all types of patients i.e. adult, paediatric and neonatal.
1.SpO2 measurement range at least 40-70 and 70 to 99 %, minimum gradation 1%.
2.Accuracy of SpO2 better than ± 1% for range 40-70 and better than ± 3% for range 70-99.
3.Pulse rate range at least 30 to 240 bpm, minimum gradation 1 bpm.
4.Accuracy of pulse rate better than ± 5 bpm.
5.Signalstrength or quality to be visually displayed.
6.Audiovisual alarms required: high and low SpO2 and pulse rate (operator variable settings), sensor disconnected, sensor failure, low battery.
7.Should have TFT Screen display.
8.Plethysmograph (may be in form of bar) display is mandatory.
9.The machine should measure all parameters in low perfusion states and irrespective of motion artifacts.
10. Settings- Should have minimum 24 hrs trend memory for SpO2 & PR.
11. User's interface-Easily accessible touch button to operate the machine.
12. Software and/or standard of communication-in built

CONFIGURATION:
1. Case is to be hard and splash proof
2. Display must allow easy viewing in all ambient light levels
3. Supplied in protective case for clean storage and safe transport
4.Should be less than 5 kg
5.heat dissipation-dispersed through exhaust
6. Mobility, portability-Mobile

ENERGY SOURCE:
1. Voltage (value, AC or DC, monophase or triphase)-220 to 240V, 50 Hz
2. Battery operated-Internal, replaceable, rechargeable battery allows operation for at least four hours in the event of power failure

3. Battery charger to be integral to mains power supply, and to charge battery during mains power operation of unit.
4. Tolerance (to variations, shutdowns)-Voltage corrector / stabilizer / UPS to allow operation at ± 30% of local rated voltage
5. Protection-Electrical protection by resettable circuit breakers in both live and neutral supply lines, Alarms should include Power failure.
6. Power consumption-50-100 W
7. Other energy supplies-Mains supply cable to be at least 3m in length ACCESSORIES, SPARE PARTS,

CONSUMABLES:
1. Accessories –Adult Probe : 1 No., Pediatric Probe : 1 No., Two reusable Y Probes with clips for infant use,
2. Spare parts (main ones)-Two sets of spare fuses (if non-resettable fuses used) Consumables / reagents (open, closed system)-NA

5. BOYLE'S APPARATUS

Product Quality Standards:
• Should be USFDA/CE/BIS approved for the quoted model.
• Manufacturer should be ISO 9001 & ISO 13485 certified for quality standards.
Technical Specification:
1. Construction: Trolley made by tubular rigid stainless steel
2. Capacious drawer for keeping anaesthesia kit /accessories.
3. Should have provision for attaching 2 cylinders each for Oxygen and Nitrous Oxide (Total 4 Cylinder).
4. Should have Stainless Steel table Top tray.
5. Should have modified monitoring accessories tray.
6. Should have 5" Diameter Antistatic breaking castor wheel.
7. Large diameter Oxygen and nitrous oxide gauge for high visibility and clarity.
8. Complete with standard Magill's Circuit.
9. Should have Flow meter with Hypoxic guard for oxygen, nitrous oxide air two bars for attaching Halothane GoldMan vaporizer bottle and double chamber circle absorber each of 1 kg.
10. Should be upgradable for attaching the temperature and flow compensated vaporizer.
11. Should have oxygen failure warning device.
12. Should ensure no nitrous oxide flow, if flow of oxygen is lower than 0.5ltr/min (nitrogen lock).
13. Should have change over mechanism with oxygen flush.
14. Should have rota meter study of maximum limit 10liters/min for both oxygen and nitrous oxide.
CO2 Absorber:
• Should have double chambered soda lime canister with 1.0 kg capacity each for low flow operation.
• Should have visible inspiratory and expiratory valves.
• Should have adjustable pressure relief valve.
• Should have bi-stable BAG to VENT switch to change over from Manual to Mechanical ventilation. [Cost of CO2 absorber should be quoted separately in the financial bid which will be taken into evaluation.] Vaporiser (Halothane and Isoflurane):
• Should be interlock mounting system to mount atleast 2 nos. of vapourisers.
• Should have provision to attach two vaporisers for Halothane &Isoflurane.
• Should be of Selectatec type mounting with front control dial knob.
• Should be of Key fill type.
• Should have glass window for level monitoring.

• Should have tool free installation and should have interlocking facility.
• Should be temperature and flow compensated with high accuracy of delivered concentration of agent, particularly at low flow.
• Should have nominal capacity of 250ml or above volume of Anesthetic agent.
• Should be maintenance/service free for atleast 5 years.
• Should be CE marked. [Cost of each vaporiser (Halothane &Isoflurane) should be quoted separately in the financial bid which will be taken into evaluation].

Accessories:
Mox cylinder connector to the machine: 1set.
Paediatric circuit: 1No.
Adult circuit: 1No.
Face mask =2,3,4 size.(one of each)
Rebreathing Bag 2 litre for adult and 0.5 litre for paediatric: 2nos.
Endotracheal tube 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5 (cuffed) i.e. high volume with low pressure cuff and stelete.
Laryngoscope: Paediatric: 1No. & Adult: 2Nos.
Machine should be supplied with Oxygen cylinder :2nos (5ltrs) and
Nitrous Oxide Cylinder : 2nos (5ltrs)

6. BLOOD DONOR COUCH

Product Quality Standards: Should be USFDA or CE approved model. CE certificate must be issued by European• authority. Manufacturer should be ISO 13485 certified for quality standards.•Shall meet to IEC 60601-1/ IS 13450, General requirements for safety of medical• devices.

Operational Requirement:
1. Provides a comfortable position for the donor.
2. Variable positioning for either arm with comfortably wide arm-rests.
3. Arm rests should 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. Drawers should be provided for the upkeep of equipment & consumables.
7. If a vasovagal attack occur, the donor's head should be lowered immediately and his legs should be lifted above his heart level simultaneously so that blood can flow back to the brain and other vital organs. This facility should be available.

Technical Specification:
1. Comfortable chair type without separate section for backrest.
2. Should be a single upholstery unit with soft padding for cushioning and rexin cover.
3. It should have step less electric remote controlled backrest & leg rest adjustment.
4. Adjustable arm rest for donor’s comfort and phlebotomist friendly
5. Easily tilted to head low position, electrically operated.
6. Comfortable working level for the operator. Lifting capacity - Approx 120 kg.
7. Storage Drawers/trays for storing consumables & Blood Collection Monitors.
8. Should have provision to fix on mobile collection van on base with support clamps.

Scope of Supply:
- Donor Couch: 01no.

- Dust Cover: 01no.
- Storage drawer or tray: 1no.
- Arm Rests(pair): 01 pair
- Remote control: 01no.
- Power Supply: Power input should be 220-240VAC, 50Hz fitted with Indian plug
- Suitable Servo controlled Stabilizer/CVT.

7. BLOOD COLLECTION MONITOR

Product Quality Standards:

•Should be US FDA or CE approved model. CE certificate must be issued by European authority. Manufacturer should be ISO 13485 certified for quality standards.

•Shall meet to IEC 60601-1/ IS 13450, General requirements for safety of medical

• devices.Shall meet IEC 60601-1-2 (Or Equivalent BIS) General Requirements of Safety for

• Electromagnetic Compatibility.

Operational Requirement:

It is meant for stationary and mobile use. Gentle mixing and control of collection time to give high quality blood (platelets). Suitable for all blood bags on the market. Automatic check on blood flow and collection time with buzzer alarm.Shall continuously display collected volume, flow and time during collection. Shall provide repetitive notification of completed collection every minute including gentle mixing to avoid coagulation.

Technical Specification:

1. Volume Setting: Pre-selection of volume to be collected.
2. Tarring of bag volume before collection. Tarring range: 0 to 600 gm.
3.Automatic storage and recall of set volume.Measure volume with best accuracy.
4. Indications and Alarms for Commencement & end of collection, time taken for collection, blood flow rate with audio alarm when blood flow is higher than 180ml/min & lower than 20ml/min., Main power failure
5. Should have continuous notification of completed collection including gentle mixing to avoid coagulation.
6. Automatic clamping at termination of preset volume collection.
7. Should have memory for past donation volumes.
8. Should have accuracy of ±2% of preset volume.
9. Should have automatic release of bag when lifted.
10. Continuous agitation of blood bags during collection: 12±2 rpm.
11. Easy provision to change preset volume.
12. Should operate on mains as well as rechargeable battery. On battery it should operate for a minimum of 8 hours or minimum 60 continuous blood collections. Power Supply: Power input should be 220-240VAC, 50Hz fitted with Indian plug

8. PORTABLE TUBE SEALER

Product & Manufacturer Quality Standards:

Manufacturer should be ISO 9001•& ISO 13485 certified.

Quoted model should be CE or USFDA approved.•

Should meet the electrical safety standards of IEC/EN 60601.•

Technical Specification:

1. Should be a Radio frequency sealing

2. No warm -up time required.
3. Should be Easy separation of tube segments after sealing.
4. Should have well protection for sealing head.
5. Should produce hermetic seal hence no contamination &hemolysis.
6. Should run on internal rechargeable battery.
7. Sealing time: Less than 2 sec.
8. Should have indication Lamps for Charging, Battery Low, Battery Level.
9. Should have sealing indication in the sealing head.
10. Should have minimum 1000 seals on fully charge battery.
11. Should have sealing gun along with cable length at least 2mtr.
12. Should run on ambient temp. of 10-400C. 13. Power supply: 220V ±10%, 50Hz.

9. PORTABLE BLOOD BAG REFRIGERATOR

Product Quality Standards:

Should be USFDA or CE or BIS approved model.

- Manufacturer should be ISO 13485 certified for quality standards.
- Shall meet to IEC 60601-1/ IS 13450, General requirements for safety of medical• devices.

Should have regulatory certificate (ECE R10.4) for suitability of unit on vehicle.

Technical Specification:

1. Should be custom made for mobile blood donor vehicles to sustain different road conditions, terrains and diverse weather conditions.
2. Specific to transport blood & blood products in hot & cold climates.
3. Should have capacity to accommodate 80-100 blood bags (350ml.). with internal volume of 140ltrs.
4. Should maintain internal temp. from 2 to 8 degree C consistently.
5. Should capable to operate in external operating temp. from 10 to 40 degree C.
6. Should have temp.holdover time of minimum 12hrs.
7. Body cabinet should be made of single piece by rotational moulding and grade and UV resistant polyurethane as per regulatory standards.
8. Should have PU foam insulation of 80-100mm thickness for maintaining the required holdover time.
9. Should be specially designed to protect them from road damages during vehicle movement in diverse road conditions and easily stackable.
10. Should have hermetic sealed compressor.

Power Supply:

Power input should be 220-240VAC, 50Hz fitted with Indian plug
Resettable overcurrent breaker shall be fitted for protection
Suitable Servo controlled Stabilizer/CVT should be supplied.

10. AUTOMATIC BIOCHEMICAL ANALYSER

1. Should be USFDA / CE as per IVD approved system.
2. Should be a floor model system.
3. It should be fully automatic random-access analyzer capable of doing Biochemistry, immunoturbidimetric tests. ISE option should be available for Sodium, Potassium, Chloride.
4. It should be an open system in terms of programming and reagent usage.
5. Should have minimum throughput of 700 tests/hour or more (photometric) and at least 1000 test/hour with ISE.
6. Required test parameters are a) Substrates such as Albumin, Bilirubin, Direct Bilirubin, Total Cholesterol, Cholesterol HDL, Cholesterol LDL, Creatinine, Glucose, Microprotein Plus,

Total Protein Plus, Triglycerides, Urea UV, Uric Acid b) Enzymes such as Alanine Aminotransferase (ALT/GPT), Alkaline Phosphatase (ALP), Amylase, Aspartate Aminotransferase (AST/GOT), Creatine Kinase MB (CK-MB), Creatine Kinase NAC (CK-NAC), Gamma Glutamyltranspeptidase Plus (GGT Plus), Lactate Dehydrogenase (LDH-L), Lipase c) Specific Proteins such as Haptoglobin, Glycosylated Hemoglobin (HbA1c), immunoglobin A (IgA IP), Immunoglobin G (IgG IP), Immunoglobin M (IgM IP), Microalbumin d) Electrolytes and Ion Selective Electrodes (ISE) such as Calcium, Chloride, Iron, Magnesium, Phosphorus, Carbon Dioxide (ISE), Chloride (ISE), Potassium (ISE), Sodium (ISE)

7. Should have two reagent probes and two separate sample probes with level detection, collision protection, automatic washing station with integrated mixing & preheated reagent up to 37degC.
8. Capacity refrigerator of 2 -8 degree C for reagent storage should be available.
9. Should have On Board Laundry System for cuvettes
10. Should have low water usage and one distillation plant of required capacity should be provided by bidder.
11. Automated reagent management with 64 refrigerated positions
12. Sample volume should be from 1 to 50ul per test programmable in the steps of 0.1ul.
13. On Board Quality Control with L-J plot and quality control programs at 3 levels.
14. Should have two separate syringes for reagents and samples.
15. Should have 8 channel automatic washing system for reaction cuvette.
16. Should have measurement capability of wavelengths range from 340 - 800 nm
17. Should have photometric range from -0.1 to 3.0 Abs with resolution of 0.001 Abs
18. Light Source: Halogen lamp
19. Absorbance Resolution: 0.0001A and Repeatability ≤2%.
20. System with printer facility should be provided.
21. Software should give biochemistry test along with sample Bar code and online reporting.
22. Online UPS of suitable rating having at least 2hrs. back up must be supplied.
23. System should also be provided with 16 channel Centrifuge machine, pipettes variable range 2-20µl, 20-100µl, 100-100µl. and System test pack for Glucose, SGPT, SGOT, ALP, Bilirubin Total & Direct, cholesterol, triglyceride, Urea, Creatinine, Albumin, Total Protein, Uric Acid, Calibrator, Control Solutions, Cuvette, Cleaning solution and all other required consumables for 5000 tests investigations.
24. Initially all the reagents, consumables, calibrators and controls etc. to be supplied along with the machine for processing of 1000 Nos. of sample. (N.B-1. Cost of all individual reagent/cleaning solution/rinsing solution required for processing for 100 nos. of sample per month must be quoted in the pdf format (Format-A) of the financial bid, which shall be taken into account for price evaluation and shall be approved & valid for 10 years from date of approval In case of individual pack system, cost of each required pack must be furnished. 2.Cost of disposable accessories or reusable accessories as mentioned above or any other consumable items/other accessories required for functioning of the machine has to be quoted in separate price bid format (Format-B) as price break up of excel BoQ.

- The analyzer should be automated, discrete, patient prioritized, random access clinical chemistry analyzer capable of performing biochemistry and immunoturbidimetric assays

- The analyzer should have throughput of at least 700 tests / hour photometric and more than 1000 tests/hour with ISE (optional)
- The analyzer should have more than 25 default programmed chemistries and minimum 5 open channel tests
- The analyzer should have facility for unlimited number of programmable profiles and calculation Items
- The analyzer should have provision of a single sample rack that can load atleast 100 samples at a time.
- The analyzer should have a separate carousal for STAT samples with provision to load atleast 20 STAT samples at a time, and additionally have more than 20 positions for blanks, controls, standards and ISE solutions in the same STAT carousal
- The analyzer should accept 5 ml, 7 ml and 10 ml test tubes. 2 ml cup, micro cup and should have cup on tube facility for sample testing
- The analyzer should have sample pipetting between 2–55 µl with increments of 0.1 µl and 70 µl (Fixed) for Direct ISE
- The analyzer reagent tray should perform three reagent chemistries and accepts more than 40 reagent bottles each in separate reagent tray for R1 & R2. It should accept 20 ml, 50 ml bottles and 5 ml adapters
- Analyzer should have dedicated sample probe and 2 or more separate probes for reagents.
- The analyzer should have more than 140 permanent hard glass cuvettes
- The analyzer should have minimum reading volume of 150 µl or more
- The analyzer should consist of multi wavelength diffraction gratings with 15 wavelengths ranging from 340 – 800 n.m.
- The analyzer should have provision for 4 channel Direct ISE
- The analyzer should have dilution ratio from 2 to 150 times for sample and calibrator
- The analyzer should have facility for vertical obstruction detection, clot detection for sample, Capacitance based liquid level sensing, Froth detection, Auto dilution and Auto rerun and reflex testing
- The analyzer should have facility for calibration curve viz : linear (one, two point and multi point) K factor, 4P, 5P, Logit Log, Cubic spline, Exponential , Polynomial
- The analyzer should have provision for last 5 usable calibration
- The analyzer's should have water consumption of less than 30 litres/hour
- The analyzer should have dedicated immersion mixing facility with atleast 2 pairs of rotating mixer units with user defined programmable speeds (at least 3 speeds)

11. C-ARM COMPATIBLE ORTHOPAEDIC OPERATION THEATRE TABLE

1. Should be USFDA approved.
2. Manufacturer should have ISO 13485 certification.
3. The five section table top is X-ray translucent and is equipped with removable, antistatic 50mm thick mattresses.
4. The base & column of the table is made of high quality medical stainless steel (Grade – 304).
5. Non- reflecting surface, antibacterial & is easy to clean.
6. The table can provided with a top sliding of 250 mm, Dual Leg Section & Battery backup

7. Hanging Orthopedic Attachment including pelvic Support, Tibia Nailing enables the limbs to perform strain free.
8. Top dimension L 2032 x W550mm
9. Height adjustment Adjustment by electro-hydraulic moment should be from 715mm – to highest possible label
10. Table Top Sliding 250mm (optional)
11. Trendelenburg /Reverse 30°/ 25°
12. Lateral tilt 20°/ 20°
13. Kidney elevator 150mm
14. Back Rest (up/ down) 80°/ 25°
15. Leg Rest (up / down) 15°/ 90°
16. Head Rest (up/ down) 20°/ 60°
17. Power Supply 24V DC
18. Battery Backup for atleast 2 -3 hours
19. Attachments for spine surgery
20. Height adjustment, lateral Tiles, Trendelenburg, and Flex – Reflex, Chair Position and Longitudinal
21. Sliding top should be operated by Remote control.
22. Head and Leg sections are detachable & interchangeable. POWER DRILL SYSTEM Should be USFDA approved. Manufacturer should have ISO 13485 certification.

Driving Unit:
1.Motor with MCB (90 watt)
Foot control¬ Flexible Shaft¬ Stand¬& Base Tool Kit¬ Special Container¬
2. Canulated Drill Handpiece:
a) PISTOL GRIP.
b) SS Jacob"s Drill Chuck (0-6mm).
c) Weight – 800 gm approx.
d) Speed 1200 RPM on load
e) 5.5mm cannulation
f) Ideal for drilling
g) Autoclavable
h) Compatible to Driving Unit only.

3 . Reverse-Forward Hand piece:
a) Pistol Grip.
b) Trigger For Forward & Reverse Changing.
c) Stainless Steel Jacob"s Drill Chuck (0- 1/4")
d) Weight 800 Kg Approx.
e) Ergonomically Designed Grip
f) Maximum Speed 800 Rpm
g) 5.5mm Cannulation
h) Autoclavable
i) Compatible To Driving Unit

4 . Resiprocating Saw Hand Pieces:
a) Pistol Grip
b) To take difficult cuts at depth

c) Ideal for TKR, THR
d) Two types of blades
e) Reciprocations 13,000/ CPM
f) Weight - 650gms approx
g) Autoclavable

5 . Orthopedic Flexible Shaft:
a) Length 1.5 mtrs
b) Weight approx. 1000 gms
c) Autoclavable
d) Push-Pull Type ends
e) Autoclavable

6.Orthopedic Flexible Reamers:
a) Flexible Reamer Shaft 8mm dia fixed Head. (Code J)
b) Flexible Reamer Shaft fordetachable heads up to 12mm. (Code K)
c) Flexible Reamer Shaft for detachable heads above 12mm. (Code M)
d) Detachable Reamer Heads from 8.5 to 12mm, step 0.5mm (Code L1)
e) Detachable Reamer Heads from 12.5 to 15mm, step 0.5mm (Code L2)
f) Guide Wires standard length 100cm,
g) Flexible Reamer Shaft standard length 440mm

7. Cannulated Reaming Hand piece With Accessories:
a) Pistol grip.
b) Max. Speed 400 RPM.
c) AO Coupling.
d) 5.5mm cannulation.
e) Ideal for intermedullary reaming.
f) Weight-1 kg approx.
g) Adaptors Available: Jacobs, Trinkle, Synthes, Hudson.
h) Available with fixed and detachable Reamer shafts [8mm to 15mm] 0.5mm difference.
i) Available with Guide wire [100 cm] with olive and plain.
j) Autoclavable.
k) Compatible to driving Unit only.

8. Wire Driver Handpiece:
a) Pistol Grip.
b) (Cannulation 4mm).
c) Autoclavable.
d) Simplified Lever Type Operation for continuous wire driving.
e) Wire holding range- 0.8 to 3.5mm.
f) Ease in size selection with rotary front cap.
g) Weight-800 grams approx.
h) Compatible to driving unit only.

12. ECG MACHINE (12 CHANNEL)

Product Quality Standards:

- Should be US FDA or European CE approved model.
- CE certificate must be furnished by notified agency.
- Manufacturer should be ISO 13485 certified for quality standards.
- Shall comply with IEC 60601-2-25, Particular requirements for the basic safety & essential performance of electrocardiographs.
- Shall meet IEC-60601-1-2: General Requirements of Safety for Electromagnetic Compatibility.

Technical Specification:

1. Should be compact & light weight.
2. Should be of 12 lead ECG acquisitions with A4 size printout.
3. Should have High-resolution color display provides real-time preview of 12-lead ECG and post-acquisition review of acquired ECG.
4. It should have ECG interpretation for adult & paediatric.
5. Should have alphanumeric elastomer keyboard features dedicated "one-touch" buttons for ECG acquisition, rhythm printing and ECG transmission/order retrieval.
6. Should have benefits of bi-directional communication via USB, USB memory stick, internal modem, LAN or wireless LAN.
7. Should have internal ECG storage up to 100 ECGs & should be expanded up to 200 ECGs.
8. It should have Digital Sampling Rate minimum 5000 s/sec/channel used for pacemaker spike detection;
9. Should have operates on AC as well as rechargeable battery with internal battery charger. Fully charged battery operates for minimum 4 hours / 50 ECGs printout. Auto shut off when not in use.
10. Should have user selectable multiple printout format 3+1, 3+3, 6 channel and 12 channel with user selectable rhythm leads.
11. Power supply: Power input to be 220 – 240V AC, 50Hz fitted with Indian plug of appropriate rating.

13. SPIROMETER or PULMONARY FUNCTION TEST MACHINE:

- Should be US FDA or European CE approved model. CE certificate must be furnished by notified agency.
- Manufacturer should be ISO 13485certified for quality standards.
- Shall comply with IEC 60601- Particular requirements for electrical safety of the device.

Technical Specification:

1. Diagnostic spirometer with oximetry option.
2. Spirometer with 2500-test memory.
3. Oximeter with 1000 hours recording.
4. Should have bluetooth connection.
5. Should be available with disposable or reusable digital turbine flowmeter.
6. Should have feature to record best 3 trials.
7. Upto 8 Blows on one screen.
8. Internal Temperature Sensor for BTPS conversion.

9. Paediatrics incentive animation.
10. High-resolution colour screen.
11. Should have in built silent Thermal Printer. Should provide printing papers for 50 tests.
12. No calibration required.
13. PRE-POST bronchodilator comparison.
14. Selectable language and predicted values.
15. Carrying case should be provided.
16. Power Supply: 220 Volts AC and Rechargeable Battery.
17. Should have battery back up for 30 minutes.
18. Flow Sensor: bi-directional digital turbine.
19. Flow range: + 16 L/s
20. Volume accuracy: +3% or 50 ml.
21. Flow accuracy: +5% or 200ml/s
22. Should be portable. Measured Parameter: FVC, FEV1, FEV1/FVC%, FEV6, FEV1/FEV6%, PEF, FEF 25-75%, FEF 50%, FEF 75%, FET, Vext, FIVC, FIV1, FIV1/FIVC%, PIF, *FVC, *FEV1,*PEF, VC, IVC, IC, ERV, FEV/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV Real time, Flow/Volume, and Volume/Time curve.¬Brochial challenge with FEV1 dose-response.¬Lung age estimation.¬
Connectivity: USB, Bluetooth and RS232.¬
Power supply: Power input to be 220 – 240V AC, 50Hz fitted with Indian plug of appropriate rating
Accessories- Hand set, Turbine Transducer, Software CD, USB cable, Reusable mouth pieces, Adult noise clips, padetric noise clip, Carry Bag, & User mannual 01 no each. PC / laptop, Desk jet printer.

14. OPERATION TABLE (MANUAL-HYDRAULIC)

MANUFACTURER & PRODUCT QUALITY STANDARD:

- Should be US FDA or European CE approved of the quoted model.
- CE certificate must be submitted by notified agency.
- Manufacturer should confirm to ISO 13485 standard.

TECHNICAL SPECIFICATIONS:-

1. Should be a manually controlled operating table, working range from floor level: 700- 1040mm.
2) Should be adjustable to all essential positions.
3) Should be equipped with movement controls at side of the table.
4) Should have Frame and bottom should be made of Stainless Steel 304 material.
5) Should have reinforced three section stainless steel top.
6) Height should be adjustable by oil pump, foot step control.
7) Should have detachable head rest which can be easily adjustable to any desired position, above or below table top.
8) Trendelenburg: ≥25°-30°
9) Reversed Trendelenburg: ≥30°
10) Should have adjustment of Head Section, back section & leg section.
11) Kidney Position should be achievable by breaking the table.
12) Table-top should be radio-lucent. Dimensions (metric) Table top dimension (1900 mm x 525 mm) ± 10% Table elevation: (700mm to 1000 mm) ± 10% Weight (lbs, kg): Should be able to bear patient having weight upto 120 kg

15. CBC MACHINE (5 PART)

Quality Standard:

- Should be US FDA / CE(Notified)of the quoted model Should be compliant to ISO 13485:

Quality systems –

Medical devices –

- Particular requirements for the application of ISO 9001.applicable to manufacturers and service providers that perform their own design activities. Should have local service facility .
- The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

Technical Specifications:

- Automatic blood cell counter that measures 24 parameters including 5-part differential of WBC is required complete with printer.
- Parameters to be measured are : RBC, PLT, WBC, Hb, Hct, MCV, MCH, MCHC, RDW, MPV, PDW, PCT, LYM%, LYM#, Mono%, Mono#, Neut%, Neut#, Baso%, Baso#, Eo%, Eo# and other two parameters as per bidder's choice.
- Histogram WBC 5-part diff distribution, RBC distribution, PLT distribution .HC, RDW, PLT, MPV, PCT, PDW.

Measurement Principle :

- Electrical impedance method for CBC analysis.

Flow cytometry method for Differential and reticulocyte analysis.

Sample volume:

- Whole blood up to 150 µL.
- It should also be able to give all parameters with a finger prick volume of app 20 µL Throughput>= 60 samples per hour.
- Built in LCD screen / External LCD or TFT colour monitor with PC & software.
- Linearity Ranges
- WBC 1-99.0 * 103• /µL
- RBC 0.30-7.00 * 106• /µL
- HGB 0.1-25.0 g/dL
- HCT 10.0%-60.0%
- PLT 10-999 * 103 /µL
- Reproducibility (CV) WBC RBC HGB HCT PLT LYM% MON% GRA%
- The sampling probe should be automatically cleaned off, so that any blood stack doesn't occur. Should have cyanide free Hb estimation.
- Should have immature population reporting facility.
- It should take only 60-80seconds to acquire the measurement result Various sensors should check the condition of the instrument.
- If any abnormality is detected, an error message be displayed so that occurrence of trouble is prevented Integrated thermal printer / External laser printer (B/W)
- On board memory for about 200-250 tests records.
- Monitoring and flagging functions.
- Automatic startup, Electronic self checks, rinsing and background count check and automatic cleaning in case of blockage in capillary/ bubble in fluid.
- Printer paper for at least 1000 test should be provided
- Reagent cost should be quoted separately for 1000 test /month for 5 years of all parameters in the price schedule, which shall be taken into account for evaluation.
- Bidders should quote the break-up of all the reagents required for 1000 test / month (estimated) for all parameters for 5 years in the specified price format.

However, purchase order for reagents for successful bidder shall be given based on actual requirement. Power Supply Power input to be 180-270VAC; 50Hz and UPS of suitable rating with voltage regulation and spike protection for 30 minutes back up. Calibration: The CBC Machine need to be calibrated in every 6 months during the warranty period as well as CMC period. The cost of such calibration should be mentioned in the unit price as well as in CMC price.

- Documentation User/Service manual in English
- Compliance reports 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.

16. FULLY AUTOMATIC RANDOM ACCESS CHEMILUMINESCENCE IMMUNOASSAY (CLIA)ANA LYSER

1.1 Description of Product A medical diagnostic based on the highly specific interaction between an antibody and an antigen. Chemiluminescence Immunoassay analyser is used to perform biochemical tests to detect or measure specific proteins or other substances through their properties as antigens or antibodies.
1.2 Function / Application Fully automated, latest bench-top analyser based on latest Chemiluminescence technology for measuring the assays with very high sensitivity and linearity and should be able to perform the immunoassay's (hormones thyroid, fertility including E3 bone, special immunoassay‟s, cardiac markers, cancer/tumour markers, anaemic markers, infections markers) from serum, plasma and urine samples. Standards and Safety
2. Quality Standard relating to
2.1 Product model Should be USFDA and/or European CE approved product.
2.2 QMS of Manufacturer Should be ISO 13485 certified for quality standards.
2.3 Electrical safety (latest amendment) Should comply with IEC 60601 standards for the safety and essential performance of medical electrical equipment, for electrical safety OR IEC 61010Safety requirements for electrical equipment for measurement, control, and laboratory use Technical
3. Technical Characteristics (Performance Parameter)
1. System should be fully automated random access chemiluminescenceanalyzer. It should be closed type barcoded system.
2. The system should have the facility to run thyroid markers and other hormone, cancer makers, cardiac makers, infectious makers etc at the same time.
3. Should be Bench Model.
4. Through put should be greater than 80 tests/hr.
5. Programmable parameters more than 60 test.
6. Sample position should be 60 or more and separate STAT lane for emergency samples.
7. Sample type: Serum /Plasma/Urine/CSF.
8. Assay time should be upto 50 minutes.
9. Sample volume of test up to (5µl or 10µl) to (50µl or 100µl or 200 µl) depending upon the analyte& dead volume should not be more than 50ul in sample cup.
10. Should have the provision for continuous on-board sample loading of ≥ 50 samples and ≥ 15 reagents at a time showing the status of regents on-board.
11. Should have capacity to load 25 to 30 Reagents packs of different parameters at a time.
12. Onboard cooling should be available for reagents. Inbuilt refrigeration system with controlled temperature & humidity for reagent storage to maintain the stability of reagents on board.
13. The system should have calibration stability of minimum 1 month.
14. Ready to use reagents / consumable packs where no mixing or reconstitution should be required for integrated & compact with reagents & reaction wells in one pack only.
15. Should have the facility to perform STAT sample.

16. Flexible to use different sample containers like primary tubes with different sizes, sample cups, micro cups and cup on tube for easy processing.
17. Universal sample tray should accommodate multiple sample tube sizes/sample cups with facility of bar code reading
18. Facility for sample clot detection, bubble detection, sample detection, reagent detection, low and high viscosity, thin layer fluid or fibrin and short sample detection, Save-theSample Clot/Bubble Management, Liquid level sensing to ensure accuracy.
19. This should have onboard dilution and automated re-run facility.
20. This system should have the facility to store minimum 5000 test results which can be transferred to PC via pen drive.
21. Capability of bar-coded stored master curve with two point calibration.
22. Should have disposable tip sampling system / effective wash technique to prevent carryover.
23. Facility of self-diagnosis and error recovery system with on board operators guide should be available.
24. The instrument should have the facility for integration with clinical chemistry analyser. \
25. No plumbing or external water system should be required.
26. Instrument should provide integrated process control that monitors & verifies during sample & assay processing and report can be seen on the screen & be able to print for every test done.
27. The system should have facility to check all hardware before producing patient results &same should be available on screen as well as on print.
28. Covid-19 IgG Kit Should be coated with S1 Spike protein and kit should US FDA approved.
29. It should be a US FDA approved kit for plasma therapy.
30. On board stability of Covid-19 IgG reagent should be 8 weeks or more than that.
31. Control should ready to use and provided by manufacturer.
4. Calibration
4.1 Reagents stability Once opened, reagents stability as per company literature should be declared for each parameter and opened reagent should be usable for minimum of 60days.
4.2 Calibration Protocol & Calibration frequency
1. Calibration Protocol & Calibration frequency as per company literature should be declared for each parameter.
2. Calibrators should be supplied free of cost.
3. Equipment Calibration to be done whenever required during the warranty period at free of cost. 5. Additional Accessories, Spare parts, Consumables
5.1 Consumables

1. Standard consumables consisting of the followings shall be provided.
1.a. Wash buffer,
1.b. Substrate,
1.c. Reaction cuvette / well / rotor / vessel
1.d. Requisite plastic consumables such a cuvettes, disposable tips.

2. Consumables for screening the Convalescent Plasma donors for Transfusion Transmitted Infections (TTIs) consisting of the followings shall be provided.
2.a. HBsAg antibody and its control and calibrators
2.b. HCV antibody and its control and calibrators
2.c. HIV antibody and its control and calibrators

3. Consumables for IgG anti body against SARS Cov2 with its control and calibraters.
N.B: A standard kit shall be provided free of cost for installation & training purpose. Cost of each consumable mentioned shall have to be quoted in Format-A of Financial bid (separate PDF format other than BoQ) which shall be taken into account for financial evaluation. The prices of the same

will remain valid for 01 year (Tender Inviting Authority reserves the right for any alteration of Terms and Conditions without assigning any reasons thereof.) Non-submission of format A as well as not specifying the cost of all reagents required for performing the tests as described, shall lead to rejection of bid during financial evaluation.

5.2 Computer System, Printer & other related peripherals

1. Should be supplied with an integrated computer with inbuilt software. Any future software upgradation to the latest version (if required) shall be done free of cost.
2. System shall have windows based software capable of up gradation, with a touch screen monitor for programming.
3. Shall have QC package system to monitor results.
4. System shall have bidirectional RS 232 / USB interface compatible with laboratory information system/hospital information system (LIS /HIS) for on line computerization & customization of patient‟s report.
5. Should supply external printer which is fully compatible with the quoted model and recommended by the OEM to take print out of patient results and QC reports without any problem. 6. Should have the capability of inbuilt inventory management system by tracking all the reagents and supplies automatically.

6. Miscellaneous Parameters

1. Should be based on Enhanced Chemiluminescencetechnology
2. Should be Fully Automated random access Immunoassay System with a throughput of more than 80 tests/hour.
3. No plumbing or external water system required.
4. Ready to use reagents packs no mixing or reconstitution required for integrated & compact with reagents & reaction wells in one pack only.
5. Ready to use consumable packs & no mixing or reconstitution required.
6. Calibration stability should be between 25 to 30 days for each parameter to decrease reagent consumption.
7. Should have capacity to load 20 Reagents packs of different parameters at a time.
8. Should have facility for minimum 80 samples positions and separate STAT lane for emergency samples.
9. It should have Clot, bubble, low and high viscosity, thin layer fluid and short sample detection, Save-the-Sample Clot/Bubble Management, Liquid level sensing.
10. Universal sample tray should accommodate multiple sample tube sizes/sample cups with facility of bar code reading
11. Should use disposable sample tips to avoid carry over& cross contamination.
12. Should have the facility to detect clot, short samples, bubble, viscosity and thin layer fluid or fibrin to ensure accuracy.
13. Instrument should provide integrated process control that monitors & verifies during sample & assay processing and report can be seen on the screen & be able to print for every test done.
14. Sample volume per tests should be between 10ul to 80ul only & dead volume should not be more than 50ul in sample cup.
15. Should have the inbuilt refrigeration system with controlled temperature and humidity for reagent storage to maintain the stability of reagents on board.
16. Should have the capability of inbuilt inventory management system by tracking all the reagents and supplies automatically.

17. Should have QC package system to monitor results.
18. Shall have the patient data storage facility for a minimum of 5000 reports.
19. The system should have facility to check all hardware before producing patient results & same should be available on screen as well as on print.
20. The firm should have installation of the same instrument in blood bank of repute Northern part of India and must be present in the blood bank for more than three years.
21. The instrument quoted must have USFDA and European CE certification.
22. Instrument can be connected to LIS /HIS.
23. UPS required to run the instrument should be provided free of cost by the firm. Maintenance of UPS should be instrument provider's responsibility and should have the same warranty and guarantee terms as for the instrument.

17. BIPOLAR COAGULATOR CAUTERY

Product Quality Standard:

- Should be CE/USFDA/BIS approved model.
- Manufacturer should be ISO 13485 certified. Technical Specification: ¬ Output power : 5 W or more. ¬ Should have output power indicator ¬Should have 7-segment LED or LCD display. ¬ O/p level : 0 to 9 positions ¬ Input supply : ~110-230 V, 50 Hz

Standard Accessories

1. Silicone bipolar cord
2. Standard tenzel bipolar forceps 3. Foot switch

18. ELECTROLYTE ANALYSER

Sample loading:	Syringe
Type of sample:	Whole blood, Serum , Plasma, Diluted urine
Lithium:	Yes
PH:	Yes
Thoughput (Number of Sample) per hour:	60
Reagent pack Type:	Compact reagent pack
Auto sampler connectivity:	Yes
Probe wiper system/ attachment:	Yes
OEM liquid controls:	Tri-level
Calibration:	Both Automatic and On demand/manual
Patient sample data entry:	Manual
Type of patient data entry:	Numerical
Type of display:	LCD
Printer:	In built
Online UPS provided:	Yes
UPS Back up Time:	30 mins
Type of battery:	Ni-MH
Availability of toll free facility for technical support maintened by OEM or authorised agencies:	Yes

19. BINOCULAR MICROSCOPE

Microscope Type: laboratory binocular non-hinged type with built in light and with light intensity regulator
Conformity to Indian Standard: Research IS:5204 latest
ISI MARKED :NA
Eye piece Type : Compensating
Binocular Eye pieces Confirming to the requirements of IS: 8275/1976 (latest) :Yes
Eye Piece with magnification : Set of Two For Binocular 10x
Objective Type : achromatic
Objective Magnification :100X,40X,10X,4X
Numerical Apertures of Objective: 1.25
Type of lamp for Illumination :LED
Plano Concave mirror attachment :Yes
Stage : Rectangular
Size of Stage : 76 X 40 MM/Standards Size
Coarse and Fine Movement of stage:Yes
Co-axial focusing :Yes
Micrometer Arrangement :No
ACCESSORIES
Extra eyepieces (inclusive in the scope of supply) : NA
Carrying case (inclusive in the scope of supply):Yes
WARRANTY
Warranty 3 years
CERTIFICATION
Availability of Test Report from Central Govt/NABL/ILAC accredited lab to prove conformity to specification No
Test Report No and Date N.A.
Name and Address of the LabN.A.
Manufacturer Should be ISO13485 certified
Model should be CE/USFDA /ISI approved

20. LAB AUTOCLAVE

Type of Sterilizer: VERTICAL CYLINDRICAL Steam Sterilizer Pressure type Sterilizer
Chamber size: 300 mm (Diameter) x 350 mm (Length), with Silicon door gasket (expansion type).
Electric load of the unit shall be:2-3 KW.
Steam supply to Sterilizer : Steam Generation by electrically heated using immersion heaters wired for operation on 1 phase wire230 Hz AC supply [with immersion heaters having mineral filled sheathed heating elements conforming to IS: 4159/2002 duly BIS marked and complying with safety requirements as per IS : 302-2-201(1992)]
it should work with 1 phase 220/230 V 50 Hz AC supply
Material: Sterilizer parts; Chamber, Jacket, Door, Door Ring and shall be made of SS 316/SS316L
Type of control : Manual
Provision of Lock on Steriliser Chamber door: Manual Lock
Display facility for Sterilisation Cycle parameters : Manual pressure Gauge Steam & vacuum release valve .
Warranty Period: 3 year
Pressure, Steel & Spore Test Certificate from a Govt/NABL/ILAC approved testing laboratory shall be furnished by Seller to Buyer for the offered
Product should be CE/BIS approved
Conformity to standard for electrical safety latest amendment :IEC - 60101
Manufacturer should be ISO13485 certified

21. INCUBATOR

Conformity to Standards: CE/BIS
Conformity to standard for for electrical safety latest amendment :IEC - 61010
Performance Parameters
Purpose Bacteriological incubator are used for the incubation of biological products under controlled conditions
Type of Incubator :Bacteriological Incubator
Capacity in liters 20
Material of Inner Chambers: SS 304
Material of Outer Chamber: CRCA (powder coated point) Steel
Ambient Temperature in ^{o}C: 5^{o}C above ambient to 60 ^{o}C (Bacteriological Incubator)
Temperature Accuracy in ^{o}C: ±0.5^{o}C
Temperature Uniformity in ^{o}C : ±2^{o}C
Insulation : Glass wool
Controller : Microprocessor based PID control
Digital Display of temperature in ^{o}C : Yes
Type of Display : LED
Type of Temperature sensor : PT100
Power supply : 220 V , 50 Hz Single Phase
Door: Insulated door and fitted with heavy hinges and should have Toughened glass window Air circulation fan
Type of Shelves : Removable
Material of Shelves : SS wire mesh
Number of shelves :2
Size of incubator (L x W x H) in mm x mm x mm:NA
Weight in kgs: NA
Auto power break off: No
Over temperature protection: Yes
Safety alarm system : Yes
Instruction manual to be provided : Yes
Warranty in Years : 3
Standards
Manufacturer should have ISO13485 certification: Yes
Copies of all certifications and reports to be provided to buyer on demand at time of supplies: Yes
Product should be CE/BIS approved

22. CENTRIFUGE-8 TUBES

Performance Parameters
Purpose: Separating Serum from blood or for urine sedimentation
Centrifuge Design: Bench Top
Weight including Default Rotor in kg: NA
Auto cut off: Yes
Timer provided: Yes
Maximum RPM 3000-3500
Number of steps for RPM variation :In steps /Continuous
Incremental Steps of Variable RPM :300-400
Type of Motor: Brushless (without carbons)
Maximum Noise level when working at 1 meter distance in db 50

Ambient operating Temperature range in Degree centigrade Celsius and humidity range 0 to 50 degree centigrade and Relative humidity 15 to 90%
Rotor imbalance diagnostics and automatic stop if required: Yes
Facility to ensure that In case Machine is running and lid is opened with manual lock by user , machine shall stop: Yes
Maximum Timer Set range 60 minutes
Timer settings Provided :interval of 10 seconds up to 1 minute and over 1 minute up to 60 minutes in interval of 1 minute:NA
Display :LED /LCD
Speed Controller : Microprocessor controlled preprogrammed speed controller
Speed Control: Accuracy in case of set speed (Plus minus RPM)
Rotor configuration: Swing Out Rotor
Rotor Feature with reference to Autoclavability: Autoclavable Rotor @ 121 Degree Celsius,
Maximum Volume of the tube testable: 15 ml centrifuges tubes
Rotor Size: 8X15ml
Power supply :Single phase, 230 V 50 HZ AC Source
Power consumption in watts: 500Max
Length of Power cord in meters 2
The Equipment shall be installed and demonstrated before Acceptance installation and demonstration:Yes
Accessories: Spanner to tight or loose Nut of Rotor on Motor shaft head puller, spare rotor nuts ,fuse-2,
Warranty in Years 3
Material Parameters:
Assembly Material for manufacture of Medical Centrifuge: Consists of Die cast Aluminum, Aluminum sheet, Stainless Steel, CRC Steel, Plastic and Rubber
Lid Material of Medical Centrifuge : mC.R.C Steel Finish with Powder Coating or stove painting / ABS Plastic of injection molding
Body Material of Medical Centrifuge: C.R.C Steel Finish with Powder Coating or stove painting / ABS PLASTIC OF injection molding
Centrifuge Bowl material of Medical Centrifuge: 304 Quality Stainless Steel Molded
Material of Rotor : Aluminium,
Standard:
ISO13485 certification for Manufacturer: Yes
Copies of all certifications and reports to be provided to buyer on demand at time of supplies Yes
Product should be CE/USFDA/BIS approved

23. STADIOMETER

Standards:
Conformity to Stadiometer as per ICDS standards : Yes
Stadiometer designed to Measure Height of Adult and Children aged 24 Month and Above in Vertical Position : Yes
Performance Parameters
Smallest Graduation for Stadiometer (cm) : 0.1 cm
Accuracy for Stadiometer (cm) : (+/-)0.1 cm
Precision for Stadiometer (cm) : (+/-)0.1 cm
Warranty (in Years) : 3
Dimensional And Material Parameters
Unit of Measurement : In Centimeters

Measuring Length in vertical position of Stadiometer (should be able to measure up to 200 cm at least) :200 centimeter
Width of board for stadiometer (cm) : Approx. 5.5 cms
Weight of the device (Kg) :4 kilogram or less
Material of Board : mild steel rust proof
Additional Features
No part Should be Loose or Shaking During Transportation : Yes
Double sided graduation Parallel to Board for Easy Measurement : Yes
Stable connection assuring precise and accurate measurement : Yes
No need of calibration as all parts have prefixed position: Yes
Stadiometer should have Firm flat surface :Yes
Designed for heavy duty use in demanding conditions : Yes
Simple and fast set up, no tool (screw driver etc) required :Yes
Orientation of numerals on the measurement scale: parallel to the board :Yes
Stadiometer should have large foot plate providing extra stable base and smoothly gliding measuring slide/wedge : Yes
Stadiometer shall have Adjustable feet for stability on uneven or soft ground and also spirit level indicator to check flat surface : Yes
Fold-up Mechanism and low-weight, making it compact and easy to transport : Yes
Stadiometer shall be free from sharp edges and corners : Yes
Stadiometer shall have friction feature between board and measuring slide/wedge for preventing the latter from drooping when released: Yes
Durable, Resistance to excessive Humidity, High temperature resistant, water resistant and shock Resistant :Yes
Stadiometer supplied with :
1 Carry bag or carry case made of long lasting fabric, zipper closer
(ii) removable, adjustable shoulder/back strap(s) and
(iii) small side pocket for storage of operating instructions, loose parts and/or stationery material :Yes
Stadiometer supplied with Instructions for use, training, maintenance and trouble shooting in English, Hindi and any other regional language as per requirement, appropriately illustrated with pictograms : Yes
Packed in a carton box which should be of sturdy quality and provides adequate protection of the goods while in transportation :Yes
Reports
Model approval from Director (Legal Metrology) : Yes
Certificate number and date from Director (legal Metrology) Department :IND/--/--/--- DATED:--/--/20--
Type Test certificate including Environmental conditions from Regional Reference and standard laboratory (RRSL) : Yes
RRSL Certificate Number, date and address
Calibration from concerned weight and measurement controller ate to be obtained at the time of supplies : Yes
Model approval certificate, Type test and calibration certificate to be furnished if asked by buyer at the time of supplies: Yes

24. DIGITAL BP APPARATUS

Type Of SPHYGMOMANOMETERS or Blood Pressure recording unit: Digital
Conformity to Indian Standard for SPHYGMOMANOMETERS : NA for digital
Measuring device : Automated
Type : Integrated
ISI MARKED : NA for digital
Measurement Method : Oscillometric
Display for Digital BP instrument: LCD(Liquid Crystal Digital) Display
Range: Pressure measurement (mmHg) : 0 to 300
Range: Pulse measurement for digital with accuracy ± 5%. (per minute) 40 to 200
Accuracy: Pressure measurement (mmHg) : +/- 3
Pressure Detection : Capacitive Pressure sensor
Inflation Automatic Pressure Application by pump
Deflation and rapid Air Release : Automatic Pressure Release Valve
Cuff Range : Medium (22-32)cm
Cuff: disinfect able one piece and bladder cuffs, tested according to ISO 105 EO1/ equivalent standard.
Operating Temperature range : 0 to 55 degree Celsius
Stroage Temperature range : (-10) to 55 degree Celsius
Automatic power off if system is idle for 3 minutes :Yes
Weight (in gram) :230
Power
Power Source: AA size chargeable battery set
Type of AA Size chargeable Battery (AA Size) :Alkaline/ Li-ion
WARRANTY, CERTIFICATIONS, TEST REPORTS
Availability of Type Test Report covering complete test parameters as per IS3390 latest for Mercurial and IS7652 latest for Aneroid type, from any ILAC/NABL accredited/Central GovLABFor digital type including Environmental test from any ILAC/NABL accredited/Central Gov LAB : Yes
CE Marking Certificate for B.P. Apparatus Model. Yes
For Digital Sphygmomanometer ,Availability of Type test reports consisting of verification of all the features & functional parameters & environmental tests sequences as under:
a) Dry heat test (For 16 hours at a temp of 55degree C in accordance with IS: 9000/part-3/section-3/1977)latest : Yes
For Digital Sphygmomanometer Cold test(For 4 hrs at a temp of (-10) degree C in accordance with IS: 9000/part-2/section-3/1977latest c) Damp Heat Cyclic Test (For 2 cycles of 24 hrs at a temp 55 degree C & 95% RH in accordance with IS: 9000/part-5/section-1/1981)latest Note:- The BP Instrument shall be checked for all the parameters before conditioning After completion of the above environmental tests sequence, with a recovery period of 1 to 2 hrs, BP Instrument shall be functional.

25. SPHYGMOMANOMETER

Type Of Sphygmomanometer: Aneroid
Design: Corrosion resistant shock proof body, chrome plated metal/ stainless steel pressure control valve
Conformity to Indian Standard for SPHYGMOMANOMETERS :IS 7652 latest for Aneroid
Measuring device :Mechanical
Type : Portable
Measurement Method: auscultatory
Display for BP instrument:Gauge’s background in white color. Graduated scale for ever/ 2mmhg, every 10 units and every 20 units.
Range: Pressure measurement (mmHg) : 0 to 300

Accuracy:Pressure measurement (mmHg) +/- 3
Pressure Detection: NA
Deflation and rapid Air Release: Manualsetting of deflation possible up-to 2/3mm Hg/sec. From 260mmHg To 15mm Hg in a maximum deflation time of 10 seconds
Cuff Range: (22-32)cm
Cuff Type: Nylon straps cuff with pouch, latex bulb with completely chromium plated valve with regulation of vent-hole air by screw valve.
Sterilization / Disinfection: The cuff should be disinfect able one piece and bladder cuffs, tested according to ISO 105 EO1/ equivalent standard.
Tube : Single rubber tubes used should have an internal diameter of 3 ± 0.5mm and the external diameter should not be less than 8mm
Dimensions of the Equipment (mmXmm): NA
Dimensions of the Dial screen (mmXmm) : The dial manometer with diameter of 50 mm-60mm
Operating Temperature range 0 to 55 degree Celsius
Stroage Temperature range (-10) to 55 degree Celsius
Weight (in gram) 150
WARRANTY, CERTIFICATIONS, TEST REPORTS
Availability of Type Test Report covering complete test parameters as per IS7652 latest for Aneroid type, from any ILAC/NABL accredited/Central GovLABFor digital type including Environmental test from any ILAC/NABL accredited/Central Gov LAB: Yes
CE/IS Marking Certificate for B.P. Apparatus Model. Yes

26. HUB CUTTER

Product Quality Standard:

- Should be USFDA or CE or ISI approved product
- Manufacturers should have ISO certification for quality standards

Technical Specification:

- Should be light weight, portable & compact
- Housing should be moulded type, shock proof and made of ABS plastic/stainless steel of 304 grade
- Should be provided with removable discharge tray for easy disposal of syringe hubs
- Should have provision to burn the needle and cut the syringe tip
- Should have high carbon steel cutter to cut the syringe tips
- Should able to cut and destroy the needle up to 18G.
- Handle type operation.

ANNEXURE – I

CHECK LIST

(please arrange the documents serially in the following order& do the page numbering of the entire bid document and mention the page no. in the column "page No" against the particulars in the check list as mentioned below for ease of scrutiny)

COVER – A (TECHNICAL BID)

Sl. No.	Documents submitted	YES / NO	Page No.
1	Tender Paper Cost		
2	Earnest Money Deposit		
3	Details of Manufacturing License / import license		
4	BIS/CE/US FDA Certificate		
5	MSME Certificate (If any)		
6	Copy of Valid relevant ISO Certificate		
7	Copy of valid GST registration certificate.		
8	Copy of valid PAN		
9	Annual Turnover Statement from Chartered Accountants **(Annexure-II)**		
10	Audited financial statements of last 3 consecutive years. [i.e – 2017-18, 2018-19, 2019-20]		
11	Performance Statement during last 3 years [i.e –2017-18, 2018-19, 2019-20] **(Annexure-III)**		
12	Proof of supply of similar Medical Equipments to Govt./PSU Hospitals in India through open tender duly supported by order copy with end-user certificate of successful completion. [i.e – 2017-18, 2018-19, 2019-20]		
13	The declaration form in **(Annexure – IV)** duly signed by the tenderer before Notary Public / Executive Magistrate.		
14	Manufacturer's authorisation **(Annexure - V).**		
15	Details name, address, telephone no., Fax, e-mail of the manufacturer / authorized distributor / franchise / contract person / office in Odisha **(Annexure - VI).**		
16	Price bid as per **(Annexure - VIII)**		
17	All pages are serially in order and securely tied with seal and signature of the bidder.		

NOTE: ABSENCE OF ANY OF THE ABOVE DOCUMENT OR IN THE PRESCRIBED FORMAT LEADS TO REJECTION OF BID.

ANNEXURE – II

ANNUAL TURN OVER STATEMENT

(In the letterhead of the Chartered Accountant)

The Annual Turnover for the last 3(three) financial years of M/S_____who is a manufacturer/importer/distributor of Medical Equipment are given below and certified that the statement is true and correct.

Sl.	Financial Year	Turnover in Rs.
1	2017-18	
2	2018-19	
3	2019-20	
Average Annual Turnover in Rs.		

*Provisional audited statement shall not be considered.

Date:
Place:

Signature of Auditor/ Chartered Accountant

(Name in Capital)

Seal

Membership No.

UDIN

N.B: This turnover statement should also be **supported by** copies of audited **annual statement** of the last three financial years / **Annual Report** and the turnover figures mentioned above should be **highlighted** there.

ANNEXURE – III

PERFORMANCE STATEMENT

(For the period of last three years)

(Please furnish the data serially starting from 01.04.2017 to 31.03.2020)

(Please attach the order copies of the client serially, the names of which are mentioned below)

Sl. No.	Order Placed by (Address of purchaser) (attach documentary proof)*	Order no.	Order Date	Value in (Rs.)	Tender Reference No.	Page no. in the bid	Have the items supplied satisfactorily (attach documentary proof)**	Page no. in the bid

(Attach separate sheets if the space provided is not sufficient)

Signature and seal of the Bidder

* The documentary proof will be copies of the purchase order (during the last 3 years) indicating P.O. No. and date.

** The documentary proof will be certificate from the consignee/end user indicating P.O. No. and date.

ANNEXURE – IV

DECLARATION FORM

I / We …….having My / our /organisation……office at…….do declare that I / We have carefully read all the terms & conditions of tender of the _____,Odisha for the supply of Medical Equipment. The approved rate will remain valid for a period of one year from the date of approval. I will abide with all the terms & conditions set forth in the tender paper Reference no.

I/We do hereby declare I/We have not been de-recognised / black listed by any State Govt. / Union Territory / Govt. of India / Govt. Organisation / Govt. Health Institutions for supply of Not of Standard Quality (NSQ) items / part-supply / non-supply.

I/We agree that the Tender Inviting Authority can forfeit the Earnest Money Deposit and or Security Deposit and blacklist me/us/organisation for a period of 5 years if, any information furnished by us proved to be false at the time of inspection / verification and not complying with the Tender terms & conditions.

I / We further declare that I / We possess valid manufacturing license / authorised distributor bearing no . ……Valid up to …… I / We …… do hereby declare that I / we will supply the _____as per the terms, conditions & specifications of the tender document. I / we further declare that I / we have a franchise in Odisha.

Signature of the bidder :

Date :

Name & Address of the Firm:

Affidavit before Executive Magistrate / Notary Public.

ANNEXURE – V

MANUFACTURER'S AUTHORISATION FORMAT

To

The CDM&PHO MAYURBHANJ
Deptt.of Health & Family Welfare
Govt. of Odisha.

Ref: Tender No. C.D.M & P.H.O (Mayurbhanj) – 2020 – 2021 – Medical Equipments – 01Dated _____ for _____.

Dear Sir,

We _____who are established and reputed manufacturer of _____{(name and description of items offered) separate sheet may be attached} having factories at _____ (Address of Factory) do hereby authorize M/s _____ (Name and address of Distributor / Agent) to submit a bid and sign the contract with you against the above referred tender.

We also extend our full guarantee for the items quoted by M/s. _____ _____ as per the terms and conditions in your tender under reference above.

Yours faithfully,

Name of the Manufacturer
(Signature with seal)

Note: This letter of authority should be on the letter head of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. It should be included in the bid submitted by the tenderer if the tenderer is not the manufacturer.

ANNEXURE – VI

DETAILS OF THE TENDERER & LOCAL CONTACT PERSON

	Corporate Office	Local Branch Office / Zonal Office, in Odisha.
Name & Full Address		
Telephone Nos., landline		
Mobile		
Fax		
E – Mail		
Date of Inception		
Manufacturing License Nos. & Date		
Name of the contact person and designation		
GST Regd. No.		

Signature of the Tenderer :
with seal

Date :

Official Seal :

ANNEXURE – VII

DRAFT AGREEMENT

THIS AGREEMENT IS MADE AT _____ THIS THE DAY OF _____ **202__**

BETWEEN

Name of the Supplier
with full address

Here in after called the "Supplier(s) _____" as 1st Party

AND

The Govt. of Odisha
Health & F.W. Department
Represented through the
C.D.M & P.H.OMAYURBHANJ / **THE CONSIGNEE**
Hereinafter called the "PURCHASER" _____ as 2nd Party.

Relying on the documents and representation of facts connected to the issue of aforesaid parties to undertake the responsibilities of sale and purchase of following equipment(s) etc. with the terms & conditions hereinafter laid down.

And whereas the 2nd party "Purchaser(s)" is willing to purchase

Name of the Item:

Specifications: As per specifications laid down in the Tender terms & conditions

The Supplier(s) has agreed to sell the Medical Equipment(s) completed in all respects according to the Tender requirements and their / his offer dtd._____ and the Supplier(s) has also agreed to install to make them operative at the destination mentioned in the Tender document with the following descriptions and their cost mentioned against each.

Description of goods:	**Offered Price**	**Total**

The price / cost of the item also include the followings in addition to above.

1. Insurance
2. Freight
3. Transportation
4. Customs duty / Excise duty
5. Charges for documents, instructions manual, tools
6. F.O.R. at the destinations mentioned in the consignee list
7. Any other charges including loading & unloading, packing & forwarding etc. will be paid by the Supplier(s) till the completion of the installation and turnkey job if any.

TERMS AND CONDITIONS:-

PRICE:

Only the price quoted by the Supplier(s) in his / their financial proposal will be the price for payment and no other price escalation will be allowed at any circumstances.

TERMS FOR PAYMENT :-

A. The payment(s) shall be made by purchaser in Indian currencies No advance payments towards cost of Medical Equipment will be made to the tenderer. No payment will be made to the supplier if he has not deposited the unconditional performance security in shape of Bank draft amounting to 10% of the purchase order value.

B. Before release of payment the supplier has to submit the signed agreement.

GOVERNING LANGUAGE :

The contract shall be written in English language. English language version of the contract shall govern its interpretation. All correspondences and other documents pertaining to the contract which are exchanged by the parties shall be written in English.

DELIVERY OF DOCUMENT :

Four (4) copies of the Supplier invoice / bills showing purchase order number, good's description, quantity, unit price, total amount with stock entry certificate by the consignee.

PACKAGING :

The supplier shall provide such packaging of the goods as is required to prevent their damage or deterioration during transit to their final destination. The packaging shall be sufficient to withstand without limitation rough handling during transit and exposure to extreme temperature, salt and precipitation during transit and upon storage. All primary packaging containers which come in contact with the item should strictly protect the quality and integrity of the equipment. Packing case size and weights should be taken into consideration, in case of remoteness of final destination and the absence of heavy handling facilities at all points in transit.

The packaging marking shall show the description of quantity of contents, the name of the consignee and address, the gross weight of the packages, the name of the supplier with a distinctive number of marks sufficient for purposes of identification. Each package shall contain:

i. a packaging note quoting the name of the purchaser
ii. the number and date of order
iii. nomenclature of the goods
iv. Name & address of the consignee
v. Name & address of the supplier.

TERMS OF CONTRACT :

The contract is valid up to……and the C.D.M & P.H.O, MAYURBHANJ will be at liberty to terminate the contract either wholly or in part without assigning any reason. The tenderers will not entitled to any compensation whatsoever in such terminations.

PENALTIES :

If the successful tenderer fails to execute the agreement and / or deposit the required security within the time specified or withdraws his tender after acceptance of his tender owing to any other reasons, he is unable to undertake the contract, his contract will be cancelled and the Earnest Money Deposit deposited by him along with his tender shall stand forfeited and he will also be liable for all damages sustained by the purchaser by reasons of such breach, such as failure to supply / delayed supply including the liability to pay any difference between the prices accepted by him and those ultimately paid for the procurement of the articles concerned. Such damages shall be assessed by the purchaser, whose decision is final & binding in the matter.

If any articles or things supplied by the tenderer have been partially or wholly used or consumed after supply and are subsequently found to be in bad order, unsound, inferior in quality or description or are otherwise faulty or unfit for consumption / use & rusted then the contract price or prices of such articles on full will be recovered from the tenderer, if payment had already been made to him or the tenderer will not be entitled to any payment for that item & no further order will be given to him. For infringement of the stipulations of the contract or for other justifiable reasons, the contract may be terminated by the purchaser and the tenderer shall be liable for all losses sustained by the purchaser in consequence of the termination which may be recovered from the Security Deposit made by the tenderer or other money due or become due to him.

Supply of sub-standard items or non - performance of tender terms & conditions will disqualify a firm to participate in the tender for the next five years.

ARBITRATIONS :

In the event of any dispute out of the contract, such dispute should be subject to the Jurisdiction of the Civil Court, Dist. MAYURBHANJ or High Court, Odisha.

CHANGE OF TERMS AND CONDITIONS :

Any amendment to the terms & conditions and clauses of the agreement if required must be done in writing duly signed by the two parties.

IN WITNESS WHERE OF the parties herein to have set and subscribed their respective hands the day and year first herein above written.

Executed by Purchaser (s) / Consignee — In presence of (Witness)

Executed by Supplier(s) — In presence of (Witness)

ANNEXURE – VIII

Name of the Item (Item mentioned in the Schedule of Requirement) (With Make & Model)	Specification **(Section V)**	Unit Price which includes excise duty / customs duty, packing, insurance, forwarding / transportation (door delivery) with 3 (three) years onsite warranty & **excludes GST** Cost in Rs. (both in words & figures)	CMC (**excluding GST**) for two years after expiry of three years warranty period (please mention on yearly basis)	**Cost of **Turnkey if required** (all accessories for installation & commissioning including **all taxes for turnkey** in Rs. (Door delivery & installation)	***Total Cost** (Unit Price with CMC & Turnkey if any) (Exclusive of GST)	GST (if any) on & above the item price mentioned in (3) (Mention whether GST, the % of tax & it's value in Rs.)
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**6=3+4+5**	**7**
			1st year: 2nd year: 3rd year: Total			
			1st year: 2nd year: 3rd year: Total			
			1st year: 2nd year: 3rd year: Total			
			1st year: 2nd year: 3rd year: Total			

N.B:

1. **The quantity of requirement may increase or decrease as per the requirement.**
2. **Use separate sheet if required.**