Government of Maharashtra
Maharashtra Medical Goods Procurement Authority (MMGPA)

"Request for Proposal (RFP) for Supply, Installation and Commissioning of Equipments for District Hospital"

RFP Reference No.: E- 217/MMGPA/Equipments for District Hospital (2025-26) Date: 19.09.2025

1st Floor, Arogya Bhawan St. George's Hospital Compound,
Near C.S.M.T. Railway Station, Mumbai - 400 001.
Maharashtra
Website: https://mahatenders.gov.in.
Email: maha.mmgpa2023@gmail.com

Disclaimer

The information contained in this Tender Document or subsequently provided to Bidder(s), whether verbally or in documentary or any other form, by or on behalf of the Maharashtra Medical Goods Procurement Authority (MMGPA) or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this Tender Document subject to which such information is provided.

This Tender Document is not an agreement and is neither an offer nor invitation by the MMGPA to the prospective Bidders or any other person. The purpose of this Tender Document is to provide interested parties with information that may be useful to them in making their financial offers (Bids) pursuant to this Tender Document. This Tender Document includes statements, which reflect various assumptions and assessments arrived at by the MMGPA in relation to the project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This Tender Document may not be appropriate for all persons, and it is not possible for the MMGPA, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this Tender Document. The assumptions, assessments, statements and information contained in this Tender Document may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this Tender Document and obtain independent advice from appropriate sources.

Information provided in this Tender Document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The MMGPA accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The MMGPA, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender Document or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Tender Document and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender Document or arising in any way for participation in this Tender Document.

The MMGPA also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this Tender Document.

The MMGPA may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Tender Document.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the MMGPA or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the MMGPA shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the bidding process.

Glossary

Abbreviations and Acronyms	Description
BG	Bank Guarantee
BOM/BOQ	Bill Of Material/Quantity
CA	CHARTERED ACCOUNTANT
CAMC	Comprehensive Annual Maintenance Contract
CBS	Cost Based Selection
CMC	Comprehensive Maintenance Contract
CRC	Consignee Receipt certificate
DPIIT	Department for Promotion of Industry and Internal Trade
EMD	Earnest Money Deposit
EM-II	Entrepreneurs Memorandum
FEMA	Foreign Exchange Management Act
GST	Goods and Services Tax
IA	Implementation Agency
IP	Intellectual Property
IQ	Installation Qualification,
ISO	International Organization of Standardization
KPI	Key Performing Indicators
LLP	Limited Liability Partnership
MMGPA	Maharashtra Medical Goods Procurement Authority
MSME	Ministry of Micro, Small & Medium Enterprises
NEFT	National Electronic Funds Transfer
O&M	Operation and Maintenance
OEM	Original Equipment Manufacturer
OP	Operational Qualification
PAN	Permanent Account Number
PO	Purchase Order
PQ	Performance Qualification
RFP	Request For Proposal
RTGS	Real Time Gross Settlement
SSI	Small-scale industries
TCV	Total Contract Value

MAHARASHTRA MEDICAL GOODS PROCUREMENT AUTHORITY

Bid Notice

Tender reference No: E-217/MMGPA/Equipments for District Hospital (2025-26)

Maharashtra Medical Goods Procurement Authority (hereinafter referred to as "Authority"), Mumbai invites **ONLINE BID** for the year **2025-26** in **two envelope system** from the Manufacturers/Importers/Authorized Distributor for the purchase of following items.

Schedule of requirements:

Sr. No.	Equipment Name/Item Name	No.of units	Tender fee (Rs.)	EMD (Rs.)	Consignee and Delivery Address
1	Thermometer	82	**50000+9000(GST @ 18%)**	**6400000**	**District Hospital Thane**
2	Examination Light	24			
3	Height Measurment Scale Wall Mounted	43			
4	Stethoscope	41			
5	Weighing Machine Adult	41			
6	Weighing Machine Pediatric	41			
7	LED Torch	73			
8	Sphygmonometer	70			
9	Otoscope	20			
10	Tuning fork	20			
11	Hammer	20			
12	Tounge Depressor	20			
13	Examination Table with IV Stand Foot Step	45			
14	Revolving Stool	760			
15	LED X-Ray Viewing Box	43			
16	Fetal Doppler	8			
17	Fetal Monitor	13			
18	Fetoscope	8			
19	Infantometer	18			
20	Stadiometer	10			
21	100 M.A X-Ray Machine (Mobile)	1			
22	ECG Machine	2			
23	Colour Doppler Ultrasound Machine with 4 Probes: Abdomen, Pediatric	1			
24	Ultra-Sonogram (obs & gyne)	1			
25	Portable Ultrasound	1			

26	EMG Machine	1			
27	ECHO Machine	1			
28	Lead Partition	5			
29	OT Table	1			
30	OT Light	1			
31	Laryngosocpes with Blades	54			
32	Crash Cart Trolley	66			
33	Medicine Trolley	48			
34	Surgical Scrub	1			
35	Anesthesia Workstation	6			
36	Suction Machine (Electrical)	1			
37	Autorefractor Keratometry	1			
38	Digital Lensometer	1			
39	Non Contact Tonometer	1			
40	Slitlamp	1			
41	Digital Phoraptor	1			
42	Operating Microscope	1			
43	Operating Microscope Basic	1			
44	Pheco Machine	1			
45	Yag Laser	1			
46	IOL Master	1			
47	Crossmatch workstatation	1			
48	Centrifuge	4			
49	Tube Sealer	1			
50	Blood Collection Monitor	1			
51	Doner Coach	1			
52	Blood bank Refrigerator	1			
53	Plasma Freezer -80 Degree	1			
54	Plasma Extractor	1			
55	VDRL Shakar	1			
56	Blood Bank Centrifuge 12 Bucket	1			
57	Composcale	1			
58	Hand Stripper	1			
59	Platelet Agitator with Incubator	1			
60	Portable donar chair	1			
61	Calorimeter	1			
62	Elisa reader and washer	2			
63	Semi Auto analyzer	1			
64	Electrolyte Analyzer	1			
65	Reagent Refrigrator	1			
66	Fully Automatic Biochemistry Analyser High End	1			

67	Tube Lebling Analyzer	1			
68	Advance 5 part cell counter with autoloader	1			
69	Cell Counter	1			
70	ESR Analyzer	1			
71	Binocular Microscope	2			
72	Coagulation Analyzer	1			
73	HBA1C Analyzer fully automatic	1			
74	Biosafety Cabinate	1			
75	Microtom	1			
76	Tissue processor	1			
77	Embeding system	1			
78	Slide stainers	1			
79	Cytocentrifuge	1			
80	Grossing station	1			
81	RTPCR analyzer	1			
82	Nucleic acid extraction system	1			
83	Gel documentation system	1			
84	Laminar flow hood	1			
85	Deep freezer -20	1			
86	Deep freezer -80	1			
87	Chemiluminescence immunology analyzer clia	1			
88	Incubators	2			
89	Water Bath for Serology	1			
90	Hot Air Oven	1			
91	Rotor/Shaker	1			
92	Time stop watch	1			
93	Alarm Clock	1			
94	HB Meter	1			
95	PH Meter	1			
96	Dental Chair with Accessoriess	8			
97	Dental Xray Machine with RVG	3			
98	BP Apparatus	17			
99	Defibrillator	6			
100	Video Bronchoscope	1			
101	Audiometer	1			
102	Tympanometer	1			
103	Berra Machine	1			
104	ENT Head light	1			
105	OAE Screeing Machine	4			
106	Moterized Labor Table	9			
107	Infant Weighing Scale	15			

108	Neonate Pulse Oxymeter Table Top	14			
109	Vacuum Extractor	9			
110	Beds with foam Mattress	619			
111	Bed side Locker Delux	691			
112	SpO2 Monitor	52			
113	Nebulizer Ultrasonic	70			
114	IV Stand	653			
115	Over Bed Table	706			
116	Motorized ICU Beds	47			
117	Syringe Infusion pump	40			
118	Multipara Monitor with Stands	29			
119	Strecher on Trolley	24			
120	Pediatric ICU Beds	13			
121	Pulse Oximeter with Pediatric Probe	5			
122	Pediatric Ventilator	3			
123	ABG Machine	1			
124	Portable LED Standing Lights	1			
125	Foot Operated Suction Machine	20			
126	Bilirubinometer	7			
127	Bubble Cpap	13			
128	High Flow Nasal Machine	3			
129	Open Care Radiant Warmer	44			
130	Phototherapy Single Surface LED	15			
131	Transport Incubator	6			
132	Oxygen Hood	35			
133	Pulse Oximeter Table Top	5			
134	Cardiac Markar	1			
135	Glucometer	20			
136	Dressing Drum small	45			
137	Dressing Drum Medium	45			
138	Dressing Drum Large	45			
139	Instrument try Small	45			
140	Instrument try Medium	45			
141	Instrument try Large	45			
142	NO2 Cylinder	30			
143	CO2 Cylinder	30			
144	Anesthesia Workstation High End with accessories	5			
145	C Arm Machines flat panel	3			
146	Neumatic Torniquet	1			
147	Power Bone Drill Machine	1			

148	Cautery Machines High End with accessories	5			
149	Plasma Sterilizer with accessories	5			
150	Harmonic Generator with accessories	5			
151	4K Laparoscope with hand instruments and accessories	5			
152	Cautery Pad with cautery machine with accessories	5			
153	Debrither with Microdrill with accessories	5			
154	Smoke Evacuator with accessories	5			
155	LSCS Set of 58 Instruments	9			
156	Laparatomy set of 83 Instrument	12			
157	MTP Set of 15 Instrument	9			
158	Trachestomy Set of 32 Instruments	12			
159	Eye surgery Set of 43 Instruments	6			
160	Abdominal Tubectomy set of 63 Instrument	9			
161	Abdominal Hysterectomy Set	9			
162	Vaginal Hysterectomy Set	9			
163	STSG Set	12			
164	Delivery kit set of 20 instruments	9			
165	VASECTOMY SET of 2 Instrument	12			
166	Post Martum Kit	6			
167	Chalazion set of 25 Instruments	6			
168	Ortho Instrument Set	6			
169	ENT Set 32 instruments	4			
170	Automated System to Treat Liquid medical Waste	5			
171	Needle Cum Syringe Destroyer	150			
172	Three Segment Waste Segreegation Trolley	50			
173	Sharp Container	1000			
174	Three Bucket System for Cleaning	50			
175	Waste Transportation Trolley	20			
176	Autoclave 4 Drum	6			
177	Three seater Chair	100			
178	Cupboard	50			

179	Medicine Rack	50			
180	Instrument Cabinate	50			
181	Bedside Screens	100			
182	Oxygen Cylinder Trolley	10			
183	Video Laryngoscope	4			
184	Cough Assisst Machine	3			
185	Blood Warmer	10			
186	PFT Machine	2			
187	Flow Meter with Spanner	100			
188	Patient Warmer	10			
189	MTP High Suction Machine	10			
190	Emergency Hydraulic Trolley	18			
191	Biomedical Waste Bucket	912			
192	Lead Apron	20			
193	Digital X Ray Cassette 8x10	5			
194	Digital X Ray Cassette 10x12	5			
195	Digital X Ray Cassette 14x17	5			
196	Digital X Ray Cassette 11x14	5			
197	X Ray Films 8x10	25			
198	X Ray Films 10x12	25			
199	X Ray Films 14x17	25			
200	X Ray Films 11x14	25			
201	Ambu Bag Adult kit	32			
202	Ambu Bag Pediatrict kit	40			
203	Rapid test kit	1			
204	Micro Pipettes	1			
205	Ambu bag neonatal	42			

Delivery terms: Delivery at the assigned consignee address as per bid conditions.

Interested eligible bidders may obtain further information of technical specifications, required quantities and other terms and conditions applicable for procurement of above items from the tendering website **https://mahatenders.gov.in**.

Bidders will have to compulsorily quote for all Equipment and quantity listed in schedule of requirements and the evaluation will be conducted on combined price quoted for all equipment.

BID SCHEDULE

All bid related activities (Process) like Downloading of bid document, submission of bid and submission of EMD and other documents will be governed as per the time schedule given under Key Dates below:

Sr. No.	Activity	Period
1.	Period of sale of Tender document/ Download	**From 19.09.2025 at 06.00PM**
2.	Date for Submission of Queries	**Before Pre-bid meeting**
3.	Date of pre-bid meeting	**26.09.2025 at 02.00 PM**
4.	Dates for uploading tender document	**From 19.09.2025 at 06.00pm to 13.10.2025 up to 02.00 pm**
5.	Last date and time for submission of tender:	**13.10.2025 at 2.00 pm**
6.	Date and time of openingof Envelope No.1	**14.10.2025 pm**

Address for communication	**1st Floor, Arogya Bhawan, St. Georges Hospital Compound, Near CSMT Railway Station, Mumbai- 400 001. Telephone No.: 022-22717527**

A complete set of tender documents may be purchased by interested eligible bidder by online payment of a non-refundable fee ("Bid/Tender Fee"). Bidder has to pay **online payment of bid fee by RTGS/NEFT to the A/c of** "**Maharashtra Medical Goods Procurement Authority. Mumbai**" as per the table given and within time as per schedule.

As per Govt. Resolution by Industries, Energy & Labour Department, Maharashtra State, dated 1.12.2016 - Entities who are registered under Micro, Small and Medium Enterprises Development Act, 2006 are exempted from paying Tender Form Fees and Earnest Money Deposits.

The bidders shall be rejected summarily upon failure to follow procedure prescribed in the bid document. The conditional bid shall be rejected.

Chief Executive Officer, Maharashtra Medical Goods Procurement Authority, Mumbai reserves all the rights regarding this bid document and procedure.

Sd/-
CHIEF EXECUTIVE OFFICER,
MAHARASHTRA MEDICAL GOODS PROCUREMENT AUTHORITY
MUMBAI

Contents

Fact Sheet

Clause Reference	Topic
Commercial Bid Evaluation	***The method of selection is LCBS (Least Cost Based Selection-L1)***
Downloading RFP Document	RFP can be downloaded from https://mahatenders.gov.in.
Earnest MoneyDeposit (EMD)	Bidders are required to pay the EMD/Bid Security of ₹ 6400000 /- throughonline mode on **https://mahatenders.gov.in** or in the form of Bank Guarantee issued by a Scheduled / Nationalized Bank in the form provided in **Annexure XVII**
Scope of Work	Procurement is for services linked to Supply, Installation and commissioning of or use of various public health institution in Maharashtra.
Pre-bid meeting and clarifications	A pre-Bid meeting will be held on 26.09.2025 at 2.00pm Clarifications may be requested on or before the schedule date and time for submission of pre-bid queries as per the bidding schedule.
Language	Proposals should be submitted in the English language only.
Taxes	For all goods/services supplied, the Bidder shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed/incurred until delivery of the contracted products or services.
Bid Validity	180 days from the date of Technical Bids opening
Submission of Responses	Bidders must upload and submit all the documents on the Mahatender portal https://mahatenders.gov.in *Each of the above documents must be uploaded in the format specified for this purpose*
Submission of Proposals	This is online process; interested bidders are required to submit the proposal online only by the date and time specified in the RFP.
Last Date of Submission	Proposals submitted after 13.10.2025 **02:00PM** will not be accepted bythe e-Tender portal.
Tender Fee	All bidders shall pay tender fee of **₹50000+9000(GST @ 18%)** In case of revision of the above-mentioned tender fee, bidders shall pay revised tender fee.

TERMS AND CONDITIONS:

1. Introduction

Maharashtra Medical Goods Procurement Authority (MMGPA), Mumbai has been formed as per the Maharashtra Medical Goods Procurement Authority Act 2023 (Mah. Act No. XIII of 2023). The procurement authority has been formed with an objective to simplify and expedite the procurement process of medical Goods and Equipment's for health institution, under the state government and certain other health institution in the state as mentioned in the above act.

1.1. **Chief Executive Officer, Maharashtra Medical Goods Procurement Authority, Mumbai**, hereinafter referred to as the **"Authority "**invites online bid in two Envelope systems for supply of Equipment specified in **Annexure-X** Schedule of Requirements, for use in public health facilities in the State of Maharashtra.

1.2. All bid related activities ("Bid Process") like Bid Document Downloading, Bid submission and submission of Bid Security/Earnest Money Deposit and other documents will be governed by the bid schedule given in bid notice.

1.3. All activities of this bid are carried out online on Website **https://mahatenders.gov.in**. The bid document is uploaded on Government of Maharashtra, (GoM) e-tendering website **https://mahatenders.gov.in** and has to be downloaded as well as filled up and submitted online only. The Bidders are required to submit online bid fees (Non-refundable) as mentioned through **online payment gateway in A/c of "Maharashtra Medical Goods Procurement Authority, Mumbai"**. In no case, the bid fee should be mixed with EMD amount. The bid shall be liable to be rejected summarily upon failure to follow procedure prescribed in the Bid document.

1.4. **The quantities mentioned in the Bid are only approximate estimated quantities. The Chief Executive Officer, Maharashtra Medical Goods Procurement Authority, Mumbai reserves the right to increase or decrease the quantities', maximum up to 50% of the quantities to be purchased without assigning any reason thereof.**

1.5. If any bidder wishes to lodge any complaint against the other bidder regarding submission of false documents, information etc, the bidder has to submit the complaint before price bid opening along with deposit of **Rs.50,000 (Rupees Fifty Thousand only)** online in favor of **"Maharashtra Medical Goods Procurement Authority, Mumbai"** in the form of deposit. This complaint will be submitted to Appeal Committee along with facts. The amount so deposited shall be refunded, if after scrutiny the complaint is found to be true by the Appeal Committee. However, if the complaint is found to be false and malafide the deposit will be forfeited. No interest shall be paid against this deposit. **Any complaint received after price bid opening will not be entertained.**

1.6. e-bidding process related Queries can be sent on email – eproc.support@maharashtra.gov.in /Help: The Toll-Free Telephonic Help Desk Number1800-3070-2232. / Mobile: +91- 7878107985, +91-7878107986 ,+ 91-7878007972 and +9-7878007973 (9:00 am - 10:00 pm) Mon to Sat.

1.7. The Orders/ Circulars issued by Govt. of Maharashtra from time to time will be applicable to this bid.

1.8. The entire bidding process is governed by rules and clauses mentioned in Maharashtra Government Industries Department Stores Purchase Rules GR dated 01.12.2016, General Financial Rules 2017 and CVC Guidelines. Any disputes raised by the bidder, shall be resolved within the framework of these rules and clauses

1.9. **A bidder who has been blacklisted/ debarred for the quoted product(s) in any state / department/ undertaking/ corporation will not be allowed to participate in Bid for the said product(s) and will not be evaluated.**

2. Eligibility criteria:

Eligibility criteria for this bid are mentioned:

Sr. No.	Basic Requirement	Specific Requirement	Documents required
1.	**Registered Legal Entity**	The Bidder shall be any person/Company/ Society/Proprietorship/ Partnership firm/Trust registered under applicable Act in India/ Government-owned enterprise or institution The Bidder shall be – a) A manufacturer having valid manufacturing and equipment license for the items quoted. **OR** **b)** An Importer* having valid import license and equipment license for the items quoted. **OR** **c)** Authorized Distributor fulfilling all tender conditions. **d)** Separate Manufacturer's Authorization will be required for each equipment. **e)** Registered with the GST Authorities. **f)** Should have a valid PAN number. **Importer refers to a legal Entity such as a Company/ Society/ Trust/Partnership* firm *registered under applicable Act in India/ Government-owned enterprise or institution that engages in the process of bringing equipment or goods from outside India into the country's borders for commercial purposes.* *Importer itself shall be responsible for supply and maintenance of the equipment as per the terms of RFP and shall not engage any third party for the same)*	a. Copy of certificate of incorporation/registration along with charter documents like copy of Memorandum and Articles of Association, and other registration documents according to the nature of entity. b. Attested photocopy of valid manufacturing Equipment/ import license with product list duly approved by the Licensing Authority for each and every product quoted as per specification in the bid. The license must have been duly renewed up to date and the items quoted shall be clearly highlighted in the license. If quoted item is manufactured at different places, Manufacturing License & Performance certificate should be enclosed. c. Manufacturer's Authorization as per Annexure XIV to be provided by Importer, Authorized distributor d. Copy of GST Registration certificate issued by GSTN authorities. e. Copy of PAN Card.
2.	**Certifications/ registration**	The Bidder shall have to provide requisite certifications/registration.	a. Certificates of DPIIT (if applicable) b. Original manufacturer's certificate that the product is being used in country of origin. c. Import Export Certificate (IEC Code) d. Affidavit of Importer regarding equipment being imported in India for last three years.
3.	**Litigation**	The Bidder should not be involved in any major litigation such as fraud, FEMA violations and any other civil or criminal proceedings that may have an impact of affecting or compromising the delivery of services as required under this contract.	Affidavit as per Annexure VII.
4.	**EMD/Bid Security**	Bidders are required to pay the EMD/Bid Security of **₹6400000 /-** through online mode on **https://mahatenders.gov.in or in the form of BG as per annexure XV**	• EMD in the form of NEFT/RTGS/BG

Sr. No.	Basic Requirement	Specific Requirement	Documents required
5.	**EMD Exemption**	If a Bidder is a Micro Small and Medium Enterprise ("MSME") / Small Scale Industry ("SSI") then subject to submission of relevant documents as provided in this table, such Bidder may be exempted from submitting EMD in accordance with Appendix-8 of Govt. Resolution by Industries, Energy & Labour Department, Maharashtra State, dated 1.12.2016.	• Requisite Certificate of Micro and Small-scale manufacturing industries registered under Micro, Small and Medium Enterprises development act 2006. • Importer shall produce authorization Certificate from manufacturer as authorized seller as per Annexure XIV • EM-II certificates whenever necessary (mandatory for Medium Enterprises)
6.	**Conflict of Interest**	On the date of submission of the proposal, the Bidder should not be involved in any conflict-of-interest situation.	Undertaking by the authorized signatory as per Annexure I
7.	**Blacklisting or banned**	On the date of submission of the proposal, the Bidder should not be blacklisted or banned by any ministry/department/attached offices/sub-ordinate offices under Government of India and any State government, Autonomous bodies (established by Central/State govt), any Central/State PSUs for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices.	Affidavit as per **Annexure VII**
8.	**Debarment**	On the date of submission of the proposal, the Bidder should not be debarred	Affidavit as per Annexure VII.
9.	**Average Annual Turnover**	Average Annual Turnover (in last three financial years (2022-23, 2023-24, 2024-25) shall be at least **Rs. 32 Cr.**	Certificate issued by a statutory auditor/chartered accountant (as attached Annexure-IV) along with Audited Financial Statements confirming the Average Annual Turnover of the Bidder during the stated Financial Years must be submitted.
10.	**Net Worth**	The net worth of the bidder in the financial year (2024-25) should be **positive**.	Certificate issued by a statutory auditor/chartered accountant (as attached **Annexure-IV).**
11.	**Technical Capability**	Bidder must have successfully undertaken supply, installation & commissioning of quoted Equipment or Medical Equipment & Instruments of an amount of **Rs 32Cr.** during last three financial years	The Bidder shall provide the documentary evidence in support of its credentials such as agreement copy/ work order / Letter of Award. This should be supported by work completion certificate/customer satisfaction certificates with customer details and client certificate. Statutory auditor's certificate or Chartered Accountant's certificate, as the case may be, shall be submitted for demonstrating the past

Sr. No.	Basic Requirement	Specific Requirement	Documents required
			experience. (as per Annexure number 3)
12.	**Production Capacity / Import Quantity**	Production Capacity of the Original Equipment Manufacturer must be minimum 1.5 times of the quoted order quantity in last one financial year.	Certificate of Statutory Auditor/Chartered Accountant For importers and Authorized distributors Certificate of Statutory Auditor/Chartered Accountant of OEM has to be submitted in Annexure III
13.	**Service center**	In case of Bidder being Manufacture**r**, the bidder should have at least 2 service centers in state of Maharashtra. In case of Bidder being Importer/Authorized distributor, the bidder should ensure that OEM have at least 2 service centers in state of Maharashtra.	List of at least 2 service centers in Maharashtra with address and contact details shall be provided by the bidder which shall exist for the period of warranty as mentioned and also, during the additional CAMC/AMC period, if awarded. The Importer/Authorized Distributor shall provide an undertaking from OEM that OEM shall have at least 2 service centers for the period of warranty as mentioned and also, during the additional CAMC/AMC period, if awarded.

2.1 Conflict of Interest

Conflict of Interest among Bidders/ Agents A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

a. they have controlling partner (s) in common; or
b. they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
c. they have the same legal representative/agent for purposes of this bid; or
d. they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
e. Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
f. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There

can be only one bid from the following: 1. The principal manufacturer directly or through one Indian agent on his behalf; and 2. Indian/foreign agent on behalf of only one principal.

g. Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
h. In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

3. Cost of bidding:

The bidder shall bear all costs associated with the preparation and submission of their online bids and the Authority will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4. Corrigendum:

The bidder shall note that any corrigendum issued regarding this bid notice will be published on the https://mahatenders.gov.in.

5. Pre-bid meeting:

The pre-bid meeting will be held at the date, time and venue mentioned in the e-bid Notice.

A prospective bidder requiring any queries/clarification with regard to the bid document shall contact the Authority by letter or email preferably prior to the date of pre bid meeting. Email ID – maha.mmgpa2023@gmail.com

The bidder shall submit the Authorization letter nominating a responsible person of the bidder to attend the meetings like pre bid & negotiation meeting.

The prospective bidder(s) should submit their Queries /Suggestions/ Observations, if any, on or before the schedule date for receipt of queries in writing.
Only Queries/ Suggestions / Observations received in writing within stipulated scheduled time will be discussed and clarified in pre-bid meeting and any modification of the bid documents, which may become necessary as a result of pre-bid meeting, shall be made by Maharashtra Medical Goods Procurement Authority, Mumbai exclusively through the issue of an addendum/ corrigendum and shall form part of the RFP. The RFP uploaded shall be read along with any modification. Authorized representatives of prospective bidder(s) can attend the said meeting and obtain clarification regarding specifications, scope of works & tender conditions. Authorized representatives should have authorization letter to attend the pre-bid meeting, subject to the condition that queries are submitted in time.

Non-attendance at pre-bid meeting shall not be a cause for disqualification of the bidder. The suggestions/ objections/ queries which are not in consonance with the requirement of the bid & received during pre-bid meeting may not be considered, Maharashtra Medical Goods Procurement Authority, Mumbai reserves the right to accept or reject the same.

6. Amendment of bid document:

6.1. At any time prior to the deadline for Sale of bid, the Authority may amend the bid documents by issuing Addendum/Corrigendum.

6.2. The bidder will not be communicated separately regarding the amendment. Any amendment to the bid shall be placed on the e-bidding website (https://mahatenders.gov.in.)

6.3. Any addendum/corrigendum as well as clarification thus issued shall be a part of the bid documents. And it will be assumed that the information contained in the amendment will have been taken into account by the bidder.

6.4. To give prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Authority shall extend, at its discretion, the deadline for submission of bids, in which case, the Authority will notify all bidders by placing it on website of the extended deadline and will be binding on them.

7. Submission of Bids:

The bid should be submitted online through website https://mahatenders.gov.in. in two envelopes i.e. **Technical Bid in envelop no.1** & **Commercial Bid in Envelop no.2** along with EMD & Bid Fee. **All documents should be properly signed, sealed and then uploaded.**

To prepare and submit the bid/offer online all bidders are required to have e-token based DIGITAL SIGNATURE CERTIFICATE. The Digital signature certificate should be obtained from competent authority; However, the e-tender website or helpline numbers may guide you for obtaining the same.

7.1 Technical Bid (Envelope No. 1):

Technical offer must be submitted online at https://mahatenders.gov.in..in as per the instructions on the portal. The bidder must upload the following documents.

FOLLOWING DOCUMENTS ARE MANDATORY & SHOULD BE ENCLOSED IN SEQUENCE & ORDER, in PDF only along with the table of content:

7.1.1. The instruments such as power of attorney, resolution of board etc. authorizing an officer of the bidder for signing the bid document.

7.1.2. Authorization letter nominating a responsible person of the bidder to attend the meetings like pre bid & negotiation meeting.

7.1.3. Attested photocopy of valid manufacturing equipment license with product list duly approved by the Licensing Authority for each and every product quoted as per specification in the bid. The license must have been duly renewed up to date and the items quoted shall be clearly highlighted in the license. However, Loan Licensee/ third party licensee are not allowed.

7.1.4. Proof of Tender Fee/ EMD paid (if exempted appropriate copies for same)/ BG for EMD as per Annexure XVII.

7.1.5. The documents comprising the Bid shall also include:

Annexure I: Letter Comprising the Technical Bid

Annexure II: Compliance Sheet for Pre-qualification Proposal

Annexure III: Proforma for Production And Sale Statement

Annexure IV: Annual Turnover statement for three years

Annexure V: Details of Manufacturing unit

Annexure VI: Contract Form

Annexure VII: Undertaking for rates, specification, blacklisting status on Stamp paper duly notarized

Annexure VIII: Mandate Form

Annexure IX: Power of Attorney for signing of Bid

Annexure X: Technical Specifications

Annexure XI: Compliance sheet for Technical Proposal

Annexure XII: Place of delivery

Annexure XIII: Self Declaration Affidavit (on Rs.100/- Stamp Paper)

Annexure XIV: Manufacturer's Authorization From

Annexure XVIII: Checklist duly signed by authorized representative of bidder.

- Copy of Tender Fee RTGS transaction.
- Copies of Balance Sheet and Profit and Loss Accounts for last three years i.e. (2022-23, 2023-24, 2024-25) certified by the Auditor. If last year's Audit report is not finalized the Tenderer should submit Provisional Audit Report signed by Chartered Accountant.
- PAN and GST Registration certificate.
- Copy of the GST return of last quarter.
- Attested copy of valid registration made by manufacturer for offered product under Micro & Small, Medium Industries Development Act, 2006.
- EM-II certificates whenever necessary
- Electrical safety standards if required in Technical Specifications
- Incorporation / Registration Certificate of bidder
- All documents required as per point no. 2 eligibility criteria.
- All other documents as per the terms of RFP.

7.2 Commercial Bid (Envelope No. 2):

a) All Commercial offers must be submitted online https://mahatenders.gov.in. as per theinstructions given on the portal. No hard copy of commercial bid shall be submitted. In case a bidder submits commercial bid in hard copy, such bid shall be summarily rejected.

b) Rates should be quoted in the Commercial Bid part-1 of **Annexure XIX only**.

c) Part-2 of **Annexure XIX** Should be filled by the Bidder. However, it will be used only for the purpose of comparing the rates offered by the bidder in various other bidders.

d) Price bid in **Annexure XIX** Part-I should not be submitted in technical bid. If the price bid Part-I is submitted in technical bid, the bid will be rejected.

8. Deadline for submission of bid – as per schedule mentioned in bid notice.

9. Opening of Bid:

On the date and time specified in the bid notice following procedure will be adopted for opening of bid.

9.1. Opening of Technical Bid (Envelope No.1):

Technical bid (Envelope No.1) of the bid will be opened by the bid opening authority. Bidder is free to attend himself or depute an authorized officer as his representative.

9.2. Opening of Commercial Bid (Envelope No.2):

The Commercial Bid shall be opened as per e-tendering procedure after the evaluation of the technical bid. The Commercial Bid shall be opened only for those Bidders who are qualified in evaluation of Technical Bid. The date and time of Commercial Bid opening will be communicated electronically through portal.

10. Period of Validity of Bid:

10.1. The bid shall remain valid for a period of 180 days after the date of opening of the technical bid (Envelope No.1)

10.2. Prior to the expiration of the bid validity the Authority may request the bidders to extend the bid validity for the period as required by the Authority.

11. Earnest Money Deposit: (EMD)

11.1. All bids must be accompanied by Earnest Money Deposit (EMD – Online)

11.2. EMD should be in favor of "Maharashtra Medical Goods Procurement Authority, Mumbai".

11.3. EMD will be Exempted as per schedule -8 of G.R.No. SPO- 2014/Pra.Kra.82/Part-III/Industry-4, dated 01.12.2016 issued by Industry, Energy & Labor Department, Mantralaya, Mumbai-1

11.4. Bids that do not include the Earnest Money Deposit (EMD), unless exempted as per the RFP terms, will be promptly rejected.

11.5. Unsuccessful bidder's EMD will be discharged/ returned after award of contract to the Selected bidder.

11.6. The bidder shall not be entitled for any interest on EMD.

11.7. The Selected bidder's EMD will be discharged after signing the Contract and submitting the Performance Security Deposit as stipulated.

11.8. The EMD shall be forfeited or if bidder is exempted from EMD, the bidder may be debarred/ blacklisted under the following conditions.

11.8.1. Bidder fails to accept the purchase order.

11.8.2. If a bidder withdraws its tender at any stage during the bidding process.

11.8.3. In case of a successful bid, if the bidder fails:

i. To sign the Contract in accordance with terms and conditions or.

ii. To furnish Performance Security Deposit &/ or processing fee as per bid clause15

12. Prices:

12.1. The prices quoted and accepted will be binding on bidder and valid for a period of one year from the date of signing of contract and any increase in price during the period of one year will not be entertained.

12.2. Purchases may be made on staggered basis as per the requirement of the Authority within one year from the date of signing of the contract.

12.3. **Rates should be quoted in Indian Rupees only** for each of the required Equipment separately on consignee address delivery basis according to the unit asked for strictly as per the format of price schedule **(Appendix-II).** Bid for the supply of Equipment with conditions like 'AT CURRENT MARKET RATES' shall not be accepted. The Authority shall not be responsible for damages, handling, clearing, transport and insurance charges and will not be paid. The deliveries should be made as stipulated in the place /consignee address in the purchase order placed with successful tenderer. Conditional bids are not accepted and liable for rejection.

12.4. In case of any enhancement in GST/Other taxes due to statutory Act of the Govt. Or any other taxes newly levied by Govt. after the date of submission of bid and during the bid period, the quantum of additional GST/Other taxes so levied will be allowed to be charged extra as separate item without any change in price structure of the equipment and accessories approved under the

bid. For claiming the additional cost on account of the increase in GST/Other taxes, the bidder should produce a letter from the concerned Competent Authorities for having paid additional GST/other taxes on the goods supplied to the Authority and can also claim the same in the invoice.

12.5. **Fall Clause:**

It is a condition of the contract that all through the currency thereof, the price at which bidder will supply the stores should not exceed the lowest price charged by the bidder to any Govt. Organization / Semi Govt. Organization during the currency of the contract and that in the event of the prices going down below the contract prices, the bidder shall promptly furnish such information to the Authority to enable him to amend the contract rates for subsequent supplies.

13. Technical Specifications:

13.1. The bidder shall carefully read and understand the technical specifications, quality requirements, applicable standards, Acts & Rules including the Mandatory requirement for substantiation of their compliance without deviating from bid requirements.

13.2. The bidder shall carefully read & understand the specifications mentioned in **Annexure X.**

14. Evaluation of bids:

14.1. After opening of technical bid, on the scheduled date, time and venue, contents of the tenders received online through e-tendering process along with all prescribed mandatory documents will be examined.

14.2. The Authority shall scrutinize the documents mentioned above for its eligibility, validity, applicability, compliance, and substantiation including post qualification criteria as per bid document.

14.3. The Authority shall also analyze that there is no collusive or fraudulent practice involved in the entire tendering process amongst all the tenders received.

14.4. The technical scrutiny shall be on the basis of submitted substantiation documents and Medical Device Rules 2017 including allied standards of BIS codes.

14.5. All the equipment's supplied should comply and conform to BIS/CE certificate from notified body with a 4 digit number /USFDA certificate. The equipment must be approved by CDSCO and should have ISO-13485 Certificate.

14.6. Any bid that does not meet the bid conditions laid down in the bid document will be declared as not responsive and such bids shall not be considered for further evaluation. However, the bidders can check their bid evaluation status on the website.

14.7. Bids which are in full conformity with bid requirements and conditions shall be declared as responsive bid for opening price bid on the website and price bid of such bidders shall be opened later, on a given date and time.

14.8. Authority can call for original documents for verification and any other supporting documents.

15. Technical Qualification Criteria

i. Bidders who meet the pre-qualifications/eligibility requirements would be considered as qualified to move to the next stage of Technical and Financialevaluations.
ii. The Medical equipment offered should meet all the technical and functional specifications given in the **Annexure-X,** Non-compliance to any ofthe technical and functional specification will attract rejection of the proposal.
iii. Compliance on each parameter with detailed substantiation how the offered product meets the requirement. (Do not write simply Yes or Complied, If written, then bid will be rejected)
iv. Bidders, whose bids are responsive, based on minimum qualification criteria as in Pre- Qualification Criteria would be considered technically qualified and proceed for demonstration as per clause no.27

15.1. Commercial Bid Evaluation

i. The Financial Bids of technically qualified Bidders will be opened on the prescribed date in the presence of Bidder representatives, who wish to attend.
ii. The Bidder, who has submitted the lowest combined Commercial bid for all equipment, shall be **selected as the ("Lowest Bidder") i.e., L1** Bidder and shall be called for further process leading to the award of the contract.
iii. Only fixed price financial bids indicating total prices for all the deliverables and services specified in this bid document will be considered.
iv. The bid price will include all taxes and levies and shall be in Indian Rupees.
v. Any conditional bid would be rejected.
vi. Errors & Rectification: Arithmetical errors will be rectified on the following basis: "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail"

15.2. Final Selection

i. The Bidder submitting the lowest combined Commercial bid for all equipment shall be the L-1 Bidder based on the Least Cost methodology (the "L-1 Bidder"). The Bidder whose Proposal is adjudged as responsive and meets the requirements in its technical evaluation in accordance with this RFP and who quotes the lowest price in its Commercial bid shall ordinarily be declared as the selected Bidder (the "Selected Bidder"). In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder. In the case of two or more Bidders quoting the same value, the Bidder having the higher annual average turnover as per the eligibility criterion would be the first in sequence.

ii. In the event that 2 (two) or more Bidders are qualified in terms hereof as L-1 (the "Tie Bidders"), then such Bidder having the higher annual average turnover as per the eligibility criterion would be the first in sequence. Further, if Tie Bidders are found to be having the same average annual turnover also, then the number of projects undertaken in the last 03 (three) years shall be taken into consideration and the Bidder having the higher number of projects shall be awarded as Lowest Bidder. In case, Tie Bidders are found to be having the same number of projects undertaken also, then such Tie Bidders shall be asked to further submit a best and final offer quote ("Best and Final Offer") which shall be a lower price than their common L-1 quote for being eligible for consideration; and in such event lower price offered with respect to the L-1 quote among them shall be the Selected Bidder.

16. Performance Security Deposit & Contract.

16.1. The Selected Bidder shall furnish the Performance Security Deposit to the Authority within 15 days from the date of communication of Selected Bidder for an amount of (3%) of the

contract/order value and enter into Contract by paying requisite stamp duty in favor of Govt. of Maharashtra. Cost of stamp duty will be as per The Maharashtra Stamp Act. The cost of Stamp paper should be borne by the bidder.

16.2. The Bidder shall provide Performance Security Deposit in the form of Demand Draft in favor of "Maharashtra Medical Goods Procurement Authority, Mumbai" payable at Mumbai from any Nationalized or Scheduled bank or in the form of Bank Guarantee issued by a Scheduled / Nationalized Bank in the form provided in **Annexure XVI.**

16.3. The Performance Security Deposit will be discharged by the Authority and returned to the Supplier upon receipt of demand form supplier, not later than 60 days following the date of completion of the Supplier's performance obligations, including the warranty obligation, under the contract.

16.4. The Performance security deposit shall be forfeited as a compensation for any loss resulting from the failure to perform the obligations under the contract or in the event of termination of the contract or in any event as the Authority thinks fit and proper.

16.5. For items quoted by importer/Authorized Dealer, the bidder will enter into Tri parties' agreement. The agreement will be in between Maharashtra Medical Goods Procurement Authority, Mumbai + Importer/Authorized Distributor + Manufacturing Company on Non-Judicial Stamp Paper of requisite value.

16.6. The micro and small enterprises registered with the National Small Industries Corporation (NSIC) and the Micro, Small and Medium Enterprises Development Institute has been exempted from depositing the security amount for the purchase up to Rs. 25,000/- and if the purchase price is higher than Rs. Twenty-Five (25) thousand then, they shall be required to keep the amount to the extent of 3% of the purchase price or Rs. Ten (10) thousand, whichever is less, as security. However, the goods having price more than Rs. Twenty-five (25) thousand, the first twenty-five thousand should not be taken into calculation.

17. Proprietary data and Patent Rights :

17.1. All documents and other information supplied by the Purchaser or submitted by a Bidder to the Purchaser shall remain or become the property of the Purchaser. Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. The Purchaser will not return any Bid, or any information provided along therewith.

17.2. Patent Rights: The supplier indemnify the purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

18. Award of Contract:

18.1. The Authority will award the Contract to the Selected Bidder whose bid has been determined to be responsive and has been determined to be the Lowest Bidder (L1).

18.2. The Authority will place supply orders on staggered basis if required during the contract period.

18.3. A contract will not be awarded to the Selected Bidder if Performance Security Deposit is not deposited by him to the Authority within stipulated time limit, if any extension for the submission of performance security has not been asked.

18.4. The Selected Bidder who is liable for award of contract should transfer the Performance Security as per Clause 15 of this RFP.

18.5. The Selected Bidder shall sign the Contract within a period of 15 (fifteen) days of issue of award of Contract.

19. Period of Contract:

The contract shall commence from the date of its signing and will be valid for a period of twenty four months from the date of supply or delivery of all equipment under the Contract.

20. Deliverables and Timelines

The Bidder should deliver the medical equipment as per schedule given below:

Sl. No.	Deliverable	Location for Delivery	Timelines
1.	Supply / Delivery of equipment	As per **Annexure XII.**	Within 60 days for goods manufactured in India and 90 days for Imported goods from the issue of the PO (Purchase Order).
2.	Installation of Equipment		Within 7 Days from the delivery of equipment(s). In Exceptional circumstances due to unavoidable circumstances at Consignee level, CEO MMGPA shall review the situation and allow extension in installation period.
3.	Operational Acceptance of the equipment		Within 7 days from the Installation.
4.	Comprehensive warranty period		2 years from the date of successful installation except 100 M.A X-Ray Machine(Mobile), Colour Doppler Ultrasound Machine with 4 Probes: abdomen, pediatric, Ultra-sonogram (obs&gyne), Portable ultrasound, ECHO Machine, Digital X Ray Cassette 14x17 which will have a warranty period of 5 years and for fetal monitor will have a warranty period of 3 years as mentioned in Technical Specifications.
5.	Frequency of visits to consignee addresses concerned during Warranty/CMC		One visits every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs/break down calls.

21. Delivery Period:

Sr. No.	Item	Units	Period
1	Thermometer	82	Within 60 days for goods manufactured in India and 90 days for Imported goods from the issue of the PO (Purchase Order).
2	Examination Light	24	
3	Height Measurment Scale Wall Mounted	43	
4	Stethoscope	41	
5	Weighing Machine Adult	41	
6	Weighing Machine Pediatric	41	
7	LED Torch	73	

8	Sphygmonometer	70	
9	Otoscope	20	
10	Tuning fork	20	
11	Hammer	20	
12	Tounge Depressor	20	
13	Examination Table with IV Stand Foot Step	45	
14	Revolving Stool	760	
15	LED X-Ray Viewing Box	43	
16	Fetal Doppler	8	
17	Fetal Monitor	13	
18	Fetoscope	8	
19	Infantometer	18	
20	Stadiometer	10	
21	100 M.A X-Ray Machine (Mobile)	1	
22	ECG Machine	2	
23	Colour Doppler Ultrasound Machine with 4 Probes: Abdomen, Pediatric	1	
24	Ultra-Sonogram (obs & gyne)	1	
25	Portable Ultrasound	1	
26	EMG Machine	1	
27	ECHO Machine	1	
28	Lead Partition	5	
29	OT Table	1	
30	OT Light	1	
31	Laryngosocpes with Blades	54	
32	Crash Cart Trolley	66	
33	Medicine Trolley	48	
34	Surgical Scrub	1	
35	Anesthesia Workstation	6	

36	Suction Machine (Electrical)	1	
37	Autorefractor Keratometry	1	
38	Digital Lensometer	1	
39	Non Contact Tonometer	1	
40	Slitlamp	1	
41	Digital Phoraptor	1	
42	Operating Microscope	1	
43	Operating Microscope Basic	1	
44	Pheco Machine	1	
45	Yag Laser	1	
46	IOL Master	1	
47	crossmatch workstatation	1	
48	Centrifuge	4	
49	Tube Sealer	1	
50	Blood Collection Monitor	1	
51	Doner Coach	1	
52	Blood bank Refrigerator	1	
53	Plasma Freezer -80 Degree	1	
54	Plasma Extractor	1	
55	VDRL Shakar	1	
56	Blood Bank Centrifuge 12 Bucket	1	
57	Composcale	1	
58	Hand Stripper	1	
59	Platelet Agitator with Incubator	1	
60	Portable donar chair	1	
61	Calorimeter	1	
62	Elisa reader and washer	2	
63	Semi Auto analyzer	1	

64	Electrolyte Analyzer	1	
65	Reagent Refrigrator	1	
66	Fully Automatic Biochemistry Analyser High End	1	
67	Tube Lebling Analyzer	1	
68	Advance 5 part cell counter with autoloader	1	
69	Cell Counter	1	
70	ESR Analyzer	1	
71	Binocular Microscope	2	
72	Coagulation Analyzer	1	
73	HBA1C Analyzer fully automatic	1	
74	Biosafety Cabinate	1	
75	Microtom	1	
76	Tissue processor	1	
77	Embeding system	1	
78	Slide stainers	1	
79	Cytocentrifuge	1	
80	Grossing station	1	
81	RTPCR analyzer	1	
82	Nucleic acid extraction system	1	
83	Gel documentation system	1	
84	Laminar flow hood	1	
85	Deep freezer -20	1	
86	Deep freezer -80	1	
87	Chemiluminescence immunology analyzer clia	1	
88	Incubators	2	
89	Water Bath for Serology	1	
90	Hot Air Oven	1	
91	Rotor/Shaker	1	

92	Time stop watch	1	
93	Alarm Clock	1	
94	HB Meter	1	
95	PH Meter	1	
96	Dental Chair with Accessoriess	8	
97	Dental Xray Machine with RVG	3	
98	BP Apparatus	17	
99	Defibrillator	6	
100	Video Bronchoscope	1	
101	Audiometer	1	
102	Tympanometer	1	
103	Berra Machine	1	
104	ENT Head light	1	
105	OAE Screeing Machine	4	
106	Moterized Labor Table	9	
107	Infant Weighing Scale	15	
108	Neonate Pulse Oxymeter Table Top	14	
109	Vacuum Extractor	9	
110	Beds with foam Mattress	619	
111	Bed side Locker Delux	691	
112	SpO2 Monitor	52	
113	Nebulizer Ultrasonic	70	
114	IV Stand	653	
115	Over Bed Table	706	
116	Motorized ICU Beds	47	
117	Syringe Infusion pump	40	
118	Multipara Monitor with Stands	29	
119	Strecher on Trolley	24	

120	Pediatric ICU Beds	13	
121	Pulse Oximeter with Pediatric Probe	5	
122	Pediatric Ventilator	3	
123	ABG Machine	1	
124	Portable LED Standing Lights	1	
125	Foot Operated Suction Machine	20	
126	Bilirubinometer	7	
127	Bubble Cpap	13	
128	High Flow Nasal Machine	3	
129	Open Care Radiant Warmer	44	
130	Phototherapy Single Surface LED	15	
131	Transport Incubator	6	
132	Oxygen Hood	35	
133	Pulse Oximeter Table Top	5	
134	Cardiac Markar	1	
135	Glucometer	20	
136	Dressing Drum small	45	
137	Dressing Drum Medium	45	
138	Dressing Drum Large	45	
139	Instrument try Small	45	
140	Instrument try Medium	45	
141	Instrument try Large	45	
142	NO2 Cylinder	30	
143	CO2 Cylinder	30	
144	Anesthesia Workstation High End with accessories	5	
145	C Arm Machines flat panel	3	
146	Neumatic Torniquet	1	
147	Power Bone Drill Machine	1	

148	Cautery Machines High End with accessories	5	
149	Plasma Sterilizer with accessories	5	
150	Harmonic Generator with accessories	5	
151	4K Laparoscope with hand instruments and accessories	5	
152	Cautery Pad with cautery machine with accessories	5	
153	Debrither with Microdrill with accessories	5	
154	Smoke Evacuator with accessories	5	
155	LSCS Set of 58 Instruments	9	
156	Laparatomy set of 83 Instrument	12	
157	MTP Set of 15 Instrument	9	
158	Trachestomy Set of 20 Instruments	12	
159	Eye surgery Set of 43 Instruments	6	
160	Abdominal Tubectomy set of 63 Instrument	9	
161	Abdominal Hysterectomy Set	9	
162	Vaginal Hysterectomy Set	9	
163	STSG Set	12	
164	Delivery kit set of 20 instruments	9	
165	VASECTOMY SET of 2 Instrument	12	
166	Post Martum Kit	6	
167	Chalazion set of 25 Instruments	6	
168	Ortho Instrument Set	6	
169	ENT Set 32 instruments	4	
170	Automated System to Treat Liquid medical Waste	5	
171	Needle Cum Syringe Destroyer	150	
172	Three Segment Waste Segreegation Trolley	50	
173	Sharp Container	1000	
174	Three Bucket System for Cleaning	50	
175	Waste Transportation Trolley	20	

176	Autoclave 4 Drum	6	
177	Three seater Chair	100	
178	Cupboard	50	
179	Medicine Rack	50	
180	Instrument Cabinate	50	
181	Bedside Screens	100	
182	Oxygen Cylinder Trolley	10	
183	Video Laryngoscope	4	
184	Cough Assisst Machine	3	
185	Blood Warmer	10	
186	PFT Machine	2	
187	Flow Meter with Spanner	100	
188	Patient Warmer	10	
189	MTP High Suction Machine	10	
190	Emergency Hydraulic Trolley	18	
191	Biomedical Waste Bucket	912	
192	Lead Apron	20	
193	Digital X Ray Cassette 8x10	5	
194	Digital X Ray Cassette 10x12	5	
195	Digital X Ray Cassette 14x17	5	
196	Digital X Ray Cassette 11x14	5	
197	X Ray Films 8x10	25	
198	X Ray Films 10x12	25	
199	X Ray Films 14x17	25	
200	X Ray Films 11x14	25	
201	Ambu Bag Adult kit	32	
202	Ambu Bag Pediatrict kit	40	
203	Rapid test kit	1	

204	Micro Pipettes	1	
205	Ambu bag neonatal	42	

22. Place of delivery:

The goods should be delivered to the consignee's addresses safely undamaged and tallied. The consignees' addresses are mentioned in **Annexure-XII**

22A. Transfer of Title of Equipment with Accessories -

Unless otherwise stated in the contract, notwithstanding any inspection and approval by the consignee on the Selected Bidder's premises, or any payments made to the Selected Bidder, property in the equipment (and resultant rights and liabilities) shall not pass on to the consignee until the equipment have been received, inspected, and accepted by the consignee or its representative. The equipment and every constituent part thereof, whether in the possession or control of the consignee, his agents or servants or a carrier, or the joint possession of the Selected Bidder, his agents or servants and the consignee, its agents, or servants, shall remain in every respect at the risk of the Selected Bidder, until their actual delivery is accepted by the consignee or its representative. The Selected Bidder shall alone be entitled and responsible for making claims against any carrier in respect of non-delivery, short delivery, mis-delivery, loss, destruction, damage, or deterioration of the equipment entrusted to such carrier by the Selected Bidder for transmission to the consignee or its representative.

22B. Insurance

Goods should be dispatched at carrier's risk, failing which they should be properly covered by transit Insurance with Government insurance Fund, MHADA, Bandra (East), Mumbai-400 051 or New Address

1) The goods are inserted in packages in a safe and in a sound condition,
2) According to the normal trade practice packing used is good. Failure to comply with these instructions may result in non-acceptance of transit risk by the Insurance Officer.

23. Guarantee/Warranty Terms:

a. The Selected Bidder has to warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
b. The Selected Bidder further have to warrant that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Tender Inviting Authority's specifications) or from any act or omission of the Selected Bidder, that may develop under normal use of the supplied goods.
c. All the equipment's including the accessories supplied as per the technical specification as mentioned in the bidding document should carry comprehensive warranty (including all spares) for a period mentioned in this document in the first instance. During this period, the successful Bidder shall replace all defective parts and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the Selected Bidder during the period of comprehensive warranty. The items which are not covered under warranty should be clearly mentioned along with rate of the items.
d. On expiration of the comprehensive warranty period, the Selected Bidder shall be willing to provide after sales support for an additional period on mutually agreed terms and conditions.
e. The prospective Bidder, who is Importer/ Authorized Distributor, shall submit an undertaking from the Original Equipment Manufacturers (OEM) that they are willing to provide spare parts for the period of warranty as mentioned and also, during the additional CMC/AMC period, if awarded. The OEM shall also assure continuity of service to their product, even in the event of change in Authorized service partner/ dealership or the Bidders – their existing Authorized service partner/ dealers shall ensure and provide service during the warranty / CAMC period. The undertaking from OEM is an essential

document forming part of the Technical Bid, without which the tenders will be rejected summarily in the first round itself.

f. After sales service centers in Maharashtra should be available as part of the pre-qualification and the Bidder shall provide proof of their capability to undertake such maintenance/repair within the stipulated time. (Companies without service center/partner in Maharashtra should give an undertaking that they shall establish/appoint their service center/partner within a period of three months of the signing of contract)

g. The Selected Bidder shall provide preventive maintenance as per the frequency mentioned in this document during the warranty period. The Bidder shall attend any number of break down/repair calls as and when informed by the Consignee authority.

h. Upon receipt of such notice for repair/breakdown from the user institution, the Successful Bidder shall, within the period as specified in this document, and with all reasonable speed, repair or replace the defective goods or parts thereof, without cost to the Tender Inviting Authority.

i. If the successful Bidder, having been notified, fails to rectify the defect(s) within the period specified/ mentioned in this document, the Tender Inviting Authority may proceed to take such remedial action a may be deemed necessary, at the Selected Bidder's risk and cost and without prejudice to any other rights which the Tender Inviting Authority may have against the successful Bidder under the contract.

j. Failure to attend the repairs in time or failure to attend the stipulated preventive maintenance visit or failure to replace the defective equipment's or to provide stand by equipment if the fault/down time exceeds the stipulated period or to ensure the stipulated up-time in a year shall lead to forfeiture of the performance security and/or may lead to blacklisting/debarring of the defaulting Bidder.

k. The equipment which requires quality assurance test shall be done at free of cost immediately after installation, during the comprehensive warranty period, during the CMC / AMC period, by the demand of User and also when major spares are replaced.

l. Any mandatory approval required for installation shall be obtained by the successful Bidder in liaison with the respective authorities.

m. The Bidder shall submit the parameters which require calibration, and the frequency of calibration required.

n. The Bidder shall undertake on-site calibration of the equipment every year as part of the after sales service during the period of comprehensive warranty, CMC/AMC or on demand from the user.

o. The Bidder shall also have to submit whether periodic replacements of consumable items are required for proper functioning of their quoted machine/Equipment If yes they should submit the list of such consumables along with price list and frequency of replacement per year, if the same is not replaced free of cost during warranty / guarantee period.

p. The offered warranty includes:

   i. Visits to the user institutions at frequencies prescribed as part of preventive maintenance.

   ii. Testing & calibration as per technical/service/operation manual of the manufacturer or as per the period specified or as per the demand of the user.

   iii. Quality Assurance tests (if applicable).

   iv. The cost of labour for all repairs/ and all spares required for replacement during repairs all kinds of accessories, Probes, all types of sensors and transducers, Electrodes, Detectors, battery, battery for UPS, other vaccumatic parts etc. wherever applicable and also the accessories and other devices supplied along with the equipment's which forms part of the equipment system, without which it cannot perform satisfactorily.

   v. The exclusion of warranty of any vital equipment parts will be compared with offers of other Bidders during evaluation of the bids and this may be taken into consideration in deciding the successful Bidder on the basis of expert advice.

   vi. The Bidder shall provide up-time warranty of complete equipment as mentioned in this document,
   the uptime being calculated on 24 (hrs) X 7 (days) basis failing Warranty period will be extended for every additional day of down time equal to one week.

   vii. The installed software should be the latest one for the particular model and all future software updates should be provided free of cost during the Warranty period.

24. Warranty Period:

a) The "Complete System" shall remain under warranty period of 2 year from the date of satisfactory installation except 100 M.A X-Ray Machine(Mobile), Colour Doppler Ultrasound Machine with 4 Probes:abdomen, pediatric, Ultra-sonogram(obs&gyne), Portable ultrasound, ECHO Machine, Digital X Ray Cassette 14x17 which will have a warranty period of 5 years and for fetal monitor will have a warranty period of 3 years as mentioned in Technical Specifications. The Complete System should include the basic unit and allied supporting components to be supplied by the bidder along with basic unit.
b) During warranty period, bidder shall provide at least four maintenance visits per year at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval, a proportionate deduction in the form of damages on pro-rata basis will be recovered from the bidder from the Performance Security amount in accordance with KPIs. In case the Performance Security is not adequate, Authority shall have right to recover the losses / damages from other sources as well.
c) Bidder shall also attend all breakdown calls within 3-7 days of the receipt of the information from Consignees through fax/e-mail/mobile/SMS etc.
d) During warranty period, bidder shall maintain and keep 95% uptime per year of the "Complete System." as per calculation given below: -.

1 Year = 365 days

95% of 365 days = 347 Days per annum

e) The bidder shall compensate the uptime less than the specified above for every additional day of down time over and above 18 days stipulated above, warranty period will get extended by one week as penalty at no extra cost i.e., the extended penalty period will be equal to one week for every additional day of down time.
f) During warranty period, bidder will make the "Complete System" in satisfactory working condition. In case, any spare parts need replacement due to normal wear and tear, bidder will supply and install the same for which no additional payment is to be made. If any spares / accessories / consumables etc. are not replaced by the bidder during warranty period, bidder should mention it clearly with name of the items with frequency of replacement and its rate with a validity to cover warranty period.
g) In case, the bidder is not able to provide services (and the items / accessories is not functioning as the reason thereof) due to natural calamity (act of God), Political unrest, Riot and fire at the user site, then in such a situation the warranty period will be extended by the period for which the item / accessories could not be operated because of supplier not been able to provide services.
h) During warranty period, in case of any alleged damage due to accident / human error, a committee under the Chairmanship of CEO, MMGPA, Mumbai with one member from the bidder and one member from the Authority will decide the authenticity of the claim. The decision of the committee shall be final and binding on both the parties.
i) Replacement of equipment's/ parts and service thereof due to manufacturing defects during warranty period will be entirely at the supplier's cost. The expenditure incurred on account of transport, installation, commissioning, and various duties involved in the replacement of equipment's/ parts shall be borne by the supplier.

25. After Sales Services: -

a) After expiry of the warrantee/Guarantee period of the equipment, the Selected Bidder will have to undertake the Comprehensive Annual Maintenance contract (with spare parts) of the Complete System for the further life span of equipment. The life span of the equipment shall not be less than ten years. In special circumstances the total life span of the Equipment/ items may be reduced by the Authority.
b) The Complete System should include the basic unit and allied supporting components to be supplied by the bidder along with basic unit.
c) During Comprehensive Annual Maintenance Contract, bidder shall **provide at least four maintenance visits per** year at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval per year, a proportionate deduction in the form of damages at the rate of 1/2% of CAMC contract amount per week will be deducted maximum up to 5%.
d) Bidder shall also attend all breakdown calls within 3-7 days of the receipt of the information from Consignees through fax/e-mail/mobile/sms etc.
e) During Comprehensive Annual Maintenance Contract**, bidder** shall maintain and keep **95% uptime** per year of the **"Complete System"** as per calculation given below: -.

1 Year = 365 days
95% of 365 days = 347 Days per annum

f) The bidder shall compensate the uptime less than the specified above for every additional day of down time over and above 18 days stipulated above, warranty period will get extended by one week as penalty at no extra cost i.e., the extended penalty period will be equal to one week for every additional day of down time.

g) During Comprehensive Annual Maintenance Contract, **bidder** will make the "**Complete System"** in satisfactory working condition. In case, any spare parts, PCB etc. needs replacement due to normal wear and tear; bidder will supply and install the same for which no additional payment is to be made. **If any spares / consumables / accessories etc. are not covered under Comprehensive Annual Maintenance Contract charges, it should be clearly mentioned with frequency of replacement and with rate. The validity of rate of such items should also be mentioned clearly. What will be the rate of escalation on the quoted rate after expiry of the validity of rate of such item must be mentioned.**

h) The payment of Comprehensive Annual Maintenance Contract will be made on half yearly basis after submission of satisfactory functioning report of the Complete System by the officials authorized by the Authority.

i) In case, the **bidder** is not able to provide services (and the items / accessories is not functioning as the reason thereof) due to natural calamity (act of God), Political unrest, Riot and fire at the user site, then in such a situation the Comprehensive Annual Maintenance Contract will be extended by the period for which the item / accessories could not be operated because of supplier not been able to provide services.

j) During Comprehensive Annual Maintenance Contract, in case of any alleged damage due to accident / human error, a committee under the Chairmanship of CEO, MMGPA, Mumbai, with one member from the bidder and one member from the Authority will decide the authenticity of the claim. The decision of the committee shall be final and binding on both the parties.

26. Comprehensive Annual Maintenance Contract:

a) The decision to enter into CMC or AMC will be determined on the basis of cost and complexity of the equipment by the Tender Inviting Authority, at its discretion, prior to the expiration of warranty period. In case if it is decided by Authority to enter into CAMC contract, the vendor will have to submit CAMC agreement at the time of supply of items. The Performance Security Deposit for CAMC contract will be 10% of the CAMC cost.

b) The Comprehensive Maintenance Contract (CMC) is otherwise an extended warranty. All the terms and conditions agreed by the successful Bidder for executing the comprehensive warranty of the equipment shall be extended during the period of CMC, only difference being the payment of CMC charges is absent during the period of comprehensive warranty.

c) The cost of CMC, accessories, spares, and consumables as in case may be quoted along with taxes applicable, if any. The taxes to be paid extra, to be specifically indicated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.

d) Failure/refusal on the part of the successful tender supplying/installing the equipment's to enter into CMC with the Tender Inviting Authority, at the end of the Comprehensive Warranty Period, if the Authority, as the case may be, desires so, shall lead to forfeiture of performance security and may also result in the blacklisting/debarring of the Bidder.

e) The payment of the agreed CMC charges will be made as per frequency for payment after satisfactory completion of said period, on receipt of service report/ break down report from the user.

f) The Bidder shall also have to submit whether periodic replacements of consumable items are required for proper functioning of their quoted machine/Equipment? If yes, they should submit the list of such consumables along with price list and frequency of replacement per year if the same is not included in quoted
Comprehensive Annual Maintenance Contract charges per year.

g) The tenderer will have to agree to enter into an Annual Maintenance Contract (AMC)@ 0.5% per year of the Order value of the machinery / equipment (excluding taxes).

h) Where required, tenderer will have to agree for Comprehensive Maintenance Contract (CMC) inclusive of all spares @ 5% of the Order value (excluding taxes) of the equipment per year. The period of such AMC / CMC will be of 8 years after completion of warranty period. In case of non-compliance of AMC/CMC the supplier will be liable to pay a damages. Such damages shall be recovered from the amount of the Performance Security submitted. Payment for AMC /CMC on yearly basis will be made by the user's

institution, at the end of year after satisfactory performance report from the end user.

Key Performing Indicators (KPI)

Sr. No.	SLA Description	Resolution Target	Liquidated Damage (LD)
1.	Supply/Delivery of equipment(s)	Within 60 days for **goods manufactured in India** and 90 days for Imported **goods** from the issue of the PO (Purchase Order).	1/2% per week delay and thereof of the Purchase Order value, maximum up to 5% value of the Purchase Order
2.	Installation of Equipment	Within 7 days of supply of equipment(s)	1/2% per week delay and thereof of the Equipment Value, maximum up to 5% value of the Equipment
3.	Operational Acceptance of the equipment(s)	Within 7 days ofInstallation of equipment(s)	1/2% per week delay and thereof of the Equipment Value, maximum up to 5% value of the Equipment
4.	Any defect in EQUIPMENT or any of its part	Resolution: <= 3 Days from the time the call is logged by end user.	1/2% of cost of the Equipment & accessories will be deducted per week up to maximum 5% of PO Value post which purchaser may proceed to take such remedial action as may be necessary. Damages will be recovered from due payment to bidder or from Performance Security deposit. Once the Performance Security deposit get forfeited,the bidder will be required to recoup the Performance Security deposit. if the bidder fails to recoup the Performance Security deposit or settle the damages amount, the bidder will be blacklisted for three years. (Performance Security deposit will be released after settlement of damages.)
5.	Warranty	Resolution: <=3-7 Days from the time the call is logged by end user.	The **Selected Bidder** must ensure 95% uptime during warranty period. In case of downtime, warranty period will be extended for period of downtime. If the equipment is not attended within 3 days for Mumbai, 7 days for other places the supplier will be liable to pay a damages of 1/2% of purchase cost for every week of delay. Such damages will be recovered from the amount of security deposit. Certificate of such uptime / downtime issued by the end user will be binding for the supplier.
6.	Annual Maintenance Contract (For rendering services)/ The tenderer will have to agree to enter into an Annual Maintenance Contract (AMC)@ 0.5%per year of the Order value of the machinery / equipment (excluding taxes).	Resolution: <=3-7 Days from the time the call is logged by end user.	1/2% per week delay and thereof of the Equipment Value, maximum up to 5% value of the Equipment

Sr. No.	SLA Description	Resolution Target	Liquidated Damage (LD)
7.	**Comprehensive Annual Maintenance Contract: -** Where required, tenderer will have to agree for Comprehensive Maintenance Contract (CMC) inclusive of all spares @5% of the Order value (excluding taxes) of the equipment per year. The period of such AMC / CMC will be of 8 years after completion of warranty period. In case of non-compliance of AMC/CMC the supplier will be liable to pay damages. Such damages shall be recovered from the amount of the Performance Security submitted. Payment for AMC /CMC on yearly basis will be made by the user's institution, at the end of year after satisfactory performance report from the end user.	Resolution: <=3-7 Days from the time the call is logged by end user.	1/2% per week delay and thereof of the Equipment Value, maximum up to 5% value of the Equipment

27. Demonstration:

Demonstration of quoted product is mandatory for technically qualified bidders before the opening of financial bid. Such bidders shall produce the quoted product for demonstration on the date (approximately within 7 days from the date of declaration of technically qualified bidder) and at the place specified by the MMGPA, Mumbai, India. If the concerned bidder fails to do so, the said bid will be summarily rejected and the EMD will be forfeited. If demonstration / testing of equipment offered by the bidder is found to be non-satisfactory, then the said bid will not be considered, and the bid will be rejected.
Consumables should submit in 3 samples.
In case of Equipment for which it is not possible to arrange demonstration at the MMGPA due to technical reasons like requirement of regulatory certificates and bulky equipment, demonstration shall be arranged at the site where the equipment is stored by the bidder. Demonstration of such equipment shall be done on the date (approximately within 7 days from the date of opening of technical bid) and at the place specified by the MMGPA, Mumbai, India. If the concerned bidder fails to arrange the product for the demonstration, or after the demonstration, the said product does not satisfy the test, the bid of the said bidder will be rejected and EMD will be forfeited. The decision to arrange Demonstration onsite shall be at the sole discretion of CEO, MMGPA and will be binding on all the bidders. The cost of arranging the demonstration shall be borne by the bidder.

The demonstration of equipment should be attended by empaneled members as decided by CEO, MMGPA from members empaneled by Government Resolution dated 31.10.2017. The video recording of the demonstration shall be mandatorily done. Soft copy of the Video Recording shall be handed over to the representative of MMGPA who witnessed the demonstration, at the site itself. Arrangement of Video Recording shall be done by the bidder at their own cost. The demonstration report shall be prepared on same day and signed by all present including representatives of bidder and the report of the demonstration should be scanned and mailed to to General Manager (Technical), MMGPA on office mail I.D. on the same day.

28. Pre-dispatch Inspection:

The Pre-dispatch inspection will be done by a team appointed by CEO, MMGPA prior to shipment and the team will inspect the equipment physically in accordance to the tender specifications and certify the following

things: -

a. The equipment is new and made of virgin material, it is not reconditioned / retrofitted.
b. The name of the equipment manufacturer, model and serial nos. of equipment & country of manufacturer.
c. "Maharashtra Government (MMGPA) Supply" shall be affixed on each equipment item by using aluminum strip of appropriate size.
d. The team shall clearly mention in their report the purchase order no., date and name of consignee.
e. Packing List: - It shall be issued by original manufacturer/importer/ Authorized Distributor.
f. Country of origin Certificate: - It shall be issued by competent authority of that country (Chamber of commerce of concerned Country) mentioning Name of manufacturer, consignee, name of equipment, invoice No., Qty. etc.
g. Original Invoice issued by bidders / manufacturer should contain following details: -
h. The name of the equipment manufacturer, model, and serial nos. of the equipment.
i. Name of the consignee -list attached.
j. Allowances of pre-dispatch inspection team shall be borne by the Bidder.

29. Consequences of default by Bidder:

29.1. **Damages on late delivery:** If the supplier fails to deliver the goods or any consignment thereof within the period prescribed for delivery, the purchaser shall be entitled to recover 1/2 % of the value of the delayed supply for each week of delay or part thereof subject to the maximum of 5%, calculated from the next day after the agreed delivery period is over.

29.2. **Consequences of inferior substandard/supply**: - If the equipment supplied is found of inferior quality or not as per specifications, the contractor shall replace the equipment within one month from the date of intimation at the cost & risk of the contractor and also liable to pay the fine imposed by the consignee, failing which Performance Security Deposit of the contractor shall be forfeited and the tenderer shall be liable for penal action including black-listing etc. In addition to the forfeiture of the Performance Security Deposit, if any fine is imposed by the consignee same shall be recovered from other dues to the contractor from –his bills payable.

29.3. **Replacement of Rejected materials**: - Tenderer / Contractor shall have to replace rejected material with approved one. The supplier shall remove the rejected material within 15 days failing which the same will be disposed of by consignee at the risk and cost of contractor without any further correspondence in this regard.

29.4. **Risk & Cost Purchase:** - In case the Contractor/s, shall at any time during the continuance of these presents fails to supply satisfactorily the equipment within the prescribed time as herein provided and or in case shall fail to replace any part/s that may have been rejected with other of approved quality, the consignee shall be at liberty forthwith to procure the same in the open market at the risk and cost of the contractor/s. Similarly if the work underlying the contract is not executed satisfactorily within the stipulated period or after the same having been disapproved wholly or partly is not rectified or re-done to the satisfaction of the Officer in Charge within the said specific period, the consignee shall get the same executed or rectified or re-done through any other agencies, at the entire risk of the supplier and expenses thereby incurred, shall be payable by the supplier and / or may be deducted from any moneys due or become due to the contractor/s and the consignee may, however fix such other subsequent date as he may think fit by which the delivery of the said article and or execution of the said work shall be completed.

29.5. **Blacklisting:** - The firm shall be black-listed for a period of two years, if it is found that: -

a. Forged documents are submitted.

OR

b. If it becomes responsive on the basis of submission of bogus certificate / information.

29.6. In case of non-supply of equipment / accessories or supply of substandard quality or supply of equipment / accessories found to have been previously used or having re-furbished parts.

29.7. Replacement of equipment's/ parts and service thereof due to manufacturing defects during warranty period will be entirely at the supplier's cost. The expenditure incurred on account of transport, installation, commissioning, and various duties involved in the replacement of equipment's/ parts shall be borne by the supplier.

30. Third Party Inspection: -

30.1. In the event of challenge raised about the technical specifications or the working of the equipment by the technically disqualified bidder/s or the user department, the CEO, MMGPA, Mumbai will have the authority to appoint third party inspection. The cost of third-party inspection shall be borne by the tenderer, but such "third-party inspection" will be at the discretion of CEO. MMGPA

31. Installation & Site plan:

Requirement regarding site/location for installation of equipment, if any, should be mentioned in the tender. Time required for installation of system after delivery must be mentioned. In case of delay in installation Authority will have right to charge liquidated damage.
Specify the following points for installation of the System: -

a) Total power consumption along with breakup of main System and Accessories.
b) Whether the System needs uninterrupted power supply.
c) Maximum tolerated transfer time in case of interruption of power supply.
d) Whether the System needs any humidity control device.
e) Whether the System needs any separate power line/isolation Transformer.
f) Does the System need the electrical shielding?
g) Whether Air Conditioner is required for the System.
h) Does it require special civil works for installation?

32. Force Majeure:

If, at any time, during the continuance of this contract the performance in whole or in part by either party of any obligation under this contract shall be prevented of delayed by reason of any war, hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restriction, strikes, lock-outs or acts of God (hereinafter referred to as "events"), provided notice of happening of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such nonperformance or delay in performance; and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of purchasing officer as to whether the deliveries have been so resumed or not, shall be final and conclusive, provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may at its option terminate the contract PROVIDED ALSO that it the contract is terminated under this clause, the purchaser shall be at liberty take over from the contract at a price to be fixed by the purchasing Officer which shall be final all unused, undamaged and acceptable materials, bought out components and stores in course of manufacture in the possession of the contractor at the time of such termination or such portion there of as the purchaser may deem fit accepting such material, bought out components and stores as the contractor may with the concurrence of the purchaser elect to retain.

33. Confidentiality:

33.1. Information relating to the examination, clarification, evaluation, and comparison of bids, and recommendations for the award of a Contract shall not be disclosed to bidders or any

33.2. other persons not officially concerned with such process until the notification of Contract award is

made.

33.3. Any effort by the bidder to influence the Authority in the Authority 's bid evaluation, bid comparison, or contract award decisions may result in the rejection of the bidder's bid.

34. Payment:

Payment against supply order issued under this bid will be made by Maharashtra Medical Goods Procurement Authority, Mumbai.

Payment of 80% of the of the contract value will be released against receipt of original GST invoice duly supported by acknowledgement of receipt of equipment in good condition certified by concerned facility in charge at consignee location. Remaining 20% payment will be released after successful installation and satisfactory commissioning and operation of the equipment and upon submission of following documents:

i. 3 copies of supplier's invoice.
ii. Acceptance certificates issued by the consignees.
iii. Payments towards the supply of Items will be made strictly as per the rules of MMGPA, Mumbai. The payment will be made through RTGS/ NEFT. The bidder shall furnish the relevant details to make the payment through RTGS/NEFT and the change of Bank Account during the validity of the bid will not be entertained normally.
iv. The bidder must furnish CRC (Consignee Receipt certificate) IQ, PQ and OQ certificate approved, signed and stamped by the Authorized Consignee.

The Authority shall have every right to deduct the pending dues on account of loss, compensation, or any remedial action in monetary terms from the said payment. The supplier shall not agitate the said issue in future.

35. Corrupt or Fraudulent Practices:

35.1. The Authority as well as bidders shall observe the highest standard of ethics during the procurement and execution of such contracts.

35.2. “Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

35.3. Fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract to the detriment of Authority and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Authority of the benefits of free and open competition.

35.4. “Collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of the Authority, designed to establish bid prices at artificial, non-competitive level; and. “Coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or effect the execution of the contract.

35.5. “The Authority will reject a bid for award if it determines that the bidder recommended for award has directly or through an agent engaged in corrupt or fraudulent practices in competing for the contract in question.

35.6. The Authority will declare a firm or individual as ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that they have, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

36. Resolution Of Dispute:

36.1. In the event of any question, dispute, or differences in respect of contract or terms and conditions of

the contract or interpretation of the terms and conditions or part of the terms and conditions of the contract arises, the parties may mutually settle the dispute amicably.

37. Arbitration:

37.1. In the event of failure to settle the dispute amicably between the parties, the same shall be referred to the sole arbitrator as mutually agreed upon by the parties. The award passed by the sole Arbitrator shall be final and binding on the parties.

37.2. The arbitration proceedings shall be carried out as per the Indian Arbitration and Conciliation Act, 1996 and the rules made thereunder. For settlement of all disputes & Arbitration the place of jurisdiction shall be Mumbai, Maharashtra. The language of Arbitration shall be English.

38. **Governing Language:** English language version of the contract shall govern its Interpretation.

39. Applicable laws:

The contract shall be governed in accordance with the law prevailing in India, Act, Rules, Amendments, and orders made there on from time to time.

40. Indemnification:

The supplier shall indemnify the Authority against all actions, suit, claims and demand or in respect of anything done or omitted to be done by supplier in connection with the contract and against any losses or damages to the Authority in consequence of any action or suit being brought against the supplier for anything done or omitted to be done by the supplier in the execution of the contract. The supplier shall submit an indemnity bond to this effect.

41. Jurisdiction: All the suits arising out of the contract shall be authority in the court of competent jurisdiction situated in Mumbai only and not elsewhere.

42. Saving clause:

No suits, prosecution or any legal proceedings shall lie against the Chief Executive Officer, Maharashtra Medical Goods Procurement Authority, Mumbai, or any person for anything that is done in good faith or intended to be done in pursuance of bid.

Appendix I: Pre-qualification-cum-Technical Bid Templates

I. General

The Bidders are expected to respond to the RFP using the forms given in this section and all documents supporting Pre-Qualification / Technical Evaluation Criteria.

Pre-Qualification Bid & Technical Proposal shall comprise of following forms:

Annexure to be used in Pre-Qualification cum Technical Proposal (Envelope 1)

Annexure I: Letter Comprising the Technical Bid
Annexure II: Compliance Sheet for Pre-qualification Proposal
Annexure III: Proforma for Production And Sale Statement
Annexure IV: Annual Turnover statement for three years
Annexure V: Details of Manufacturing unit
Annexure VI: Contract Form
Annexure VII: Undertaking for rates, specification, blacklisting status on Stamp paper duly notarized
Annexure VIII: Mandate Form
Annexure IX: Power of Attorney for signing of Bid
Annexure X: Technical Specifications
Annexure XI: Compliance sheet for Technical Proposal
Annexure XII: Place of delivery
Annexure XIII: Self Declaration Affidavit (on Rs.100/- Stamp Paper)
Annexure XIV: Manufacturer's Authorization Form
Annexure XV: Format for EMD Bank Guarantee if not submitted online.
Annexure XVIII: Checklist duly filled and signed by the bidder's Authorized representative.

Annexure I: Letter Comprising the Technical Bid

To,
Chief Executive Officer,
Maharashtra Medical Goods Procurement Authority,
1st Floor, Aarogya Bhawan,
Near CSMT Railway Station,
Mumbai 400001 (Maharashtra)

Subject: Request for Proposal (RFP) for……..

Dear Sir,
Having examined the bid document and addendum/corrigendum, if any the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and deliver the goods under the above-named Contract in full conformity with the said bid document and our financial offer in the Price schedule submitted in Envelop No. 2 which is made part of this bid.

We undertake that all information provided in our bid and in the Appendices is true and correct and all documents accompanying such bid are true copies of their respective originals.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the bid document.

We undertake that as on the date of submission of the proposal, we are not involved in any conflict-of-interest situation.

If our bid is accepted, we undertake to submit the security deposit in the form, in the amounts, and within the times specified in the bid document.

We agree to abide by this bid for the Bid Validity Period specified in the bid document and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

Until the formal final Contract is prepared and executed between us, this bid together with your written acceptance of the bid shall constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any bid you may receive.

We agree and undertake to abide by all the terms and conditions of the RFP Document. In witness thereof, We submit this Proposal under and in accordance with the terms of the RFP Document.

Signed: _____

Date: _____

In the capacity of _____

Duly authorized to sign this bid for and on behalf of _____

Signature & stamp of bidder

Annexure II: Compliance sheet for Pre-Qualification Proposal

(The pre-qualification proposal should comprise of the following basic requirements. The documents mentioned in this compliance sheet along with this form, needs to be a part of the Pre-Qualification proposal)

Sr. No.	Basic Requirement	Specific Requirement	Documents required
1.	**Registered Legal Entity**	The Bidder shall be any person/Company/ Society/Proprietorship/ Partnership firm/Trust registered under applicable Act in India/ Government-owned enterprise or institution The Bidder shall be – a) A manufacturer having valid manufacturing and equipment license for the items quoted. **OR** **b)** An Importer* having valid import license and equipment license for the items quoted. **OR** **c)** Authorized Distributor fulfilling all tender conditions. **d)** Separate Manufacturer's Authorization will be required for each equipment. **e)** Registered with the GST Authorities. **f)** Should have a valid PAN number. **Importer refers to a legal Entity such as a Company/ Society/ Trust/Partnership firm registered under applicable Act in India/ Government-owned enterprise or institution that engages in the process of bringing equipment or goods from outside India into the country's borders for commercial purposes.* *Importer itself shall be responsible for supply and maintenance of the equipment as per the terms of RFP and shall not engage any third party for the same)*	a. Copy of certificate of incorporation/registration along with charter documents like copy of Memorandum and Articles of Association, and other registration documents according to the nature of entity. b. Attested photocopy of valid manufacturing Equipment/ import license with product list duly approved by the Licensing Authority for each and every product quoted as per specification in the bid. The license must have been duly renewed up to date and the items quoted shall be clearly highlighted in the license. If quoted item is manufactured at different places, Manufacturing License & Performance certificate should be enclosed. c. Manufacturer's Authorization as per Annexure XIV to be provided by Importer, Authorized distributor d. Copy of GST Registration certificate issued by GSTN authorities. In case of e. Copy of PAN Card.
2.	**Certifications/ registration**	The Bidder shall have to provide requisite certifications/registration.	a. Certificates of DPIIT (if applicable) b. Original manufacturer's certificate that the product is being used in country of origin. c. Import Export Certificate (IEC Code) d. Affidavit of Importer regarding equipment being imported in India for last three years.
3.	**Litigation**	The Bidder should not be involved in any major litigation such as fraud, FEMA violations and any other civil or criminal proceedings that may have an impact of affecting or compromising the delivery of services as required under this contract.	Affidavit as per Annexure VII.
4.	**EMD/Bid Security**	Bidders are required to pay the EMD/Bid Security of ₹ 6400000/- through online mode on https://mahatenders.gov.in. or in the form of BG as per annexure XV	• EMD in the form of NEFT/RTGS/BG

Sr. No.	Basic Requirement	Specific Requirement	Documents required
5.	**EMD Exemption**	If a Bidder is a Micro Small and Medium Enterprise ("MSME") / Small Scale Industry ("SSI") then subject to submission of relevant documents as provided in this table, such Bidder may be exempted from submitting EMD in accordance with Appendix-8 of Govt. Resolution by Industries, Energy & Labour Department, Maharashtra State, dated 1.12.2016.	• Requisite Certificate of Micro and Small-scale manufacturing industries registered under Micro, Small and Medium Enterprises development act 2006. • Importer shall produce authorization Certificate from manufacturer as authorized seller as per Annexure XIV • EM-II certificates whenever necessary (mandatory for Medium Enterprises)
6.	**Conflict of Interest**	On the date of submission of the proposal, the Bidder should not be involved in any conflict-of-interest situation.	Undertaking by the authorized signatory as per Annexure I
7.	**Blacklisting or banned**	On the date of submission of the proposal, the Bidder should not be blacklisted or banned by any ministry/department/attached offices/sub-ordinate offices under Government of India and any State government, Autonomous bodies (established by Central/State govt), any Central/State PSUs for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices.	Affidavit as per **Annexure VII**
8.	**Debarment**	On the date of submission of the proposal, the Bidder should not be debarred	Affidavit as per Annexure VII.
9.	**Average Annual Turnover**	Average Annual Turnover (in last three financial years (2022-23, 2023-24, 2024-25) shall be at least **Rs 32 Cr.**	Certificate issued by a statutory auditor/chartered accountant (as attached Annexure-IV) along with Audited Financial Statements confirming the Average Annual Turnover of the Bidder during the stated Financial Years must be submitted.
10.	**Net Worth**	The net worth of the bidder in the financial year (2024-2025) should be **positive**.	Certificate issued by a statutory auditor/chartered accountant (as attached **Annexure-IV).**
11.	**Technical Capability**	Bidder must have successfully undertaken supply, installation & commissioning of quoted Equipment or Medical Equipment & Instruments of an amount of **Rs 32 Cr.** during last three financial years (2022-23, 2023-24, 2024-25)	The Bidder shall provide the documentary evidence in support of its credentials such as agreement copy/ work order / Letter of Award. This should be supported by work completion certificate/customer satisfaction certificates with customer details and client certificate. Statutory auditor's certificate or Chartered Accountant's certificate, as the case may be, shall be submitted for demonstrating the past experience. (as per Annexure number III)

Sr. No.	Basic Requirement	Specific Requirement	Documents required
12.	**Production Capacity / Import Quantity**	Production Capacity of the Original Equipment Manufacturer must be minimum 1.5 times of the quoted order quantity in last one financial year.	Certificate of Statutory Auditor/Chartered Accountant For importers and Authorized distributors Certificate of Statutory Auditor/Chartered Accountant of OEM has to be submitted in Annexure III
13.	**Service center**	In case of Bidder being Manufacture**r**, the bidder should have at least 2 service centers in state of Maharashtra. In case of Bidder being Importer/Authorized distributor, the bidder should ensure that OEM have at least 2 service centers in state of Maharashtra.	List of at least 2 service centers in Maharashtra with address and contact details shall be provided by the bidder which shall exist for the period of warranty as mentioned and also, during the additional CMC/AMC period, if awarded. The Importer/Authorized Distributor shall provide an undertaking from OEM that OEM shall have at least 2 service centers for the period of warranty as mentioned and also, during the additional CMC/AMC period, if awarded.

Annexure III: Proforma for Production And Sale Statement

(For a period of last 3 Years)

(To be submitted on the letterhead of the Statutory Auditor/ Chartered Accountant of the Bidder)

Sr. No.	Year	Name and full Address of the Purchaser	Purchasing Entity (Gov./Semi Gov./Other)	Name of the Product	Purchase Order No. & Date	Purchase Order Quantity	Purchase Order Value (in Rs.)	Quantity		PO Copy enclosed on Pg. No.
								Manufactured Qty	Sold Qty	
1	2022-23									
2	2023-24									
3	2024-25									

Add rows as per requirement.

Note:

1. In support of above statement, enclose the copies of supply orders with client's satisfactory certificates. All purchase orders should be enclosed in the sequence as per the data provided in table above.
2. All the data provided in the above table has been verified by undersigned CA.

Name, Membership number and signature of the Chartered Accountant:
UDIN:
Name and seal of the firm:
Location, Date:

Authorized Signature *(PoA holder)*
[In full and initials with Seal]:
Name and Title of Signatory:
Name of Bidder (*Firm/ Organization's name*):
Address:
Telephone:
Email:
(Name and seal of the Bidder)

[*Location, Date*]
Disclaimer: If, 1. The bidder is OEM , then the details of Annexure III of production in last three years
The bidder is Authorized distributor, then the details of Annexure III of sale in last three years

Annexure IV: Average Annual Turnover and Net Worth of the Bidder

(To be submitted on the letterhead of the Statutory Auditor/ Chartered Accountant of the Bidder)

The Average Annual Turnover and Net Worth details of M/s _____ for participation under the RFP are given below and certified that the statement is true and correct.

Sr. No.	Year	Turnover (In Rs.)	Positive Net worth (*Yes/ No*)
1	**2022-23**		
2	**2023-24**		
3	**2024-25**		
4	**Average Annual Turnover of above 3 years**		

This is to certify that the Net worth of (*name of Bidder*) is Positive for last 3 (three) Financial Years i.e., (2022-23, 2023-24, 2024-25) as per the Audited Financial Statements.

For the purposes of this RFP, net worth (the "**Net Worth**"), in case of Company shall mean the aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited balance sheet, but does not include reserves created out of revaluation of assets, write-back of depreciation and amalgamation.

For other eligible entities, the Net Worth shall mean the amount derived by subtracting the liabilities from the corpus and reserve amounts as certified by the chartered accountant/statutory auditor having valid registration.

Note:

(a) Certificate issued by a statutory auditor/chartered accountant along with Audited Financial Statements confirming the average annual turnover of the Bidder during the stated financial years must be submitted on the letterhead of the Statutory Auditor.

(b) Provide supporting Audited Financial Statements (Balance Sheets, Profit and Loss Statements, etc.) of the bidding organization/ firm.

Name, Membership number and signature of the Chartered Accountant:
UDIN
Name and seal of the firm:
Location, Date:

Authorized Signature *(PoA holder)*
[In full and initials with Seal]:
Name and Title of Signatory:
Name of Bidder (*Firm/ Organization's name*):
Address:
Telephone:
Email:
(Name and seal of the Bidder)
[*Location, Date*]

Annexure V: Details of Manufacturing Unit

1. **Name of the Manufacturer:**

2. **Full address:**

3. **Phone Nos.:**

4. **Fax No.:**

5. **Email ID:**

6. **Date of inception:**

7. **License No. & date:**

8. **Issued by:**

9. **Valid up to:**

10. **RTGS (Real Time Gross Settlement) System or Core Banking A/c No.:**

11. **Details of installed production capacity for 1 year:**

Sr. No.	Equipment name	Total Production Capacity	Actual Production	Installed Quantity
1	Thermometer			
2	Examination Light			
3	Height Measurment Scale Wall Mounted			
4	Stethoscope			
5	Weighing Machine Adult			
6	Weighing Machine Pediatric			
7	LED Torch			
8	Sphygmonometer			
9	Otoscope			
10	Tuning fork			
11	Hammer			
12	Tounge Depressor			
13	Examination Table with IV Stand Foot Step			
14	Revolving Stool			
15	LED X-Ray Viewing Box			
16	Fetal Doppler			
17	Fetal Monitor			
18	Fetoscope			
19	Infantometer			
20	Stadiometer			
21	100 M.A X-Ray Machine (Mobile)			
22	ECG Machine			
23	Colour Doppler Ultrasound Machine with 4 Probes: Abdomen, Pediatric			
24	Ultra-Sonogram (obs & gyne)			

25	Portable Ultrasound			
26	EMG Machine			
27	ECHO Machine			
28	Lead Partition			
29	OT Table			
30	OT Light			
31	Laryngosocpes with Blades			
32	Crash Cart Trolley			
33	Medicine Trolley			
34	Surgical Scrub			
35	Anesthesia Workstation			
36	Suction Machine (Electrical)			
37	Autorefractor Keratometry			
38	Digital Lensometer			
39	Non Contact Tonometer			
40	Slitlamp			
41	Digital Phoraptor			
42	Operating Microscope			
43	Operating Microscope Basic			
44	Pheco Machine			
45	Yag Laser			
46	IOL Master			
47	Crossmatch workstatation			
48	Centrifuge			
49	Tube Sealer			
50	Blood Collection Monitor			
51	Doner Coach			
52	Blood bank Refrigerator			
53	Plasma Freezer -80 Degree			
54	Plasma Extractor			
55	VDRL Shakar			
56	Blood Bank Centrifuge 12 Bucket			
57	Composcale			
58	Hand Stripper			
59	Platelet Agitator with Incubator			
60	Portable donar chair			
61	Calorimeter			
62	Elisa reader and washer			
63	Semi Auto analyzer			
64	Electrolyte Analyzer			
65	Reagent Refrigrator			
66	Fully Automatic Biochemistry Analyser High End			
67	Tube Lebling Analyzer			

68	Advance 5 part cell counter with autoloader			
69	Cell Counter			
70	ESR Analyzer			
71	Binocular Microscope			
72	Coagulation Analyzer			
73	HBA1C Analyzer fully automatic			
74	Biosafety Cabinate			
75	Microtom			
76	Tissue processor			
77	Embeding system			
78	Slide stainers			
79	Cytocentrifuge			
80	Grossing station			
81	RTPCR analyzer			
82	Nucleic acid extraction system			
83	Gel documentation system			
84	Laminar flow hood			
85	Deep freezer -20			
86	Deep freezer -80			
87	Chemiluminescence immunology analyzer clia			
88	Incubators			
89	Water Bath for Serology			
90	Hot Air Oven			
91	Rotor/Shaker			
92	Time stop watch			
93	Alarm Clock			
94	HB Meter			
95	PH Meter			
96	Dental Chair with Accessoriess			
97	Dental Xray Machine with RVG			
98	BP Apparatus			
99	Defibrillator			
100	Video Bronchoscope			
101	Audiometer			
102	Tympanometer			
103	Berra Machine			
104	ENT Head light			
105	OAE Screeing Machine			
106	Moterized Labor Table			
107	Infant Weighing Scale			
108	Neonate Pulse Oxymeter Table Top			
109	Vacuum Extractor			
110	Beds with foam Mattress			
111	Bed side Locker Delux			

112	SpO2 Monitor			
113	Nebulizer Ultrasonic			
114	IV Stand			
115	Over Bed Table			
116	Motorized ICU Beds			
117	Syringe Infusion pump			
118	Multipara Monitor with Stands			
119	Strecher on Trolley			
120	Pediatric ICU Beds			
121	Pulse Oximeter with Pediatric Probe			
122	Pediatric Ventilator			
123	ABG Machine			
124	Portable LED Standing Lights			
125	Foot Operated Suction Machine			
126	Bilirubinometer			
127	Bubble Cpap			
128	High Flow Nasal Machine			
129	Open Care Radiant Warmer			
130	Phototherapy Single Surface LED			
131	Transport Incubator			
132	Oxygen Hood			
133	Pulse Oximeter Table Top			
134	Cardiac Markar			
135	Glucometer			
136	Dressing Drum small			
137	Dressing Drum Medium			
138	Dressing Drum Large			
139	Instrument try Small			
140	Instrument try Medium			
141	Instrument try Large			
142	NO2 Cylinder			
143	CO2 Cylinder			
144	Anesthesia Workstation High End with accessories			
145	C Arm Machines flat panel			
146	Neumatic Torniquet			
147	Power Bone Drill Machine			
148	Cautery Machines High End with accessories			
149	Plasma Sterilizer with accessories			
150	Harmonic Generator with accessories			
151	4K Laparoscope with hand instruments and accessories			
152	Cautery Pad with cautery machine with accessories			
153	Debrither with Microdrill with accessories			
154	Smoke Evacuator with accessories			

155	LSCS Set of 58 Instruments			
156	Laparatomy set of 83 Instrument			
157	MTP Set of 15 Instrument			
158	Trachestomy Set of 20 Instruments			
159	Eye surgery Set of 43 Instruments			
160	Abdominal Tubectomy set of 63 Instrument			
161	Abdominal Hysterectomy Set			
162	Vaginal Hysterectomy Set			
163	STSG Set			
164	Delivery kit set of 20 instruments			
165	VASECTOMY SET of 2 Instrument			
166	Post Martum Kit			
167	Chalazion set of 25 Instruments			
168	Ortho Instrument Set			
169	ENT Set 32 instruments			
170	Automated System to Treat Liquid medical Waste			
171	Needle Cum Syringe Destroyer			
172	Three Segment Waste Segreegation Trolley			
173	Sharp Container			
174	Three Bucket System for Cleaning			
175	Waste Transportation Trolley			
176	Autoclave 4 Drum			
177	Three seater Chair			
178	Cupboard			
179	Medicine Rack			
180	Instrument Cabinate			
181	Bedside Screens			
182	Oxygen Cylinder Trolley			
183	Video Laryngoscope			
184	Cough Assisst Machine			
185	Blood Warmer			
186	PFT Machine			
187	Flow Meter with Spanner			
188	Patient Warmer			
189	MTP High Suction Machine			
190	Emergency Hydraulic Trolley			
191	Biomedical Waste Bucket			
192	Lead Apron			
193	Digital X Ray Cassette 8x10			
194	Digital X Ray Cassette 10x12			
195	Digital X Ray Cassette 14x17			
196	Digital X Ray Cassette 11x14			
197	X Ray Films 8x10			
198	X Ray Films 10x12			

199	X Ray Films 14x17			
200	X Ray Films 11x14			
201	Ambu Bag Adult kit			
202	Ambu Bag Pediatrict kit			
203	Rapid test kit			
204	Micro Pipettes			
205	Ambu bag neonatal			

Date:
Seal **Signature**
Name (in capital letters)

Note: The details of manufacturing unit shall be for the premises where item quoted are actually manufactured.

THE DETAILS OF FACTORY PREMISES

Person In-charge of Factory

Name :

Phone No. :

Mobile No. :

Nearest Land mark of Factory:

Layout

Km from Airport :

Name of the Airport and City:

Km from Railway Station :

Name of the Railway Station:

Km from Bus Stand :

Name of the Bus Stand and City :

Name of designation of the authorized signatory

Note: The details of manufacturing unit shall be for the premises where item quoted are actually manufactured.

Annexure VI: Contract Form

(Stamp duty as applicable as per MSA)

THIS AGREEMENT made the .....day of....., 200... Between..... (Name of Authority) of..... (Country of Authority) (Hereinafter "the Authority") of the one part and..... (Name of Supplier) of..... (City and Country of Supplier) (Hereinafter called "the Supplier") of the other part:

WHEREAS the Authority is desirous that certain Goods and ancillary services viz. (Brief Description of Goods and Services) be procured and has accepted a bid by the Supplier for the supply of those goods and services in the sum of.....(Contract Price in Words and Figures) (Hereinafter called "the Contract Price"). Whereas the supplier has deposited a Demand Draft in favor of "Maharashtra Medical Goods Procurement Authority, Mumbai" payable at Mumbai from any Nationalized or Scheduled bank of Rs..... (Rs. in words.....) as performance security towards the fulfillment of this agreement.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The contractor has accepted the contract on the terms and condition set out in notice No.-------- .....as well in the Acceptance Letter No : -.....Dt:..... ----------which will hold good during the period of this agreement.

3. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

(a) The Price List submitted by the Supplier;
(b) The Schedule of Requirements;
(c) The Technical Specifications;
(d) Terms & conditions of tender document.
(e) The Authority's Notification of Award.

4. In consideration of the payments to be made by the Authority to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Authority to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
5. The Authority hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
6. Upon breach by the supplier of any of the condition of the agreement, the Chief Executive Officer may by a notice in writing resolving, determine and put an end to this agreement without prejudice to the right of the Government to claim damages for antecedent breaches thereof on the part of the supplier and also to responsible compensation for the loss occasioned by the failure of the supplier to fulfill the agreement as certified in writing by the Chief Executive Officer which certificate shall to conclusive evidence of the amount of such compensation payable by the supplier to the Government.
7. This Agreement shall remain in force until the expiry of 24 (Twenty Four) months from the

date of supply or delivery of all equipment under the Contract but notwithstanding herein or in the tender and acceptance forms contained, the Government shall not be bound to take the whole or any part of the estimated quantity herein or therein mentioned and may cancel the contract at any time upon giving one month's notice in writing without compensating the Supplier.

8. The Supplier has fully read, understood & shall abide by all the term and conditions as stipulated in Bidder document, failing which the Contract Agreement is liable to be terminated at any time without assigning any reason by the Maharashtra Medical Goods Procurement Authority, Mumbai.
9. Any change/amendments if required to be incorporated in the Agreement at a later stage shall be discussed & mutually agreed by both the parties and supplementary agreements shall be binding on both the parties and shall form the part of this agreement.
10. This Contract Agreement shall be governed by and construed in accordance with the laws of Republic on India.

Brief particulars of the goods and services which shall be supplied/provided by the Supplier are as under:

Sr. No.	BRIEF DESCRIPTION OF GOODS & SERVICES	QUANTITY TO BE SUPPLIED*	UNIT PRICE	TOTAL PRICE	DELIVERY TERMS
					As per the supply order

*1. Actual quantity to be supplied may vary & will be strictly as per actual requirement.
2. Actual supply to take place only after & as per the supply order(s) issued by Maharashtra Medical Goods Procurement Authority, Mumbai from time to time.
Tender Document is a part & parcel of the contract.
4. All terms & conditions will apply as per Maharashtra Government Industries Department, Stores Purchase Rules issued vide Government Resolution no. 82 dated 1.12.2016 and other applicable Government Resolutions.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.
Signed, Sealed and Delivered by the Said. (For the Authority) in the presence of:.....
Signed, Sealed and Delivered by the Said..... (For the Supplier) In the presence of….

Following documents to be submitted in original to this office

1. **Proof of all documents inclusive of all Appendices and Annexures of this RFP**

Address for communication:

Office of the ---
Chief Executive Officer,
Maharashtra Medical Goods Procurement Authority,
1st Floor, Aarogya Bhawan,
Near CSMT Railway Station,
Mumbai 400001 (Maharashtra)

Annexure VII: Non-Blacklisting Affidavit

Undertaking for rates, specification, blacklisting status on Stamp paper duly notarized
AFFIDAVIT on Non-Judicial Stamp Paper of Rs. 100/-
(Original copy To be submitted to this office)
Undertaking for rates, specification, blacklisting status on Stamp paper duly notarized

Reference: Tender No. E-217/MMGPA/ Equipments for District Hospital (2025-26)

1. I/We undertake to provide the drugs/medicines/equipment's as required by Maharashtra Medical Goods Procurement Authority, Mumbai and there will be no deviation in composition, quality, packing etc.

2. The firm ……..(Name of the Firm) has not been found guilty of malpractices, misconduct or blacklisted/debarred/ deregistered for the quoted product by any department of Govt. of Maharashtra or by any local authority and semi Govt. organization and other State Government/Central Government's organizations/ procurement corporation as on the date of submission tender document for the quoted items."

3. The firm is not involved in any major litigation such as fraud, FEMA violations and any other civil or criminal proceedings that may have an impact of affecting or compromising the delivery of services as required under this contract.

Seal **Signature**

Date

Place

Annexure VIII: Mandate Form

01	Company Name	
02	Postal Address of the company with Telephone No., Fax No. and Mail address	
03	Name of the Managing Director/ Director/Manager Mobile No./Phone No. E-mail address	
04	Name and designation of the authorized company official Mobile No./Phone No. E-mail address	

Bank Details

01	Name of the Bank Branch Name & Address; Branch Code No. Branch Manager Mobile No. Branch Telephone no. Branch E-mail ID	
02	9 digit MICR code number of the bank and branch appearing on the MICR cheque issued by the bank.	
03	IFSC code of the Branch	
04	Type of Account (Current/Savings)	
05	Account Number (as appear in cheque book)	

(Please **attach the original cancelled cheque** issued by your bank for verification of the above particulars)

I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold Maharashtra Medical Goods Procurement Authority, Mumbai responsible for the same. I have read the conditions of tender / agreement entered and agrees to discharge the responsibility expected of me/from the company as a tenderer/ successful bidder.

Date: Company seal Signature

Place: (Name of the person signing & designation)

CERTIFIED THAT THE PARTICULARS FURNISHED ABOVE BY THE COMPANY ARE CORRECT AS PER OUR RECORDS

Bank Seal with address

Signature of the Authorized Official of the bank

Annexure IX: Power of Attorney for signing of Bid

Know all men by these presents, We_____ (Name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr./ Ms. (name), son/daughter/wife of and presently residing at _____, who is presently employed with us and holding the position of _____ , as our true and lawful attorney (hereinafter referred to as the "***Attorney***") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid for qualification and submission of our Bid for [***] (Project) for the [***] (the "***Authority***") including but not limited to signing and submission of all Bids, bids and other documents and writings, participate in Pre-bid and other meetings/conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Agreement with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds, and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, _____, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS _____ DAY OF _____ 2_____

For

_____

(Signature, name, designation, and address)

Witnesses:
1.(Notarized)

2.Accepted

_____

(Signature)

(Name, Title and Address of the Attorney)

Notes:
The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder. For a Power of Attorney executed and issued overseas, the document shall also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

Annexure X: Technical Specification

Technical Specification of Thermometer

GMDN Name		Thermometer
1	Clinical purpose	To monitoring fever, tracking illness progression, and assessing recovery in patients
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	• **Rapid & Accurate:** Offers fast & accurate reading with approximately 45 seconds on rectal, 60 seconds for oral body temperature and 60 seconds underarm measuring time. • **Easy to use:** With one-button operation, you can easily switch between Celsius and Fahrenheit units within 3 seconds by long-pressing the power button. • **Safe & Easy to clean:** The thermometer comes in a protective storage case which keeps the versatile thermometer safe and ready for use. It can be cleaned easily and hygienically for next use. • **Hi-Res LCD Display:** Even in the darkroom, you can clearly see the readings on a high-resolution LCD display. • **Fever Alarm:** It also features a tone signal (fever alarm) that indicates peak temperature and memory recall to the last reading.	
4	User's interface	Manual
5	Size	11.5 x 1.7 x 1cm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO Certificate for standard quality.

Technical Specification of Examination Light

	GMDN Name	Examination Light
1	Clinical purpose	To provide focused, high-intensity illumination for patient examinations and minor procedures
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Shadow less Mobile Lamp Central IL luminance 50,000 LUX at 1m (max) LED Life 50,000 Hours Color Temperature (CCT) 3700 – 5500 k Full Spectrum RI 95 Ra Light Spot Diameter 8” No of LEDs 12 ISO ,CE Certified .	
4	User's interface	Manual
5	LED Life	50000 Hrs
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Height Measurement Scale Wall Mounted

GMDN Name		Height Measurement Scale Wall Mounted
1	Clinical purpose	To accurately measure a person's height, particularly in clinical settings
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Special Design: Aesthetically designed for saving space with its roll-up mechanism. **Multiple Application**: This stature meter is perfect for office, school, doctor's office, home convenience so that your family can measure the height easily. **Quality Material**: It has double-faced adhesive tape on the back and comes with 3 screws for firm wall mounting. **Easy to Read:** You can read the height measurement easily on display with less labor and time. **Accurate:** The height meter is lightweight portable, accurate & reliable.	
4	User's interface	Manual
5	Size	Upto 200 Cm Height
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Stethoscope

GMDN Name		Stethoscope
1	Clinical purpose	To listen to internal body sounds, primarily those of the heart, lungs, and intestines
2	Used by clinical department/ward	all Departments and Wards
3	**Technical characteristics (specific to this type of device)**	
	Aluminum alloy anodized 45mm chest piece High quality printed diaphragm 175mm head frame made of 5mm thick brass pipe 21 inch (Approx) non-greasy superior tube Extra soft tight sealing ear knobs Name tag with high visibility Spare printed diaphragm and ear knobs	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Weight Machine Adult

GMDN Name		Weight Machine Adult
1	Clinical purpose	To accurately measure a person's Weight.
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Large backlit LCD digital display Includes Auto-Zero reset and Auto-Power-Off after ~1 minute Rubber padding underneath to prevent slipping Error messages for exceeding capacity or low power Battery-free kinetic energy—just press (or stomp) the power button to generate power via internal mechanism Thick, tempered glass surface—pressure tested and unbreakable; durable build	
4	User's interface	Manual
5	Capacity	8 to 180 Kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	One Year

Technical Specification of Weight Machine Pediatric

GMDN Name		Weight Machine Pediatric
1	Clinical purpose	To accurately measure a person's Weight.
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Large backlit LCD digital display Includes Auto-Zero reset and Auto-Power-Off after ~1 minute Rubber padding underneath to prevent slipping Error messages for exceeding capacity or low power Battery-free kinetic energy—just press (or stomp) the power button to generate power via internal mechanism Thick, tempered glass surface—pressure tested and unbreakable; durable build	
4	User's interface	Manual
5	Capacity	120 Kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	One Year

Technical Specification of LED Torch

GMDN Name		LED Torch
1	Clinical purpose	To examine the Patients
2	Used by clinical department/ward	All Department
3	**Technical characteristics (specific to this type of device)**	
	Color Black Power Source Battery Powered Light Source Type LED Material Plastic White Brightness 120 Lumens Weight 60 Grams SLIDE SWITCH: The intuitive slide switch ensures easy operation, even in low light or while wearing gloves, making it simple to use with one hand.	
4	User's interface	Manual
5	Weight	60 Gram
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Sphygmomanometer

GMDN Name		Sphygmomanometer
1	Clinical purpose	To Measure Blood Pressure
2	Used by clinical department/ward	all Departments and Wards
3	**Technical characteristics (specific to this type of device)**	
	0 to 300 mm of Hg scale with an elegant finish Fused type, permanent graduation marking on the glass tube Special control valve for perfect pressure drop Best quality cuff for getting an excellent grip Surface plating adapted to all exposed metal parts to prevent corrosion Fine numbering and durable background contrast paint for clear visibility Optimum damping effect provided for easy and fast measurement	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of OtoScope

GMDN Name		Oto Scope
1	Clinical purpose	To examine the ear canal and eardrum, allowing clinicians to diagnose various ear conditions
2	Used by clinical department/ward	ENT Department
3	**Technical characteristics (specific to this type of device)**	
	Colour Black & Silver Number of Memory Sticks1 Weight 340 g Dimensions 16.5 x 5 x 3 cm Height 3 Centimeters Width 5 Centimeters The new standard in LED illumination for true colour images and a precise diagnosis. Swivelling viewing window with 3x magnification built into the instrument. Black inner instrument head. Distal F.O. illumination. Reflex-free illumination of tympanum and ear canal. Insufflation port for pneumatic mobility testing. One-Hand Operation of the instrument for more flexibility during examination	
4	User's interface	Manual
5	Weight	340 Gram
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Tuning Fork

GMDN Name		Tuning Fork
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	General Medicine, Pediatrics, ENT (Ear, Nose, and Throat), Dentistry, and Emergency Medicine Department
3	**Technical characteristics (specific to this type of device)**	
	Tunning Fork All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Hammer

	GMDN Name	Hammer
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Orthopedic Department
3	**Technical characteristics (specific to this type of device)**	
	Hammer All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Tongue Depressor

GMDN Name		Tongue Depressor
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	General Medicine, Pediatrics, ENT (Ear, Nose, and Throat), Dentistry, and Emergency Medicine Department
3	**Technical characteristics (specific to this type of device)**	
	Tongue Depressor should be manufacture by ISO 9001:2015, ISO 13485:2016 and CE certified company. The Hardness of The Instruments Concerning The Lengths And Bands Are Within The Hardness Demand So That Over The Years A Uniform Standard Can Be Guaranteed.	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Examination Table with IV Stand Foot Step

	GMDN Name	Examination Table with IV Stand Foot Step
1	Clinical purpose	An examination table on which the patient lies during a examination. This table is usually found inside the examination room in hospital.
2	Used by clinical department/ward	Examination Room
3	**Technical characteristics (specific to this type of device)**	
	Overall Approx. Dimension :- 1830mm L X 600mm W X8 60mm H CRCA tubular framework. One drawer and one cabinet. Step Stool Provided with 75mm thick PU foam mattress of 32 density. The mattress should be reversible. Pretreated and epoxy powder coated with 8 tank process. The product should be Pretreated and epoxy powder coated with 8 tank process. He manufacturer should have in house 8 tank pretreatment and powder coating process. The manufacturer should submit the Pollution Control Board certificate for the same Company should have following certificates for quality standard ISO 9001-2015, ISO13485 from notified certifying body and OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Dimensions	1830mm L X 600mm W X8 60mm H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Revolving Stool

GMDN Name		Revolving Stool
1	Clinical purpose	To provide healthcare professionals with adjustable, mobile seating for easy access to patients during examinations, treatments, and minor surgical procedures.
2	Used by clinical department/ward	All Ward and Departments
3	**Technical characteristics (specific to this type of device)**	
	1. Overall approx. dimension: Top 290mm dia x Height adjustment 465mm to 710mm. 2. It should have Stainless Steel top of 304G. 3. The base frame of the stool should be made up of MS CRCA pipe. 4. Finish: All mild steel components should be thoroughly in house pre-treated chemically to remove rust, grease, oil, etc. by 8 tank dip and drain process, including separate degreasing, de- rusting, phosphating each followed by water rinsing, activation and air drying to give phosphate coating. 5. The treated metal surface should be coated in-house with epoxy powder with paint film thickness of 60microns (minimum) and oven baked at 180 degree to 200 degree centigrade. 19. Finishing & workmanship in the medical furniture is of prime importance and must be of high standard. All corners shall be rounded off so that there shall be no sharp corners and holes, should be burr free. 20. All process parameters to be as per documented IMS procedures for quality assurance (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
9	Warranty	Two Years

Technical Specification of LED X-Ray Viewing Box

S. No	GMDN Name	LED X-Ray Viewing Box
1	Clinical Purpose	To illuminate and display X-ray films for examination, aiding in accurate diagnosis and treatment planning
2	Used by clinical Department/ Ward	All Departments & wards
3	Technical Characteristics (Specific to this type of device)	
	Slim, Durable and Effective Energy Efficient: Savings range from 82% to 93% No UV emission Unparallel latest LED backlight technology. 4-5 times longer than regular CCFL/EEFL Power efficient. L.E.D Light with long life- upto 100,000 hours Reliable magnetic nipper Initial brightness can be set Film activated switch, automatic shutdown if no film inside for 2 sec 12 step digital dimmer to get the perfect brightness Power Consumption: 60W Power Supply Input: 100-240V/50/60hz Brightness (LUX):>7500 Net Weight (KGS):8.8 Light Source: LED Dimensions: 884x504x25mm Viewing Area: 728”x417”	
4	User’s Interface	Manual
5	Size	884x504x25mm
6	Mobility, Portability	Portable
7	Protection	UV Stable
8	Quality Certifications	CE European and ISO 13485:2013 certified & Manufacturer must be ISO 9001:2015 & WHO GMP Certified

Technical Specification of Fetal Dopler

GMDN Name		Fetal Dopler
1	Clinical purpose	To assess the well-being of a fetus during pregnancy and labor
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	
	Size: 2.5” x 5.5” Accurately detects the fetal heartbeat, ensuring you can hear your baby’s voice even in the early stages of pregnancy Safe for both mother and baby, making it ideal for regular use at home. The radiation-free fetal doppler ensures peace of mind while monitoring your baby’s health. Easily view your baby’s fetal heart rate in beats per minute on the backlit digital screen, ensuring accurate readings Compact and lightweight, this fetal heartbeat monitor is designed for home use, giving you the flexibility to monitor your baby’s heart anytime, anywhere Clear Sound with Two Listening Methods: Hear your baby's heartbeat through the high-fidelity speaker or connect headphones for private listening Low Battery Indicator: Stay informed with the low power indicator, so you never miss an opportunity to check on your little one	
4	User's interface	Manual
5	Size	2.5” x 5.5”
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Fetal Monitor

GMDN Name		Fetal Monitor
1	Clinical purpose	To assess the well-being of a fetus during pregnancy and labor
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	
	Should be used for recording and analyzing the Fetal Heart Rate (FHR) and contractions of uterus during antepartum and intrapartum period. 1. Should have TFT display of 10.1 Inch or more with Touch screen facility. 2. Should have the facility for twin monitoring. 3. Should have facility to connect wired transducer probes and event marker. 4. The display screen should have Tilt adjustable from 0-90degree. 5. Should display FHR1, FHR2 and TOCO on screen 6. Should have graphical, Numerical and Trend display modes. 7. Should have pulse Doppler technology with Transducer frequency of <1.5 MHz. 8. Should have Pulse Doppler with 7 to 9 elements/ crystal design for better sensitivity. 9. Should have Touch screen as well as rotary knob for patient data entry 10. Should have both automatic and manual fetal motion detection. 11. Should have FHR measurement range of at least 30-240 bpm. 12. Should have Toco measurement range of 0-100 unit. 13. Should have a Resolution of 1 bpm for FHR and 1 unit for TOCO 14. Should be capable of displaying color coded FHR1 &FHR2 traces with bpm. 15. Should have in built thermal printer with automatic paper feeding system. 16. Should have Z- fold/roll recording paper of 150 mm width or more 17. Should have a printing chart speed of 1,2,3 cm/min. 18. Inbuilt Memory storage of minimum 24 hours or more. 19. Computerized trace interpretation should be provided for ante partum monitoring of high risk pregnancies. 20. It should have heart rate offset mode to visually distinguish between the heart rates of twins with ability to offset the secondary FHR. 21. It should have blinking correspondence to each beat. 22. Should be provided with user adjustable audio visual alarm for fetal heart rate (FHR) 23. Should have an inbuilt rechargeable battery with a backup of minimum 3 hours or more. 24. Should be provided with the following Standard Accessories: a. FHR probe-2 b. TOCO probe-1 c. Event Marker-1 d. Probe belt-3 No e. Ultrasound gel-1 f. Power cable-1 g. Z-fold paper (150mm) 25. The product should be USFDA /European CE / BIS certified from regulatory authorities for medical equipments. 26. Should have Following Electrical safety standards IEC 60601-1, IEC60601-1-2, IEC 60601-2-37	
4	User's interface	Manual
5	Display	TFT display of 10.1 Inch or more
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable

8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Three Year

Technical Specification of Fetoscope

GMDN Name		Fetoscope
1	Clinical purpose	To assess the well-being of a fetus during pregnancy and labor
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	
	Fetoscope All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Infantometer

GMDN Name		Infantometer
1	Clinical purpose	To accurately measure the length of infants
2	Used by clinical department/ward	Pediatric and neonatal departments
3	**Technical characteristics (specific to this type of device)**	
	It is a height measuring device for New Born Babies. It can be used everywhere and is particularly suited for use at Doctor's clinics, Hospital as well as patient's home. It has a flat firm Surface board with fold up mechanism and low weight for babies up to 24 months. It can be conveniently transported to any location. Technical Specifications: Measuring Range: 45cm-90 cm. Unit of measurement: Centimeters. Graduation: 1mm. Accuracy: 0.2cm. Precision:0.2cm. Board Width: 24cm Devices Weight: 1.2 kg.	
4	User's interface	Manual
5	Weight	1.2 KG
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Stadiometer

GMDN Name		Stadiometer
1	Clinical purpose	To accurately measure the Height of Persons
2	Used by clinical department/ward	All departments and Wards
3	**Technical characteristics (specific to this type of device)**	
	It is a mobile height measuring device for Children as well as Adults. It can be used everywhere and is particularly suited for use at Doctor's clinics, Hospital, Institutions, Gyms as well as home. It can be conveniently transported to any location. Technical Specifications: Measuring Range: 20-205cm/8-81 Inch. Graduation: Imm/1/8inch. Dimension (WxHxD): 328x2145x574mm. Devices Weight: 3.6 kg.	
4	User's interface	Manual
5	Weight	3.6 kg.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of 100 MA X Ray Machine (Mobile)

GMDN Name		100 MA X Ray Machine (Mobile)
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology, Orthopedics, Emergency Rooms, Wards (including ICU and NICU), and Operating Rooms
3	**Technical characteristics (specific to this type of device)**	
	X-RAY GENERATOR The x-ray generator should be Line frequency 8KW The output should have output of 100mA & 100KV. The control panel should be feather touch. The control panel should have digital display of KV, mA, mAs, Secs. The radiography KV should be 40 to 100KV with increment of 1KV steps.. The radiography mA should be from 40-100mA in 4 mA stations i.e. 40, 60, 80 & 100mA.. The radiographic mAs should be from 0.1 to 200mAs. The control should have Anatomical Program selection of various body parts with Indications (APR) The control should have pre programmed protection of x-ray tube. The generator should have micro processor based electronic overload system. The x-ray tube should be 1no. Stationary anode with focal spot of 2.8mm & Inherent filtration should be 0.5mm Al. It should have indication for error, X-Ray ON & Mains, The double slot manual light beam collimator should be supplied with the system. It should have auto cut off facility. The double step exposure switch should be provided. X-RAY STAND It should be of compact designed & light weight for easy maneuverability. It should have spring balanced vertical movements of tube arm. It should have articulated extended arm for easy x-ray positioning. It should have hand brake for breaking the overall system while moving. It should have arrangement to park the tube cross arm in extreme lower position while moving the machine on Ramps, Lifts & Wards etc. POWER SUPPLY The unit should runs on Single Phase 230 Volts, 20Amps, 50Hz. Auto compensation of Line Voltage Compensation of ±10%. The company should have service centre in Maharashtra. The spare parts for the same should be available as and when required. The weight of the machine should be of approx 150Kg. The equipment should confirm to BIS (Bureau of Indian standards). The equipment should have type approval from AERB (Atomic Energy Regulatory Board) for radiation safety.	
4	User's interface	Manual
5	Weight	approx. 150Kg.
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with

		alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality(Notified Body) , USFDA Approved .
10	Warranty	Five Years

Technical Specification of ECG Machine

	GMDN Name	ECG Machine
1	Clinical purpose	To record and analyze the heart's electrical activity
2	Used by clinical department/ward	all departments
3	**Technical characteristics (specific to this type of device)**	
	1. Should be 3-channel ECG recording with 3 lead simultaneous acquisition 2. Should have minimum 5-inch or more display 3. Should have virtual alphanumeric keyboard 4. Should have Auto, Manual modes which can be chosen freely 5. Should have automatic inbuilt ECG interpretation software 6. Should have detection for lead disconnected, printer door open, paper over, low battery on display. 7. Should have a frequency response of 0.01-150 Hz 8. Should have sampling frequency of minimum 500 samples/sec 9. Should have CMRR of <100 dB 10. Should have option to select the gain from 1.2 mm/mV, 2.5 mm/mV, 5 mm/mV, 10mm/mV, 20 mm/mV 11. Should have AC filter, , Notch Filter and Low Pass filter 12. Should have USB/Wifi Connectivity for ECG data transmission 13. Should be dedicated software to download ECG in PDF format 14. Should have a large storage of 100 or more ECGs 15. Should have High resolution thermal recorder 16. Should have different recording speeds: 12.5mm/s,25mm/s, 50mm/s. 17. Should have Inbuilt rechargeable battery 18. Should be able to operate for minimum 3 Hours / print 30 or more ECGs on fully charged battery. 19. The device should be provided with standard accessories: a. ECG Cable -1 No b. Gel Bottle- 1 No c. Chest Electrodes (Set of 6) - 1 No d. Limb Electrodes (Set of 4)-1 No e. Paper Roll- 1 Roll 20. Power Supply :- Input to be 220-240 V AC 50 Hz Fitted with Indian fit 21. The product should be USFDA /European CE certified from regulatory authorities for medical equipment. 22. Organization should be ISO/ICMED 13485 certified. 23. The Device should be CDSCO Certified. 24. Electrical safely confirms to standards for electrical safety IEC/EN60601-1,60601-1-2,60601-2-25.	
4	User's interface	Manual
5	Display	5 Inch
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning.	1) Disinfection: Parts of the Device that are designed to come

	Disinfection & Sterility issues	into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Colour Doppler Ultrasound Machine with 4 Probes

GMDN Name		Colour Doppler Ultrasound Machine with 4 Probes
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology and Ultrasound Department
3	**Technical characteristics (specific to this type of device)**	
	1. The system should streamlines the workflow to improve remarkable efficiency with the Artificial Intelligence (AI)-powered tools including measurement, parameter adjustments, image optimization, etc. 2. System should be robust state of art fully digital high end latest color Doppler ultrasound system under current production capable of performing imaging advance applications. 3. Offered system should have whole body scanning Applications & software for have a wide range of applications includes: Abdominal, OB/GYN, Cardiology, Urology, Small parts, Vascular, Pediatrics , Orthopedic, Anesthesia, MSK applications. Advance applications like Real time 4D, Strain Elastography, Stress Echo and Contrast etc. 4. System should have following Scanning Modes: B, Dual B, Quad B, THI, PIH, M mode, Trapezoid Imaging, Color Doppler, Power Doppler Imaging, Directional PDI, Dual-Live, Real-time Panoramic Imaging ,live real time 3D/4D imaging ,Contrast Imaging ,Elastography Imaging. 5. System must have compounding facility. Other equivalent Technology can also be offered. Processing technology in technical bid should be highlighted. 6. The system offered must have High Definition Speckle Reduction Imaging, which is a real-time algorithm to increases contrast resolution by reducing speckle noise while maintaining true tissue appearance. This image processing technique should be able to remove speckles and clutter artefacts 7. Anatomic M-Mode should be available with at least 3 M line cursors 8. System must provide 8 TGC levels slider controls 9. System must have provision of vertical gains called LGC for proper gain adjustments. At least 8 LGC segments should be available 10. System should have facility for real time and frozen, pan or point zoom. 11. System should have facility for HD Zoom. 12. System should have a full screen zoom mode to occupy complete monitor display. 13. System must support high resolution 23” LED monitor, which is Anti-flickering, with Contrast and Brightness adjustments, with forward and backward Tilt , left / right swivel facility 14. The system should be able to support at least 5 transducers with universal ports allowing electronic switching between transducers.Atleast 4 transducers should be active. 15. The system should be slim and the control panel height should be adjustable electronically. 16. The system should have 13” high resolution and sensitive Touch command Screen which enable direct access to all basic and advanced system controls 17. System should offer Scanning depth of About 35 cms. 18. System should have at least 256 gray scale for better imaging 19. The system should have a high dynamic range of at least 280 dB, higher will be preferred 20. System must provide multiple number of focal point, minimum up to 12,Also Focus span should be adjustable 21. System should have highly effective filter technology to show the separation of blood flow & tissue signal 22. System should provide an innovative technology for visualizing the hemodynamic for	

	tiny vessels 23. System must provide 3D –like color Doppler flow on routine transducer to strengthens boundary definition of vessel walls 24. Should have Auto Image optimization function, Physical key should be available on the keyboard for easy access. 25. System should have at least 1 TB SSD for digital image storage 26. System should have at least 2 ports of Hi Speed USB for data transfer 27. The system should have the facility of digital storage and retrieval of B/W and color image data on built-in CD/DVD Drive. 28. System should be provided with DICOM connectivity as standard. 29. The system should have real time 2D panoramic view imaging that operates by sweeping a transducer over the area of interest. 30. The system should have real time Colour Panoramic view imaging that operates by sweeping a transducer over the area of interest for seeing the vasculature 31. The system should have extensive calculation software package for general applications, Obs/Gynaec, MSK , vascular, urology, small part, Cardiac Calculations, Doppler calculations, Auto Trace 32. System must provide Auto IMT measurement package in vascular applications 33. System must be upgradeable to Auto OB ((NT/AC/HC/FL/BPD)) measurement package in Obstetrics application for ease of use in obstetric application. 34. System must provide Auto EF measurement package in Cardiac applications 35. System should provide FreeHand 3D Imaging in the convex probe 36. System should provide Volume 3D/4D Imaging Probe and have advanced real time 4D capabilities 37. System should have torch focusing view in 3D/4D applications 38. System should have Glass body/Silhouette feature in 3D /4D applications 39. System should have 3D/4D MultiSlice view or tomographic mapping 40. System must have speckle reduction facility in 3D/4D mode as well. 41. System must be available with TV Volume probe 42. System must have capacity of 4D imaging utilized for attaining a whole view of the pelvic floor useful in viewing pelvic anatomy like muscles, bladder, uterus, etc. 43. System must Volume contrast imaging mode on 3D/4D 44. System must Offer Spatial-temporal imaging correlation STIC with the help of 4D imaging. 45. System should be capable of providing STIC Color and add blood flow information. 46. System must provide (Myocardial Quantitative Analysis) tool for measuring global and regional wall motion of the left ventricle (LV). MQA automatically contours the global & regional wall and calculates strain data. 47. System must have technology which can provide a fast and convenient ultrasound image/cine transmission and real-time sharing of ultrasound screen between the system and the patients' smart devices. 48. Semi- Automatic Volume Calculation for Follicles in Convex Volume as well as TV volume probe 49. The system should provide Real Time Strain Elastography for Liver, Breast , and Prostate Applications. It should be available with Convex ,linear and TVS probe 50. Should have strain ratio measurements in Elastography mode. 51. System should be supplied with following probes: □ Broad band convex array transducer with bandwidth of 1-7 MHz □ Broad band linear probe for Vascular with bandwidth of 3-15 Mhz. □ Broad band TVS probe with bandwidth of 3-15 MHz with 200-degree FOV. □ Broad band micro convex array probe with bandwidth of 4-12 MHz

	52. Bidder has to provide Reporting Computer with computer table trolley, chair with printer for report printing along with the USG machine. 53. Bidder has to provide 3KVA Online UPS along with the machine which can be connected to USG machine.	
4	User's interface	Manual
5	Display	13” high resolution and sensitive Touch command Screen
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality(Notified Body)/ USFDA Approved .
10	Warranty	Five Years

Technical Specification of Ultra-Sonogram (Obs and Gyne)

	GMDN Name	Ultra-Sonogram
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology and Ultrasound Department
3	**Technical characteristics (specific to this type of device)**	
	1. System should have facility of system maintenance and upgrade completed by updating software to achieve product improvements and advanced technology. 2. System should support Point of Care and Anesthesia Applications .The system should have ability to detect structures as small as several hundred microns for use in applications such as MSK and Breast. 3. The unit must be compact, portable and lightweight, weighing less than 5 kg. 4. System should have high resolution full featured touchscreen type IPS 12 inch monitor display. 5. The system should have a streamlined control panel consisting at the most 5 most commonly used buttons/knobs for ease of use. 6. Unit should be able to give very high image quality with advance technologies like compound imaging for better tissue differentiation and edge detection, equivalent to high end cart based systems. 7. System should be able to support speckle reduction imaging for better tissue differentiation and edge enhancement. 8. System should have following Scanning Modes: a) General :- B, Dual B, THI, Color Doppler, Power Doppler Imaging, Directional PDI, PW 9. The system should have a high dynamic range of about 35dB to 100 dB 10. The system should have a minimum of 128 GB SSD memory 11. System should have the software to automatically detect the intima media thickness. 12. System should possess software for Enhanced and Super Needle Visualization to track the needle clearly at steep angles during the procedures while maintaining striking image quality of the target structures. 13. It should highlight the needle tip and needle shaft in some color to know the track of the needle more accurately 14. The needle Visualization software facility should be available on both High frequency Linear and Convex probes for superficial as well as deeper blocks. 15. System should provide B mode steering in linear probe. 16. System should be able to display the Biopsy Guideline. 17. System should offer maximum scanning depth of 40 cms 18. System should provide a compare view function wherein during the examination the current ultrasound image can be compared with previous study data. 19. System should provide at least 16 levels for zooming the image. 20. System should have full screen mode to be able to visualize the images even from a distance 21. System should be able to store cine clip prospectively as well as retrospectively. 22. System should have latest technology of harmonics imaging which includes the third harmonic band 23. System should provide thumbnails of images and clips saved on the scanning screen 24. System should provide ease of use to delete unwanted images from the thumbnail review itself. 25. System should provide facility to add text ,body marker and measurements on image opened from thumbnail review 26. The system should have DICOM capability.	

	27. The system should have Automatic image optimization capability in B mode and the PW mode. 28. The system must have the ability to function by AC / DC or battery power with the same degree of functionality, the battery life (run time) shall be at least 1 hours, this need to be demonstrated. 29. System should have the capability to have option to attach additional battery and give a backup of upto 2hrs 30. Should be able to store images and clips in Jpeg/Bmp DICOM/AVI formats and also able to Data transfer through DICOM or USB. 31. It should be easy to hand-carry the system without insertion and removal of AC power/USB cable. It should be possible to mount the system on the cart with VESA as well 32. System should be provided with wide band probe :- a) Convex Probe: - 2 - 5 MHz wideband curved array transducer for general purpose, abdominal, deep nerve access Specially Sub gluteal & abdominal application. b) Linear Probe :- i) 14-4 MHZ Multi-frequency, broadband linear array transducer for vascular, nerve imaging, vascular, MSK, nerve imaging, etc. ii) It should give maximum depth of 8 cm.	
4	User's interface	Manual
5	Display	high resolution full featured touchscreen type IPS 12-inch monitor display.
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality(Notified Body)/ USFDA Approved . .
10	Warranty	Five Years

Technical Specification of Portable Ultrasound

	GMDN Name	Portable Ultrasound
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology and Ultrasound Department
3	**Technical characteristics (specific to this type of device)**	
	1. High end color Doppler ultrasound with Wide band width technology, capable of producing high resolution images in Abdomen, OB-GYN, Fetal Heart, Small Parts, MSK, Urology etc. applications. 2. 15.6" HD LCD monitor with 0 – 180 degrees open angle. It should support full screen imaging to utilize entire screen area. 3. Backlight control panel which enables user to operate in dark. Design should be easy enough to understand / user friendly. 4. 10.1" brightness adjustable touch screen for smooth workflow. Should support QWERTY keyboard, Gesture controlled virtual TGC sliders. 5. System should have two active and universal ports. All the transducers must be pin less and compatible with both the ports. 6. Machine should have compact and light weight design. 7. System should be compatible with multiple transducer choices, covering linear, convex, micro-convex, Endo cavity, phased array etc. Should have an option of high frequency linear probe for superficial, MSK studies. 8. System should have facility for real time and frozen zoom. 9. Total operating depth range should be wide enough to cover vast range of applications. Depth should be accessible from 1 to 45 cm. 10. Monitor should have thumbnail view of saved images and cine clips and easy reviewing of images on monitor quickly. 11. System should support at least 4 no. of focus and intra focus adjustment should be possible. 12. System should have latest state of the art wideband transducers capable of processing signals from 1 to 17 MHz. 13. System should provide wide SV gate adjustment to cover all types of Doppler. It should have range from 0.5 to 40mm. 14. The operating modes system should have – 2D, M-mode, Color mode, PW, CW, Power and Bi-directional flow, TDI. 15. System should have full spectrum imaging – Tissue harmonic imaging, Spatial compound imaging, speckle reduction technology, trapezoidal image, Quad and dual imaging. 16. Spatial compounding and speckle reduction technology should be given as standard configuration. Both features should be available with all transducers and with all applications. 17. Auto resolution adjustment in B-mode with a single button. 18. System should support Dual B, Quad B, Duplex, Triplex, Dual live imaging. 19. Linear probe should support trapezoid view without losing the resolution at sides. 20. System should support AMM. 21. System should be able to support biopsy mode in all probes for needle guided procedures. Guide line should be visible properly. 22. The system should offer multiple application dedicated presets inbuilt. Further provision to create user defined presets. 23. System should have dynamic range of 20 to 320 dB. 24. Should have facility to store cine retrospectively as well as prospectively.	

	25. Should have cine saving capacity of 200000 frames for B-mode. Cine saving capacity of 180s for M mode and 240s for PW/CW mode. 26. System should have image management software and easy access to old saved images. System should have inbuilt SSD of 120 GB. Provision to upgrade to 1 TB SSD. 27. System should have faster booting up time up to 30 seconds and boot up form sleep mode should be 5 seconds. 28. Light weight system – weighing 4.3 Kg. 29. Should have optional inbuilt battery back-up for two hours. 30. Machine should have fast operating system, ideal for emergency scans. 31. Provision to connect printer directly to the machine or transferring images/reports to PC. 32. System should be DICOM enabled. All the necessary software shall be provided by manufacturer. 33. All the measurement packages should be supported for various applications such as Abdominal, OB/Gyn, Cardiology, Urology, Small Parts, Vascular, Orthopedic etc. 34. System should support Auto IMT measurement. Measurement should update simultaneously as the cursor is being moved. 35. System should display Fetal growth in a graph chart according to measurement items and their OB tables. 36. Dedicated comments/ annotation charts should be available in the system for various applications such as Abdominal, OB/Gyn, Cardiology, Urology, Small Parts, Vascular, Orthopedic etc. And user should be able to edit and rearrange list of comments as required. 37. System should be provided with multi-frequency broad band probes – a. 1.0 – 5.0 MHz phased array probe for adult cardiac, abdomen and cephalic applications. b. 3.0 – 10.0 Mhz Endocavity Transducer with FOV of 200 degree for Gyncecology ,Trans-vaginal ,Trans-rectal and Urology applications.	
4	User's interface	Manual
5	Display	15.6” HD LCD monitor
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality(Notified Body)/ USFDA Approved ..
10	Warranty	Five Years
11		Separate trolley should be provided with Ultrasound Machine

Technical Specification of EMG Machine

GMDN Name		EMG Machine
1	Clinical purpose	To assess the health of muscles and the nerve cells that control them
2	Used by clinical department/ward	Neurology Department
3	**Technical characteristics (specific to this type of device)**	

- Must work on all Microsoft's Windows platform like Windows XP, 7, 8, 10 (32 and 64 bit each)
- It must have facility of online monitor cloning & control.
- Must have facility of online update/print to PDF/email PDF through in software.
- Shock stimulator should have Rotary knob to control the current and FND display to show the current value.
- High quality Headphone compatible to TDH 39 should be supplied with machine that can be used with Adult as well as Pediatric patients.
- Must have Bio-Feedback option in EMG.
- Must have Single fiber EMG (SFEMG).
- Must have facility of free EMG storage for 5 minutes that can be Reviewed and Replayed with Audio.
- Must have facility to export data to MATLAB/LAB View or compatible software.
- Must have test protocol creation facility for fast software operations.
- Must have facility to send EMG data in DICOM format to PACS Server.
- EMG software and drivers must be digitally certified by Microsoft's authorized certifying authority to ensure reliability and security.
- Must have option for software customization according to customer need before order finalization.
- Must have optional Image capturing facility through web camera for taking snapshot of stimulating site for analysis.
- 4 Channel Acquisition run on battery and mains.
- In built battery backup for at least 4 Hrs hours to eliminate grounding artifact.
- Sweep Speed and Sensitivity can be changed after acquisition.
- Patient Isolation for patient safety provided by optically isolating acquisition module from input box.
- User Programmable Rates for all Stimulators.
- Impedance check should be display on screen and it must be real time if any change it shows in numeric form on computer screen.
- User definable marker names. All markers are automatic.
- Individual settings for all nerves.
- Auto Protocol for BERA test where you can define intensities for different traces.
- Tones/Envelopes stimulation for different audio tests such as LLR, MLR, P300.
- Easy muscle scoring with pre-defined groups.
- Facility of reviewing EMG data with Raster.
- Customizable graphical user interface.
- Shock stimulator must have current display on it to stimulate accurately.
- Online guide to locate various Muscles/Nerves.

General Specifications

Channels	4
Sensitivity	0.1, 0.2, 0.5, 1, 2, 5 10, 20, 50, 100, 200, 500 μv/div: 1, 2, 5, 10, 20 mV/div.
Low Pass Filter (LPF)	Selectable at 100, 200, 500Hz: 1, 2, 3, 5, 10 KHz, 2 Pole, 12db/octave) filter.
High Pass Filter (HPF)	Selectable at 0.2, 2, 20, 30, 100, 200, 500Hz
Sweep Speeds (NCS & EP)	1 to 1000ms.div in 19 steps (1, 1.5, 2, 3, 5, 7.5, 10, 15, 20, 30, 50, 75, 100, 150, 200, 300, 500, 750, 1000)
Sweep Speeds (EMG)	2 to 500ms/div in 13 steps (2, 4, 6, 10, 20, 30, 50, 75, 100, 150, 200, 300, 500)

CMRR	>110db
Input Impedance	>100M Ohms (Common mode)
Noise	< 0.5 uV rms. (1Hz to 10 KHz)
A/D Conversion	16 bit analog to digital conversion
Averager	Number of averages per channel upto 9999
Electrical Stimulation	
Duration	20µs, 50µs, 100µs, 200µs, 500µs and 1 ms
Rate	0.5, 1, 3, 5, 7, 10, 15, 20, 25, 30 PPS standard or any user definable value.
Electrical Stimulator	
Type	- Handheld, constant current electrical simulator with stimulus intensity trigger on handle. - Start/Stop, Save/Capture, Live Average Switches are provided on stim handle. - Compatible with adult and pediatric test.
Isolation	Electrical isolated stimulator with independent controls.
FND	FND for current value on shock stimulator Handle.
Stimulator range	0- 100mA
Auditory Stimulator	
Type	Normal, insert and bone conduction headphones.
Stimulus	Click(Rare, Comp, Alt), Pips, Pure Tone
Frequency	250 Hz to 8000 Hz
Intensity	0-110 db nHL or 30-140 db SPL with minimum variation of dB (user selectable)
Presentation	Left, right or both ears.
Click Duration	100 Us square wave clicks, Rarefaction, Condensation or Alternating polarity.
Envelops	Linear, Gaussian, Blackman, Hanning.
Masking Range(White noise)	Contra lateral masking from 0dB to 80 dB nHL.
Rate	User definable
Visual Stimulator	
VEP Monitor (Optional)	VEP monitor for black and white or color with user programmable colors, pattern reversal check board stimulation, vertical bars, horizontal bars. Features centre fixation target, independent quadrant and half field stimulation.
Square Dimensions/Sizes	2, 3, 4, 5, 7, 8, 9, 11, 13, 16, 21, 32, 64 of full screen
Flash mode	Available

Rate	User definable
LED Goggles	Flash /Pattern stimulus selectable for right, left or both eyes.
LED Flash Stimulator	Optional
Electrical Specification	
Interface	USB
Power Supply	230/110 V
Battery and Charger	
Battery	Li Ion 11.1 V
Battery backup time	Minimum 4 hours backup when fully charged.
Battery Charging Time	6 Hours Maximum
Battery Charger	12.7V±0.2, 750 mA
Environmental Conditions	
Operating Temperature	5°C to 50°C
Storage Temperature	-10°C to 55°C
Humidity	5% to 90%
Atmospheric Pressure	70 to 106 kPa

Computer Specifications	
Processor	i3
RAM	4 GB
Hard Disk/Storage	1TB GB HDD
Monitor/Display	LCD/TFT/LED Screen
CD Drive	DVD Writer
Input device	Keyboard, Mouse
Power backup	UPS 600 VA
Printer	Laser (Black & White)

4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.CE (Notified body) / USFDA
9	Warranty	Two Year

Technical Specification of Echo Machine

	GMDN Name	Echo Machine
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology and Ultrasound Department
3	**Technical characteristics (specific to this type of device)**	
	1. High end color Doppler ultrasound with Wide band width technology, capable of producing high resolution images in Abdomen, OB-GYN, Fetal Heart, Small Parts, MSK, Urology etc. applications. 2. 15.6" HD LCD monitor with 0 – 180 degrees open angle. It should support full screen imaging to utilize entire screen area. 3. Backlight control panel which enables user to operate in dark. Design should be easy enough to understand / user friendly. 4. 10.1" brightness adjustable touch screen for smooth workflow. Should support QWERTY keyboard, Gesture controlled virtual TGC sliders. 5. System should have two active and universal ports. All the transducers must be pin less and compatible with both the ports. 6. Machine should have compact and light weight design. 7. System should be compatible with multiple transducer choices, covering linear, convex, micro-convex, Endo cavity, phased array etc. Should have an option of high frequency linear probe for superficial, MSK studies. 8. System should have facility for real time and frozen zoom. 9. Total operating depth range should be wide enough to cover vast range of applications. Depth should be accessible from 1 to 45 cm. 10. Monitor should have thumbnail view of saved images and cine clips and easy reviewing of images on monitor quickly. 11. System should support at least 4 no. of focus and intra focus adjustment should be possible. 12. System should have latest state of the art wideband transducers capable of processing signals from 1 to 17 MHz. 13. System should provide wide SV gate adjustment to cover all types of Doppler. It should have range from 0.5 to 40mm. 14. The operating modes system should have – 2D, M-mode, Color mode, PW, CW, Power and Bi-directional flow, TDI. 15. System should have full spectrum imaging – Tissue harmonic imaging, Spatial compound imaging, speckle reduction technology, trapezoidal image, Quad and dual imaging. 16. Spatial compounding and speckle reduction technology should be given as standard configuration. Both features should be available with all transducers and with all applications. 17. Auto resolution adjustment in B-mode with a single button. 18. System should support Dual B, Quad B, Duplex, Triplex, Dual live imaging. 19. Linear probe should support trapezoid view without losing the resolution at sides. 20. System should support AMM. 21. System should be able to support biopsy mode in all probes for needle guided procedures. Guide line should be visible properly. 22. The system should offer multiple application dedicated presets inbuilt. Further provision to create user defined presets. 23. System should have dynamic range of 20 to 320 dB. 24. Should have facility to store cine retrospectively as well as prospectively. 25. Should have cine saving capacity of 200000 frames for B-mode. Cine saving capacity of 180s for M mode and 240s for PW/CW mode. 26. System should have image management software and easy access to old saved images.	

	System should have inbuilt SSD of 120 GB. Provision to upgrade to 1 TB SSD. 27. System should have faster booting up time up to 30 seconds and boot up form sleep mode should be 5 seconds. 28. Light weight system – weighing 4.3 Kg. 29. Should have optional inbuilt battery back-up for two hours. 30. Machine should have fast operating system, ideal for emergency scans. 31. Provision to connect printer directly to the machine or transferring images/reports to PC. 32. System should be DICOM enabled. All the necessary software shall be provided by manufacturer. 33. All the measurement packages should be supported for various applications such as Abdominal, OB/Gyn, Cardiology, Urology, Small Parts, Vascular, Orthopedic etc. 34. System should support Auto IMT measurement. Measurement should update simultaneously as the cursor is being moved. 35. System should display Fetal growth in a graph chart according to measurement items and their OB tables. 36. Dedicated comments/ annotation charts should be available in the system for various applications such as Abdominal, OB/Gyn, Cardiology, Urology, Small Parts, Vascular, Orthopedic etc. And user should be able to edit and rearrange list of comments as required. 37. System should be provided with multi-frequency broad band probes – a. 1.0 – 5.0 MHz phased array probe for adult cardiac, abdomen and cephalic applications. b. 3.0 – 10.0 Mhz Endocavity Transducer with FOV of 200 degree for Gyncecology ,Trans-vaginal ,Trans-rectal and Urology applications.	
4	User's interface	Manual
5	Display	15.6” HD LCD monitor
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality(Notified Body)/ USFDA Approved.
10	Warranty	Five Years

Technical Specification of Lead Partition

	GMDN Name	Lead Partition
1	Clinical purpose	To Protect from Radiation
2	Used by clinical department/ward	Radiology, Orthopedics Departments
3	**Technical characteristics (specific to this type of device)**	
	1)Size 6' x 3' 2)Made of wooden plywood. 3)Lead sheet of 1.5mm thickness is sandwich between 2 plywood. 4)Total thickness of partition is 1" 5)Viewing window of size 4" x 7" with lead glass of same size. 6)The sunmica of grey color is fitted on both side of plywood from outside. 7)It is mobile and moves on 4 legs with castors wheels.	
4	Size	6 feet H x 3 Feet L
5	Mobility, portability	Yes
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
7	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
8	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality. AERB Approved
9	Warranty	Two Years

Technical Specification of OT Table

GMDN Name		OT Table
1	Clinical purpose	To position and support patients during surgical procedures
2	Used by clinical department/ward	Operation theatre
3	**Technical characteristics (specific to this type of device)**	
	1. The Operation Table designed to provide facilities for movements and positioning proper to all surgical procedures. 2. The Operation Table consist of Head, Back, Kidney, Pelvic with uro cut and leg sections with manually controlled drives for head, kidney, leg section and floor lock. 3. Table top made of a special scratch resistant, hardwearing and easy to clean material. Base column covers to be made of good quality stainless steel alloy and stainless steel. 4. Table base cover made of rust proof, acid-resistant impact- resistant material. 5. Full-length radio-translucent top with provision complete coverage of patient's anatomy. 6. C-Arm compatible tabletop radio translucent for X-Ray photographic and provided with anti-static, antibacterial, soft slow recovery mattresses at least 5cm in thickness. 7. The operating table provide an elevated surface that supports the patient's body during operation procedures, stabilizing patient's position and providing optimal exposure of the field. 8. Mattress pad 2" thick (latex free) for correct and comfortable positioning of patients at the joint areas between different segments, with cut-out on seat position of the table top. 9. Mattress to be fully radiolucent, antistatic, detachable, impermeable to fluids, easily cleanable. 10 Powered 100% radiolucent Kidney Bridge position should be obtained without moving the patient, through Hand Crank by using lift min, 150mm /break function. 11. The Table have return to level function with one press of the button on remote. 12. The table have backlit corded hand control to operate following functions. Height adjustment Trendelenburg/Reverse Trendelenburg Lateral Tilt Back Section/Chair Position Flex-Reflex Zero Position 13. Safety key attached with remote to block electrical system in case of critical operations. 14. In case of failure of the handset, the table have the possibility of working all functions through standby controller. 15. The microprocessor based control system is fully programmable and can store upto two user-programmable preset positions in its memory that can be recalled anytime by simply pressing M1 or M2 button. 16. Individual Locking Function. 17. Manual override operation for critical table movements in case of electronic failure. The override system should have following back up movements up/down, Trend/Rev Trend, Rt/Lt Tilt, chair position, flex-reflex. 18. Detachable-Interchangeable head and leg sections provide further versatility. 19. Integrated weight compensation by manual adjustment of the head and leg sections. 20. The Operation Table mounted on strong castors to facilitate relocation of the table. 21. Stable base construction with 4 double swivel castors with central brake for easy motion and maneuvering. 22. Hydraulic Brakes, on all 4 no.'s corners having PU castors for mobility and 360º rotation applied through foot pedal 23. Locking of the double swivel castor via foot pedal. 24. In built rechargeable battery backup with a capacity to operate the table for 1 weeks in case of mains AC power failure. The battery status should be indicated on override panel through LED. 25. Charging the batteries via line power supply 220-240VAC, 50Hz. 26. The Operation Table designed to support heavy patient loads of 200 KG. 27. Length of the table top including head rest and leg rest 1980mm. 28. Width of table top without side rail 533mm. 29. Height adjustment 750- 1050 mm state, lifting stroke 300mm. 30. Trendelenburg/Reverse Trendelenburg +30°/-25° state. 31. Back plate adjustment +80°/-25° state. 32. Leg rest +15°/-90° state. 33. Flex-Reflex – 220 deg/120deg 34. Lateral tilt left and right 20° state. 35. Head rest +90°/-90° state. 36. Kidney elevator (Up) 15cm 37. General Accessories O Anesthesia screen, height adjustable – 1 pc	

	O Lateral support, width and height adjustable – 1 pair O Shoulder support, width and height adjustable – 1 pair O Arm posturing device, swivelling and height adjustable – 1 pair O Geopel knee crutches, swivelling and height adjustable – 1 pair O Radial setting clamp – 1 pair O Flat bar clamp – 7 pc O Mattress – 1 set 38. The unit is ISO 9001:2015, EN ISO 13485:2016, OHSAS 18001:2007 & CE	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of OT Light

	GMDN Name	OT Light
1	Clinical purpose	To provide focused, high-intensity illumination for patient examinations and minor procedures
2	Used by clinical department/ward	Operation Theatre
3	**Technical characteristics (specific to this type of device)**	
	Ceiling Mounted Dual Dome LED OT Light • OT light system should comprise of two domes- One principal/major dome and one satellite dome • Each dome should have at least 3 Multi-colour LED chips blended together to create natural light so as to prevent casting of colour shadows • Maximum Light Intensity at 1-meter distance should not be less than 1,25,000 LUX for Principal dome and less than 1,00,000 LUX for Satellite dome • Light Intensity for each dome should be adjustable in at least 9 steps (10%-100%) • While varying light Intensity (LUX), colour temperature (Kelvin) setting should remain constant and vice versa– Mutually independent LUX and KELVIN operation for both light heads • Variable Colour temperature from 3500-5500 K adjustable in 7 steps or more for both the principal as well as satellite dome to cater to all types of surgeries and surgeons • The entire light head structure and design must be Laminar flow compatible and should move as one unit and the light dome diameter for both the Principal and Satellite domes should not be less than 600 mm and not greater than 750 mm so as to strike a perfect balance in maintaining Laminar flow compatibility and Shadow less effect • The principle & satellite dome should be inter-marginable in order to form one large homogenous dome to facilitate for supra major surgeries where up to 3 surgeon should be able to operate together without compromise in shadowlessness. • Every light petal must have a provision to be individually serviced onsite • Light Control panel for both light heads must be micro-controller based with • One Key / Button / Control for recommended mode of operation • Minimum illumination depth of 1 meter. i.e. 50 cm above and below the standard operating height of 1 meter • LED life span of atleast 50,000 Hours • Colour rendering Index (CRI) for Principal dome should not be less than 95 and for satellite dome should not be less than 93 • LEDs in any of the light petal must have 'Non-Planar' alignment to increase optical efficiency and generate more LUX for less Wattage. • Variable light beam focus from 7 to 14 inches or more from a fixed height of 1 meter by rotating The sterilizable handle clockwise and anticlockwise to change the angle of light petals and achieve maximum shadow less effect from any operating height • The unit should be supplied with detachable, sterilizable handle at the center petal for aiming and focusing of light head • The support arm for the light head must also be provided with a detachable and sterilizable handle for OT assistant use. • Minimum of 6 mechanical maneuvering adjustments must be provided to the light unit for ease of positioning convenience during critical surgery • Main extension arm and Support C-Arm for light head must have lock-free 360 degrees rotation • Blending from all the sources of light must create a homogenous light field with maximum Shadow less effect. • Net power consumption per dome must not exceed 150 Watts at maximum LUX for any of	

	the domes • Under any light intensity/ colour temperature/ mechanical setting, the primary focus diameter of the light must not be less than 6 inches. • Must have Parallel Feedback Architecture: That is, malfunctioning of any particular LED • Should not affect light output LUX intensity and shadow less effect. In case of failure of a Single • LED, other LEDs must compensate for its loss by automatically increasing their Light intensity • Light must be upgradeable in case an extra arm for camera or monitor is needed • Even on continuous usage, the heat generated by the dome should not be more than 3 degrees of the room temperature • Both the domes must have separate CE approved SMPS power supply with universal AC input and output DC operating voltage not exceeding 14 Volts • Power supply Wattage rating must be such that even a single power supply can drive both • the domes simultaneously in case of an emergency • Equipment should be CE approved/certified for following internationally recognized IEC • standards for electro medical equipment: - IEC 60601-1-1 - Electrical Safety General requirements - IEC 60601-1-2 - Electro Magnetic Compatibility (EMC) - IEC 60601-2-41- Basic safety and essential performance of Surgical Luminaires - IEC 60601-1-6 - Collateral standard- Usability (*60601-2-41) • Supplier must also bear following ISO certifications: - ISO 13485:2003 - Quality management system of Device - ISO 9001:2008 - Quality management system of Company • ISO 14001 • OHSAS 18001	
4	User's interface	Manual
5	No Of Dome	2 (Principal and satellite)
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	No
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality (Notified Body)/USFDA.
11	Warranty	Two Years

Technical Specification of Laryngoscope with Blades

GMDN Name		Laryngoscope with Blades
1	Clinical purpose	To visualize the vocal cords and larynx during procedures like tracheal intubation
2	Used by clinical department/ward	Anesthesiology, Emergency Medicine, and Otolaryngology (ENT) departments
3	**Technical characteristics (specific to this type of device)**	
4	Should Designed and developed using best quality Stainless steel. Handles housing two 1.5V Cells. Made with 304 Stainless Steel (SS) with matt finish. LED white light with non reflecting Light. Has a Light Bulb Incorporated into the blades, approximately 1/3 of the distance from the tip. Blade:1,2,3,4 No , Blades : Miller 1, MAC -1,2,3,4 Packing: Rexine Bag All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
5	User's interface	Manual
6	Weight	Approx 500 Gram
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	Baldes should be Autoclavable
10	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
11	Warranty	Two Year

Technical Specification of Crash Cart Trolley

GMDN Name		Crash Cart Trolley
1	Clinical purpose	A trolley it could be carry material required to handle emergency situation to treat the patients
2	Used by clinical department/ward	All wards
3	**Technical characteristics (specific to this type of device)**	
	Overall approx. size: 990mm L X 490mm D X 1600mm H. CRCA tubular framework. Should have 12 no's-colored bins. Should have SS I.V. Rod and Cardiac massage board. Should have Five no's CRCA sheet drawers of different sizes. Two drawers should have height of 100mm, two of 125mm and one of 177mm height. All the drawers should be locked with central lock mechanism. All drawers should have heavy duty telescopic sliding channels. Should have Two I.V. bottle storage tray. Should have SS Handle. Should have Oxygen cage attachment. Trolley mounted on Four non-rusting 125 mm dia. Polyurethane Wheels 2 with brakes and 2 without brakes. Pretreated and epoxy powder coated with 8 tank process. Company should have following certificates for quality standard ISO 9001-2015, ISO13485, OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Dimensions	approx. size: 990mm L X 490mm D X 1600mm H.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Medicine Trolley

	GMDN Name	Medicine Trolley
1	Clinical purpose	A trolley it could be carry material required to handle emergency situation to treat the patients
2	Used by clinical department/ward	All wards
3	**Technical characteristics (specific to this type of device)**	
	overall approx. dimension: 660 mm L x 480 mm W x 1630 mm H Mild steel tubular frame work and MS Shelves Three removable plastic bins and two polystyrene lockable storage unit with two drawers having containers of different sizes four heavy duty non rusting casters 125 mm dia with brake complete with four corner buffers SS IV rod and oxygen cylinder holder (MS) Pretreated and powder coated finish	
4	User's interface	Manual
5	Dimensions	approx. size: 660 mm L x 480 mm W x 1630 mm H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Surgical Scrub

GMDN Name		Surgical Scrub
1	Clinical purpose	To significantly reduce the risk of surgical site infections by minimizing the microbial load on the hands and forearms of the surgical team
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	The unit should be made of 304 grades high-quality stainless-steel square tubes and the entire body should be out of high-quality stainless steel of 16 & 18 Gauge with satin polish finish. The unit should have a floor mount design with pedestal base. Tailor made to suit the site available. The unit should be compatible with all the regular and standard plumbing. The unit should have irrigation facility which allows washing of instruments, tubes, endoscopes etc. The body should be designed to eliminate backsplash, overflow and stagnation. The unit should have an option of manual actuated water supply by or foot operated taps. Soap operation should have hand pump as well as hand free controls. The unit should have jet irrigation facility which allows washing of instruments, tubes, endoscopes etc. 2 bay tap with sensor operated & timer.	
4	User's interface	Manual
5	No of Bay	2 Nos
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Anesthesia Workstation

	GMDN Name	Anesthesia Workstation
1	Clinical purpose	To deliver and manage anesthesia during surgical procedures
2	Used by clinical department/ward	Anesthesia Departments
3	**Technical characteristics (specific to this type of device)**	
	- Anesthesia Workstation should be made of Molded Fiber (FRP) body Construction With Air, Oxygen and Nitrous Oxide flow meter. - Anesthesia Workstation should have a built in Hypoxic guard to ensure 25% O2 more than total gas. -Anesthesia Workstation should have 5 tube flow meters – 2 for Oxygen, 2 for N2O and one for Air. - Anesthesia Workstation should come with Regulators and content gauges for 2nos O2 pin index yokes, 2os N2O pin index yokes. - Central Pipeline connection for O2, N2O and Air with High Pressure tubing for the same. - Anesthesia Workstation should be supplied with O2 failure alarm which should give visual and audio indication – OFWD. - Anesthesia Workstation has a facility for built in gauge meters for the pipeline pressure to ensure about the leakages inside the machine. - Anesthesia Workstation should be supplied with the facility to mount 02 units of Tec 5/6 type vaporizers. - Anesthesia Workstation should have an O2 Flush system. - Anesthesia Machine is mounted on castor wheels. - The machine should have 3 drawers / cabinets for proper storage - The machine should have a tray for placing syringe, etc. GSM Closed Circuit Breathing System: This highly advanced integrated absorber system should come with visible Inspiratory and Expiratory Valve, Transparent Chamber, Soda-lime Canister with facility of By-pass to allow change of soda lime whilst operating. Special Features: • Bellows Volume: 0 – 1500 mL (Pediatric and Adult applications) • APL Valve: 2 – 70 cmH20 • CO2 Canister Volume: 1.5 L • By-Pass: Automatically senses detached CO2 canister and allows for change of soda lime during an operation is being performed • Bag / Vent Switch: Switch for manual ventilation and mechanical ventilation • Automatic absorber heating technology to avoid water condensation Temperature Compensated Vaporizer: - Anesthesia Workstation should be supplied with 02 units of Isofloran / Sewofloran Temperature compensated Vaporizers, each, consisting of Temperature compensated, flow compensated and back pressure compensated Vaporizer with easy fitting on Anesthesia Machine with agent capacity of 300 ml. • 3 vole % safety locking system against accident overdose • Non-contamination baffle system against accident tilting or inverting Scale of concentration control: 0 - 2 vole % in intervals of 0.2; 2 - 6 vole % in interval of 0.5% Inbuilt Integrated Anesthesia Ventilator:	

	- Anesthesia Workstation should be with built-in integrated Anesthesia Ventilator Features: • Anesthetic Ventilator with a minimum display size of 7” Screen • The ventilator should have the following modes of ventilation: Volume Control Ventilation with PEEP • The ventilator should monitor the following parameters: Real Time Volume Monitoring, Peak Pressure Monitoring, FiO2 Monitoring • Adult and Infant applications should be compatible • Operating power source: 100 to 240 VAC, 50/60Hz, 6.5A • Back up battery capacity: Capacity for a minimum of 2 hours • Charging time: 4 hours • Back-up of working parameters for fast operation • Service mode for calibration of the pressure and flow sensor • Auto-zeroing for reference airway pressure Controls: • Microprocessor controlled ventilator • Mode: VCV, Manual, Standby • Waveforms: Pressure-time • Real time waveforms • FiO2: Standard chemical oxygen sensor (galvanic cell) • Ventilator Rate : 1 – 100 bpm • Tidal Volume : 20 – 1500 ml • I : E ratio : 4:1 - 1:10 • PEEP: Integrated Electronic PEEP: 4 – 30 cmH2O • Insp. Time: 0.1 – 10 sec (Increment: 0.1 sec) Alarms with visual and audio indications: • Apnea • High- and low-pressure alarm • Low battery • Internal battery for normal working under electric power failure • Charging	
4	User's interface	Manual
5	Display	7 Inch Screen
6	Back up battery	Minimum 2 hours
7	Mobility, portability	Yes
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
9	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
10	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
	Warranty	Two Years

Technical Specification of Suction Machine (Electrical)

	GMDN Name	Suction Machine (Electrical)
1	Clinical purpose	To remove unwanted fluids and secretions from a patient's body, particularly from the airway
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Housing: ABS Body Jars: Polycarbonate 2 X 2.5 Overflow Protection: Mechanical Type Tubing: Non – collapsible Suction Tubing Vacuum Gauge: 3.0 inch , 0-760 mmHg Filter: Bacterial filter autoclavable / Reusable Pump type : Oil Immersed Rotary Vane Capacity: -710mmHg +- 10 at 32~35 LPM Noise Level : <50 dB A +- 3 Motor: 1/4 HP, FHP Power: 220/230V AC, 50 Hz, 180W RPM: 1440 Should be ISI & CE Marked, ISO: 13485:2003, WHO-GMP	
4	User's interface	Manual
5	Noise Level	<50 dB A ±3
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Autorefractor Keratometry

	GMDN Name	Autorefractor Keratometry
1	Clinical purpose	To objectively measure a patient's refractive error and corneal curvature.
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	Refraction Measurement The System should be able to give a precise Refraction of Patient. Sphere -25.00 D to +22.00 D in steps of 0.12 D/ 0.25 D Cylinder 0.00 D to ±10.00 D in steps of 0.12 D/ 0.25 D Axis 0° to 180°, in steps of 1° Corneal vertex distance 0.00, 10.00, 12.00, 13.50, 15.00 mm Pupil distance (PD) 10 mm to 85 mm Min. pupil diameter 2 mm **Keratometry** Corneal curvature 5.00 to 10.20 mm, in steps of 0.01 mm Corneal refraction 33.00 D to 67.50 D, in steps of 0.12 D/ 0.25 D Corneal astigmatism 0.00 D to -15.00 D, in steps of 0.12 D/ 0.25 D Axis 0° to 180°, in steps of 1° Corneal diameter 2.00 to 12.00 mm, in steps of 0.10 mm Chin rest movement 65 mm, motorized. **Printer** Printer Internal thermal printer (paper width 57 mm), printable PDF via optional network printer **Connectivity** 1 x serial interface RS 232; fully isolated 2MOPP 1 x network connection (LAN 10 / 100); fully isolated 2MOPP Supported data output options: EMR, PMS systems, file-based to network folder and USB stick Web service interface for data retrieval 1 x USB interface (for USB stick only) 1 x VGA monitor output. Output data format XML (JOIA), PDF Readiness for Connectivity to Digital Refraction System of same make **Certifications** The ARK System should be European CE and US FDA Approved	
4	User's interface	Manual
5	Printer	Internal thermal printer (paper width 57 mm)
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
10	Warranty	Two Year

Technical Specification of Digital Lensometer

	GMDN Name	Digital Lensometer
1	Clinical purpose	To measure the optical properties of lenses, including eyeglasses and contact lenses
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	Measurement sensor Shack-Hartmann wavefront sensor **Measurement wavelength** 546 nm (e line) **Sphere Power:** -25 D to +25 D in steps of 0.01 / 0.06 / 0.125 / 0.25 D **Cylinder Power** 0 D to ± 10 Din steps of 0.01 / 0.06 / 0.125 / 0.25 D **Cylinder Axis** 0° to 180° in steps of 1° **Addition Value** 0 D to +10 D in steps of 0.01 / 0.06 / 0.125 / 0.25 D **Prism Value** 0 Δ to 20 Δ in steps of .01 / 0.06 / 0.125 / 0.25 Δ **Pupil distance** 0 mm to 82 mm **Measurement Display** 7" tiltable color touch screen **UV measurement** Integrated UV spectrometer with display of UV protection level and UV spectrum mode **Spectrometer measurement range** Up to 8 wavelengths between 365 nm and 480 nm, default: 365 nm*, 375 nm*, 395 nm* and 405 nm* **Measurement Modes** >Standard and multifocal > Progressive/Bifocal > Soft and hard contact lens > Tinted > UV **Automation** auto trigger **Data Transfer** Automated data transfer to Phoropter for subjective refraction **Printer** Integrated Thermal printer **Power supply** 100 V to 240 V~, 50 Hz to 60 Hz, 40 VA **Dimensions (W x D x H)** 210 mm x 270 mm x 417 mm **Weight** 6kg	
4	User's interface	Manual
5	Weight	6 Kg
6	Printer	Internal thermal printer
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
11	Warranty	Two Year

Technical Specification of Non-Contact Tonometer

GMDN Name		Non-Contact Tonometer
1	Clinical purpose	To measure intraocular pressure (IOP), the pressure inside the eye, without touching the eye's surface
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	The System should be able to measure the Intraocular pressure of patient comfortably and should provide reliable report. 2.The System should have auto tracking of the probe to find the right position and initiate the measurement. 3.Monitor: 5.7" touch screen LCD TFT 4.The NCT Should have Measuring range: 7 – 60 mmHG 5.There should be a forehead rest for patient. 6.The NCT should have Monitor: minimum size 5.7" LCD TFT. 7.The system should come with the Printer: Thermal printer Paper: Thermal paper (width: 57 mm, roll diameter: 50 mm). 8.System Weight should be around: 11 kg. 9.Power requirements - Power frequency: 50/60 Hz Power consumption: 60 – 85 VA Voltage: 100-240 V Readiness for connectivity to Digital Refraction System 10.The NCT should be able to provide network Connectivity, Direct Dicom and well-defined EMR Interface.	
4	User's interface	Manual
5	Weight	11 Kg
6	Display	5.7" touch screen LCD TFT
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
11	Warranty	Two Year

Technical Specification of Slit Lamp

	GMDN Name	Slit Lamp
1	Clinical purpose	To examine the structures of the eye, including the cornea, lens, iris, and retina
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	The Slit Lamp should have the Magnification: 5x, 8x, 12x, 20x, 32x, with 10x eyepieces 6x, 10x, 16x, 25x, 40x with 12.5x eyepieces. Slit Lamp with camera . Requirement for digital slit lamp . Built in digital camera with Higher resolution and sensitivity. Field of view diameter should be 26.5-8.7 mm Eyepieces magnification Should be Optionally 10x or 12.5 super high-eyepoint eyepieces Compensation of ametropia should be: 8 D Width of Slit images Should be continuous from 0 to 12 mm Length of Slit lamp: In steps 0.2/1/3/5/9/12 mm, continuous 1- 12 mm Rotation of slit image should be Continuous ±90° Decentration of slit lamp: - 4* horizontally, click stops at- 10*,0*,+10* Swivel range of slit projector: 180*, scale for angular difference, click stops at- 10*/ 0*/ + 10* Angle of incidence: 0* or 0* - 20* tiltable with optional tiltable prism head Filters: Blue, Green, (red free), swing-in, heat- reflecting filter permanently integrated diffusing screen swing-in Free working distance exit prism/patient's eye should be 88 mm, Travel of instrument base should be 30 mm (vertical), 1.2 in (vertical), 110 mm (lateral), 4.3 in (lateral), 90 mm (axial), 3.5 in (axial) Vertical travel of headrest should be around 59 mm, 2.3 in Brightness of the Slit Lamp should be Continuously Adjustable. Projection illumination: 15V LED, Rated Voltage: 100- 240 V+ 10% self-sensing 50/60 Hz Applanation Tonometer: Goldman Applanation Tonometer from the same manufacturer & of International Standards The Slit Lamp Should be Provided with the High-Quality Motorized Table. The Equipment should be European CE, US FDA Approved.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
8	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
9	Warranty	Two Year

Technical Specification of Digital Phoropter

GMDN Name		Digital Phoropter
1	Clinical purpose	To determine a patient's refractive error and ultimately their eyeglass or contact lens prescription
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	The Digital Phoropter should be able to give a precise Subjective Refraction of patient. Operator should be provided with the facility of touch screen Panel PC or iPad. The System should be compatible with the WLAN. The Complete system Phoropter and Acuity Charts should allow easy intuitive operation Via Touch Screen interface. Screen Testing Distance should be 1 to 8 meters. Polarization directions for analyser's: Right eye 45 degrees and left eye 135 degrees. It should provide spherical Power range : - 19.00 To + 16.75 D.(Incremental 0.12/0.25 D). Cylinder Lens: 0 to +/- 8.75 D. Cylinder Axis: 0 to 180 degrees (Increments with 1-degree steps). PD: 48 to 80mm. Rotary Prism: 0 to 20. Retinoscopy: +1.5 D, +2.0 D. Pin Hole lens- 2mm. Red/Green Filter: Right eye: red / left eye: green. Polarizing filter Right eye: 135°, 45° / left eye: 45°, 135°. Line voltage 100 – 240 V AC ± 10%, 50…60 Hz It should have Interface : USB / WLAN and RS232 / Bluetooth.	
4	User's interface	Manual
5	Screen Testing Distance	1 to 8 Meters
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
10	Warranty	Two Year

Technical Specification of Operating Microscope

GMDN Name		Operating Microscope
1	Clinical purpose	Used in various surgical procedures to provide magnified and illuminated views of delicate structures, enabling more precise and accurate interventions
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	Main Microscope: • Apochromatic optics with anti-reflex multi coating. • Continuous zoom magnification. •Foot Pedal 10 – 12 functions. • Focusing range minimum 46-48 mm • XY coupling range 60mm x 60mm or more • 0- 180 Deg. Inclinable binocular tube with focal length f= 160mm- 170 mm, Wide angle high point eye pieces 10X. • High-quality objective lens with apochromatic optics and focal length of 200 mm Mount diameter 65 mm. • Integrated Beam Splitter in microscope body for assistant microscope. Illumination • LED illumination source with color temperature of 4,500 K (daylight effect). • Red reflex enhancer with variable angle of illumination, Bright flex illumination • Integrated Color enhancement, Ha-Mode, blue blocking filter. • Illumination angles: 2 (for rich and homogeneous red reflex) and 6 (for depth enhancement switchable by rotating knob. CCTV Attachment. • 1 CCD full HD 1080 lines camera with 1080 lines. attachment Integrated within microscope body without any external attachment. Preferred from same manufacturer. Floor Stand • Heavy duty Floor Stand with mechanical friction brakes. • Full HD Video recorder with USB port & external 1TB Hard Disc. • Full HD LED TV 32” from reputed make. • After sales service preferred from Principal manufacturer. Should have service centers or factory certified service engineers. • Should have centralized customer care nos. to register service request. Integrated intra- oct imaging continuous zooming , light additional teaching head needed	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
7	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
8	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
9	Warranty	Two Year

Technical Specification of Operating Microscope Basic

	GMDN Name	Operating Microscope Basic
1	Clinical purpose	Used in various surgical procedures to provide magnified and illuminated views of delicate structures, enabling more precise and accurate interventions
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	Surgical Operating Microscope for Ophthalmic Surgery **Focusing:** Motorized through footswitch. **Focusing range** Minimum 48 mm **Magnification:** Manual 5-step, Magnification changer **Magnification factors:** 0.4 / 0.6 / 1.0 / 1.6 / 2.5 **Overall Magnification:** 3.4 X to 21 X (With 10X Eyepiece) or better **Binocular Tube:** 45° inclined tube f=170 mm **Eyepieces** 10x wide field (Optional 12.5x) **Objective lens:** f = 200 mm, apochromatic, 65 mm diameter **Illumination:** LED light source. Illumination controllable with footswitch. Switching off of the light on raising the microscope arm desirable. **Illumination Geometry** Rich, homogeneous red reflex through continuously variable illumination angle from 2 and 6 degrees. **Filters:** Blue barrier filter, Halogen mode filter. Colour enhancement **Stand** Floor stand with 4 rotatable castors with brake **UPS** 1 KVA online UPS to be supplied with the machine **US FDA & CE** US FDA and CE approved	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
7	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
8	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
9	Warranty	Two Year

Technical Specification of Phaco Machine

	GMDN Name	Phaco Machine
1	Clinical purpose	To break down and remove the cloudy lens of the eye
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	Ultrasound (U/S): • Must have a lightweight (less than 40 grams) 6 crystal handpiece with ability to work on both Longitudinal &Transverse (orbital motion) ultrasound delivery modes. U/S Frequency of the handpiece 28 KHz . At least two handpieces to be provided with the basic configuration. • Phaco Modes: Linear and Nonlinear Continuous, Pulse, Micro Pulse, Burst, MBurst, Occlusion Pulse, Occlusion Micro Pulse • U/SPower: 1-100% Fluidics: • Peristaltic Pump with Linear/ Non-Linear control of vacuum modes, Vacuum range: 5mm – 650 mm hg • Flow Rate: 1-50 CC/min (Linear/NON-Linear) • Rise time options should be available. Rise time 1,2,3 • FVP mode should be available. • Venting: Air/Fluid venting system. • Mobile trolley with Motorized IV pole to Increase & Decrease the IV bottle height • Equipment must work with Reusable/Autoclavable Tubing for use during surgical procedure. Diathermy: • Type: Bipolar, 500 – 600 KHz frequency range with Power range of 1-7W(max) • Control 5-100%(Linear/NON-Linear) Vitrectomy: Vitrectomy Mode: Pneumatic(Guillotine) type cutter with Single and 60-3000cuts per minute (Linear/Non -Linear)20G,23G,25G cutter facility . In-Built Compressor for Anterior Vitrectomy must be provided. Cataract + Vitrectomy must be provided(Anterior + Posterior) Programmability & User Controls: • 10Independentuserprogrammodes, with voice assistance all important modes and functions. • Footswitch: User programmable multifunctional foot pedal for angle & side buttons with reflux mechanism, Different step changes giving vibrating feedback to the surgeon • Video Overlay: Equipment To be provided along with Video overlay enabled in all modes. • Display: Anti-Glare Interactive soft touch clear LCD Display (10.4” or above) Electrical Specifications: Mains power: 110-230VAC, Frequency50-60Hz, Power Rating 150VA(MAX) Certification: The product must have BIS Certification, ISO 13485 & ICMED 13485	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
7	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents

8	Certificates	Manufacturer should have European BIS Certification, ISO 13485 & ICMED 13485 Approved for standard quality.
9	Warranty	Two Year

Technical Specification of Yag Laser

	GMDN Name	Yag Laser
1	Clinical purpose	To treat posterior capsular opacification after cataract surgery, and for peripheral iridotomy in glaucoma
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	Laser wavelength 1064 nm Laser source: Nd :YAG laser: flash lamp-pumped, Q-switched Beam profile: super-Gaussian for highly precise beam profile. Optical breakdown. 2- 2.7 mj or less in air Pulse duration < 4ns Pulse mode: Single Pulse - 9mJ to 13 mJ ; Double pulse -18mJ to 28 mJ; Triple pulse- 29mJ to 45mJ. Energy attenuation levels: 20- 25 steps Pulse repetition frequency Max.2 Hz. Focus diameter 8- 10 micron in air. Cone angle/Angle of exit aperture 16 Deg. Switchable aiming beam : 4 point and 2 point Aiming beam, with 620 - 670nm wavelength. With option to change the brightness. Focus offset between aiming beam and therapy beam upto +/- 300 um posterior & anterior focus shift in a step of 75um from 150um to 300um with fixed optics for highest precision. Parameter display Laser system should have option to change parameters from slit lamp, and also the option to display the parameters in eye piece. Slit Lamp 3 step magnification changer with 10x eyepieces and straight tube f=140mm with PD adjustable 50-78mm. Illumination : LED with halogen effect. 5.6V,2W with continuously adjustable brightness Slit width 0-14mm continuous, Length 1/3/5/9/14mm Floater treatment Laser system should have the option of floater treatment. Treatment report System should be capable of generating treatment report with or without additional software form the manufacturer. Camera system Laser slit lamp should have a option for integrated camera for imaging the procedure. Cooling system Thermoelectric cooling system	
4	User's interface	Manual
5	Laser wavelength	1064nm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
10	Warranty	Two Year

Technical Specification of IOL MASTER

	GMDN Name	Optical Biometer
1	Clinical purpose	To determine IOL power for cataract surgery.
2	Used by clinical department/ward	Ophthalmic Departments
3	**Technical characteristics (specific to this type of device)**	
	The System should be an Optical Coherence Biometry (Non-contact A scan) with Swept source technology. 2.Instrument should be capable of non-contact measurements of the parameters like Axial length Corneal radii, Anterior Chamber Depth, White on white measurement, Lens Thickness and Central corneal Thickness. 3.It should be a SWEPT Source Biometry showing full length OCT image showing anatomical details of the Eye on a longitudinal cut through the entire eye. 4. It Should have telecentric keratometry for distance independent keratometry. (Critical). The System should give accurate result with fast repeatability as quick as 2000 scans per second. (Critical). 5. Should be able to detect usual eye geometries, such as a tilt or decentration of crystalline lens. 6. It should have the fixation check to see foveal pit to avoid incorrect measurements caused by undetected poor fixation. 7. There should be a Facility of fixation check. All measurements callipers are shown on the full-length OCT image to verify the structure of the eye has been measured. Thus, potential source of errors should be eliminated. 8. The instrument should have the following Measurement Range: • Axial Length 14 - 38 mm. • Corneal radii 5 - 11 mm. • Anterior Chamber depth 0.7 - 8 mm. • Lens thickness 1 – 10mm (Phakic eye) & 0.13 – 2.5mm (Pseudophakia eye) • Central corneal thickness 0.2- 1.2mm. • White - to – white 8mm - 16 mm. 9.The Instrument Should be able to give the following Measurement Accuracy: • Axial length - 8 Micron • Corneal Radii - 0.09 D • Anterior Chamber depth - 11 Micron • Lens Thickness - 12 Micron • Central Corneal Thickness - 2 Micron 10.Biometer should be Upgradable to: Posterior keratometry measurements, Total K. 11.It should be upgraded to New Haigis T formula on board for Toric IOL power calculation. 12. System should have Formulas for IOL calculation SRKII, SRK / T, Holladay 2, Hoffer Q, Haigis suite including Haigis L & Haigis T 13. Barrett Suite consisting of Barrett Universal II, Barrett Toric & Barrett True-K 14. The equipment should have integrated hardware & software (CPU) within single unit. 15.Should have Central Topography upgradable without external hardware or any attachment. 16. System should have built in computer for storage, retrieval, and processing of data. 17. It should be possible to load the IOLs optimized by ULIB and carry out further Optimization of IOL constants within the instrument. (Critical). The Device Should Have Optimized A Constants for more than 270 IOL Models. 18. It should be possible to transfer the captured data to	

	1) Computer assisted cataract Surgery system 2) Data management system. (EMR or PMS). 19. The Instrument should be provided with a computer system with the Wireless printer for the Reports generation. 20. The equipment should be able to connect with the Integration software and should be able to transfer the data to the central storage. 21. The Equipment must be supplied with the Indian motorized Table. 22. The equipment must be supplied with 1 KVA Ups. 23. Built in central Topography features should be added.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
8	Certificates	Manufacturer should have European CE and US FDA Approved for standard quality.
9	Warranty	Two Year

Technical Specification of Crossmatch Workstation

	GMDN Name	Crossmatch Workstation
1	Clinical purpose	To sterilization of medical equipment and materials using dry heatss
2	Used by clinical department/ward	Microbiology labs
3	**Technical characteristics (specific to this type of device)**	

INCUBATOR
o Microprocessor Digital temperature controller in order to maintain superior temperature accuracy.
o The controller shows SV (Set Value), PV (Process Value), Incubation Set Time & Remaining Time on the display.
o Pre-set incubation time can be settable.
o Audio alarm for completion of incubation time.
o Energy Efficient
o Light weight Ergonomic design.
Incubation Temperature 37.0°C (Settable)
Accuracy ± 0.5°C
Incubation Time 15 Minutes (Settable)
Pre Heating Time Approximately 10 minutes.
Operating Conditions Temperature - 18o to 30o C
Overall Dimension (W x D x H mm)- 315 X 275 X 125
Weight Approx. 4.3 KG.
Operating voltage 220 – 240 VAC, 50 Hz, Single Phase

CENTRIFUGE
Microprocessor control, digital display which indicates the RPM and time.
 Centrifugation of 12 Gel cards. (Rotor for 12 Cards)
 Audio visual alarm provided for door open and end of cycle.
 User friendly key pad to start and stop the timer.
 Light weight and ergonomically designed for ease of operation.
 Three layers protection of steel structure and get the ideal centrifugation result.
 Speed raising and reducing quickly, operate simply. Running parameters can be editable.
 Brushless DC frequency motor with simpler construction, more reliable performance, longer life and quietly running.
 Rotor is connected to spindle by specialized taper sleeve, loading simple and quick, no direction**.**
Rotor Type Swing Rotor
Capacity 12 Cards
Maximum Centrifuge speed (RPM) 1500 RPM
Centrifuge Time 10 Min.(settable up to 90 min)
Safety Alarms Door (Lid) open alarm, End of cycle.
Operating voltage 220 – 240 VAC, 50 Hz, Single Phase
Operating Conditions Temperature : 18° to 30° C
Maximum Humidity - 80%
Clean & Dry Environment
Supply Fluctuations ±10V from the normal voltage

-Workstation Table

	- Tips Box - Pipettes Single Channel-4 - Test Tube Stand	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 40 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Centrifuge

	GMDN Name	Centrifuge
1	Clinical purpose	For separating components of liquid samples based on density, enabling various diagnostic and therapeutic applications
2	Used by clinical department/ward	Hematology, biochemistry, serology departments.
3	**Technical characteristics (specific to this type of device)**	
	Automatic rotor identification, ensures operator safety Stainless Steel centrifuge chamber, easy to clean Brushless Induction motor with variable frequency drive Microprocessor controller with digital display Stable speed output even under unstable voltage conditions Smooth &soft start Low sample temperature rise Inverter fault detection with auto shutdown 7 segment LED display of speed Max speed 6000rpm Max RCF 5250g Max capacity 400ml Digital timer range 0-99 min digital countdown timer & continous run Noise _<60db WxDxH 390x470x290 mm Selection of 3acceleration &deceleration profile Safety lid interlock to prevent lid opening during centrifugation Imbalance detection & centrifugation stop with display of error Dynamic brake for quick deceleration Motor overload protection Gas hinge to prevent door falling Emergency lid lock realease Last set parameters recall (useful for repetitive analysis) Wide variety of rotors & reduction adaptors Spin mode	
4	User's interface	Manual
5	Size	WxDxH 390x470x290 mm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Tube Sealer

GMDN Name		Tube Sealer
1	Clinical purpose	To seal plastic tubing, primarily in blood bags, infusion bags, and urine bags, to ensure sterility and prevent leakage
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	FEATURES O The Tube Sealer is a compact and lightweight tube sealer with a hand unit. (TABLE TOP) O The machine is suitable for use where work space is limited or where one tube sealer machine will be shared by multiple users. O When the trigger lever is pulled, the machine generates strong high-frequency power to melt thermoplastic tubing. It makes a seal on tubing in approx. 1.5 seconds. O Sealing operation is activated automatically the tube is place in between the electrodes O LED'S are provided for indication of Mains , Ready , Seal, Battery . O Battery Support Should be handy portable with battery inbuilt for nearly 6 hrs. Input Voltage 220 – 240 VAC Radio Frequency 40.68 MHz Sealing Time 1.5 Sec. Approx. Sealing Type Automatic Diameter of tube 3 to 6 mm Power consumption 100 VA Weight 3.4 Kg. Approx. Size 175 X 320 X 130 mm Fuse 5 Amp	
4	User's interface	Manual
5	Weight	3.4 Kg. Approx
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Blood Collection Monitor

GMDN Name		Blood Collection Monitor
1	Clinical purpose	To precisely and safely collect blood during donations or transfusions
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	Must have a weighing range of 50-500 ml Must have Automatic tare to zero for the bag weight Should have adjustable low and high flow alarms Should have adjustable donation time out up to 20 minutes The default volume must be adjustable Should clamp Automatically at termination of preset volume collection Should have option for manual clamp for usage in case of emergency Must have a weighing accuracy +/-2% Must weight less than 4.5 kg inclusive of battery Must have easily detachable tray for cleaning and disinfection which are compatible with all bag systems: Must have a 16 x 2 LCD screen for clear display of programmed volume, collected volume, flow rate, main battery, collection enhancement, manual clamping, and pause function Must have LED indication on commencement of collection and indication with alarm at the end of collection Must have LED indications like power, start, pause, debit flow, battery low and battery full: Must have indication of time taken for collection: Must have indication with alarm if blood flow rate is high or low: Must have continuous display of collected volume, flow and time during collection Trays Should oscillate continuously at 12+/- 2 rpm during collection Should operate on mains as well as rechargeable battery. On battery it should operate for a minimum of 8hrs or 50 collections Pause facility to pause during collection	
4	User's interface	Manual
5	Weight	4.5 kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 35 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Donar Coach

GMDN Name		Donar Coach
1	Clinical purpose	To allowing donors to find a comfortable and relaxed position
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	FEATURES • Facility for blood collection from both sides. • Provides a comfortable position for the donor. • Variable positioning for either arm with comfortably wide arm-rests. • Tilt adjustment can be done by using remote control. • Comfortable chair type with soft padding for cushioning and rexin cover • Two Geared Actuator. Ensuring safety and comfort to the donor. 4 Heavy Duty Lockable castors for easy mobility • Based on heamo dynamic principles. (Donor's head can be lowered • Immediately and legs can be lifted above heart level so that blood can flow back to the brain and other vital organs, in case of vasovagal (attack) 2 output source points for blood bag weighing machine with agitator SPECIFICATIONS Power Supply 230 VAC Weight 60 KG Lifting Capacity 150 kg Control Corded Remote Power Consumption 100 W Movement Actuation DC Motor Size in Normal Condition 620W x 2050D x 1440H mm Size in Stretched Condition 620W x 2050D x 1100H mm Length of Arm Rest 60 cm Width of Arm Rest 15 cm Upholstery Soft Upholstery of 2.5 thick	
4	User's interface	Manual
5	Weight	60 KG
6	Lifting Capacity	150KG
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Blood bank Refrigerator

	GMDN Name	Blood bank Refrigerator
1	Clinical purpose	To preserve the integrity of the blood cells and prevent the degradation of important components
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	Should have a chamber temperature range of 2°C to 6°C Should have a total storage capacity of 160 nos of 450ml blood bags Should have a corrosion free Interior of SS 304 grade which helps in easy cleaning Should have a 18 swg CRCA/HDGI Sheet - powder coated Should have built in microcontroller-based temperature recorder and controller unit (TRCU) positioned at eye level for better visibility and monitoring Must have six inch, 7-day, ink-less pressure sensitive circular chart recorder and accuracy should be +/- 1 degree Celsius Should have triple pane glass door which insulates the refrigerator from atmospheric temperature and better visibility of blood bags with key lock. Must have an internal evaporator fan for uniform temperature maintenance inside the chamber. It should switch off automatically whenever the door is opened Should have perforated sliding Stainless steel tray which allows bags to be placed upright with sufficient airspace to reduce " Sardine effect" Should have 5 stainless steel slide out trays Should have separate inner acrylic door with magnetic latch ensures minimal loss of cooling: Should have hotline around the mouth of cabinet to prevent moisture condensation Should have internal stabilizer which ensures steady supply voltage for the whole blood storage cabinet and prevents voltage fluctuations (Optional) Should have a factory calibrated encapsulated digital sensor dipped in liquid medium to measure temperature at an accuracy of ±0.5ºC Should have flicker free CFL lamp for uniform lighting and better visibility of samples inside the cabinet Should include caster wheels as a standard feature Should have refrigeration system “On” indicator provided as a standard feature Should have audible and visual high and low temperature alarms as a standard feature Should have an alarm silence button Should have a power fail alarm as a standard feature Must incorporate a inbuilt battery back up of 2 hours to ensure continuous operation of the TRCU during power failure: Should have display of 4*7 Segment LED with 0.5ºC display resolution Must utilize non-CFC, commercially available refrigerant Must keep the refrigerator free of frost without elevating the chamber temperature Must have a cabinet with a clear powder coated finish to guard against rust and corrosion There must be eye level indications of power/Line in from inbuilt stabilizer : NA Chart change and Chart set options in TRCU must be available :NA Must have MCB protection in the input power line. Should comply IEC safety /EMI/EMC standards, ISO 9001 ,ISO 13485 certified and CE marked with Class II a.	
4	User's interface	Manual
5	Temperature range	2°C to 6°C

6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 30 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Plasma Freezer -80 degree

GMDN Name		Plasma Freezer
1	Clinical purpose	To safe storage of frozen blood plasma or blood components and test samples
2	Used by clinical department/ward	Blood Bank
3	Technical characteristics (specific to this type of device)	
	STANDARD FEATURES O Microprocessor Digital temperature controller in order to maintain superior temperature accuracy. O The controller shows both SV (Set Value) and PV (Process Value) on the display. O Temperature safety high low Audio visual alarm. O Door open Safety alarm. O High density CFC free Poly Urethane foam (PUF) for minimal temperature losses and save power consumption. O Heavy duty hermetically sealed compressor, air cooled refrigeration system and CFC free refrigerant. O fix SS 304 plain trays. O Solid insulated door with lock & handle, Magnetic gasket is provided for airtight sealing O Castor wheels are provided for easy movement with an option for having locks. O Weekly temperature circular chart recorder helps to record storage conditions. O Multi or single channel Data logger with RS 485 port. (OPTIONAL) O Battery backup for temperature display and Recorder up to 2 Hrs. (UPS OPTIONAL) Inner Dimension (W X D x H mm) Vertical 560 x 560 x 960 Horizontal 960 x 560 x 560 Volume 300 Ltrs. No. of Trays Vertical 4 Nos. Horizontal 4 Nos. Bag Capacity 300 (450 ml.) Temperature UP TO-40.0 °C Stabilization Time Approximately 90 minutes. Operating voltage 220-240 VAC, 50 Hz, Single Phase	
4	User's interface	Manual
5	Dimension	Vertical 560 x 560 x 960 Horizontal 960 x 560 x 560
6	Volume	300 Ltrs
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 30 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to -80° deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover.

		2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Plasma Extractor

GMDN Name		Plasma Extractor
1	Clinical purpose	To extract Blood component from centrifuged bags
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	FEATURES o Easy to use and portable oStainless steel spring-loaded acrylic plate exerts uniform pressure on the blood bag. o Manual system accepts all kinds of blood bags. o Transparent plate for visual control of Red cell & Plasma. o Power full spring with adjustable to regulate pressure. o Anti-slip feet keep unit in place. o Handle with ball end provides a comfortable grip. o Frame and construction in stainless steel 304 o Its sturdy construction make it durable and reliable o Hook keeps the handle in place before and after expression. Construction Powder coated CRCA steel / Stainless steel 304 Clamping control type Manual Pressing mechanism Spring-loaded acrylic plate Compression plate 10 mm thick transparent acrylic. Dimension W x D x H mm 170 W x 250 D x 250 H mm Gross Weight 3.1 Kg.	
4	User's interface	Manual
5	Dimension	170 W x 250 D x 250 H mm
6	Weight	3.1 kg
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of VDRL Shakar

GMDN Name		VDRL Shakar
1	Clinical purpose	To accurately measuring and transferring small volumes of liquid samples, particularly in diagnostic testing and research
2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	• Universal platform with adjustable roller to fix the sample in micro-plate, petri-dish, glass vessels or test tubes • Brush less motor for maintenance free operations • Adjustable rollers to fix samples of different sizes • Rubber cushion help in stable sample holding APPLICATIONS: • VDRL testing • Microbiology • Molecular biology • Pathology • Biotechnology Dimension (W x D x H) 270 x 260 x 125 (mm) Platform size 7 x 11 Shaking orbit 10 mm Countdown timer 0-15 minutes Min speed 180 RPM Power Supply 220-240 v, 50 Hz, Single phase SPEED INDICATOR DIGITAL SHAKER HAVE 3ADJUSTABLE ROLLERS	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Blood Bank Centrifuge 12 Bucket

	GMDN Name	Blood Bank Centrifuge 12 Bucket
1	Clinical purpose	To separating blood components like plasma, red blood cells, and platelets in blood banks and transfusion centers
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	FEATURES • Touch screen HMI and PLC control system • Program up to 99 precise speed control and reproducibility. • There is a Safety cut-off in case of unbalanced rotation. • All parameters/settings are password protected. • Audio visual alarm for process complete, imbalance cut-off and process terminate. • Brush less induction motor with frequency drive. • Preset program for different type of bag. • Safety lid interlock to prevent door opening during centrifugation. • Two pre cooling programs ie. 4°c & 22°C. • Integrated soft key Lid opening system with extra safety manual opening in case of power failure. • Viewing window for RPM calibration. • Safety Gas hinges to prevent immediate Lid drop. Accessories balancing weights in buckets. Control System Micro controller Temperature Range 4°C to 22°C Rotor 6 Place Aluminium swing out rotor head to hold 6 metal carrier having capacity to hold 2 bags with plastic buckets & wind shield of 4 mm thick. Buckets 1000 ml x 12 Nos. Maximum Speed (RPM) 4200 Maximum RCF 5812 Time Range 99 minutes Overall Dimension (W x D x H mm) 845 x 945 x 940 mm Weight 400 kg Operating voltage 220 – 240 VAC, 50 Hz, Single Phase	
4	User's interface	Manual
5	Dimension	845 x 945 x 940 mm
6	Weight	400Kg.
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 35 deg C and relative humidity of 15 to 80% in ideal circumstances. . 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard

		quality.
11	Warranty	Two Year

Technical Specification of Compo scale

	GMDN Name	Compo scale
1	Clinical purpose	To accurately measure the volume and specific gravity of blood components
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	FEATURES o Light weight portable and compact design with heavy duty construction. o Bright LCD displays of Weight and Volume with accuracy of ± 1 gm. o Rechargeable battery operated. o Helps better balancing of refrigerated centrifuge. o Tare provision to account for the weight of the blood bag. o Auto Calibration. o Micro Controlled based technology for high accuracy o ABC Moulded body. o Stainless steel pans with plain surface for easy cleaning purpose. o Accurate, simple and user-friendly. o Quick sense, no warm-up time. o It is ergonomically designed. TECHNICAL SPECIFICATIONS Weighing Capacity 10 KG Accuracy ± 1gm Power consumption 100 VA Input Voltage 220 – 240 VAC Battery Backup 12V 1.2 Ah Lead Sealed Battery Power consumption 15 VA Weight. 4.7 Kg. Approx. Overall Dimension W x D x H mm 315 x 265 x 120 mm	
4	User's interface	Manual
5	Weight	4.7 Kg
6	Dimensions	315 x 265 x 120 mm
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 35 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 5 to 40 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Hand Stripper

GMDN Name		Hand Stripper
1	Clinical purpose	To efficiently and safely empty blood from the collection tubing of a blood bag
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	Should comply with safety requirements of ISO 9001 ,ISO 13485 certified and CE marked Should have a stainless-steel body material The bead should be blasted and passivated The handle should be made of Plastisol The roller must be of Derlin It should weigh not more than 215 grams Should be capable of stripping, sealing/ crimping and cutting	
4	User's interface	Manual
5	Weight	215 grams
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Platelet Agitator with Incubator

	GMDN Name	Platelet Agitator with Incubator
1	Clinical purpose	To safely store and preserve blood platelets for transfusions
2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	FEATURES O Microprocessor Digital temperature controller in order to maintain superior temperature accuracy. O The controller shows both SV (Set Value) and PV (Process Value) on the display. O Temperature safety high low Audio visual alarm. O Door open Safety alarm. O High density CFC free Poly Urethane foam (PUF) for minimal temperature losses and save power consumption. O Heavy duty hermetically sealed compressor, air cooled refrigeration system and CFC free refrigerant. O LED light provided for illumination, controlled through door open and close O Heavy duty Castor wheels for easy movement, and wheels can be locked. O Weekly temperature circular chart recorder helps to record storage conditions. O Multi or single channel Data logger with RS 485 port. : (OPTIONAL) O Battery backup for temperature display and Recorder up to 2 Hrs. (UPS OPTIONAL) Temperature 22.0°C Temp. Accuracy ± 0.5°C Stabilization Time Approximately 20 minutes. Agitator Placement 1 No. No. of bags 48 Nos. No. of Trays 8 Nos. Inner Dimension (W x D x H mm) 520 x 460 x 460 Overall Dimension (W x D x H mm) 690 x 750 x 1050 Operating voltage 220 – 240 VAC, 50 Hz, Single Phase	
4	User's interface	Manual
5	Dimension	690 x 750 x 1050
6	No of Bag	48 Nos.
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 35 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Portable Donar chair

	GMDN Name	Portable Donar chair
1	Clinical purpose	To ensure donor comfort, which can positively impact the donation experience and encourage regular blood donation
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	Portable Donar Chair -Frame Stainless Steel 304 -Capacity 150kg -Foldable -Fabrick -Free Size - Weight Approx 15kg	
4	User's interface	Manual
5	Weight	Approx 15kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Calorimeter

GMDN Name		Calorimeter
1	Clinical purpose	To determining metabolic rates, assessing nutritional needs, and studying the effects of drugs and diseases on the body's energy expenditure
2	Used by clinical department/ward	critical care units and specialized metabolic centers
3	**Technical characteristics (specific to this type of device)**	
	Digital Display 9 Wavelength 3 Digit Absorbance Concentration & Factory Mode Set Of 5 Glass Rount Cuvettes 12*75mm Battery Container For 8 Torch Cells Dust Cover For Analyzer	
4	User's interface	Manual
5	Display	Digital
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Elisa reader and washer

GMDN Name		Elisa reader and washer
1	Clinical purpose	To detecting and quantifying specific substances like antibodies or antigens in biological samples
2	Used by clinical department/ward	Pathology Department
3	**Technical characteristics (specific to this type of device)**	
	Elisa Reader detection Principal- Absorbance Assay Modes-Quantitative , Semi Quantitative & Quantitative 96wells Measuring Types- 8 Channels Fiber Optical System Reading Speed- Monochromatic-10 Sec. For 96wells Bi chromatic -22secs For 96wells Light Source- 12v 20w Halogen Lamp Wavelength- 405,450,492,630nm (With 3 Optional Filter Positions) Provision To Enter Filter Values Through Software Display- 320x240 Pixel STN-Blue Monochrome LCD With Led Backlight Keypad- 0.000 To 4.000 O.D Repeatability- CV<3% Stability- Drift± 0.003 O.D For 1 Hour Linearity- 0.000 To 3.000 O.D For 492nm/ 0.000to 2.400 O.D For 405nm Shaking- 3 Options (Low, Medium & High) Vibration Time Adjustable From 0 To 240sec Date Connectivity- RS 232, External USB Printer Power Supply- 100-240vac, 50/60hz (65w Max) Operating Environment- 5°C To 40°C Dimensions-400mm(W) X 525mm(L) X 185mm(H) Weight- Aprox14kg Elisa Washer Programmable Tests 100 Micro wel Types Flat U And Round Bottom Washing Manifold 8 And 12 Needles Display 192x64 Pixel STN-Blue Monochrome LCD With Led Backlight Programmable Wash Cycle 0 To 255 Washing System 1wash Buffer Bottle 1d/L Water Bottle,1 Pressure Bottle And 1wast Liquid Bottle With Liquid Level Monitoring Shake Rate 1 To 5 Levels Shake Time 0 To 255 Secs Soak Time Min. 0 Sec To Max Upto 60minuts And 60 Seconds Residual Volume 2µl Washing Accuracy ±3% At300µl Wash Liquid Volume Range 50-400µl With Increment Of 50µl Relative Humidity 95% Power Supply 100-200vac 50/60hz (55w Max) Operating Environment 5°C To 40°C Dimension 390mm(W)X410mm(L)X330mm(H) Weight Approx. 11.5kg	
4	User's interface	Manual
5	Weight	Reader 14Kg and Washer 11.5 Kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of

		15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Semi Auto Analyzer

GMDN Name		Semi Auto Analyzer
1	Clinical purpose	To analyze various biochemical parameters in biological samples like blood and urine
2	Used by clinical department/ward	Biochemistry Department
3	**Technical characteristics (specific to this type of device)**	
	1. Should have Light Source of 12V 20W quartz /Halogen/ Tungsten lamp 2. Should have ERA flow cell with copper flow cell holder with measuring volume of 30 uL 3. Aspiration volume programmable should be in the range of 300—1000 ul (0.2 to 1.0 ml) 4. Should have 6 Energy Matched filters (340 - 630nm/670mm) and provision for 2 optional filters 5. Should be capable to perform End point kinetic and 2 point kinetic (fixed time) tests and coagulation 6. Should have automatic zero setting 7. Should have option for calculated parameters 8. Should have facility for Off system parameters 9. Should have Direct Access Key to test menu 10. Should have energy saving feature 11. Should have the sample aspiration technology with maintenance free Peristaltic pump driven by a stepper motor, the aspiration volume calibration frequency is minimum 12. Should have air volume between consecutive samples and auto empty function to prevent carry over 13. Should have color Touch screen with touch pen and popup keypad or Keyboard 14. Should have Temperature Control: By means of Peltier elements - 25°C , 30°C and 37°C. 15. Should have 3 controls/test, QC survey of last 30 days control results Levy Jennings plot 16. Should have storage capacity of 5000 sample results and 18000 QC results. 17. Should have built-in thermal printer. 18. Should be portable in nature with weight of 7 kg 19. Should have CE certification 20. Should have features for LIS	
4	User's interface	Manual
5	Weight	7 KG
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year
11		Operates on 100-240 V AC power supply

Technical Specification of Electrolyte Analyzer

	GMDN Name	Electrolyte Analyzer
1	Clinical purpose	To measure the levels of electrolytes in bodily fluids like blood and urine
2	Used by clinical department/ward	Pathology and Biochemistry departments
3	**Technical characteristics (specific to this type of device)**	
	1. Principle: Direct measurement with ion selective electrode (ISE). 2. Parameter Conversion: This functionality allows quick change of Analyte. 3. Sample: Whole Blood, Serum, Plasma, CSF and Diluted Urine. For Diluted (1:5) Urine 500 Micro Liter. 4. Sample Volume: 100-150 µl Micro Liter 5. Measuring time:50- 60 Sec. 6. Throughput: 50-100 Samples/ Hour 7. Data Storage: 10000 Samples, 250 Urine, 100 QC. 8. Ambient Conditions: Temperature: 5°C - 40°C, <85% Non-condensing Humidity. 9. Output: 128X64 Graphics Display with Numeric Keypad, 24 Column Thermal Printer, Serial USB Port. 10. Input Voltage: 110/115-VAC, 50-60 Hz or 220-VAC, 50-60 Hz, 0.75 amp. 11. Size & Weight: 15.1” W X 13.2” H X 7.5” D, 4kg	
4	User's interface	Manual
5	Size	15.1” W X 13.2” H X 7.5”
6	Weight	4 Kg
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Reagent Refrigerator

GMDN Name		Reagent Refrigerator
1	Clinical purpose	To store and preserve temperature-sensitive reagents.
2	Used by clinical department/ward	Hematology or pathology departments
3	**Technical characteristics (specific to this type of device)**	
	Capacity-375 Liter Temperature Range- 2-8Degree Celsius Cooling Performance- 4 Degree Celsius Cooling Method- Ventilated Cooling Digital Display-Yes Defrost Mode- Automatic Refrigerant- R134a Insulation Thickness-50mm No of Shelf-4 Door- Double Layer Vacuum Glass Door Lock-yes Casters-yes Power Supply- 220/50 Rated Power-140 Climate Class-T Controller-Microprocessor Temperature Alarm-High/low System Alarm- Sensor Error	
4	User's interface	Manual
5	Capacity	375 Liters
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Fully Automatic Biochemistry Analyzer High End

GMDN Name		Fully Automatic Biochemistry Analyzer High End
1	Clinical purpose	To analyzing various biochemical parameters in blood and other body fluids
2	Used by clinical department/ward	Biochemistry Department
3	**Technical characteristics (specific to this type of device)**	
	Should be fully automated random access, discrete, patient prioritized, walk away system. • Should have a throughput not less than 1200T/H with ISE. • Should be capable of performing Biochemistry and ISE • Should be with single chip ISE module for easy maintenance. • Should have 100 program channels. • Should have more than 50 parameters on board per sample. • Should have option for calculated parameters. • Should be capable of accommodating not less than 100 reagent bottle positions including R1&R2 at the same time. • Should have different reagent disks for R1 & R2 • Should have reagent dispensing volume 20 – 345 uL • Should have facility to dilute concentrated reagents. • Should have minimum reaction volume of 120 uL or less. • The sample tray type should be Universal sampler with option to accommodate primary sample or cups. • Sample tray should be of turn table type with dual sample carousel which can be loaded independently. It should be rack sampler with continuous loading option • Should have a minimum of 100 sample positions excluding controls. • Should have separate position for low volume STAT sampling.(minimum 6 samples for STAT) • Should have auto dilution facility for Calibrator. • Should have End Point (with or without sample Blank) Rate (with or without sample blank) assay facility/ fixed point. • Should have calibration types of Abs, Factor, Linear, Logit-4, Logit-5, Exponential, Spline, Ref blank. • Should have sample volume as low as 1.5 uL to 35 uL. • Should have Clot detection facility. • Should have pre dilution mode, automatic re assay with diluted, reduced or increased sample volume. • Should have optimized sampling sequence for better sampling speed. • Should have a minimum of 6 independent controls per test. • Should be capable of accommodating minimum 100 standards and 6 controls at the same time. • Should have reusable reaction cuvette with more than 120 positions. • Should have reaction cuvette made up of Hard glass/quartz cuvettes. • Should have minimum 120 reaction cuvettes. • Should have reaction temperature 37oC with stability±0.1o C maintained by dry bath maintained by peltiers system. • Should have onboard laundry with more than 6 steps washing station. • Should have independent probes for taking R1, R2 and sample with liquid level sensing technology. • Should have refrigerated sample position for controls. • Should have independent dilutors made up of Acrylic or ceramic piston for sampling and	

	reagent aspiration. • Should have dual stirrer with fixed or variable speed mixing technology. • Should have Tungsten halogen lamp with photometric range -0.0 to 3.0 Abs. • Should have photometric linearity ±2% • Should have light path 8mm or lesser. • Should have fixed grating photometry with 16 Wavelengths from 340nm to 804nm (340,380,404,416,450,476,500,524,548,572,604,628,660,700,748,804) • Should have Silicon Photo diode array for light detection. • Should have touch screen user interface with external printer. • Should have auto start & auto shutdown functions. • Should have LIS compatibility. RS 232/ USB/Latest bidirectional interface and inbuilt barcode reader. Should include water purification system including cartridge , Membrane etc UPS unit including UPS batteries.	
4	User's interface	Manual
5	No of Test	1200 per hour
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Tube Lebling Analyzer

GMDN Name		Tube Lebling Analyzer
1	Clinical purpose	To ensure accurate and efficient labeling of blood collection tubes and other medical specimens
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	1. A Blood Collection Support System that promises Safety, Efficiency and Error free Specimen labelling of tubes. 2. It can be installed at the phlebotomy station 3. Number of Tube stocker should be not less than 6 4. Each tray should have capacity to store up to 20 tubes. 5. Total Tube Capacity: Not less than 120 Tubes 6. Applicable vacutainer size: 13x75mm & 13x100mm 7. Number of discharged tubes: At a time 1 tube. Discharge of prepared tube should be under control of the phlebotomist. 8. Throughput/hour: Minimum 400 tubes/Hr. 9. Automatic tube selection as per test requisition of Each patient. 10. Automated Barcode Labelling: It can stick labels precisely at Correct position and the position can be easily changed, (if required) as per the tube size; to adopt to various kinds of downstream analyzers. 11. Automatic Patient ID Verification. 12. Operator can Designate Order of Draw for the tubes. 13. Identifies & prints all the patient related information like Name, Age, Sex, Analyzer type, Ward, Chemistry or Hematology, etc. 14. System can dispense all the tubes and extra labels for the tests like Urine, Sputum or stool; as per patient test requisition, along with the Summary of the worklist (in the form of a patient kit). 15. Weekly/ Monthly Performance Report: System can capture Real time output of every Phlebotomist. 16. Workload Data: System can give report on Daily or Monthly Consumption of Tubes, Hourly Phlebotomy Collection numbers, Peak period of collection; and ability to trace sources of Error. 17. Printing method: Direct Thermal. 18. System Interfaces with LIS/ HIS.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Advanced 5part Cell Counter with Autoloader

GMDN Name		Advanced 5part Cell Counter with Autoloader
1	Clinical purpose	To analyze and quantify cells in biological samples, providing crucial information for diagnosis and treatment monitoring
2	Used by clinical department/ward	Hematology or pathology departments
3	**Technical characteristics (specific to this type of device)**	
	1. The system should be a five-part differential hematology analyzer. 2. Should have facility to display 24 reportable parameters (WBC, RBC, HGB, MCV, MCH, MCH-C, RDW-CW, RDW-SD, HCT, PLT, MPV, PDW, PCT, P-LCR, BASO#, BASO%, NEUT#, NEUT%, EO#, EO%, LYMPH#, LYMPH%, MONO#, MONO%), 4 research parameter, 4 graphs with 3 Histogram in a single screen. 3. Should have 3D differential scattergram with option for changing the view. 4. Should use third generation nucleic acid fluorescent dye-based staining, flow cytometry tri angle laser scatter technology for WBC differential. 5. There should be an independent channel for the basophil differential. 6. Should have immature granulocyte as research parameters. 7. Should use cyanide free lyse reagent. 8. Sample volume should be 20 uL and the system should have automatic dispense of diluent for predilution. 9. Should have a minimum 80 T/H throughput. 10. Should have a minimum of 50 sample positions. 11. Should have the sample rack with 10 sample positions. 12. Should have internal sample barcode reading facility. 13. Should have minimum 500,000 patient memory. 14. Should have QC with LJ Plot and Radar Graph 15. Should have a minimum of 9 reportable templates. 16. Should have the facility to print QC report in A4 format for documentation purposes. 17. Should have automatic and manual calibration facility with calibration history of at least 10 previous calibrations. 18. There should be real time display of the remaining reagents on screen. 19. Should be capable of performing CBC or CBC + Diff analysis. 20. Should be capable of aspirating sample from Closed tubes, Small open vials, Conical vials, open tubes. 21. Should have facility for aspirating control from the closed tube. 22. Should support HL7 based interfacing. 23. Linearity for the WBC should be 99.9 x 109 / L and RBC 7.0 x 1012 / L, Hb 240 gm/L, Platelet 999 x 109 / L with a carry over ≤ 5 percentage for the platelets. 24. The instrument should be provided with software installed on the latest windows-based PC with 1TB hardware for ease of use and data storage. 25. Should have barcoded reagents with only two different lysing solutions. 26. The reagents should be manufactured in India. 27. All results with histogram to be displayed in a single screen. 28. Bidder should supply all the necessary accessories along with equipment for installation which includes UPS with a minimum of 1 hr backup. 29. Should have CE certified /US FDA/BIS/CDSCO certifications for both the machine and reagents.	
4	User's interface	Manual

5	Capacity	80 Test per hour
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Cell Counter

	GMDN Name	Cell Counter
1	Clinical purpose	To analyze and quantify cells in biological samples, providing crucial information for diagnosis and treatment monitoring
2	Used by clinical department/ward	Hematology or pathology departments
3	**Technical characteristics (specific to this type of device)**	
	Machine should have large color 10 Inch TFT Touch screen display Machine should have patient memory of 200,000 report data with histograms. Machine should have window based program. Machine should have two counting chambers. Machine should have through of 60 samples per hour Machine should have reagent expiry alarm. Machine should have self check software. Machine should following sample volume Prediluted – 20 µL Whole Blood – 9 µL Machine should have dilution ration of 1:44500 or above for reducing chances of coincidence error. Machine should have one touch clog removal function. Machine should have volume time based measurement (not time based) for cell counting Machine should have jewel lining on apertures, preferably Ruby, to ensure long life of aperture. Machine should have automatic moving floating discriminators in WBC, RBC, PLT histograms. Machine should have dedicated Zap & Flash cleaning technology for individual bath cleaning Machine should have Preheat bath for proper cleaning of the aperture Machine should have linearity for Hemoglobin upto 28 gm/dl for better diagnosis Machine should have 4 USB ports to connect the keyboard, mouse, printer, barcode Machine should have Supports bi-directional LIS Machine should have Thermal Printer, 50mm wide paper, various printout formats Machine should have External printer optional	
4	User's interface	Manual
5	Display	10 Inch TFT Touch screen display
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of ESR Analyzer

	GMDN Name	ESR Analyzer
1	Clinical purpose	To measure the rate at which red blood cells settle in a test tube over a specific time period
2	Used by clinical department/ward	pathology laboratories and hematology departments
3	**Technical characteristics (specific to this type of device)**	
	Random access Upgraded Westergren Method, Throughput 40 samples/hour Infrared Photometry principle gives reading Accuracy 3.5" Colour TFT Touch Screen Wireless LIS connection and in built thermal printer Measuring Principle Infrared Photometry Test Channels- 20 Throughput -40 Samples/Hour Loading Pattern- Random Access Sample Requirements- 1.28 mL, Sodium Citrate whole blood ESR Measuring range- 0 - 140 mm/hour ESR Measuring Accuracy- ± 1 mm reading accuracy Tests Duration- Selectable 30 and 60 Minutes Optical reading resolution-- ± 0.04 mm optical measurement precision Temperature Compensation --Automatic temperature conversion to 18ºC. (Manley Table) IOT connectivity- Available* LIS- Wireless Wifi Connectivity-Available Memory- 1024 Samples Display- 3.5" Colour TFT Touch Screen with stylus Internal Thermal Printer- Available External Barcode Scanner (Optional)- Low cost, Optional, USB Port Weight -3.6 Kgs Dimensions- 260 x 210 x 173 mm (LxWxH) Power Supply -12 Volts, 3 Amp	
4	User's interface	Manual
5	Weight	3.6 Kgs
6	Display	3.5" Colour TFT Touch Screen
7	Dimensions	260 x 210 x 173 mm (LxWxH)
8	Mobility, portability	Portable
9	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
10	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
11	Certificates	Manufacturer should have ISO Certificate for standard quality.
12	Warranty	Two Year

Technical Specification of Binocular Microscope

GMDN Name		Binocular Microscope
1	Clinical purpose	To detailed examination of biological samples for diseases and abnormalities
2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	• Stand: Single mold sturdy stand with anti rust materials. Extended base for better stability • Viewing Bodies: 45° inclined Binocular Head, 360° rotatable, Inter pupillary distance 54 - 74mm • Eyepiece: Wide field focusable paired eyepiece 10x/18mm with foldable eye guard, lockable • Noise piece: Quadruple Nosepiece (Ball bearing type) with rubber grip • Objectives: LP series DIN Plan Achromatic objectives 4x,10x, 40x (spring loaded), 100x (spring loaded, oil),anti fungus • Mechanical Stages: Rectangular stage size 135 x 124mm, X/Y travel range 76mm x 50mm. Low drive movement controls, with ball bearing slides for smooth operation. • Condenser: Sub stage Abbe condenser NA 1.25 with aspheric lens. Iris diaphragm with snap-in blue filter. Rack and pinion movements on metal guides • Focusing: Co-axial coarse and fine focusing on ball drive system for highly smooth operation. • Illumination : LED† or Halogen 6V-20W illumination with variable illumination control. Up to 100,000 hours of LED life and 2,000 hours of Halogen lamp life • Electrical: Input 220V - 240V AC, CE Approved	
4	User's interface	Manual
5	Viewing Bodies	45° inclined
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Coagulation Analyzer

GMDN Name		Coagulation Analyzer
1	Clinical purpose	To assess a patient's blood clotting ability, aiding in the diagnosis and management of bleeding disorders, thrombosis, and monitoring patients on anticoagulant therapy
2	Used by clinical department/ward	Hematology departments
3	**Technical characteristics (specific to this type of device)**	
	1. Should be an open system capable of performing PT, APTT, Fibrinogen and factor tests 2. Should be with single channel measuring with magnetic mixer motor 3. Minimum test volume should be 150uL 4. Should be with automatic cuvette detection 5. Should be capable of double determination if required 6. Should have minimum 4 cuvette pre incubation positions 7. Should have at least one position for reagent incubation 8. Measuring principle should be turbo densitometry. 9. Should have facility to edit the ISI value 10. Should have facility to edit calibration curves up to 9 points 11. Should have LCD display 12. Should have facility to calculate INR value 13. Instruments manufactured in the European union is preferred 14. Weight should be less than 1 Kg	
4	User's interface	Manual
5	Weight	1 Kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of HBA1C Analyzer Fully Automatic

GMDN Name		HBA1C Analyzer Fully Automatic
1	Clinical purpose	To measure the average blood glucose levels over the past 2-3 months
2	Used by clinical department/ward	Chemistry and hematology departments
3	**Technical characteristics (specific to this type of device)**	
	1. Fully Automated HPLC analyser 2. 50 Samples can be loaded at a time 3. Continues loading of Sample 4. Throughput of 50 Samples/Hour 5. Assy time is only 72Seconds per sample 6. CV <1% 7. Sample types should be whole blood 8. The system should offer both NGSP & IFCC value reporting on the same patient, control and calibrator report. 9. Inbuild barcode reader for patient details. 10. Auto mixing of sample 11. De cap free workflow 12. Intelligent consumable management with RFID tag 13. Calibration frequency – One per Column for 1000Test. 14. Measuring range 3% - 20% 15. System should able to screen the HbF 16. System should detect the most common Hb Varients in India (HbS, HbC, HbD and HbE)	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Biosafety Cabinet

	GMDN Name	Biosafety Cabinet
1	Clinical purpose	To protecting laboratory personnel, the environment, and samples from biohazards
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	Galvanized Iron Sheet with Epoxy Polyester Thermosetting Powder Coating of 60-80 microns, 1.5 mm Thickness G.I. sheet. Anti Microbial Powder Coated / OR / Stainless Steel 304 grade 1.2 mm complete. Internal Dimensions L x D x H (mm) : 1235 x 600 x 650 +/- 5 mm External Dimensions L x D x H (mm) : 1400 x 785 x 2270 +/- 5 mm Down Flow Velocity 60 FPM at 4” from the ULPA Grill Inflow Flow Velocity 100 FPM across the work access opening. Body Finish Glossy Off White Colour Design Class II – B2 compliant 100% Air exhausted back to the environment through a dedicated duct. Cleanliness Class ISO Standard 14644 -1 ISO Class 3 Noise Level Less Than 60 Db at 1 Meter from the face of the filter Stages of filtration 1) ULPA Final = 0.12µ with an efficiency of 99.9995% 2) ULPA Exhaust = 0.12µ with an efficiency of 99.9995% 3) Primary Pre Filter = 15 micron with efficiency of 85% (ULPA Filter : AAF India Ltd.) Front Door One piece full view frame less sliding toughened glass door 6 mm thick. Motorized automatic door. ULPA Filter Grill SS 304 grills duly perforated and polished Motor Blower Assembly For Supply and Exhaust “Godrej” make variable speed motor mounted on PU coated FRP Blowers with Aluminum Impellers Switches & Speed Controller Feather touch microprocessor control Fluorescent lighting “Osram” make. 36 Watt Slim tube light- 2 Chokes for lighting “Wipro” make Electronic Choke 36 watts – 3 nos. Ultra Violet Lighting 3 feet length G30T8 30 Watt “Philips” make Electrical socket 5 / 15 Amps socket – 1 Nos. Internal Work Area Complete Stainless Steel 304 with rounded joint less corners Pressure gauge Magnehelic gauge Gas / Vacuum Cock Standard make (Premier make) (Optional - it will be cost extra Rs. 2,145/-) Wheels & Leveling Lugs PU solid wheels with plated brackets & Metal Leveling Lugs Power Supply & Service Single phase 230V, 50Hz power supply Consumption : 600 Watts	

	All services from Front and Back • Alarm for Excess Height opening and automatic cutoff for UV tube when the door is open. • Interlocked switches for UV & Lights. • Stainless Steel drain collection system • Raised arm rest prevents grille blocking, and provides comfortable working posture. • Single-piece work tray to contain spillage with sloped easy-to-swipe perimeter. • System is ergonomically designed with angled cabinet front which is sloped at around 10° for enhanced comfort and reduced operator fatigue. • For easy servicing all cabinet components, including ULPA filters are easily accessible from the front /back to allow for rapid service and minimal work disruption during preventative maintenance and recertification. System will comply with NSF/ANSI 49 to ensure a safe operating environment for Class II, Type A2 conditions	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Microtome

	GMDN Name	Microtome
1	Clinical purpose	To cut thin sections of tissue for microscopic examination
2	Used by clinical department/ward	Pathology laboratory
3	**Technical characteristics (specific to this type of device)**	
	1. Manual Rotary Microtome should be ergonomically made and compact design and imported microtome. 2. Manual Rotary Microtome should have mechanical precision feed mechanism should be available. 3. Manual sectioning and coarse feeding should be through smooth running hand wheel and coarse wheel. 4. Manual Rotary Microtome should have manual sectioning in full hand wheel rotation with forward and backward travel is carried out by the coarse feed wheel. 5. Manual Rotary Microtome should have vertical guidance by zero-backlash and maintenance-free cross roller bearings. 6. Manual Rotary Microtome should have specimen orientation should be universal X & Y axes with 8° and Z -axis with rotatable at 360° should be available. 7. Specimen retraction during return travel, can be turned off and Peltier-cooled Cool Clamp device for standard clamp to maintain paraffin blocks at 10°C during sectioning process. 8. Manual Rotary Microtome should have two mechanical trimming stages of 10 µm & 30 µm or more. 9. Should have 2-in-1 blade holder for High profile blades and low-profile blades setting. 10. Manual Microtome should have resettable electronic section counter with LCD should be available. 11. Section thickness range should be 0.5 µm to 60 µm with following increment range from 0.5 to 2 µm in 0.5 µm- increments, from 2 to 10 µm in 1 µm- increments, from 10 to 20 µm in 2 µm- increments and from 20 to 60 µm in 5 µm- increments. 12. Section thickness setting knob should be available on both sides on manual rotary microtome. 13. Manual Rotary Microtome should have horizontal overall specimen feed should be 28 mm or more. 14. Manual Rotary Microtome should have vertical specimen stroke should be 60 to 70 mm. 15. Manual Rotary Microtome should have options of a peltier-cooled device cool cut to maintain paraffin blocks at 10°C during sectioning process. 16. Should have lateral displacement to the knife base enables to use the entire length of blade without removing of adjusting blade. 17. Should having spacious section waste tray that can cover the entire working area and below the blade holder also. 18. Should have integrated arm rest with spacious section waste tray that can cover the entire working area and below the blade holder and electronic section counter should be available. 19. The equipment should be European CE and USA-FDA listed & manufacturer must be ISO certified. 20. Equipment should be provided with following accessories- both high and low profile blades: 1 packets each, one standard specimen clamp & one universal specimen clamp. 21. The physical demonstration of the equipment offering actual tender specifications at the site should be mandatory & Demonstration and installation should be free at cost.	

4	User's interface	Manual
5	Display	LCD
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Tissue processor

	GMDN Name	Tissue processor
1	Clinical purpose	To prepare tissue samples for microscopic examination, primarily for diagnosing diseases
2	Used by clinical department/ward	histology and pathology laboratories
3	**Technical characteristics (specific to this type of device)**	
	1. Automatic tissue processor should be carousel type with 12 stations of 1.8 litre each; 9 reagent stations, 3 wax baths with double basket operations. 2. Automatic tissue processor should have shaking or vertical agitation movement for each to tissue basket which increases infiltration quality at a high degree of precision. 3. Automatic tissue processor should have excess temperature cut of facility to avoid tissue loss at 75° (±4°C) Celsius. 4. Automatic tissue processor should have rotational movement for each stations which can rotate the tissue basket in clockwise and anti-clockwise direction and changes the rotational direction every 60 seconds for an homogeneous mixture of the reagents and a reduction of processing time. 5. Automatic tissue processor should have reagent resistant polypropylenes reagent containers or metal containers. 6. Automatic tissue processor should have centrifugal agitation which can change rotation direction of tissue basket in clockwise and anti-clockwise direction and changes the rotational direction every 15 seconds or vacuum system. 7. Automatic tissue processor should have nine or more programs with infiltration time independently selectable from 1 minutes to 90 hour or more. 8. Automatic tissue processor should have audible alarms, error message and warning codes should be available. 9. Automatic tissue processor should have centrifugal agitations or spiral agitation or vacuum system to all the reagent containers from 1st station to 12th station. 10. Automatic tissue processor should have double basket operations with 110-130 cassettes in each basket, thus total capacity in both basket should be at least 220-260 cassettes with selectable vertical agitation, rotational movement, centrifugal agitation or spiral agitation or vacuum system. 11. Should have centrifugal speed up to 70 rpm with selectable timing or should have vacuum system with pressure difference of maximum 500 hPa approx. 0.5 bar to all the reagent stations. 12. Should have paraffin temperature setting range from 50°C to 70 °Celsius 13. Should have facility to manually or electronically lift the carousal and remove tissues in case of long power failures.	

	14. Automatic tissue processor should have centrifugal agitation or vacuum system with fume extraction system with active charcoal filter. 15. Should have LCD display which shows all parameters throughout the process, such as program start time, program remaining time, start delay, total duration of the program, rotational agitation and shaking movement, basket's centrifuging, temperature of paraffin baths, date and time. 16. Should have capacity of ten or more different programs that can be freely set up by the user. Each one of the programs can be started in immediate or delayed mode without any time limit as per the user preference. 17. Automatic tissue processor should be easily rotated via the four rollers mounted on the base which allows users to have fast and safe access to each one of the vessels. 18. Automatic tissue processor should have possibility of interrupting an automatic process for reloading or removing cassettes for special applications before the end of a run should be available. 19. Automatic tissue processor should have drain time should not exceed 60 sec to avoid carry over of reagents. 20. Automatic tissue processor should have facility to automatically immerse of tissue basket in a station during the power failure and Auto-restart function should also be available. 21. Automatic tissue processor should have electronic locking facility to avoid inadvertent operation. 22. Automatic tissue processor should be as per CE (IVDR) EU 2017/746 and US-FDA registered and UK MDR 2002 or CSA certified.	
4	User's interface	Manual
5	Display	LCD Type
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Embedding system

	GMDN Name	Embedding system
1	Clinical purpose	To Embedding tissues in Data Analysis Histological Experiments and Storing Tissues culture.
2	Used by clinical department/ward	pathology Departments
3	**Technical characteristics (specific to this type of device)**	
	Automatic Paraffin Embedding system should have microprocessor controlled two piece tissue embedding system consisting of heated paraffin station and separate cold plate Automatic Paraffin Embedding system should have at least 5 to 6 liters paraffin reservoir with and screen control panel with temperature setting range from 50ºC to 70ºC in 1º increments. Automatic Paraffin Embedding system should have to 5.8 to 6 inch liquid crystal touch display (LCD) screen and integrated capacitive touch keys for hot paraffin dispensing module for controlling all important parameters of workstation. Automatic Paraffin Embedding system should have integrated paraffin trimmer mandatory or external paraffin trimmer to be provided for trimming or excess was after cooling. Automatic Paraffin Embedding system should have operating temperatures of heated module: 50ºC to 70ºC , adjustable in 1ºC increments control, for hot paraffin dispensing module by touch screen display with integrated cassette lid disposable waste tray. Automatic Paraffin Embedding system should have paraffin flow activation by means of adjustable, pivotable clip-activated either manually by pushing or via optional foot switch with controllable volume & flow rate via rotatable knob is dispensing module. Automatic Paraffin Embedding system should have working start time and end time setting, weekly, working days setting with real time setting via integrated capacitive touch keys liquid crystal touch screen display, for beginning and end of the work time and working days to be programmed as per user in hot paraffin dispensing module. Automatic Paraffin Embedding system should have continuously adjustable paraffin flow rate with rectangular shaped peltier cooling unit/ integrated cold spot in front of the nozzle. Automatic Paraffin Embedding system should have integrated cold spot also for extra-large cassettes with paraffin drain system with one or more waste tray & trays for cassettes or molds with foldable lid. Automatic Paraffin Embedding system should have rapid cooling temperature range from -3°C to -12°C independently selectable instead of constant temperature setting for quicker paraffin embedding and should be able to provide error message for operation condition monitoring. Automatic Paraffin Embedding system should have temperature range, programmable independently for cassette tray, embedding mold tray, work area surface, ten forceps holder, paraffin tank, paraffin tank, paraffin dispenser adjustable from 50ºC (122ºF) to 70ºC (158ºF), programmable by the liquid crystal touch screen display. Automatic Paraffin Embedding system should have optimum LED illumination of working surface by LED lamp, controlled via integrated capacitive touch keys on liquid crystal touch display screen. Automatic Paraffin Embedding system should have optimum LED illumination of working surface by LED lamp and should have additional independently controlled hot spot light and auxiliary Lighting. Automatic Paraffin Embedding system should have large heated working surface & integrated mould tray and cassette bath with temperature adjustment by liquid crystal touch screen display from 50ºC to 70ºC in 5ºC increments. Automatic Paraffin Embedding system should have spacious, easy-to-clean, heated wok area with grooves and several drain holes for excess paraffin rapidly drains. Automatic Paraffin Embedding system should be capable of speeding up paraffin melting process as per requirement while working in shifts by increasing the temperature of paraffin	

	bath. Automatic Paraffin Embedding system should have backlit integrated capacitive touch keys, liquid crystal touch screen intuitive display consisting of icons and touchable control and programming buttons in touch screen of weekday/working day, paraffin tank temperature, left, right, up down, start time, current time, scheduler time, date format, end time, working surface temperatures, enter, error, warning, operate/standby or sleep mode, melting indicator, date/ message code, setup/setting, trays temperature, LED illumination control on-off & all functions by liquid crystal touch display screen in the paraffin dispensing module. Automatic Paraffin Embedding system should be designed & manufactured to new advance latest safety concept, with US FDA registration and EC certification and CSA or IEC certified. Automatic Paraffin Embedding system should have cassette bath & mould tray should be heatable, with integrated paraffin trimmer to accommodate changes in embedding workflow and user preference. Automatic Paraffin Embedding system should have programmable for weekly timer, work days, work starting time, work end time, real time & day of week for automatic on/off of instrument with ease of capacitive touch screen keys. Automatic Paraffin Embedding hot station should have ergonomic, heated cassette bath and mould tray, unobstructed workspace with large peltier rectangular cold spot in middle of hot embedding station for best tissue orientation & optimization of workflow. Automatic Paraffin Embedding system should have heated removable at least one to two waste tray & heated removable at least 8 to 12 forceps units holder is temperature setting between 50ºC to 70ºC, during operation. Automatic Paraffin Embedding system should be supplied with accessories such as a magnifier, cassettes/embedding rings pack of 1000 embedding ring, one electronically heated forceps; stainless steel embedding molds 24 x 24 x 5mm-12Qty. stainless steel embedding molds 24 x 30 x 5mm=12Qty, stainless steel embedding molds 24 x 30 x 12mm=12Qty High melt paraffin wax 10 packs of 1 kg each. All accessories along with the instrument should be supplied from the same manufacturer only. Automatic Paraffin Embedding system should have separate cold unit with large cooling surface for holding up to 70-80 cassettes and rapid cooling temperature range from -3°C to -12°C independently selectable instead of constant temperature setting. Automatic Paraffin Embedding system cooling unit should be simple, modular design and a powerful compressor refrigeration unit with precisely controlled cooling performance with eco-friendly refrigerant, with protection class I & pollution degree 2.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Slide stainers

	GMDN Name	Slide stainers
1	Clinical purpose	To preparing tissue and cell samples for microscopic examination
2	Used by clinical department/ward	histology and hematology departments
3	**Technical characteristics (specific to this type of device)**	
	1. The fully automatic slide stainer should be imported modern high throughput robotic movement slide stainer, specifically designed for operator safety, protection and slide throughput of at least 200 slides/ hour to 600 slides per hour and should be imported. 2. Automatic Slide Stainer should have coloured touchscreen user interface which can be used for designing the protocols, initiate staining, maintain protocols and reagent usage and define system preferences and settings. 1. The fully automatic slide stainer should have processing capacity up to 10 to 12 slide racks/baskets at the same time with the same or different staining protocols. 2. Unit must have fully functional colour touch screen integrated into the main body. 3. The software must support multiple languages with easy switch between languages. 4. Unit must have battery back-up to continue staining for approximately 30 to 40 minutes in the event of a power failure and UPS back-up separately for one hour at least. 5. The unit must have an integrated USB port to allow the user to save protocols, instrument setup, and QC files for printing and/or back-up. 6. The control software must be capable of storing minimum 50-60 protocols with 50- 60 steps each. 7. The Slide basket should have minimum capacity of at least 20-30 slides/basket with continues loading of slide racks in the automatic slide stainer. 8. Slide basket handling should be robotic multi axis movement of robotic arm in X, Y & Z directions. 9. The machine should have total four doors- 2 for loading and 2 for unloading with two-tier design. 10. The unit must have the option of on-board heating stations 25 to 26 Reagent Station and 5 to 6 wash station. 11. Stainer should have separate 5-6 independently heated oven stations installed inside the stainer. 12. The unit must have option to connect exhaust extraction to protect from venting fumes into the lab. 13. The unit must have built-in lighting to allow the user a high clarity view of the staining area. 14. The software should have an Auto-Return feature to enable users to recall to the load door any previously loaded rack of slides. 15. The software must have an Urgent Start feature that enables users to priorities slide racks. 16. Staining pots must be capable of holding 320-360 ml of reagents in each container. 17. Staining pots must be capable of being cleaned in a dishwasher to minimize manual cleaning. 18. The software must be access-code protected. 19. The software should have an Auto-Allocate feature to provide the most efficient layout of reagents based upon the protocols entered. 20. Stainer should be two-tier design occupies minimal bench space.	

	21. Should have built-in lighting to allow the user a high clarity view of the staining area. 22. The instrument should have a protocol program pad or eService book in the instrument. 23. The instrument should have fume neutralization system with carbon filter & should have option to connect to exhaust extraction to protect from venting fumes into the laboratory. 24. The instrument should be EC Conformity, US-FDA and CAN/CSA-C22.2 and certificate to be provided. 25 online UPS should be provided.	
4	User's interface	Manual
5	Display	color touch screen
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Cytocentrifuge

	GMDN Name	Cytocentrifuge
1	Clinical purpose	To concentrate cells from fluid samples onto a microscope slide, facilitating their examination
2	Used by clinical department/ward	cytopathology, hematology, and microbiology Department.
3	**Technical characteristics (specific to this type of device)**	
	1. The system should be capable of using low-speed centrifugal force to separate and deposit a monolayer of cells on slides while maintaining cellular integrity from specimens of blood, urine and other body fluids. 2. It should be designed as a bench-top operation and should be programmed at all steps. 3. The centrifuge speed should be selectable from 200 to 2000r.p.m 4. The running time should be selectable from 1 to 99 minutes. 5. The acceleration rate should be selectable from low, medium and high and is independent of centrifuge speed. 6. At least 23 individual programs can be saved and recalled from the equipment with pull out program card to record 9 favorite programs. 7. Should be loaded with at least 12 patient specimens at one time, using single chamber/funnel. 8. Should be loaded with 24 patient specimens at one time, using disposable double funnel and form 2 spots on a single slide. 9. Should be easily removable for remote sample loading and unloading inside the safety cabinet without using any tools. 10. After sample loading inside the safety cabinet, the centrifuge head should provide sealing to protect the user from the danger of aerosoling pathogenic samples during centrifuge head transfer, centrifugation and sample unload. 11. Should be autoclavable. 12. LED Display for set parameters, operative speed and time remaining for current run and visual monitoring for centrifuge head through the transparent glass door. 13. The instrument should have safety lid interlock. 14. The instrument should have overspeed alarm. 15. The instrument should have imbalance alarm. 16. The instrument should have liquid impermeable keypad 17. The instrument should have built-in brake reduces free spinning time at end of run 18. The instrument should have audible signal at the end of run. 19. The instrument should have specimen safety alarm reminding users at one-minute intervals to remove specimens protect samples from air-drying. 20. Various accessories for different applications can fit into the unit include reusable & Autoclavable 0.1 to 0.5ml TPX sample chamber, disposable 0.1 to 0.5ml cytofunnel, single or double spots, fully disposable 0.1 to 0.5ml cytofunnel, single or double spots without using metal clip, Disposable 1 to 6ml megafunnel, Cytoslides fit for each type of funnel, Metal clips for holding funnel, filter card and cytoslides. validated consumable kit for cell block preparation from cell suspension, Cytocollection fluid, Mucolexx transport fluid. 21. Each set of Cytologic Centrifuge should be completed with the accessories such as Sealed head rotor – 1set, Marking pen – 1piece, operation manual. 22. The instrument should comply with IEC61010.	
4	User's interface	Manual
5	centrifuge speed	200 to 2000 R.p.m
6	Mobility, portability	Portable

7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Grossing station

GMDN Name		Grossing station
1	Clinical purpose	To macroscopic examination and dissection of tissue specimens
2	Used by clinical department/ward	Pathology departments
3	**Technical characteristics (specific to this type of device)**	
	• Grossing station should be complete unit made of Stainless steel - 304 grade and should be floor mounted model. • Grosing station should be of working Size width 5 feet & depth 3th and height not less than 6 feet. • Should have formalin dispenser with capacity of at least25 Liters and electrically switch operated at bottom of working table outlet into Working Area front shelve. • Should have stainless steel one sink at right side with drain tap to trap debris tissue bits. • Should have two shelves at front wall and both side (left & Right) side panel and electric supply board fitted for use for computer and other appliances. • Should have dual air blower motor exhaust system with filter vapor of formalin. • Should have facility of suction from plate & shelves. • Should have working table height at 36 inches from the floor level. • Top Hood is height of 3 feet from working Table • Should have florescent light - 4 feet - 2 Nos. with frosted glass covered. • Should have one small drawer at front shelves for tools storage. • Should have magnetic bar at the front shelve to stick surgical instrument accessories • Should have hand faucet with flexible hose and towel holder, tissue paper holder fitted at front shelve. • Should have infrared sensor for automatic water faucet tap. • Should have air blower's air volume exhaust at least 100 CFM. • Should have one light at bottom with sliding glass door. • Should be provided with grossing pad (Cork Sheet) - 16"x 12" - 1 Nos. • Should have tissue waste crusher at end of sink drainage. • Should be provided with digital weighing scale for weighing of grossing tissue	
4	User's interface	Manual
5	Size	width 5 feet & depth 3th and height not less than 6 feet.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of RTPCR analyzer

GMDN Name		RTPCR analyzer
1	Clinical purpose	To detecting and quantifying specific genetic material, primarily RNA, within a sample
2	Used by clinical department/ward	Microbiology departments
3	**Technical characteristics (specific to this type of device)**	
	1. System should have 96 well block with 0.2ml tubes, Strips and 96 Well PCR Plate 2. System should have at LED Excitation with at least 5 LED filters for Excitation and 5 for Detection Filter. With 5 color multiplexing. 3. Ramping rate of machine 4°C/Sec with temp. Accuracy: ± 0.1°C; Temp. Uniformity : ±0.3°C (tested at 55°C); Temperature range : 4-105°C with 0.1°C min increment 4. Ramping rate : 4°C/Sec (Max) 5. Gradient Temp. Range 1-36°C. 6. System should have automatic 3D hot lid technology to reduce evaporation. Hot Lid temp. Range 30-110°C (Adjustable Default 105°C), Automatic Hot lid. 7. Sample Volume should be 5-100 µL. 8. Detection system should be bottom based Photo Multiplier Tube Technology (PMT).Where individual target can be scanned. 9. Scanning Mode: Designated Line Scan or Entire Plate. 10. System should not require any Normalization method. It should be factory calibrated. No Passive reference needed. 11. Customization of dye should be possible in the system.i.e addition of dye to existing library should be possible 12. Dyes Used in System: F1: FAM, SYBR Green I;F2: VIC, HEX, TET, JOE,TAMRA;F3: ROX, TEXAS-RED;F4: Cy5, Quasar-670; F5: Cy5.5,Quasar-705. 13. Absolute Quantification Relative Quantification, SNP Analysis, Data Automatic Analysis, Multiple file gene expression analysis, Melting Curve Genotyping, HRM, Customized parameters. 14. software should be able to calculate Δct, ΔΔct and RQ fold values after completion of relative quantification assay for automatic post data analysis and bar chart 15. System should be an Open System. Should be compatible with reagents and plastic ware of any make/company. 16. System should be capable of plus/minus assay. SNP (should be capable of automatic and manual call with simplified Scatter plot). 17. System should be capable to import Standard curve in multiple experiments 18. System should be capable to import and export experimental data in text or excel format for data analysis 19. System should be provided with software with no download restriction. Software capable of being downloaded in multiple computer/desktop/laptop. 20. On board memory on the system > 8 gb to store minimum of 3000 run files 21. Availability of IQ/OQ/PQ	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in

		ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality. IVD certificate.
9	Warranty	Two Year

Technical Specification of Nucleic acid extraction system

GMDN Name		Nucleic acid extraction system
1	Clinical purpose	To isolating DNA and RNA from patient samples
2	Used by clinical department/ward	Molecular diagnostics and clinical research departments
3	**Technical characteristics (specific to this type of device)**	
	Features 1 Unique Touch screen and 3 shortcut keys for operation. 2 Fast extraction - 17 ~ 50min for different assays. 3 High quality consumables - qualified materials and processes which guarantee high yield and low loss of magnetic beads. 4 Open software system 5 Self-sterilization - with UV sterilizing function reduces the possibility of contamination. 6 Stability - Low noise and No vibration during working. 7 Safe and reliable - Fully automatic with disposable consumables which protect users from hazardous reagents. 8 Heating function - Pyrolysis heating and elution heating 9 Can be operated by an external mouse Sample Capacity- Minimum 24 samples /Run Process volume- 50 to 1000µl Sample Volume Range- 25 to 800µl Elution Volume- 50µl (can be optimized upto 25µl based on assay suitability) Consumables -Single sample cartridge or 96 Deep well plate + Special magnetic rod's tip Working principle- Magnetic bead based method Magnetic Rod- 4200 gauss Purification accuracy -100 copy sample positive rate > 95% Stability- CV95% Temperature Range- Room temperature to 120°C Lysis temperature- Room temperature to 1200 C Elution temperature- Room temperature to 1200 C Mixing- Mixing ways can be edited Operation interface- 4.3 inch Built-in protocol- 8 groups of preset protocols, 100 groups of protocols can be stored Protocol management -Protocols can be created, edited, deleted or save as templates Expansion interface- Standard USB, Ethernet port and RS 232 available Lighting- Yes Sterilization- UV light Exhaust- way By Exhaust Fan Data storage- Available Max. input power -DC24V, 160W Dimension W X D X H- 208 x 258 x 315 mm Weight- 8.5 Kg Certificate- CE, IVD Certified Table top automated system , Fully automatic for total nucleic acid (both DNA and RNA) for samples including plasma ,serum, whole blood, body fluids separately etc	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.

		2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality. IVD , USFDA
9	Warranty	Two Year

Technical Specification of Gel documentation system

GMDN Name		Gel documentation system
1	Clinical purpose	To detection of genetic disorders, infectious diseases, and cancer biomarkers
2	Used by clinical department/ward	clinical research Lab
3	**Technical characteristics (specific to this type of device)**	
	Advantage • Extraordinary data capture • Self Timer to prevent overexposure of Gel to UV preventing DNA Mutagenesis and loss of intensity on gel • Protects user from UV exposure Technical Specification • Product code – LA1069 • Product Name- Hi-UV™ Duo • Feature - Dual wavelength • UV Source-6 tubes of 8 Watt • Wavelength- 312 & 365 nm • Safety Timer - 1 min • Gel Size- 20 x 20 cm • Footprint (L×W×H) - 38 X 31 X 16 cm • Weight- 3.5 Kg • Power Supply- 220-240V, 50 Hz • UV tube average shelf life-. 3000 Hrs. • UV Protective shield- Yes • Hi-UV Capture codeLA1069- A	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Laminar flow hood

GMDN Name		Laminar flow hood
1	Clinical purpose	To maintain a sterile environment and prevent contamination
2	Used by clinical department/ward	Laboratories
3	**Technical characteristics (specific to this type of device)**	
	LAMINAR AIR FLOW HORIZONTAL UNIQUE FEATURES • Ergonomic Design • User Friendly • Superior Functionality • Negligible Maintenance CONSTRUCTION • Designed so as to meet the requirements of US Federal Standard 209 B (BS 5295) providing particle free air to meet (class 100 conditions). The cabinets are used in Tissue Culture and Microbiological application. • Constructed with M.S Powder coated. • Unit designed to provide a Laminar Flow Work space comprising as standard feature HEPA filter Efficiency > 99.97% microns (Factory DOP tested). Pre - filter 95% efficient microns, suitable motor blowing assembly. • Working Table Top of Stainless Steel; Stain Finish, Side Acrylic Panels; Fluorescent Tube Light; U.V Light, Pressure Differential Manometer, Gas Cock duly filled and complete with front door. **Gas Cock duly filled-OPTIONAL** • Unit mounted on Castor wheels for easy movability. the bottom of the0 incubator. STANDARD SIZE: L3'xW 2'x H 2'	
4	User's interface	Manual
5	Dimensions	L3'xW 2'x H 2'
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 40 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Deep freezer -20 Degree

GMDN Name		Deep freezer -20 Degree
1	Clinical purpose	To storing diagnostic samples like blood, plasma and serum
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	The internal chamber is made of heavy gauge stainless steel 304 for durable and corrosion free performance. The exterior is made of powder coated CRCA steel and insulated with thick layer of Poly Urethane Foam (PUF) insulation to keep the machine energy efficient. This unit is designed to maintain a stable and uniform temperature of up to -80.0°C. Microprocessor temperature controller gives accurate temperature condition inside the chamber, and having audio visual alarms in case of temperature deviation, ensure that your samples are both safe and secure. Available in Vertical and Horizontal in four different sizes. 1.Microprocessor Digital temperature controller in order to maintain superior temperature accuracy. 2.The controller shows both SV (Set Value) and PV (Process Value) on the display. 3.Temperature safety high low Audio visual alarm. 4.Door open Safety alarm. 5.High density CFC free Poly Urethane foam (PUF) for minimal temperature losses and save power consumption. 6.Heavy duty hermetically sealed compressor, cascade system and CFC free refrigerant. 7.Solid insulated door with lock & handle, Magnetic gasket is provided for airtight sealing 8.Castor wheels are provided for easy movement with an option for having locks. 9.Weekly temperature circular chart recorder helps to record storage conditions. (OPTIONAL) 10.Multi or single channel Data logger with RS 485 port. (OPTIONAL) 11.Battery backup for temperature display and Recorder up to 2 Hrs. (OPTIONAL) 12.The internal chamber is made of heavy gauge stainless steel 304 for durable and corrosion free performance. 13.The exterior is made of powder coated CRCA steel 14.Inner Dimension (W x D x H mm): 600 W x 600 D x 1100 H 15.Overall Dimension (W x D x H mm): 870 W x 940 D x 1950 H 16.Volume: 400 Ltrs. 17.No. of Trays: 4 Nos. 18.Temperature: UP TO – 20.0 °C 19.Operating voltage: 220 – 240 VAC, 50 Hz, Single Phase	
4	User's interface	Manual
5	Dimension	870 W x 940 D x 1950 H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single

		use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Deep freezer -80

	GMDN Name	Deep freezer -80
1	Clinical purpose	To storing diagnostic samples like blood, plasma and serum
2	Used by clinical department/ward	Blood Bank
3	**Technical characteristics (specific to this type of device)**	
	The internal chamber is made of heavy gauge stainless steel 304 for durable and corrosion free performance. The exterior is made of powder coated CRCA steel and insulated with thick layer of Poly Urethane Foam (PUF) insulation to keep the machine energy efficient. This unit is designed to maintain a stable and uniform temperature of up to -80.0°C. Microprocessor temperature controller gives accurate temperature condition inside the chamber, and having audio visual alarms in case of temperature deviation, ensure that your samples are both safe and secure. Available in Vertical and Horizontal in four different sizes. 1.Microprocessor Digital temperature controller in order to maintain superior temperature accuracy. 2.The controller shows both SV (Set Value) and PV (Process Value) on the display. 3.Temperature safety high low Audio visual alarm. 4.Door open Safety alarm. 5.High density CFC free Poly Urethane foam (PUF) for minimal temperature losses and save power consumption. 6.Heavy duty hermetically sealed compressor, cascade system and CFC free refrigerant. 7.Solid insulated door with lock & handle, Magnetic gasket is provided for airtight sealing 8.Castor wheels are provided for easy movement with an option for having locks. 9.Weekly temperature circular chart recorder helps to record storage conditions. (OPTIONAL) 10.Multi or single channel Data logger with RS 485 port. (OPTIONAL) 11.Battery backup for temperature display and Recorder up to 2 Hrs. (UPS OPTIONAL) : 12.The internal chamber is made of heavy gauge stainless steel 304 for durable and corrosion free performance. 13.The exterior is made of powder coated CRCA steel 14.Inner Dimension (W x D x H mm): 600 W x 600 D x 1100 H 15.Overall Dimension (W x D x H mm): 870 W x 940 D x 1950 H 16.Volume: 400 Ltrs. 17.No. of Trays: 4 Nos. 18.Temperature: UP TO – 80.0 °C 19.Operating voltage: 220 – 240 VAC, 50 Hz, Single Phase	
4	User's interface	Manual
5	Dimension	870 W x 940 D x 1950 H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 30 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single

		use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Chemiluminescence Immunology Analyzer

GMDN Name		Chemiluminescence Immunology Analyzer
1	Clinical purpose	To quantitative measurement of various substances in biological samples, aiding in diagnosis and monitoring of diseases
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. The analyser should have a minimum loading capability of 50 samples per load/batch as well as continuous sample and reagent loading & unloading capabilitywith ability to run STAT samples 2. System must be able to process Sample types: Serum & Plasma. 3. The analyser should have automatic sample dilution ranging from 1:2 to 1:40. 4. The analyser should have Clot detection capability. 5. The analyser should have a sample probe with liquid level detection and collision detection. 6. The analyser should have a throughput of not less than 180 tests/hour. 7. The analyser should have at least 30 reagent positions. 8. The analyser should have onboard refrigeration at 2-8 deg Cwith long reagent stability. 9. Analyser must have facility of auto calibration and history of calibration should be available in graphical representation. 10. The analyser should have reagent level detection. 11. Reagent packs should have RFID identification, automatic tracking and notification of inventory calibration and control validity, on board stability, low and expiry reagents. 12. Calibration curve will be stored inside the Reagent RFID. 13. The reagent on- board stability of reagent should be a minimum of 35 days for all parameters. 14. The analyser should have STAT capability for prioritized sample requests. 15. Analyser should have in built QC programs - Westgard rules, LJ graphs, Auto QC, CV%. QC history should be available. 16. Analyser should be directly connected to the drainage system for waste disposal. 17. The system should have a facility for storage and retrieval of at least 10,000 patient samples. 18. The chemiluminescence marker in the reagents should be chemical based and not enzyme based for saving cost on substrate storage and better result precision with negligible effect of interference factors. 19. The system should work with individual cuvettes where the cuvettes can be loaded by just dumping in the machine.A minimum of 1000 Cuvettes should be loaded in the system at a time. 20.Sample volume :≤ 50 µl of serum ; dead sample volume < 200 µl 21. In each assays the system should be taken the sample first then reagents for cost effective. 22. Sample Carry over will be less than <0.1ppm. 23. System should have the capability of bi- directional interfacing with hospital information system. In case of any software or application is required for the same shall be provided free of cost. 24. Analyser and reagents should be CE approved. 25. The analyser should be supplied with all necessary hardware including the computer system and software for performance of all available test parameters. 26. List of all reagents, cleaning solutions, buffers, calibrators, consumables, and any other item required for the routine maintenance and running of the machine should be provided along with available pack sizes. Frequency of usage of each consumable to be provided.	

	27. Installation, training, and validation of the equipment will be done by the bidder free of cost 28. System should have capability of inbuilt inventory management for reagents , calibration and control its flagging and management 29. Software should be user friendly with LIMS / HIMS competence graphical user interface software.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year
10	Online UPS	Analyzer should be supplied with one suitable 3 KVA UPS with external batteries for uninterrupted power supply

Technical Specification of Incubator

	GMDN Name	Incubator
1	Clinical purpose	To sterilization of medical equipment and materials using dry heat
2	Used by clinical department/ward	Microbiology labs
3	**Technical characteristics (specific to this type of device)**	
	UNIQUE FEATURES • Ergonomic Design • Easy to use • Negligible Maintenance • High Temperature Accuracy CONSTRUCTION • Double walled construction inner chamber made of I/S: SS 304 & O/S : MS POWDER COATED • Gap between the walls is filled with special grade glass wool for proper insulation to avoid heat loss and thereby saving energy. • External metal door is fully insulated with S. S. lock, hinges. There is no inner door. • Air Ventilations is provided on the top of unit to remove hot gases/fumes • Supplied with SS wire mesh shelves. HEATING ELEMENT • Heating is by specially designed heaters made of special grade chrome plated Nichrome wire (ISI Approved) which is filled at the bottom of the incubator. TECHNICAL DATA • Temp Range :5°C above ambient to 60°C • With Thermostat : ± 2°C • Temperature Controlled by Digital PID Controller. • Power Supply : 230 Volts A.C 50 Hz Single phase STANDARD SIZE: 12”x12”x12” NO OF SHALVES: 1 NOS	
4	User's interface	Manual
5	No of Shelves	1 Nos
6	Dimensions	12”x12”x12”
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 40 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single

		use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Water Bath for Serology

GMDN Name		Water Bath for Serology
1	Clinical purpose	To incubate samples at a precise and stable temperature, ensuring accurate results for various tests
2	Used by clinical department/ward	Pathology Laboratory
3	**Technical characteristics (specific to this type of device)**	
	UNIQUE FEATURES • Ergonomic Design • User Friendly • Superior Functionality • Negligible Maintenance CONSTRUCTION •Double walled Construction, Inner made of Stainless Steel 304 Q mirror finished & Exterior made of MS Powder Coated. • Gap between the walls is filled with special grade glass wool for proper insulation to avoid heat loss and thereby saving energy. • I.S.I Mark Heating Coil without Pyramid Lid. TECHNICAL DATA •Temp. Range : 5°C above ambient to 60°C Accuracy : ± 2°C •Temp. Control Digital Temp. : Micro-processor based Auto Tune P.I.D Digital Temperature Controller Controller with PT 100 sensor & Resolution 0.1°C . •Dual display one for process value (PV) &the other for Set Value of Temperature (SV) : YES	
4	User's interface	Manual
5	Dimension	565W x 300D x 270H mm
6	No of Rack	1 NO
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 30 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Hot Air Oven

	GMDN Name	Hot Air Oven
1	Clinical purpose	To sterilization of medical equipment and materials using dry heat
2	Used by clinical department/ward	Microbiology labs
3	**Technical characteristics (specific to this type of device)**	
	UNIQUE FEATURES • Ergonomic Design • Easy to use CONSTRUCTION • Double walled construction inner chamber made of SS 304 & O/S: MS POWDER COATED I/S: SS 304 & O/S : MS POWDER COATED • Gap between the walls is filled with special grade glass wool for proper insulation to avoid heat loss and thereby saving energy. • The door is fully insulated with S.S lock, hinges. • Air Ventilations is provided on the top of unit to remove hot gases/fumes • Supplied with SS wire mesh shelves mesh shelves. HEATING ELEMENT • Heating is by specially designed heaters made of special grade chrome plated Nichrome wire (ISI Approved) which is filled at the bottom of the oven. TECHNICAL DATA • Temp. Range : 50°C to 250°C • Accuracy : ± 1°C • Temperature Controlled by Digital PID Controller. STANDARD SIZE: 12”x12”x12” NO OF SHALVES: 1 NOS	
4	User's interface	Manual
5	No of Shelves	1 Nos
6	Dimensions	12”x12”x12”
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 40 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Rotor/Shaker

GMDN Name		Rotor/Shaker
1	Clinical purpose	To cell cultivation, drug development, chemical analysis, and serological testing
2	Used by clinical department/ward	Hematology and microbiology Department
3	**Technical characteristics (specific to this type of device)**	
	Brushless induction motor, frequency drive, speed 20 to 300 rpm 4" LCD display of speed universal platform of size 24" x 24" With Clamps	
4	User's interface	Manual
5	Display	4” LCD Display
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Time stop watch

GMDN Name		Time stop watch
1	Clinical purpose	To accurately time various medical procedures, patient assessments, and lab tests
2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	Time Stop Watch Its Should Be Start and Stop Button Minimum 20 minutes Counting Time	
4	User's interface	Manual
5	Counting Time	20 Minutes
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Alarm Clock

GMDN Name		Alarm Clock
1	Clinical purpose	To accurately time various medical procedures, patient assessments, and lab tests
2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	It Should Be Start and Stop Button Alarm After Timing Clear Sound With High Alarm Sound	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of HB Meter

	GMDN Name	HB Meter
1	Clinical purpose	To measure the concentration of hemoglobin in blood samples
2	Used by clinical department/ward	Blood Bank and Laboratory
3	**Technical characteristics (specific to this type of device)**	
	Working Principle Photometric detection method Measurement range 0-25.60g/dL Test Items Hemoglobin, HCT (calculated value) Specimen type Peripheral blood or venous blood Specimen volume ≤10μL Test time ≤5s Accuracy or comparability ≤±% Repeatability Within range 3.0～25g/dL, CV≤1.5% Blank counting Total amount of Hb≤0.1g/dL Data storage 2000 results can be stored Display screen 3.5" TFT Power supply Built in DC 5V 1A/Li-iron battery 3.7V Size 130 mm x 83 mm x 32 mm Weight < 500 gms (Battery included) Calibration) free from Manual calibration or insertion of chips Connectivity Smart Auto calibrated, USB, Printer , WiFi*,BT Material ABS+PC material is hard, wear resistant and antibacterial Operating environment Temperature: 5°C～35°C; Relative humidity: ≤85%RH Operating atmospheric pressure 70kPa～110kPa Storage and transportation environment Temperature: -20°C～60°C; Relative humidity: 10%～90% Storage and transportation atmospheric pressure 50kPa～110kPa	
4	User's interface	Manual
5	Weight	< 500 gms (Battery included)
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of PH Meter

	GMDN Name	PH Meter
1	Clinical purpose	To quality control procedures to ensure the accuracy and reliability of various diagnostic tests

2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	UNIQUE FEATURES • Ergonomic Design • User Friendly • Superior Functionality • Negligible Maintenance FEATURES • PH Meter with combined Ph electrode • Digital, Table Model • Range: 0-14 Ph • 3.5 LED Display • 2 point calibration	
4	User's interface	Manual
5	Display	3.5 LED Display
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover.2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Dental Chair with Accessories

GMDN Name		Dental Chair with Accessories
1	Clinical purpose	To facilitate dental examination, treatment, and/or minor surgical procedures
2	Used by clinical department/ward	Dental Department
3	**Technical characteristics (specific to this type of device)**	
	1) Fully Electric Operating Underhanging Dental Chair Unit 2) LED Light with sensor & Button 3) Pneumatic Suction 4) 2 Airoter Point 5) 3 way point 6) Micromotor Point 7) C-Silicone Tubing 8) 90 Degree glass Spittoon Movable 9) Auto Flush & Cup Filer Systeme 10) Cotton Waste Receiver 11) Zero Position 12) Movable assistance tray 13) Pneumatic Suction 14) Doctor Stool	
4	User's interface	Manual
5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through a cooling mechanism
6	Mobility, portability	Fixed
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Dental Xray Machine with RVG

GMDN Name		Dental Xray Machine with RVG
1	Clinical purpose	To capture detailed images of teeth and surrounding structures
2	Used by clinical department/ward	Dental Department
3	**Technical characteristics (specific to this type of device)**	
	Output 10mA/70KVp Input 230Volts/ 50Hz/6 amp. Voltage Compensation 200 to 250 Volts Collimation PVC filter cone Timer 0.01 to 2.0 sec. X-Ray Tube 1.4 mm/0.8 mm Model Wall mounted unit RVG Compatible Yes Standard Features Line Voltage Overload Protection Wall And Floor Models Line Voltage Compensations Precise Electronic Timer Full Lead Lined for Radiation Protection Additional Exposure Switch on Control Panel Wall Mounted for Cramped Working Conditions the Control Box Can Be Mounted on Wall or Any Other Remote Place	
4	User's interface	Manual
5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through a cooling mechanism
6	Mobility, portability	Fixed
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of BP Apparatus

GMDN Name		BP Apparatus
1	Clinical purpose	To Measure Blood Pressure
2	Used by clinical department/ward	all Departments and Wards
3	**Technical characteristics (specific to this type of device)**	
	Measuring range: • Cuff pressure :0-295mmhg • Blood pressure :30-280mmhg • Pulse rate:40-180beats/minute Accuracy: • Pressure: ±3mmhg • Pulse rate: ±5% • Environmental temperature for operation: 5 – 40 degree • Environmental humidity for operation: <90% • Environmental pressure: 80kpa-105kpa • Size: 145 mmx115mmx145mm • Measuring method: Oscillo metric method, automatic air inflation and measurement Memory: 99 readings Included Items: BP Monitor Unit, Arm Cuff, Rigid Carry Pouch	
4	User's interface	Manual
5	Display	LCD Display
6	Weight	345 grams
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Defibrillator

	GMDN Name	Defibrillator
1	Clinical purpose	To treat life-threatening cardiac arrhythmias and sudden cardiac arrest by delivering an electrical shock to the heart, aiming to restore a normal heart rhythm
2	Used by clinical department/ward	All Wards and Departments
3	**Technical characteristics (specific to this type of device)**	
	Energy: 200 Joules Capability parameter of defibrillator: ECG monitoring, external defibrillation, external pacing (transcutaneous), internal defibrillation and recording Modes in defibrillator: Automated external defibrillation and manual Number of wave-forms: 2, 3, 4 Patient compatibility to defibrillate: Adult and Pediatric paitents Type of display: Colored LCD Screen – 7 inches Facility to have synchronized cardio version: Yes Provision of in-built recorder: Yes Provision of printing ECG: Yes Facility of External non-invasive pacing: Yes Type of external transcutaneous pacing mode: Both Demand mode and fixed mode Pulse width of External non-invasive pacing in milli seconds: 40 ms Facility to monitor NIBP: Yes Facility to monitor SPO2: Yes Upgradability to monitor NIBP: Yes Upgradability to monitor SPO2: Yes ECG monitoring: Using 5/6 lead Suitability of defibrillator for transport on ground (ambulance): Yes Defibrillator should display selected energy: Yes Defibrillator should display delivered energy: Yes Standards: Conformity to Manufactures Certification: ISO 13485 and IEC 60601 Test Report Unit Should be Make in India Accessories: Li-ion Battery: 1 ECG cable: 1 NIBP pediatric cuff with hose: 1 NIBP adult cuff with hose 1, 2, Not provided SpO2 Finger Probe: 1 External defibrillator paddles (pediatric in built in adult): 1 Recorder paper roll: 10	
4	User's interface	Manual
5	Display	Colored LCD Screen – 7 inches
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning.	Not Applicable

	Disinfection & Sterility issues	
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Video Bronchoscope

GMDN Name		Video Bronchoscope
1	Clinical purpose	To visually examine the airways (trachea, bronchi, and bronchioles) and perform various procedures within the lungs
2	Used by clinical department/ward	Pulmonology, anesthesiology, and critical care departments.
3	**Technical characteristics (specific to this type of device)**	
	Monitor The monitor should be Lightweight and easy to set up on patient table / IV Pole. The monitor should have minimum internal storage capacity of 8GB and more. It should have inbuilt rechargeable Lithium-ion Battery with 3.0 Hours back-up. It should have USB Interface to transfer recorded High-resolution video and still images. Monitor should have video output capability to attach to External monitor. It should have TFT LCD Colour Touch-Screen Display & screen size should be 7.5 inches (Diagonal) and more. The Screen should have Image Extend feature for enhanced viewing of Live images & high- resolution video and still images can be recorded with touch on the screen. Should have still photograph and video record capability. Should be USFDA Certified. scope Regular with outer diameter 5.0 mm, Working Channel 2.2mm bending angles 150-180 Up & down, Working Length 600mm respectively for easy maneuver, scopes should have suction port & oxygen delivery port The working channel should allow fluid instillation and oxygen flushing One CMOS camera and two LED light source should be integrated at the distal end It should be capable of easy navigation and fast identification of anatomical landmarks The Control Lever on handle for the movement of distal tip up & Down in a single plane It should have Intermittent Suction Controller to control suction of pressing plane It should be US FDA & European CE approved device Scope Large • with outer diameter 5.0 mm, Working Channel 2.0mm bending angles 180-160 Up & down, Working Length 600mm respectively for easy manoeuvre, • scopes should have suction port & oxygen delivery port • The working channel should allow fluid instillation and oxygen flushing • One CMOS camera and two LED light source should be integrated at the distal end • It should be capable of easy navigation and fast identification of anatomical landmarks • The Control Lever on handle for the movement of distal tip up & Down in a single plane • It should have Intermittent Suction Controller to control suction of pressing plane • It should be US FDA & European CE approved device	
4	User's interface	Manual

5	Display	7.5 Inch TFT LCD Colour Touch-Screen Display
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have USFDA Certificate for standard quality.
11	Warranty	Two Years
12	Scope	Extra suction adapters

Technical Specification of Audiometer

	GMDN Name	Audiometer / PTA
1	Clinical purpose	To assess the health and function of the middle ear
2	Used by clinical department/ward	Audiology Department
3	**Technical characteristics (specific to this type of device)**	
	Safety Standards IEC 60601-1:2005, ES60601-1:2005/A2:2010, CAN/CSA-C22.2 No 60601-1-:2008 Class I, Type B applied parts. **EMC Standard** IEC 60601-1-2:2007 **Medical CE-mark** Yes Audiometer Standards Tone: IEC 60645-1:2012/ANSI S3.6:2010 Type 3 **Calibration** Calibration information and instructions is located in the AD226 Service manual **Air Conduction** TDH39: ISO 389-1 1998, ANSI S3.6-2010 DD45: PTB/DTU report 2009 E.A.R Tone 3A: ISO 389-2 1994, ANSI S3.6-2010 IP30 ISO 389-2 1994, ANSI S3.6-2010 – Des 2361 CIR 33 ISO 389-2 1994 **Bone Conduction** B71: ISO 389-3 1994, ANSI S3.6-2010 Placement: Mastoid **Effective masking** ISO 389-4 1994, ANSI S3.6-2010 **Transducers** TDH39 Headband Static Force 4.5N ±0.5N DD45 Headband Static Force 4.5N ±0.5N B71 Bone Headband Static Force 5.4N ±0.5N E.A.R Tone 3A: CIR 33 IP30 **Patient Response switch** One push button. **Patient communication** Talk Forward (TF) / Raise Hands up **Special tests/test battery** **(only extended version)** • Stenger • ABLB • Langenbeck (tone in noise). • SISI • Auto threshold: o Hughson Westlake o Békésy **Inputs** Tone, Warble Tone +5%, 5Hz (true sine wave frequency modulation). **Outputs** Left, Right, Bone L+R, Insert Phones, Insert Masking **Stimuli** **Tone** 125-8000Hz. **Warble Tone** 5Hz sine +/- 5% modulation **Masking** Narrow band noise: IEC 60645-1 2012, 5/12 Octave filter with the same centre frequency resolution as pure Tone. Synchronous masking: Locks channel 2 attenuator to channel 1 attenuator. **Presentation** Manual or Reverse. Single pulse. Multiple pulses 50-5000 msec. on/off.	

	Intensity AC: -10 to 120 dB HL BC: -10 to 80 dB Available Intensity Steps is 1, 2 or 5dB Extended range function: If not activated, the Air Conduction output will be limited to 20 dB below maximum output. Extended range only available when mains powered **Frequency range** 125Hz to 8kHz. 125Hz, 250Hz, 500 Hz, 750Hz, 1500Hz or 8kHz may freely be deselected **Internal storage** 500 clients **Data Connections** (sockets) for connection of accessories 1 x USB A for keyboard or printer 1 x USB B for PC connection (compatible with USB 1.1 and later) **External devices** (USB) Standard PC keyboard (for data entry) Supported printers: Please contact local distributer for a list of approved PC printers. **Display** 4,3" (480x272) TFT color display. Compatible software (optional) Diagnostic Suite - Noah, OtoAccess and XML compatible **Dimensions (LxWxH)** 30x23x9cm, 12x9x4 inches. **Weight** 1.3kg / 2.9lb **Power supply** 5VDC-max 1.6A UE24 type only **Batteries** 4x1.5V/1.2V Alkaline/NiMH Type AA, Note: When the instrument is battery operated the maximum stimuli output level is reduced 20dB **Operation environment** Temperature: 15-35°C Re. Humidity: 30-90% Non condensing **Ambient pressure**: 98-104 kPa Transport and storage Transport temperature: -20-50°C Storage temperature: 0-50°C Re. Humidity: 10-95% Non condensing **Warm up time** Approx. 1 minute	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year or more

Technical Specification of Tympanometer

	GMDN Name	Tympanometer
1	Clinical purpose	To assess the health and function of the middle ear
2	Used by clinical department/ward	ENT Department
3	**Technical characteristics (specific to this type of device)**	
	1 Impedance / Tympanometry class 1 incl. 2 226 Hz, 678 Hz, 800 Hz, 1000 Hz tones 3 Diagnostic and screening protocols, presets, configurable 5 Pressure range -600 to +400 daPa 6 Auto stop function, manual control, 3D graph, cartoon mode 7 Y/B/G components view (admittance, susceptance, conductance) 8 Tymp + Reflex automatic sequence 9 ETF tests: Perforated Ear Drum, (non) perforated eardrum, patulous eustachian tube 10 Reflex : 500, 1000, 2000, 3000, 4000 Hz stimulus up to 105 dB HL 12 Broadband, High and low pass noise stimulus up to 90 dB HL 13 Ipsilateral and contralateral reflex 14 eSRT for cochlear implant clinics 15 Automatic reflex threshold and reflex decay testing 16 Multi-frequency Tympanometry: (4 tones at once) • Simultaneous recording of 226 Hz, 678 Hz, 800 Hz and 1000 Hz Tympanometry - immediate results with only one button press • Display of 3D graph available • Children entertainment mode - the new pilot test 17 Upgradable to Diagnostic TEOAE & DPOAE, Binaural OAE & Multi Frequency Oae 18 Upgradable to 2 Channel Audiometer (Class3) with AC, BC & Speech Test 19 Compatible with Patient Data Base Software 20 Should be compatible to Noah 21 Hardware i. Resistive Touch Screen graphic LCD 5” ii. Real time-clock, piezo-electric sound iii. Generator, USB, Output voltage and nominal impedance (headphone socket) iv. 5 Vpp, 32 Ω Power consumption: max. 2 W. v. Memory capacity: up to 1000 patients, ca. 1000 tests (dependent on test type). vi. Supply voltage of main device should be 5V DC vii. Main unit weight should not be more than 1 kg viii. Stores up to 1000 patients on the device	
4	User's interface	Manual
5	Weight	1 KG
6	Display	Touch Screen graphic LCD 5”
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning.	1) Disinfection: Parts of the Device that are designed to come

	Disinfection & Sterility issues	into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Berra Machine

	GMDN Name	Berra Machine
1	Clinical purpose	To assess hearing function, particularly in individuals who may have difficulty with traditional hearing tests, such as infants or those with developmental disabilities
2	Used by clinical department/ward	Audiology Department
3	**Technical characteristics (specific to this type of device)**	
	1 Must be the single portable unit with the possibility of all tests suitable for diagnostic and measurement of BERA. 2 Should be enabled to perform Binaural ABR & Screening ABR 3 Should be upgradable for ASSR(Multi Frequency & Multi Rate), eABR, VEMP (CVEMP & OVEMP), Eabr, EcochG, PTA 2Channel with AC & BC Speech & Vra for children , Diagnostic OAE (TE +DP), Screening OAE (TE + DP), Diagnostic Tympanometery 4 Should include Screening ABR with Diagnostic ABR in the Module 5 Input Voltage range - 20mV to 50mV 6 Sampling rate should be 20Hz - 80000Hz 7 A/D converter - 16 bits 8 Low pass filter range should be 10-10000Hz 9 High pass filter range should be 0.01 to 5000Hz 10 Notch filter 50 or 60Hz (switchable) should not be less then 40db 11 Notch filter type should be adaptive and rescursive 12 Common mode rejection should not be less than 100 dB 13 Stimulus types: Click (0.7 to 6 kHz), Chirp (broadband, 1 to 8 kHz); with ABR-FS license: + Low- Chirp (100 to 850 Hz), Mid-Chirp (850 Hz to 3 kHz), High-Chirp (3 to 10 kHz), Tone Burst (500 Hz, 750 Hz, 1 kHz, 1.5 kHz, 2 kHz, 3 kHz, 4 kHz; waveform: 2 up, 1 plateau, 2 down). 14 Stimulus polarity: condensation, rarefaction, alternating 15 Stimulus rate: 10.1, 20.3, 30.7, 40.3, 69.9, 81.2, 90.4 Hz (default) + user-specific stimulus rate from 10 to 100 Hz; rate mode: 10, 20, 30, 40, 69, 81, 90 Hz 16 Stimulus levels: 0 to max. 95 dB nHL or transducer limits, no stimulus; step size: 5 dB; 17 Rate mode: 10 to 90 dB in steps of 5 dB 18 Masking noise offset levels (white noise): -50 to +50 dB 19 Averages: 1000 up to 20000; step size: 1000 20 Noise stop criterion: 0, 10, 15, 20, 30, 40, 50, 60, 80 nV 21 Automated wave V detection with minimum wave V criterion: 0, 20, 30, 40, 50, 70, 100, 150, 200 nVpp (optional) 22 Plot range (fixed): 0 to inter-stimulus interval + 1.5 ms (minimum 10.5 ms, maximum: 25 ms) 23 ABR works on Spread Spectrum Technology 24 Availability of Customizing the Protocols 25 Additional parameters: Auto proceed, auto stop, rate mode 26 Frequency characteristics of masking noise should be white noise (1000-20000Hz) 27 Masking type should be stimulus Relative and Absolute value 28 Software:- i. Should be able to present the stimulus in units of dBSPL, dBNHL and dBHL ii. Should be able to create customize and defined report templates iii. Should create report in MS word and PDF iv. Should have feature of auto marking v. Should create customizable protocols to perform diagnostic BERA automatically vi. Special zoom mode	

	28 Hardware:- i. Portable with Touch screen Hardware ii. Should be able to perform in Hybrid Mode (from the Device & the PC) iii. Main unit should have separate connector for transducer iv. Inbuilt amplifier v. USB portability to avoid supply voltage artifacts vi. Facility to indicate impedence in hardware and software vii. Can Print Via Computer & also Directly through Label Printer from the main unit viii. Supply voltage of main device should be 5V DC ix. Main unit weight should not be more than 1 kg x Can Store upto 1000 paitient in the main unit and unlimited in Computer	
4	User's interface	Manual
5	Weight	≤1 KG
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of ENT Head light

GMDN Name		ENT Head light
1	Clinical purpose	To illumination during examinations and surgical procedures of the ear, nose and throat
2	Used by clinical department/ward	ENT Departments
3	**Technical characteristics (specific to this type of device)**	
	Light Source Blue LED Wavelength : Peak Between 450-475 Mm Intensity : 20-100 Mw /Cm2/Nm At 40 Cm Variation In Intensity Over Six Hour : +- 10% Within Illumination Area. Effective Surface Area : 40x20 Cm Intensity Control : Low Intensity 20-70 Mw /Cm2/Nm +- 10 % High Intensity 40-100 Mw /Cm2/Nm +- 10 %	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of OAE Screening Machine

	GMDN Name	OAE Screening Machine
1	Clinical purpose	To newborn hearing screenings, assessing hearing in individuals who can't undergo standard behavioral hearing tests, and detecting hearing loss, particularly in the cochlea
2	Used by clinical department/ward	Audiology Department
3	**Technical characteristics (specific to this type of device)**	
	1. Handheld screener device for Oto Acoustic Emission Screening 2. Should be lightweight and portable. 3. Should be suitable for all types of patients – neonates, infants, pediatrics and adults. 4. Instrument should have a capacitive touchscreen for entering patient details. 5. Wireless charging cradle/docking station 6. Quick & Accurate Testing with FMDPOAE 7. There Should be an objective Pass / Refer result with no active response required from the patient. 8. The instrument should have an Active Noise-Cancellation feature. 9. Hand-held Oto Acoustics Emission screener device with LED Display to provide user information and measurement progress. 10. Automated and Wireless Data transfer 11. Availability of Wireless Report printing 12. Wireless Bluetooth Data Transmission to Docking Station 13. Integrated Camera to decode barcodes and 2D QR codes. 14. Availability of quick Patient Data Entry 15. Availability to export data to Tracking Software's and hospital database. 16. Customizable Device Configurations, User Profiles 17. Inbuilt 1000 patient database storage capacity in the Unit. 18. Testing both ears simultaneously 19. Automated Detection of the Response 20. Level Step: 1 dB 21. On-screen summary screen of the test performed with results. 22. Rechargeable battery 23. Provision for data management on the external computer. 24. Device Characteristics a. Device Weight: Not more than 300g b. Lithium-ion Battery c. Graphic LCD Display 4.3" or Equivalent Module 1. DPOAE Screener 1. Noise detection: narrow-band noise around 2f2-f1 2. Residual noise calculation: weighted averaging, summed weighting factors 3. Artifact rejection: weighted averaging 4. Response detection: phase-statistics-derived spectral SNR criterion (6, 9, 12 dB, dependent on protocol settings) 5. Leak check: analysis of feedback signal (440 Hz probe tone) 6. Probe check: limit of maximum sound pressure, symmetry check of both speakers, leak check. 7. Calibration: in-the-ear calibration with ear-canal volume adjustment 8. Frequency ratio f2/f1: 1.22 9. Minimum DPOAE level criterion: off, 0 dB, -5 dB, -10 dB, -15 dB 10. Sample rate: 48 kHz (stimulus, response)	

	11. Measurement interval: 4096 samples 12. Stimulus modes: a. Frequency-modulated DPOAE (fm = 1.4-1.6 Hz, modulation depth = 50 Hz at 1 kHz, 100 Hz at 4 kHz) b. Multi-channel DPOAE (simultaneous measurement of DPOAEs at up to two f2 frequencies in one ear) 13. Frequencies f2: 1, 1.5, 2, 3, 4, 5, 6 kHz 14. Stimulus level L2: 50, 55, 60, 65 dB SPL 15. L2/L1 relation: automatic (scissors paradigm: L1 = 0.4 L2 + 39 dB SPL, Kummer et al. 1998) 16. Frequency modulation in the presentation of the DPOAE pure tone stimuli 17. Upgradable to ABR Screener & Screening ASSR 18. Multi-channel DPOAE: simultaneous measurement of DPOAEs at up to two f2 frequencies at a time 19. Noise Cancellation Technology 20. capacitive touchscreen for entering patient details. 21. Integrated Camera to decode barcodes and 2D QR codes 22. Creation of rights-based User Profile 23. Customizable Protocol Miscellaneous: 1. CE/ USFDA / BIS Certified 2. Should be easy to clean. 3. Accessories: a. Protective Carrying Case b. Ear Tips of all sizes 5. Compatible with Patient database software	
4	User's interface	Manual
5	Display	Graphic LCD Display 4.3” or Equivalent
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have CE/USFDA Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Motorized Labor Table

	GMDN Name	Motorized Labor Table
1	Clinical purpose	To provide optimal support, comfort, and safety for mothers during labor, delivery.
2	Used by clinical department/ward	Labor Room
3	**Technical characteristics (specific to this type of device)**	
	The Motorized Birthing Bed top should be divided into Three sections – Head Section, Fixed Section and Telescopic Leg section. The Motorized Birthing Bed three sections top should be made up of 8mm thick hylam Board of which Middle & leg section should be removable for easy cleaning. Backrest, height adjustment and Trendelenburg/ reverse Trendelenburg, positions operated by electro-mechanical actuators through handset. The Motorized Birthing Bed Base frame should be of 60 mm x 30 mm x 16 G rectangular tubes fitted with four Nos. 125 mm dia heavy duty Non-Rusting Twin Wheel swiveling castors with central locking Mechanism. The Motorized Birthing Bed should have Detachable Polymer moulded Head End & Foot End Boards. The Motorized Birthing Bed should have Stainless Steel telescopic detachable height adjustable IV rods with flush 2 IV rod locations. The Motorized Birthing Bed should be provided with a pair of upholstered height adjustable knee crutches mounted on stainless steel rod. The Motorized Birthing Bed should have a pair of polymer moulded railings on both sides. The Motorized Birthing Bed should be provided with stainless steel hand grips. The Motorized Birthing Bed should be provided with 75mm thick , 32 Kg/M3 , Three section foam mattress covered with good quality removable Rexine. The Motorized Birthing Bed should be provided with Perinneal Recess at leg end. The Motorized Birthing Bed should be provided with stainless steel tray at leg end under the 120Approx.120 cut and the base should be covered with stainless Steel Sheet of 304 Grade.	
4	User's interface	Manual
5	Dimensions	Approx size: 2040mm L x 1015mm W
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Infant Weighing scale

GMDN Name		Weight Machine Infant
1	Clinical purpose	To accurately measure a Baby Weight.
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	• Automatic and manual hold function for recording the weight of wriggling babies • Large LCD display (digit size 23 mm) • Curved weighing surface • Switch-on technology: button-on • Weight capacity: 20 kg • Graduation: 5 g • Adjustable between kg/lb/oz • Easy to clean • Non-slip, abrasion-resistant rubber feet • Automatic switch-off • 2 x 1.5V AA batteries	
4	User's interface	Manual
5	Capacity	20 Kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Neonate Pulse Oxymeter Table Top

	GMDN Name	Neonate Pulse Oxymeter
1	Clinical purpose	To non-invasively measure oxygen saturation and heart rate
2	Used by clinical department/ward	all departments
3	**Technical characteristics (specific to this type of device)**	
	1 Suitable for Neonatal Patient. 2 Compact Table Top pulse oximeter with color monitor at least TFT Screen 127X34 mm. 3 Spo2 Measurement range at least 0-100%, 40-70 and 70-99%, minimum gradation +-1% 4 Accuracy of Spo2 better than +-2% from range 70-100% and better than +-3% 5 Pulse rate range at least 30 to 250 bpm, min gradation 1bpm 6 Accuracy of pulse rate better than +-2bpm 7 Audiovisual alarms required: High and Low spo2 and pulse rate (operator variable settings), Sensor Disconnected, Sensor failure, low battery. 8 Perfusion Index will be in the form of Bar and value of perfusion index will be on display. 9 Should have minimum 96 hrs trend memory for Spo2 & PR 10 Display shows Spo2(%), HR(bpm) and signal strength bar 11 Should have Clinically proven track record to work during motion and very low perfusion conditions. 12 Color TFT Large Display readable from distance, display covers of durable plastic 13 User present of high/low alarms on spo2 and pulse rate monitoring 14 Silencing features for audio alarm 15 Built-in battery status on screen 16 Automatic switch from mains to batteries in case of power failure 17 Power Requirements: 220V /50 Hz and internal re-chargeable battery (approx 4 hrs back up, automatic recharge) 18 Manufacturer should have ISO 9001 &13485 certificate. 19 Equipment Should be European CE Certificate 4 Digit Notified Body Approved 20 Should have CDSCO certificate and Make in india 21 Equipment Should be quality Assurance ERTL Report as per IEC 60601-1, IEC 60601-1-2, IEC -80601-2-61, IEC 60601-1-6	
4	User's interface	Manual
5	Display	TFT Screen 127X34 mm
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CECertificate for standard quality.
11	Warranty	Two Year

Technical Specification of Vacuum Extractor

	GMDN Name	Vacuum Extractor
1	Clinical purpose	To assist with vaginal delivery when a baby has difficulty passing through the birth canal
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	
	Should have foot switch operation so that doctor can increase the pressure easily without touching the machine. The required pressure of 600 mm Hg should be attained within minute and the pressure will be maintained. Electrically operated and power consumption should be very low. Construction Shall constructed with All 304 Grade 1mm thick SS304 sheet. Specification Jars: Polycarbonate 2 X 2.0-liter capacity with mechanical overflow system and ABS Lid. Pump type: Oil Free Double Piston Pump Capacity: -720mmHg +- 10 at 32~35 LPM Noise Level: <50 dB A +- 3 Power: 220/230V AC, 50 Hz,1Ph Vacuum Gauge: 2.0-inch, 0-760 mmHg. Features Overflow Protection: Mechanical Type Tubing: Non – collapsible Suction Tubing Maintenance free oil less pump with absolute low noise. Medical Grade Stainless Steel 304 should be used for cabinet. Air filter should reduce the environmental contamination. Reusable Bacterial filter.	
4	User's interface	Manual
5	Noise Level	<50 dB A ±3
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidityetc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Bed with Foam Mattress

	GMDN Name	Bed with Foam Mattress
1	Clinical purpose	To provide comfort, support, and facilitate medical treatment for patients in healthcare settings
2	Used by clinical department/ward	All Wards and Departments
3	**Technical characteristics (specific to this type of device)**	
	1.Overall approx. Size:- Length :2170 mm X Width : 1020mm X Height : 600mm 2. The Bed frame should be made up of Approx.60mm X 30mm Rectangular CRCA 18G tube, 3. Four section perforated CRCA sheet topmade up of Approx. 18G CRCA sheet double press bend on four sides and should have uniformly embossed holes. 4. Two separate screws for backrest and knee rest position by individual SS folding handles. 5. Bed should have 5 Full supports in width approx. 20mm X 20mm. 6. Backrest should have anti pinch mechanism for safety. 7. SS shall be 304 grade confirming to IS 6911 – 1992. 8. Detachable Head and Leg end bows of Approx. 31.75 mm X 18G dia. Stainless Steel Pipe. 9. Off set H type Leg's should be made up of Approx. 31.75 mm diameter long pipe welded to Approx. 34 mm X 34 mm X 2 mm thick angle. 10. Leg should be fitted with rubber shoes. 11. Four-flush I.V.Rod locations. 12. Load bearing capacity should be 135 kg at every point of horizontal plain. 13. A mattress should be of 100mm thick PU foam 32 density suitable mattress covered with non-woven fabric & good quality rexine with one side zip .The foam should be of sleep well. 14. Finish: All mild steel components should be thoroughly in house pre-treated chemically to remove rust, grease, oil, etc. by 8 tank dip and drain process, including separate degreasing, de-rusting, phosphating each followed by water rinsing, activation and air drying to give phosphate coating. The treated metal surface should be coated in-house with epoxy powder with paint film thickness of 60microns (minimum) and oven baked at 180 degree to 200 degree centigrade. All stainless-steel components wherever used should be of 304 grades only. 15. Finishing & workmanship in the medical furniture is of prime importance and must be of high standard. All corners shall be rounded off so that there shall be no sharp corners and holes, should be burr free. 16. All process parameters to be as per documented IMS procedures for quality assurance (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)	
4	User's interface	Manual
5	Dimensions	Overall approx. Size:- Length :2170 mm X Width : 1020mm X Height : 600mm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.

8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Bedside Locker Deluxe

GMDN Name		Bedside Locker Deluxe
1	Clinical purpose	To provides a convenient and organized storage space for personal belongings, medical supplies, and equipment, promoting comfort, efficiency, and hygiene.
2	Used by clinical department/ward	All Wards and Departments
3	**Technical characteristics (specific to this type of device)**	
	Overall approx. size : 400mm W x 400mm D x 800mm H. CRCA sheet cabinet & drawer. Mounted on 50mm -dia roller wheels Membrane top with four side edge and drawer front. Two drawers one on the top and other on the bottom of the locker should be provided. The product should be Pretreated and epoxy powder coated with 8 tank process. manufacturer should have in house 8 tank pretreatment and powder coating process. The manufacturer should submit the Pollution Control Board certificate for the same Company should have following certificates for quality standard ISO 9001-2015, ISO13485 from notified certifying body and OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Dimensions	Overall approx. size: 400mm W x 400mm D x 800mm H.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of SPO2 Monitor

	GMDN Name	SPO2 Monitor
1	Clinical purpose	To non-invasively measure oxygen saturation and heart rate
2	Used by clinical department/ward	all departments
3	**Technical characteristics (specific to this type of device)**	
	1 Suitable for Adult Patient. 2 Compact Table Top pulse oximeter with color monitor at least TFT Screen 127X34 mm. 3 Spo2 Measurement range at least 0-100%, 40-70 and 70-99%, minimum gradation +-1% 4 Accuracy of Spo2 better than +-2% from range 70-100% and better than +-3% 5 Pulse rate range at least 30 to 250 bpm, min gradation 1bpm 6 Accuracy of pulse rate better than +-2bpm 7 Audiovisual alarms required: High and Low spo2 and pulse rate (operator variable settings), Sensor Disconnected, Sensor failure, low battery. 8 Perfusion Index will be in the form of Bar and value of perfusion index will be on display. 9 Should have minimum 96 hrs trend memory for Spo2 & PR 10 Display shows Spo2(%), HR(bpm) and signal strength bar 11 Should have Clinically proven track record to work during motion and very low perfusion conditions. 12 Color TFT Large Display readable from distance, display covers of durable plastic 13 User present of high/low alarms on spo2 and pulse rate monitoring 14 Silencing features for audio alarm 15 Built-in battery status on screen 16 Automatic switch from mains to batteries in case of power failure 17 Power Requirements: 220V /50 Hz and internal re-chargeable battery (approx 4 hrs back up, automatic recharge) 18 Manufacturer should have ISO 9001 &13485 certificate. 19 Equipment Should be European CE Certificate 4 Digit Notified Body Approved 20 Should have CDSCO certificate and Make in india 21 Equipment Should be quality Assurance ERTL Report as per IEC 60601-1, IEC 60601-1-2, IEC -80601-2-61, IEC 60601-1-6	
4	User's interface	Manual
5	Display	TFT Screen 127X34 mm
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Nebulizer Ultrasonic

GMDN Name		Nebulizer Ultrasonic
1	Clinical purpose	To deliver liquid medications in the form of a mist for inhalation, particularly for respiratory conditions
2	Used by clinical department/ward	All Department and Wards
3	**Technical characteristics (specific to this type of device)**	
	• Power Supply:AC110~220V,50/60Hz • Ultrasonic Frequency:1.7MHz+-10% • Input Power:50VA • MMD:3.9pm • Maximum nebulizing rate:>_3mL/min • Timing range:0~60min • Continuous loading time:>_4h • Fill Volume of medicine cup:150ml • Fill Volume of water container: • QTN:2PCS/CTN • G.W./NW.: 4/3.5kgs Size:41.5x30x26.5cm	
4	User's interface	Manual
5	Size	41.5x30x26.5cm
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of IV Stand

	GMDN Name	IV Stand
1	Clinical purpose	To hang bags containing intravenous fluids or medicines which need to be administered to the patient
2	Used by clinical department/ward	All Wards and Departments
3	**Technical characteristics (specific to this type of device)**	
	Height adjustable from 1325mm min. to 2390mm max. Stainless steel Saline Rod. Strong base support. Pretreated and epoxy powder coated with 8 tank process. The product should be Pretreated and epoxy powder coated with 8 tank process. He manufacturer should have in house 8 tank pretreatment and powder coating process. The manufacturer should submit the Pollution Control Board certificate for the same Company should have following certificates for quality standard ISO 9001-2015, ISO13485 from notified certifying body and OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Dimensions	Height adjustable from 1325mm min. to 2390mm max
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Over bed Table

GMDN Name		Over bed Table
1	Clinical purpose	To serve as a surface for food trays
2	Used by clinical department/ward	All Wards and Departments
3	**Technical characteristics (specific to this type of device)**	
	Over all Approx Size: 810mmL x 470mmW x 810mm H Top Size: 810mm L x355mm W Height adjustment by gas spring mechanism. Height adjustment of the trolley should be on a aluminum extruded telescopic section with ball bearings for smooth up and down movement. Rectangular tube frame. Trolley mounted on 50mm-dia wheels. Pretreated and epoxy powder coated with 8 tank process. The product should be Pretreated and epoxy powder coated with 8 tank process. manufacturer should have in house 8 tank pretreatment and powder coating process. The manufacturer should submit the Pollution Control Board certificate for the same Company should have following certificates for quality standard ISO 9001-2015, ISO13485 from notified certifying body and OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Dimensions	Over all Approx Size: 810mmL x 470mmW x 810mm H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Motorized ICU Beds

	GMDN Name	Motorized ICU Beds
1	Clinical purpose	ICU Beds are required in the Intensive Care for comfort of the patient and to facilitate comfortable transfer to and for emergency/OT/Wards etc. It is also required to carry out point of care procedures including radiological procedures at the bedside.
2	Used by clinical department/ward	ICU
3	**Technical characteristics (specific to this type of device)**	
	1. Overall Size: Approx Buffer to Buffer 2170 mm L x 1030 mm W x390mm to 740 mmH 2. Mattress platform size 1965mm L x 880mm W 3. Backrest, knee rest, height adjustment and Trendelenburg/ reverse Trendelenburg, positions operated by European make electro-mechanical actuators through handset & ACP. The handset should have green color backlight. 4. Lower leg section should be adjusted by ratchet mechanism 5. One touch key provision on ACP for emergency head down 6. One touch key provision on ACP for CPR 7. Provision for function locking and unlocking on ACP 8. Provision for adjustable chair position on ACP 9. Manual pull lever on both sides of bed to quickly bring backrest to a flat position 10. Battery backup with inbuilt battery charger shall be provided 11. The ACP shall have indications for power on and the battery charge 12. Backrest and knee rest shall retract as they are individually and simultaneously raised. 13. Backrest adjustment upto 70° 14. Knee rest adjustment upto 40° 15. Trendelenburg tilt upto 12° 16. Reverse Trendelenburg tilt upto 12° 17. Degree indicator required on both the side for backrest, Trendelenburg/ Reverse Trendelenburg positions. 18. All electro mechanical actuators, control box, handset and ACO need to compatible with class of IP X6. 19. Bed frame is made from 60mm x 30mmx 1.6mm (16G) thick ERW tube with proper support. This frame is fitted on the base frame mainly made of 60mm x 30mm x1.6mm (16G) ERW tubes with various supporting links. 20. The base frame is mounted on 125mm dia non-rusting twin wheel castors with central locking mechanism. Wheel centre having precision ball bearing to run smoothly 21. The bed has polymer moulded head & foot panels detachable by hand without need ofany tool. Four corner rubber buffers of 125mm dia. 22. Bed has polymer moulded safety side railings on both sides. These shall be fitted to the mattress support sections and should be able to raise and lock through spring lock mechanism. when put down, they should go below the mattress platform for zero transfer gap. The height of the railing from the mattress base should be 390mm or more for enhanced patient safety. 23. There are four locations on the bed to hold one stainless steel saline rod 12mm dia with 31.7mm dia x 1.2mm (18G) stainless steel SS 304 Grade outer covering tube with a knob mount syringe pump. 24. The bed has pullout linen-holder made of SS rod 10min 25. The control box should be covered with MS CRCA sheet. 26. Under the bed clearance is min 150mm 27. Mattress with high quality PU foam covered with covered with rexine.	

	28. Safe working load 220kg Electrical Specification: 29. Normal 230 V Ac 30. Switch mode power supply: Operating range from100 to 240Vac50/60 Hz. 31. Electrical shock protection: Class 1 32. Power consumption ideal mode: 0.8W 33. Power consumption at maximum load: 270W max 34. Liquid ingress protection : IPX6 35. Rechargeable Batteries: 2 x 12 volt Sealed Lead /acid gel 36. Duty Cycle: 10% (Two minutes for every eighteen minutes) 37. Finishing & workmanship in the medical furniture is of prime importance and must be of high standard. All corners shall be rounded off so that there shall be no sharp corners and holes, should be burr free 38. All process parameters to be as per documented IMS procedures for quality assurance (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems) 39. The bed shall be in compliance with IEC60601-1-2 and IEC 60601-2-52:2015 safety standards. 40. M.S. Tubular parts, linkages, flats are to be In house, pre-treated andepoxy powder coated 50 to 100 microns 41. Accessories: a. Heavy duty IV pole (2 hooks) b. Urine bag holder	
4	User's interface	Manual
5	Dimensions	Overall Size: Approx Buffer to Buffer 2170 mm L to 1045 mm W x490mm to 840 mm H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Syringe Infusion Pump

	GMDN Name	Syringe Pump
1	Clinical purpose	To precisely administer fluids, medications, or nutrients into a patient's body at a controlled rate over a specific period.
2	Used by clinical department/ward	All Wards and Departments
3	**Technical characteristics (specific to this type of device)**	
	Should be Fully Microprocessor Controlled. • Should have Auto Mode for automatic calculation of accurate flow rate. • Should have Body Weight mode. • Should have Drug Library. • Should have a touch screen LCD display. • Should accept the following Syringes 5, 10, 20, 30, & 50/60 ml syringes. • Should have a wide range of flow rates from 0.1 ml/hr to 1500 ml/hr. • Should have delivery of fluid at quick rate using BOLUS facility. • Should have the following fixed Bolus Rate: 50/60 mL Syringe: 1500 mL 30 mL Syringe: 900 mL 20 mL Syringe: 600 mL 10 mL Syringe: 400 mL 5 mL Syringe: 100 mL • Should have inbuilt KVO – Keep Vein Open. • Should have a minimum of 4 hours Battery backup for emergencies & Transport. • Should have the following audio and visual alarms: Nearly empty, Empty, Bolus volume finish syringe dislocated, syringe disengaged, pressure sensor error, malfunction, remind start alarm, Occlusion, VTBI finish, internal battery near empty, AC power failure. • Should have rubber anti-slip mat at the bottom of the machine so that it can be securely placed on any surface. • Should have RS 232 interface for connectivity. • Should have a multi-direction clamp for easy fixation on to vertical or horizontal poles. • Should be light weight, compact and should have a good grip for easy portability. • Should have 3 levels of occlusion pressure monitoring as follows: Occlusion Pressure : L: 300+- 100mmHg (40.7 + 13.3KPa) M: 500+-100mmHg (66.7 + 13.3KPa) H: 800 + -200mmHg (106.7 + 26.7KPa)	
4	User's interface	Manual
5	Battery operated	Internal rechargeable battery having at least 4 hours backup
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.

10	Warranty	Two Years

Technical Specification of Multipara Monitor with stands

	GMDN Name	Multipara Monitor
1	Clinical purpose	To continuously track and display multiple vital signs of a patient in real-time
2	Used by clinical department/ward	All Department and Wards
3	**Technical characteristics (specific to this type of device)**	
	• The monitor have 12.1" inch display. Should measure these parameters for all type of patients (Adult, Pediatric &Neonatal) a) 3/5 Lead ECG b) Respiration rate c) SPO2 d) NIBP e) Temperature The monitor should have following features: • Highly visible, Night mode, bright , high resolution 12.1" TFT LCD Screen or above colour Medical grade screen resolution have 800 *600 with Big Fonts. • Monitors have ST analysis. • Audio and Visual ,Alarm should glow in different color indicating from a distance the seriousness/ priority of the alarms. • Able to operate through Single knob. • Monitor should be ESU and defibrillator protected. • Display at least 8 waveforms on a single screen along with related numerical parameters on a single screen. • Easy to recognize alarm priority system with color coded visual indication, variable pitch and It is capable for Central Monitoring System. • Real time Online remote services for Tele ICU Monitoring. • Real Time View on Android and IOS App facility. • Function has calculation packages for drugs. • It have the capability to provide event review based on the events defined by the user of the monitor as per the specific condition of the patient. • Display setting have various configurable user defined setups • Color Coding visual Alarm • Indicators for Mains, Battery and charging. • 3 hours battery back. • Facility to display all Leads in ECG on the screen at a time. • Dual Temperature facility. • Facility to Configure ECG 5Lead and 3 Lead . • Monitor have 4 digit Euorpean CE Certificate with ERTL test reports standard 60601-2-49. Standard Accessories have Standard Scope of supply should include: • NiBP Cuff (Adult) 1 No. 25 to 35CM (10"-14") • SPO2 reusable sensor probe 1 No • 3 or 5 Lead ECG Patient Cable 1 No • Operating Manual/CD 1 No	

	• Power Code 1 No. Power supply: Power input to be 220 – 240V AC, 50Hz fitted with Indian plug of appropriate rating	
4	User's interface	Manual
5	Display	12.1” TFT LCD Screen
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Stretcher on Trolley

GMDN Name		Stretcher on Trolley
1	Clinical purpose	The safe and efficient transport of patients within a healthcare facility or in emergency situations
2	Used by clinical department/ward	All Departments and Wards
3	**Technical characteristics (specific to this type of device)**	
	Overall approx. size: 2020mm L x 590mm W x 740mm H. Approx. 31.75mm Dia. CRCA tubular framework Trolley mounted on four 150mm-dia heavy duty castors two with brakes and two without brakes. Detachable powder coated top. The detachable powder coated top should be mounted on the trolley which is mounted on 150mm dia casters. The contact surface of the trolley and the powder coated top should have a non Metallic surface. SS plain IV rod with two location & oxygen cylinder holder. IV rod with two location & oxygen cylinder holder. Pretreated and epoxy powder coated with 8 tank process Company should have following for Quality standard ISO 9001-2015 ISO138485 from notified Certifying body and OHSAS,18001 &14001 CE/FDA	
4	User's interface	Manual
5	Dimensions	approx. size: 2020mm L x 590mm W x 740mm H.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Pediatric ICU Beds

GMDN Name		Pediatric ICU Beds
1	Clinical purpose	ICU Beds are required in the Intensive Care for comfort of the patient and to facilitate comfortable transfer to and for emergency/OT etc.
2	Used by clinical department/ward	Pediatric ICU
3	**Technical characteristics (specific to this type of device)**	
	Overall Size: 1480 L x 800mm W x 600mm H (fixed height) The main frame should be made from 50mm x 25mm x 18G CRCA rectangular tube. Top panel made up of 18G thick CRCA MS sheets should be perforated with uniformly embossed spaced holes in each section. Perforated should be burr free & should not have sharp edges. Top Panel is supported by box stiffener along the length duly spot-welded. Bed should have 4 nos full support in width of approx. 20mm X 20mm x 18G MS CRCA square tubes Head & Leg end bows should be made up of 31.75mm diameter CRCA tube of 18G with height of 1060mm one horizontal support of 25.4mm dia and seven vertical support of 15.80mm dia x 18 g tubes & rubber shoes reinforced with M.S. washer & arrangement to hold mosquito curtain poles. Full length drop side railing of 19mm diameter x 18G CRCA tube & 13 no's vertical support of 9.5mm dia and two 12.5 mm dia stainless steel sliding rods. Bed should be provided with PU Foam mattress of minimum 40 density. It should be covered with good quality rexine. The rexine of the mattress should be of minimum 0.7mm thickness and of GSM not less than 0.450. The dimension of the mattress should be as per the suitability of the bed dimension. The mattress thickness should be of 100 mm minimum. Finishing & workmanship in the medical furniture is of prime importance and must be of high standard. All corners shall be rounded off so that there shall be no sharp corners and holes, should be burr free All process parameters to be as per documented IMS procedures for quality assurance (ISO 9001:2015 and ISO 13485: 2016 from notified body. ISO 14001:2015, OHSAS 18001: 2007 Quality management systems) and CE/ USFDA All mild steel components should be thoroughly in house pretreated chemically to remove rust, grease, oil, etc. by 8 tank dip and drain process, including separate degreasing, de-rusting, phosphating each followed by water rinsing, activation and air drying to give phosphate coating. The site inspection is mandatory during the evaluation period. The treated metal surface should be coated in-house with epoxy powder with paint film thickness of 60microns (minimum) and oven baked at 180 degree to 200 degree centigrade. All stainless-steel components wherever used should be of 304 grades only. The manufacturer should have in house 8 tank pre-treatment and powder coating process. The manufacturer should submit the Pollution Control Board certificate for the same. Two section mattress with 100mm thick PU foam of 32 density covered with rexine for pediatric beds.	
4	User's interface	Manual
5	Dimensions	Overall Size: 1480 L x 800mm W x 600mm H
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15

		to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Pulse Oxymeter with Pediatric Probe

GMDN Name		Plus Oxymeter with Pediatric Probe
1	Clinical purpose	To non-invasively measure oxygen saturation and heart rate
2	Used by clinical department/ward	all departments
3	**Technical characteristics (specific to this type of device)**	
	1 Suitable for Pediatric Patient. 2 Compact Table Top pulse oximeter with color monitor at least TFT Screen 127X34 mm. 3 Spo2 Measurement range at least 0-100%, 40-70 and 70-99%, minimum gradation +-1% 4 Accuracy of Spo2 better than +-2% from range 70-100% and better than +-3% 5 Pulse rate range at least 30 to 250 bpm, min gradation 1bpm 6 Accuracy of pulse rate better than +-2bpm 7 Audiovisual alarms required: High and Low spo2 and pulse rate (operator variable settings), Sensor Disconnected, Sensor failure, low battery. 8 Perfusion Index will be in the form of Bar and value of perfusion index will be on display. 9 Should have minimum 96 hrs trend memory for Spo2 & PR 10 Display shows Spo2(%), HR(bpm) and signal strength bar 11 Should have Clinically proven track record to work during motion and very low perfusion conditions. 12 Color TFT Large Display readable from distance, display covers of durable plastic 13 User present of high/low alarms on spo2 and pulse rate monitoring 14 Silencing features for audio alarm 15 Built-in battery status on screen 16 Automatic switch from mains to batteries in case of power failure 17 Power Requirements: 220V /50 Hz and internal re-chargeable battery (approx 4 hrs back up, automatic recharge) 18 Manufacturer should have ISO 9001 &13485 certificate. 19 Equipment Should be European CE Certificate 4 Digit Notified Body Approved 20 Should have CDSCO certificate and Make in india 21 Equipment Should be quality Assurance ERTL Report as per IEC 60601-1, IEC 60601-1-2, IEC -80601-2-61, IEC 60601-1-6	
4	User's interface	Manual
5	Display	TFT Screen 127X34 mm
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Pediatric Ventilator

	GMDN Name	Pediatric Ventilator
1	Clinical purpose	To support children who cannot breathe adequately on their own, either temporarily or long-term
2	Used by clinical department/ward	Pediatric Department
3	**Technical characteristics (specific to this type of device)**	
	A Dedicated Neonatal Ventilator should have Conventional Modes to support critical patients of up to 30 Kgs body weight Should be microprocessor Controlled ventilator with with altitude compensation and BTPS correction The unit should be external compressor based for precise gas delivery& it should have proximal flow sensor for neonatal patient category. Should support Invasive, Non-Invasive, and High flow oxygen Nasal cannula Ventilation in Neonate and Pediatric patient The Ventilator should have 12” or more LCD screen with touch facility for real time display of all parameters/ waveforms Should have 3 waveforms- Pressure and Time, Volume and Time and Flow and Time Should have 3 loops- P-V, F-V, P-F with facility of saving for reference Graphic display to have Manual scaling facility for waves Status indicator for Ventilator mode, Battery life, patient data, alarm settings, clock etc Should have trending facility for 72 hours Should have Automatic compliance & Leakage compensation Should have following Ventilation settings parameters a) Pressure (insp) 2- 60 cmH2O b) Tidal volume guarantee (VTG) 0.1 ml to 200 ml c) Frequency up to 200 BPM d) Insp. Time 0.1 to 2 sec e) I : E Ratio 9:1 to 1:99 f) Insp. Flow 2 to 32 LPM, g) PEEP 0-30 cm H2O h) Pressure support up to 60 cm H2O i) Fi02 21 to 100% j)Trigger 0.1 to 1 Lpm k) High flow Oxygen Therapy up to 30 LPM Should have Monitoring of the following parameters. a) Airway Pressure (Peak & Mean) b) Tidal volume (Inspired & Expired) c) Minute volume d) Spontaneous Minute Volume e) Total Frequency f) Fi02 dynamic g) C20/C index h) Resistance i)Compliance (Cdyn) j) Alarms for all measured & monitored parameters& Alarm log should display up to 4500 Alarms Should have following Modes of ventilation a) Pressure Control b) SIMV with Pressure support c) SIPPV with Pressure support	

	d) CPAP e) High Flow oxygen Therapy/HFNC f) Volume Limit g) Apnea /backup ventilation h) Should have O2 flush Should have following Alarms with audio and visual text message a) Pressure changes (High/low) b) Tidal volume changes c) Minute volume changes d) High PEEP e) High/Low O2 concentration f) Power failure and Low Battery g) Patient disconnection h) Apnea Expiratory block should be autoclavable and no routine calibration required Should have integrated Battery backup for minimum 3 hour Should have interface for communications with networked devices Power input to be 220-240VAC, 50Hz Gas input (air and oxygen) - 50-100 psi Ventilator should be US FDA or European CE approved product only and should submit the respective certificate of US FDA or European CE. Configuration: a) NICU Ventilator with trolley – 01 b) Should be supplied Hinged arm holder for holding the circuit c) Neonatal autoclavable silicone patient breathing circuits -01 d) Reusable and autoclavable exhalation valve - 01 extra e) Proximal Flow sensor for neonatal -01 f) Air and Oxygen Hose - each 01 nos g) NIV kit (Masks, Prongs, Bonnets of various size)- 01 kit • Should have the VIVE flow feature for gas saving. • I:E Ratio monitored parameter should be available in all the modes. • Should have provision to view 3 waveform and 2 loops on single screen	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of ABG Machine

GMDN Name		ABG Machine
1	Clinical purpose	To analyze a blood sample taken from an artery
2	Used by clinical department/ward	critical care units, emergency departments, and operating rooms
3	**Technical characteristics (specific to this type of device)**	
	• Analyzer should measure PH, PCO2, PO2, TCO2, Na+, K+, Cl, Ionized Calcium, Lactate, Hematocrit, Glucose, Urea, Creatinine, Troponin-i, CK-MB, BNP, PT/INR, ACT on a single device with options to choose different cartridges. • Analyzer must display calculated parameters including HCO3, Base Excess, SO2, Anion Gap & Hemoglobin. • Analyzer should be small, handheld, light weight (below 1 Kg), and portable – suitable for use at Point of care/patient bedside • System must be capable of using blood samples typically less than 100ul depending on cartridge type. • System should be battery operated using power source rechargeable batteries, A lithium battery inside the analyzer maintains the clock/calendar and customization profile. • The analyzer must be USFDA and ISO certified. Copies of reports and certifications should be furnished to buyer on demand at time of supplies • Cartridge / reagent before use can be stored mostly at room temperature between 2-30 Degree C, and should have Automatic calibration. • Type of technology should be Single use cartridges • System should have Dot matrix supertwist liquid crystal to display the results. • System should communicate through link through Infrared light-emitting diode (LED). • Equipment can be transported between 10°C -45°C • System can work under barometric pressure range from 300mmHg to 850 mmHg • The analyzer should display “Low Battery” when rechargeable battery are low and should not allow to process the test. • System Should have patient Bar Code facility and ability to run a wide range of patient panels on one system. • The analyzer should contain a solid-state barometric pressure sensor, which determines the ambient atmospheric pressure used for the PO2 sensor calibration. • The analyzer should have capability to stores up to 1,000 test records. • Shelf life of the reagent / cartridges should be 4 months, On-board shelf life of reagent should be minimum 24 weeks. • The system should be BIS/US FDA / CE Certified. 2: Wireless Thermal Printer • Wireless printer should be compatible for printing wirelessly through item 1 POCT analyzer. • One Power Cord & One AC adapter • Rechargeable Battery. • Should come with One roll of printer paper and The Printer should come with 4.8V NiMH rechargeable battery pack and a power adaptor for AC outlet. • The printer should receive data directly from the analyzer via IR transmission or through a data cable • The Printer should use thermal paper 5.7 CM for printing reports. • The Printing method should be Thermal line printing. • The Printer should have power LED indicators showing ready to use, paper feeding indicator or Error. • The Printing speed should be Up to 10 lines. • The Operating temperature of the printer should be 15C to 40 C.	

	• The Weight of the printer should be less than 500 Gram. Electronic Simulator • The external electronic simulator should be a stable electronic device. • The test cycle time for the external electronic simulator should be between 1-2 minutes. • The electronic simulator should be able to check the analyser's cartridge signal reading function. • It should detection function of the analyser both below and above the measuring ranges of tests. • It should check performance of the analyser to take accurate and sensitive measurements of voltage, current and resistance from the cartridge. • The Simulator should effectively evaluate the analyser and give results on the screening of the analyser as pass /fail confirming whether the analyser will measure the results within limits specified in the range set in the analyser software. • The Weight of the device should not be more that 100 gm and operating temperature 16 to 30 C Disposable test cartridge • The disposable cartridge should contain microfabricated thin film of electrodes for testing. • The disposable cartridge should have sample handling system and a waste chamber • The disposable cartridge should have conductive pads to make electrical contact with the analyzer. • The disposable cartridge should be used in conjunction with analyzer for the simultaneous quantitative determination of specific analytes in whole blood.	
4	User's interface	Manual
5	Weight	1 KG
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Portable LED Standing Lights

	GMDN Name	Portable LED Standing Lights
1	Clinical purpose	To provide focused, high-intensity illumination for patient examinations and minor procedures
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Shadow less Mobile Lamp Central IL luminance 50,000 LUX at 1m (max) LED Life 50,000 Hours Color Temperature (CCT) 3700 – 5500 k Full Spectrum RI 95 Ra Light Spot Diameter 8” No of LEDs 12 ISO ,CE Certified .	
4	User's interface	Manual
5	LED Life	50000 Hrs
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Foot Operated Suction Machine

GMDN Name		Foot Operated Suction Machine
1	Clinical purpose	To remove unwanted fluids and secretions from a patient's body, particularly from the airway
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Foot Suction Base Powder coated heavy MS base Pump Type Heavy Piston Pump Weight (Kilogram) 5 Kgs useful for Medical , Home Healthcare Features Aspirator, Portable, Hand Held Suction Units Jar Capacity :1000ml Jar Material :Polycarbonate Capacity -600 mm Hg Filter Bacterial filter Autoclavable/ Reusable Operated Manual	
4	User's interface	Manual
5	Noise Level3	<50 dB A ±3
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Bilirubinometer

GMDN Name		Bilirubinometer
1	Clinical purpose	To quickly and non-invasively assess for jaundice (hyper bilirubinemia)
2	Used by clinical department/ward	Neonatal Intensive Care Units (NICU), Maternity Wards, and well-baby nurseries
3	**Technical characteristics (specific to this type of device)**	
	1. Non Invasive Screening device that provides a fast (on spot) objective index of icterus in infants, neonatal patients with a gestational age >24 weeks 2. Hand-held device for outpatient/inpatient usage which is of Pocket size. 3. Shouldn't use any consumables (In case consumables are present, same to be included at no extra charge for 3000 measurements) 4. Should have a Reusable measuring probe, to apply wipe disinfection 5. For measurement of transcutaneous bilirubin (TCB) 6. Jaundice Meter should be of following specifications 7. Noninvasive measurement with no consumables. Should use a light source preferably pulse xenon arc lamp - to carry out readings. 8. Detectors-Silicon photodiodes 9. Should be light weigh not more than 210 gm with integrated rechargeable battery 10. Should be capable of doing at least 250 measurements on a full charge. 11. Battery should be easily rechargeable (2hrs)	
4	User's interface	Manual
5	Weight	not more than 210 gm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Bubble Cpap

GMDN Name		Bubble Cpap
1	Clinical purpose	To treat respiratory distress in neonates
2	Used by clinical department/ward	NICU
3	**Technical characteristics (specific to this type of device)**	
	System: Valve based continuous flow CPAP and IPPR. Bubbler based Bubble CPAP Displays: Digital and Analog Display of CPAP Pressure in Capp Mode. Continuous Digital display of Delivered pressure in IPPR Mode. Alarm: CPAP High and Low Alarm (Audio Visual) Pressure Gauge: -20 to 100 cm H2O Gas Mixing: Air Oxygen Mixer Using Calibrated Rota meters. Air Source : Inbuilt air Compressor (20 to 90PSI) O2 Source: Inlet for Oxygen Gas (20 to 90PSI) Power: 230V A.C 50Hz. Accessories: Warmidifier, Breathing Circuit (Disposable), CPAP Interface, Nasal Prongs, Dummy test Lung.	
4	User's interface	Manual
5	Power Requirement	230V A.C 50Hz.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate(Notified Body /USFDA) for standard quality.
10	Warranty	Two Year

Technical Specification of High Flow Nasal Machine

GMDN Name		High Flow Nasal Machine
1	Clinical purpose	To improve oxygenation, reduce the work of breathing, and potentially prevent the need for more invasive respiratory support in various respiratory conditions.
2	Used by clinical department/ward	All departments
3	**Technical characteristics (specific to this type of device)**	
	• Should Be With HD Display Can Display on Screen - Temperature, Flow And Fio2 • Should Be With Two Modes Of Operation: High Flow And Low Flow • High Flow Range 10 to 80LPM, Low Flow Range 2 to 25 LPM • High Flow Mode Temp Range 31,34 and 37 Degree Celsius, Low Flow Temperature To Be Fix At 34 degree Celsius • Oxygen % Range From 21% to 100% • Should Be With Alarm Setting For AT Alarm, Blockage, High And Low Oxygen • Should Be with Lockable Parameters Facility No One Can Make Any Change Accidently • Equipment Can BE Used With High Flow Nasal Cannala For Adult/ Padeatric And With tracheotomy Adaptor (10-60LPM) • Breathing Circuit Should BE Disposable And Available With Responsible Price • Equipment Should Be Ready to use For Patient Within 10-14 Minute of Start of operation to reach Specified temperature • Equipment Can Be Used For More Than 3KG • Machine Should Be With Original Stand Mounting Plate to Fix the Machine And Extended arms to hook breathing Circuits/ HFNC And Basket to Carry Disposable. • Should Be Supplied With 05 Set of disposables Circuits, Chamber And HFNC • Equipment should Be Compatible With Latest Disinfection method - Ozone Technology to Disinfect the Machine • Equipment Should be Supplied With Rechargeable Disinfection Device total Disinfection Time Should Not Be more Than 25-30 Minute • Should Be With Two Year Warranty Equipment should be Repairable • Should Be With European CE.	
4	User's interface	Manual
5	High Flow Range	10 to 80LPM
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Open Care Radiant Warmer

GMDN Name		Open Care Radiant Warmer
1	Clinical purpose	To provide a controlled source of heat for newborns, particularly premature or low birth weight infants, to maintain their body temperature and prevent hypothermia
2	Used by clinical department/ward	Neonatal Intensive Care Unit (NICU), labor rooms, and nurseries
3	**Technical characteristics (specific to this type of device)**	
	Power Source: 230+/-25 Volts, 50Hz. Light Source: 6 Watts Led to Examine Babies. Heater Capacity: 800 Watts. Power Consumption: 850 Watts at 100% Heater Power. Convenient Working Level with 6mm thick high grade acrylic collapsible/drop down side Supports, accessible from all sides. Acrylic baby tray External head up/down Facility and foam Mattress. Titable warming source for ease during procedures and x ray. Instrument Tray and IV Pole. Skin & Air Temprature Displayed indivualy on Bright LED Display. Three Modes of Warming viz. Skin Air and Manual. Programmable Heater output and Warming time in Manual Modes. Alarms: Skin +1 degree celcius High -1 degree celcius low Air +1.5 degree celcius High -3 degree celcius Low Skin >38 degree celcius Over >39 degree celcius Power Failure Audio-Visual.	
4	User's interface	Manual
5	Power Requirement	230V A.C 50Hz.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality(Notified Body).
10	Warranty	Two Year

Technical Specification of Phototherapy Single Surface LED

GMDN Name		Phototherapy Single Surface LED
1	Clinical purpose	To provide a controlled source of heat for newborns, particularly premature or low birth weight infants, to maintain their body temperature and prevent hypothermia
2	Used by clinical department/ward	Neonatal Intensive Care Unit (NICU), labor rooms, and nurseries
3	**Technical characteristics (specific to this type of device)**	
	Unit has blue cool light source with wave length of 450-460nm (Peak 455mm). Free of UV and IR Radiation. Light Intensity is variable in 4 steps 25 % 50% 75 % and 100% at distance of 45cms. Unit with Digital timer Unit Mounted on Caster Wheels for easy Mobility. Height and angle adjustment facility. LED Blue 18nos in Upper Surface.	
4	User's interface	Manual
5	Power Requirement	230V A.C 50Hz.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Transport Incubator

GMDN Name		Transport Incubator
1	Clinical purpose	To maintain a stable, controlled environment for transporting newborns, particularly premature or critically ill infants, from one location to another
2	Used by clinical department/ward	Neonatal Intensive Care Unit (NICU), labor rooms
3	**Technical characteristics (specific to this type of device)**	
	Features: Thermal Maintenance by Digital Temperature Controller Transparent hood Structure for immediate visual check -up and reduces radiant heat Loss by the infant Dual Safety Mechanism is provided monitor both rises on incubator & temperature over heating of heater. Standby heating function Different power source may be used Compact, light Weight and sturdy. Mobile Trolley, equipped with a smooth up and down folding mechanism Specification: Electrical Requirement: 12 V DC Car Battery or 230 V AC Display: Skin or set temperature Controller. Temperature Controller: Electronic Temperature Controller. Heating Controller: Electrical & Battery Operated. Alarm: Over Temperature alarm for skin temperature Mechanical Specifications: Portable incubator mounted on trolley with shelf Should have Acrylic walled canopy with front and side opening with port holes Should be Mounted on heavy duty 4 castors (100 mm), 2 with brakes Should consist of Inlet for Oxygen, Sensors and IV tubing etc.	
4	User's interface	Manual
5	Power Requirement	230V A.C 50Hz.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality(Notified Body).
10	Warranty	Two Year

Technical Specification of Oxygen Hood

GMDN Name		Oxygen Hood
1	Clinical purpose	To deliver supplemental oxygen to infants
2	Used by clinical department/ward	Neonatal Intensive Care Unit (NICU), labor rooms
3	**Technical characteristics (specific to this type of device)**	
	Approximate: Height 22 cm Diam-25cm Mode Of Autoclavable Polycarbonate. Trauma free silicon neck with adjustment flap. With bilateral oxygen nozzle. Oxygen Tube Of 2M Length Provided with the hood. Device is ISO Certified. Device is Safety certified CE.	
4	User's interface	Manual
5	Size	Height 22 cm Diam-25cm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Pulse Oxymeter Table Top

	GMDN Name	Plus Oxymeter
1	Clinical purpose	To non-invasively measure oxygen saturation and heart rate
2	Used by clinical department/ward	all departments
3	**Technical characteristics (specific to this type of device)**	
	1 Suitable for Adult Patient. 2 Compact Table Top pulse oximeter with color monitor at least TFT Screen 127X34 mm. 3 Spo2 Measurement range at least 0-100%, 40-70 and 70-99%, minimum gradation +-1% 4 Accuracy of Spo2 better than +-2% from range 70-100% and better than +-3% 5 Pulse rate range at least 30 to 250 bpm, min gradation 1bpm 6 Accuracy of pulse rate better than +-2bpm 7 Audiovisual alarms required: High and Low spo2 and pulse rate (operator variable settings), Sensor Disconnected, Sensor failure, low battery. 8 Perfusion Index will be in the form of Bar and value of perfusion index will be on display. 9 Should have minimum 96 hrs trend memory for Spo2 & PR 10 Display shows Spo2(%), HR(bpm) and signal strength bar 11 Should have Clinically proven track record to work during motion and very low perfusion conditions. 12 Color TFT Large Display readable from distance, display covers of durable plastic 13 User present of high/low alarms on spo2 and pulse rate monitoring 14 Silencing features for audio alarm 15 Built-in battery status on screen 16 Automatic switch from mains to batteries in case of power failure 17 Power Requirements: 220V /50 Hz and internal re-chargeable battery (approx 4 hrs back up, automatic recharge) 18 Manufacturer should have ISO 9001 &13485 certificate. 19 Equipment Should be European CE Certificate 4 Digit Notified Body Approved 20 Should have CDSCO certificate and Make in india 21 Equipment Should be quality Assurance ERTL Report as per IEC 60601-1, IEC 60601-1-2, IEC -80601-2-61, IEC 60601-1-6	
4	User's interface	Manual
5	Display	TFT Screen 127X34 mm
6	Power Requirements	220V /50 Hz
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Cardiac Markar

	GMDN Name	Cardiac Markar
1	Clinical purpose	To diagnose and assess the risk of heart conditions like heart attacks (myocardial infarction), angina, and heart failure
2	Used by clinical department/ward	Cardiology departments
3	**Technical characteristics (specific to this type of device)**	
	1. The POC machine should be able to provide quantitative results for cardiac biomarkers, PlGF and qualitative results for Tox Drug Abuse like Amphetamines, Methamphetamines, Barbiturates, Benzodiazepines, Cocaine, Methadone Metabolites, Opiates, Cannabinoids and TCA. 2. The machine should reliably and accurately assess Myoglobin, CK-MB, Troponin I, BNP and D-Dimer in the bedside with a single strip. 3. It should provide the results quickly and easily after pressing a single button. 4. It should give quantitative results. 5. Quantitative results should be displayed clearly in a TFT Screen (minimum 4X4 inch) and printed in a strip of paper in easy to read numbers. 6. Test result should come with respective units of measurements and displayed as POSITIVE or NEGATIVE to eliminate interpretation time delay 7. Required sample volume should be minimum ($\leq$ 1 ml) and if specialized syringe / device is required to aspirate blood sample from the patients for the test, it should come with the test strip. 8. Time taken from adding the blood sample to the test strip to the result printing for Myoglobin, CK-MB, Troponin I, BNP and D-Dimer should not be more than 15 minutes. 9. The machine should not require any essentials other than the test strip. 10. It should have the required software for sending data to a local computer. 11. Should run on AC/DC power supply and battery. The battery should run for at least one hour. Should have inbuilt stabilizer if required. 12. Test strip has to be supplied by the firm and their cost to be quoted separately. 13. Should carry essential electrical safety certificate 14. The system should be US FDA approved or European CE marked 15. System should have essential log book and user manual in English	
4	User's interface	Manual
5	Display	TFT Screen (minimum 4X4 inch)
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for

		standard quality.
10	Warranty	Two Year

Technical Specification of Glucometer

	GMDN Name	Glucometer
1	Clinical purpose	To measure the concentration of glucose in the blood
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Specifications Test Method – Biosensors Measurement Unit-mg/dL Analysis Time -5 seconds Sample Volume -0.5 microliters Sample – Capillary Whole Blood Fill Detection – Automatic Hematocrit Range -15-65% Shelf life of strips – 24 months Or 3 Months from opening the vial Memory – 500 readings Battery -CR2032 Strips Stroage Temp – 0-50 °C Operation Temperature- 2-50°C Operation Humidity -10-90% (RH) Meter Weight -34g Meter Size – 10.0 x 3.1 x1.4 cm Display Size -48 mm (diagonal) Enzyme—Glucose Oxidase (GOD) CONTENTS: Glucometer 1No Lancets 10No Lancing Device 1No Battery 1No User Manual 1No Carry Case 1No	
4	User's interface	Manual
5	Weight	34g
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.

9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Dressing Drum Small

GMDN Name		Dressing Drum Small
1	Clinical purpose	Cylindrical container used to sterilize dressing material (gauze compress or cotton etc.) in a stem sterilizer (autoclave) and to keep as sterile dressing material for medical activities (i.e dressing, Injection etc)
2	Used by clinical department/ward	CSSD and ALL
3	**Technical characteristics (specific to this type of device)**	
	1) Should have an effective closing lid with a clip lock, a carrying handle, and air vents system t allow steam to circulate freely during the sterilization cycle. 2) vents to be manually closed after sterilization 3) Air vent system (opening and closure mechanism) must be efficient and easy to operate 4) Lateral air vents systems is preferable to top and bottom air vents 5) Material: Stainless Steel 202 Standard.	
4	User's interface	Manual
5	Dimensions (metric)	Diameter 9" Height 9"
6	Weight (lbs, kg)	1.2 kg
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	The case is to be cleanable with alcohol of chlorine wipes autoclavable
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Dressing Drum Medium

GMDN Name		Dressing Drum Medium
1	Clinical purpose	Cylindrical container used to sterilize dressing material (gauze compress or cotton etc.) in a stem sterilizer (autoclave) and to keep as sterile dressing material for medical activities (i.e dressing, Injection etc)
2	Used by clinical department/ward	CSSD and ALL
3	**Technical characteristics (specific to this type of device)**	
	1) Should have an effective closing lid with a clip lock, a carrying handle, and air vents system t allow steam to circulate freely during the sterilization cycle. 2) vents to be manually closed after sterilization 3) Air vent system (opening and closure mechanism) must be efficient and easy to operate	

	4) Lateral air vents systems is preferable to top and bottom air vents 5) Material: Stainless Steel 202 Standard.	
4	User's interface	Manual
5	Dimensions (metric)	Diameter 12" Height 10"
6	Weight (lbs, kg)	2.05 kg
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	The case is to be cleanable with alcohol of chlorine wipes autoclavable
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Dressing Drum Large

GMDN Name		Dressing Drum Large
1	Clinical purpose	Cylindrical container used to sterilize dressing material (gauze compress or cotton etc.) in a stem sterilizer (autoclave) and to keep as sterile dressing material for medical activities (i.e dressing, Injection etc)
2	Used by clinical department/ward	CSSD and ALL
3	**Technical characteristics (specific to this type of device)**	
	1) Should have an effective closing lid with a clip lock, a carrying handle, and air vents system t allow steam to circulate freely during the sterilization cycle. 2) vents to be manually closed after sterilization 3) Air vent system (opening and closure mechanism) must be efficient and easy to operate 4) Lateral air vents systems is preferable to top and bottom air vents 5) Material: Stainless Steel 202 Standard.	
4	User's interface	Manual
5	Dimensions (metric)	Diameter 15" Height 12"
6	Weight (lbs, kg)	2.9 kg
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	The case is to be cleanable with alcohol of chlorine wipes autoclavable
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Instrument Tray Small

	GMDN Name	Instrument Tray Small
1	Clinical purpose	To organize and transport small medical or dental instruments during procedures, sterilization, and storage
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Material : S.S. 304 Grade , 24 Gauge . Size : 8X10, Should be ISO Certified.	
4	User's interface	Manual
5	Dimensions (metric)	8" x 10"
6	Material	SS 304
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	The case is to be cleanable with alcohol of chlorine wipes autoclavable
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Instrument Tray Medium

	GMDN Name	Instrument Tray Medium
1	Clinical purpose	To organize and transport small medical or dental instruments during procedures, sterilization, and storage
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Material : S.S. 304 Grade , 24 Gauge . Size : 10X12, Should be ISO Certified.	
4	User's interface	Manual
5	Dimensions (metric)	10" x 12"
6	Material	SS 304
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	The case is to be cleanable with alcohol of chlorine wipes autoclavable
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Instrument Tray Large

	GMDN Name	Instrument Tray Large
1	Clinical purpose	To organize and transport small medical or dental instruments during procedures, sterilization, and storage
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Material : S.S. 304 Grade , 24 Gauge . Size : 12X12, Should be ISO Certified.	
4	User's interface	Manual
5	Dimensions (metric)	12" x 12"
6	Material	SS 304
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	The case is to be cleanable with alcohol of chlorine wipes autoclavable
10	Certificates	Manufacturer should have ISO Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of NO2 Cylinder

GMDN Name		NO2 Cylinder
1	Clinical purpose	To Store a NO2
2	Used by clinical department/ward	Operation Theaters
3	**Technical characteristics (specific to this type of device)**	
	Capacity 4.5 Liters Diameter 111 Working Pressure 150 Bar Test Pressure 225 Bar Easy to Operate. Light in weight (45% lighter than Steel Cylinder). Portable (Can be Easily Carried anywhere). It Includes - Empty Aluminum Cylinder with Pin Index Toggle Type Valve. Easily Refillable throughout India.	
4	User's interface	Manual
5	Capacity	4.5 Liter
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of CO2 Cylinder

GMDN Name		CO2 Cylinder
1	Clinical purpose	To Store a CO2
2	Used by clinical department/ward	Operation Theaters
3	**Technical characteristics (specific to this type of device)**	
	Capacity 4.5 Liters Diameter 111 Working Pressure 150 Bar Test Pressure 225 Bar Easy to Operate. Light in weight (45% lighter than Steel Cylinder). Portable (Can be Easily Carried anywhere). It Includes - Empty Aluminum Cylinder with Bullnose Valve. Easily Refillable throughout India.	
4	User's interface	Manual
5	Capacity	4.5 Liter to 10 L
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Anesthesia Workstation High End with accessories

GMDN Name		Anesthesia Workstation High End with accessories
1	Clinical purpose	To deliver a precise and controlled mixture of medical gases, including anesthetic agents, to a patient during surgical procedures
2	Used by clinical department/ward	Operation Theatres
3	**Technical characteristics (specific to this type of device)**	
	1. General Requirement a) Compact and modular, three gas Anaesthesia workstation with an integrated ventilator for adult to infants and integrated airway monitor for airway pressures and volume. b) The machine should be suitable for low and minimal flow anesthesia application with compliance compensation of breathing ckt, fresh gas flow compensation/ decoupling. c) The machine should have 3 lockable drawers d) The anaesthesia machine, inbuilt ventilator, vaporizer should be manufactured by same company to maintain uniformity of part and efficient after sale service. e) Dual Cascade type flow meter tubes for Oxygen, Air & N2O.Range 20 ml / min to 10 Lit/min. Calibrated in multiple scales. f) Machine should have auxiliary Oxygen flow meter . g) The system should have minimum 90 min battery backup h) Machine should have vertical mounting rails on both sides of the machine for mounting other equipment. 2. Gas delivery system a) Should have pin index yokes for Oxygen & Nitrous Oxide besides separate connection for Central gas supply for Oxygen, Nitrous Oxide and Air. b) The machine should have pressure gauges for cylinders & central supply lines mounted on front of Anaesthesia machine for better visibility. The gas connections should be non-interchangeable. c) The system should be suitable to use at minimal flow upto 700ml fresh gas setting. d) Automatic cutoff of N2O by Oxygen pressure failure. e) Hypoxic guard for linear regulation of minimum oxygen concentration at 25% volume approx. f) To ensure patient safety minimum Oxygen flow of 200 ml at low fresh gas flow settings even below total 500 ml fresh gas flow. g) Audible visual oxygen failure alarm. h) Emergency Oxygen flush at 25 – 75 L/min bypassing the vaporizer. i) In the event of complete power loss and battery failure it shall be possible to manually ventilate and deliver anaesthetic agent. 4. Vaporizer a) Machine should have possibility to mount two quick/selectatec mount type vaporizer for easy interchangeability, and safety with interlock facility. b) Should be provided with a Temperature / pressure compensated and flow independent Vaporizer for Isoflurane & Sevoflurane.. c) Vaporizer should have extended delivery range from 0 to 6 Vol. % d) The vaporizer should require no calibration in its life time. 5. Breathing System	

a) Should have fresh gas de-coupled/fresh gas compensation semi closed circle absorber system.
b) Should have adjustable pressure relief valve from 1 to 75 cmH2O.
c) Should have change over from Spontaneous to Bag ventilation with single step.
d) The system should have leak and compliance test (including patient hoses upto the Y piece) on switching on the machine.
e) Should have compact and fully autoclavable breathing system except manometer.
f) Circle Absorber should have autoclavable canister with capacity of 1.5 liters.
g) Breathing system should have water trap in expiratory port to collect water condensate.
h) Machine should have two flow sensors one in Insp and other one in expiratory port.
i) Flow sensor should be covered under warranty and CAMC.
j) Should have external fresh gas outlet for connecting Magill or Bain's circuit with electronic detection on screen for added patient safety.
k) The system should have standard integrated breathing system warmer to prevent condensation in breathing system and patient comfort.
l) Breathing system should have automatic CO2 byapss without any switch.
m) The device should have port for anaesthesia gas scavenging system.
n) Oxygen sensor should be permanent type and should be covered under warranty and CAMC.

7. Anesthesia Ventilator
a) The system should have inbuilt ventilator with electronically controlled and pneumatic or Piston driven technology.
b) Should not require changing of bellows for adult & infants.
c) Should have Color TFT Touch screen with minimum display size of 10 inch or more.
d) Modes: Manual/Spont, Cardiac Bypass mode, Volume controlled, Pressure controlled, SIMV-VCV, SIMV-PCV and Pressure support with apnea backup.
e) Should be upgradable to PCV-VG/PRVC in future via software upgrade.
f) Should have patient selection & on-screen timer for cases.
g) Tidal Volume delivery : 5 to 1500 ml (Volume mode- 20 to 1500 ml , Pressure mode - 5 to 1500 ml)
h) PEEP : off,3 to 30 mbar
i) Breathing Frequency : 4 to 100 BPM
j) I:E Ratio : 4:1 to 1:8
k) Inspiratory pause : 5% – 60% of Ti

8. Integrated Airway monitoring and display of following parameters:
a) Inspired & Expired Tidal Volume
b) Expiratory Minute volume
c) PEEP, Peak & Mean and Plateau airway pressure
d) Frequency
e) Compliance and resistance
l) Waveform displayy: P-T, V-T, F-T – 3 waveforms simultaneously display on screen.
m) Loops: Pressure- volume, Flow -volume, Pressure- flow loop .
n) Loops can be saved & review with all monitored parameters.

9. Adjustable high/low alarm limits with audio and visual alarms for the following:
a) Minute volume,
b) Airway pressure high/low
c) Insp oxygen concentration,
d) Audio power supply fail alarm.

	e) Graphical Troubleshoot Alarm management with prompt user for corrective action rather than giving alarm with no diagnostic message. 10. Machine should have RS 232 connectivity port. 11. Gas Monitoring:- The In-built Anesthesia Gas Monitoring Facility should based on side-stream technology, using Infra Red Photometry Principal & also it offer Automatic Anesthetic Agent Identification. It should monitor Both Insp and Exp CO2.N2O,O2 ,Anesthesia agents with auto identification and Age Corrected MAC value . 12. Machine should have sample gas return port for AGM sampling. 13. Machine should display trends table and graph for 48 hours. Data can be export using USB port. 14. Machine should have 4 auxiliary power outlet for connecting periphery devices 15. Machine should have network communication port and working under HL-7 protocol to integrate with HIS. •Anesthesia Machine should confirm to CDSCO registration. •Anesthesia Machine should be US FDA/ European CE (4 digit Notified)/ BIS approved. • Mandatory certification related to electrical safety must be submitted i.e- IEC 60601-1 •Manufacturer should be ISO 13485 certified. •Power input to be 220-240V AC as appropriate fitted with Indian plugs. 16. Scope of supply □ 3 gas Anesthesia machine with integrated ventilator with Trolley with 3 drawers □ Adult & Pediatric autoclavable patient tubing □ Anesthetic mask size – Adult & child – 1no each. □ Isoflurane & Sevoflurane Vaporizer. □ Central gas supply hoses (Color coded) – 1no each □ Anesthesia Gas Monitoring – 1 no. □ Sample line- 10 no. □ Water trap – 10 no. □ Instruction for use.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE/USFDA Certificate for

		standard quality.
9	Warranty	Two Year

Technical Specification of C-Arm Machine with Flat Panel

	GMDN Name	C-Arm Machine with Flat Panel
1	Clinical purpose	To medical imaging, primarily during surgical and orthopedic procedures.
2	Used by clinical department/ward	orthopedics, cardiology, vascular surgery, pain management, and urology Departments
3	**Technical characteristics (specific to this type of device)**	
	C-ARM IMAGE INTENSIFIER WITH FLAT PANEL DETECTOR (3.5KW) Microprocessor controlled C-Arm system. It should provide the excellent image quality at low radiation, ideally suited for general surgeries in many application fields and special application such as Orthopedics, Urology, Gastroenterology, Pain management, Spine fixation & Neurology. FLAT PANEL DETECTOR: • Panel - Amorphous Silicon. • Scintillator – Csl. • Effective area – 23cm x 23cm. • Pixel Pitch - 154μm or less. • AD Conversion – 16 bit. • Limiting resolution – 3.2lp/mm (1x1) or better. • DQE – At 1.0 lp/mm - 65% or better • Dynamic Range - >70dB high Gain (1x1) • Quantum limited Dose – 3.0 nGy/frame (1x1) • Matrix – 1536 x 1536 or better (1.5K x 1.5K) • Communication interface – Data I/F – Gigabit Ethernet. X-Ray I/F – Integrated X-Ray trigger control (TTL, 5V or 12V) • Field of view – 315mm2 x 315mm2. • Housing – Anodized aluminum alloy • Ingress protection – IP30. • Environment – Temperature: 10 - 40°C (Operating), Humidity – 30-75%RH (non condensing), (Operating), • Power Supply – 100-240V AC, 50Hz. Input Power – 24V DC. Maximum Power – 25W C-ARM MOVEMENTS: • Rotation: +180 Degrees. • Motorized Up/down: 420mm or more • Horizontal Travel: 210 mm or more • Arc Orbital Movement: 120 Degrees (+30deg or -90Deg) • Wig Wag: ±12.5 Degrees. • Source to Image distance should be 950mm or more. • Clearance I.I. to X-Ray tube – 800mm or more. • Depth of “C” should be at least 620mm or more. • Double steering handle separate for controlling front & back wheels movements with	

	±90 degree movement for both side. • C-Arm locking by hand handle only. • C-Arm Rotation Carriage, Panning & Cross carriage horizontal movement locks should be possible with 90° handle shift. • C-Arm wheels body should have inbuilt cable protection function. No external fitting will be acceptable due to mechanical issues. • "C" should have long handle on both side minimum covering 40% of the "C" length. X-RAY GENERATOR: • High Frequency inverter type • Output power should be 3.5KW or more. • Fluoro & Rad. KV 40 to 110 KV. • Radiographic mA: 20mA or more. • Fluoroscopic mA :- -up to 4mA or more (Normal Mode) -up to 6mA or more (Boost fluoroscopy) -up to 4mA or more (Pulse mode) -up to 8mA or more (Obese mode) -up to 1.5mA or more (Paediatric mode) • Pulse Fluoroscopic mA 9peak):- -Up to 4mA or more (Normal mode) -Up to 8mA or more (Boost fluoro mode) • It should have cumulative timer of 300 Secs. For continuous exposure, reset function should also be incorporated. • The system should have Auto Error Indication & Detection of Power Supply error, Inverter error, Filament error, Rotor error, Monoblock Temperature sensor, Thermal error & safety cut off, Tube hot should display on LCD. • The C-Arm should deliver the best Image quality at low radiation dosage i.e. on or below 6mA or if possible then even at low dosage. • Semi-Auto Mode: Change KV & with reference to it mA will change accordingly X-RAY TUBE: • Monoblock tube head having dual focus Stationary anode X-Ray tube of focal spot 0.6mm (small focus) & 1.5mm (large focus) should be provided. • Anode Heat Storage capacity should be 30kHU or more. • Lead lined fixed cone should be fixed on tube for preventing scatter radiation. • C-Arm tube cover should be made of ABS or FRP material other than metal to ensure no rusting. CONTROL: Control should have the following: • LCD Display: A very compact, soft touch control panel having APR with display on which KV, mAs, fluoro time, FmA, Zoom, Error inter lock for KV, filament, thermal are displayed on wide angle LCD. Console Panel should have following functions & Indications: • In built radio timer that enables to select mAS from 1 to 200. • Fluoroscopy timer (Five minute cumulative timer with buzzer that activates after the completion of 300seconds of exposure and to reinitiate the exposure reset switch is provided. • ABS (Automatic brightness Stabilization)/ADR selection for hands free operation. • KV, mAs & mA increase and decrease switches. • X-Ray ON Switch with indicators.

	• Switches for up/down movement of "C" on both side of control panel. • Emergency OFF Switch on the control panel. • Mode Selection switch • APR Mode that is pre-selected parameters for fluoroscopy are programmed in machines as per type of body parts selected & to be exposed. • Dual step Hand switch for Radiography and foot switch for Fluoroscopy. • Exposure ON Switches should also be provided on control Panel. • Image rotation & Image flip horizontal & Vertical Operating Modes • Fluoroscopy Mode, Boost Fluoro Mode, Auto Mode, Semi Auto mode, Obese, Paediatric & Cine mode should be provided. MEMORY SYSTEM should include the following:- • Dedicated PC based Image acquisition software with Image storage capacity of 100,000 Images. • The Image acquisition software should be only LINUX based OS with wireless keyboard & mouse and should be updated time to time. • The LINUX based system should be fast & should not contain the Virus • No other OS software other than LINUX should be offered. It should contain license copy and ensure updates for 8-10 years and anti-virus license copy for 8-10 years is also mandatory. • Acquisition software should have serial communication with controller and should be able to change KV , operation modes, image flip , rotation, image transfer and various necessary function from both sides. Serial communication should be software based without involvement of any hardware. • Image acquisition, processing & storage in 1k x 1k matrix • Elegant & compact Mobile monitor trolley with wheels with front wheel locking. Pre-Processing Features • Patient data entry & Patient work list management should be available. • Last Image Hold facility • Mode Selection from software i.e. APR presets like Patient Type – Normal & Large, Organ Type – Bone, Spine, Abdomen, Soft, Endo & Uro. • Setting of exposure parameters i.e. KV & mA should also be possible from software & console panel. • Pre-programming of different image setting parameters Like brightness, Contrast, zoom, rotation & flip functions for different operating modes, as per procedure & as per user requirements should be possible. • System should have selection of APR based on body parts for reducing x-ray dose for software. • Frame averaging (Recursive) for smoothing of images real time up to 32 frames. • Last Image Hold transfer can be done manually or automatically as per user choice. Post processing features • Image reversal-Left to Right & Top to Bottom • Image rotation Clock wise & antic clockwise • Window width (WW) & Window level (WL) adjustment for brightness &contrast. • Dynamic Zoom with pan • Image Invert / Negative Image • Thumbnail view for multiple image

	• It should have Save study/Images to USB, Save Study/Images to CD/DVD, Send to Network, Export/save Image in Jpeg, Export/Save Image in Dicom (Optional). Text & Annotation: • Addition of text • Addition of pointer Measurements Features: • Length / Distance measurement • Area measurement • Angle measurement Monitor on Trolley : 2nos 19" Medical grade high resolution monitor or 1no 27" Medical grade monitor with split screen to view live & stored images should be mounted on mobile trolley. Connectivity & storage Features: • Storage of Images on CD/DVD with inbuilt DICOM viewer software should be provided enabling to view images on any PC. • Transfer the image to USB disk should be possible. • Print formatting & printing should be possible on windows, printer as well as Dicom print function should be available to print for Dicom printer. Print Management It should have selection of Print Images, Print Layout Configuration, Landscape or Portrait, Print Preview, Paper Print, Dicom Print, Printing options in different formats (Frames of different loop should be printed on the same sheet) • Color Dye-sublimation Graphix printer (Injket Printer should not be offered) a)Printer should be compact in size. b)The Printer should be of dye sublimation technology giving print of size A5 or 6"x8" directly from main acquisition software only. b)The printing should be possible on special Laminated Paper compatible with supplied printer.. c)The special printing Paper should give 3 layers of colour print & Images should remain permanent for long period & should not get fed off. d)The printing paper should be water resistant and print should not get spread due to water. Power requirement: • The unit should be operable on Single Phase 230 V ± 10% AC, 50Hz • Whole machine should have Strong Inbulit voltage stabilizer. If the same is not incorporated than the company should provide external voltage stabilizer of 5KVA for complete unit of reputed make with warranty certificate for total warranty years. Company should not blame input power for any reason during warranty of CMC years. • UPS with 15min. backup mounted in trolley for PC & software should be provided with PC as auto start function. Accessories: • Lead Apron (0.25mm/0.35mm Lead Equivalent)- 5 Nos.,

	• Thyroid Guard- 5 Nos. • Gonald Shield – 10 Nos (5nos for Male & 5nos for Female) • Lead apron stand for holding up to 5 lead aprons – 2nos (Mobile). • Eye Protective Lead Goggles – 5nos. Other Requirements : • The unit should be Type approved by AERB. • The company should be ISO-13485 & ICMED certified. • The quoted model should be BIS/USFDA approved/European CE Certified with Notified Body No. • The equipment should be CDSCO certified • The equipment should have EN-60601 test certificate from certified LAB.	
4	User's interface	Manual
5	Mobility, portability	Yes
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
7	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
8	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
9	Warranty	Two Years

Technical Specification of Pneumatic Torniquet

GMDN Name		Pneumatic Torniquet
1	Clinical purpose	To create a bloodless surgical field during limb surgeries, improving visibility and minimizing blood loss for the surgeon
2	Used by clinical department/ward	orthopedic and plastic surgery departments
3	**Technical characteristics (specific to this type of device)**	
	Cuff Pressure Should be 0 to 600mmhg Pressure regulation should be +/- 2mmhg of set Point Console should be with 5” LCD Touch screen for Extensive & Easy operative experience. System Can be used for bilateral procedures. Online Pressure setting allows on line increase & Decrease of set pressure & set time even during the surgery. The Deflation should not be abrupt, it must be gradual. Errors must be shown for Cuff leakage detection, Tube Kinking and battery low. The digital electronic Tourniquet system must have patient optimized pressure technology to determine minimum pressure required to occlude the blood vessel. Different sizes of 90 degree angled port with positive interlocking connectors as mentioned below ; Single Port Straight Cuffs : 8”, 12”, 18”, 24”,34” Double Port straight Cuff : 18” Single Port Conical Cuff : 34” The Console works on 240VAC Power. The Console Should weigh less than 4kg.	
4	User's interface	Manual
5	Display	5” LCD Touch screen
6	Weight	Less than 2.5 KG
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
10	Certificates	Manufacturer should have ISO and CE/USFDA Certificate for standard quality.
11	Warranty	Two Year

Technical Specification of Power Bone Drill Machine

GMDN Name		Power Bone Drill Machine
1	Clinical purpose	To create precise holes in bone for implant placement, fracture fixation, and other reconstructive surgeries
2	Used by clinical department/ward	Orthopedic Department
3	**Technical characteristics (specific to this type of device)**	
	Completely enclosed & safe for medical usage Foot control for on / off &Speed control Instant Stop & Regular mechanism Heavy duty castors for mobility Inbuilt MCB & Overload protection Length 1.5/2 meters Push -pull type ends Autoclave able Dual Clutch mechanism Drilling Attachment 1. Light Weight 2. Cumulated , Autoclave able 3. Supplied with Drill Chuck 6 mm Reaming Attachment 1. Light Weight 2. Cumulated, autoclave able 3. should be Supplied with AKV Quick Coupling 4. Other couplings like Hudson, Synthesis or Zimmer can be supplied on demand. Wire Driving Attachment 1. Light Weight 2. Cumulated , autoclave able 3. Lever Type Operation 4. Quick & Simple wire selection Barrel 5. Wire holding capacity - 0.8mm to 3.5mm Quick Coupling 1. Light weight, Autoclave able 2. Supplied with quick Drill Holding Adaptor 3. Drill Holding Capacity-Upto 6mm	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Cautery Machines High End with accessories

	GMDN Name	Cautery Machines High End with accessories
1	Clinical purpose	Used in various surgical procedures to precisely cut, coagulate, and remove unwanted tissue, as well as to control bleeding (hemostasis)
2	Used by clinical department/ward	Operation theatres
3	**Technical characteristics (specific to this type of device)**	
	1. Unit should have microprocessor-controlled tissue feedback technology. 2. Unit should have Combo Generator Technology having conventional ESU, Vessel Sealing System, Saline Plasma Bipolar system, and RF Bipolar cut and coag. 3. It should feature a touchscreen display of 7 inches or larger, clearly indicating the true power on the screen. 4. An accessory socket with self-illumination should be incorporated, featuring automatic selection during generator settings. The light on the socket should blink to indicate the activation of the particular socket. 5. It should have separate and isolated sockets for the Monopolar, Bipolar, and vessel sealer. 6. It should complete self-Diagnosis during power on and should show an error code with its solution if any fault is detected. 7. It should accept dual-area (Disposable) and single-area (Reusable) patient return electrodes. Should give Green Indication if dual area patient plate applied to patient & Red indication with alarm tone if the patient plate is not applied. 8. It should have at least 100 user programs for different surgical procedures. 9. Unit should have pure sinusoidal output waveform in HF power output in cut and bipolar modes. 10. Operating Frequency of the unit should be between the 300kHz to 500kHz, it should not be more or less than this range 11. Unit should be useful for underwater procedures in monopolar as well as saline resection. 12. It should have RANDOMIZED spray coagulation for larger area coverage. 13. Unit should have Seven different modes for Cutting with a max output of 400 Watt 14. Unit should have Seven different modes for Coagulation with max output 200Watt. 15. Unit should have Five Bipolar modes with a max output of 120 watts. 16. Unit should have Auto Bipolar with delay time adjustment. 17. It should have an Alarm facility after the completion of bipolar coagulation. 18. Power Should change from 1 to 40 by step of 1W, 40 to 100 by step of 5W & 100 to max power by step of 10 W for fast setting of the generator. 19. Unit should have Two sealing modes with 5 sealing levels (80W to 150W). 20. Unit should have Vessel Sealing Mode to seal up to 7mm tissue bundles & vessels with reusable vessel sealing attachments. 21. Unit should give an alarm after the completion of the sealing cycle & auto-stop the HF power. 22. Vessel Sealing should be completed within 6 sec otherwise it should have to give an alarm and stop the HF output to prevent thermal Damage 23. System should give an alarm in Vessel sealing mode: a) if the tissue is not held properly in the sealer instrument. b) If the instrument has an internal failure. c) If too much tissue is grasped in forceps.	

	24. Unit should supply with 5 mm reusable/autoclavable Vessel sealing instrument with integrated blade and blade should be changeable and should be from the same manufacturer and must have CE certificate for same. 25. Unit should have Three Saline Plasma Bipolar Cut mode with 300Watt and Three Saline plasma Bipolar Coag with max output 200Watt. 26. Unit should suitable to do TURP in Saline with Monopolar TURP Set with Isolated Bipolar Sheath. 27. Unit should give an alarm in case of Saline Plasma Bipolar cable is broken or activated in non-saline medium activation. 28. Unit should have two RF cut and Two RF coag modes with 5 levels. 29. Unit should have RF scalpel Cut and Coag mode with current bar indication. 30. The RF/Vessel Sealing socket should include a hand control function for laparoscopic instruments, enabling cut and coagulation. Additionally, it should be operable through a double paddle footswitch for added convenience. 31. The laparoscopy instrument should feature a handswitch control on the handle for RF/bipolar cut and coagulation, eliminating the need to change instruments during surgery. 32. Unit should have tissue feedback, and pulsed interval-controlled ENDO CUT function. 33. Unit should be supplied with Double Paddle footswitch with toggle function to change the usability between the monopolar, bipolar, vessel sealing, and RF cut/coag without going back to the generator. 34. Unit must have European CE with 4 digits notified body certified and ISO 9001:2015 and ISO 13485:2016 these certificates have to submit with a technical sheet. 35. General Safety Standards: IEC 60601-1-1, IEC 60601-2-2 and EMI/EMC Compatibility Standard: IEC 60601-1-2 for Electrosurgical Generator. 36. Laparoscopy/vessel sealer 5mm instrument should and CE mark. 37. It should be supplied with the following accessories: - a. Patient Plate with cable reusable — 1 no. b. Hand switching pencil Reusable — 10 no. c. Bipolar forceps with Cable — 10no. d. Monopolar Foot Switch (Double paddle) — 5 no. e. Bipolar Foot Switch (Single Paddle) — 5 no. f. Universal adaptor — 1 no. g. Set of electrodes — 1 no. h. Reusable Sealing clamp with ratchet and cable — 10 no. i. Reusable 5mm laparoscopic bipolar cutting and coagulation instrument, featuring hand control, with a 32cm insert(straight/Maryland) and with cable. — 10 no.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard

		quality.
9	Warranty	Two Year

Technical Specification of Plasma Sterilizer with accessories

	GMDN Name	Plasma Sterilizer with accessories
1	Clinical purpose	To sterilizing medical and dental equipment, including heat-sensitive items like surgical instruments, endoscopes, and various plastic and electronic devices.
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Low Temperature Hydrogen Peroxide Gas Plasma Sterilizer 1) The Sterilizer should use Low Temperature H2O2 Gas Plasma for sterilization with plasma energy generated inside the sterilization chamber, Sterilizer should have Total Usable Volume of 25-35 litres. 2) Sterilizer should have chamber temperature of less than or equal to 560 C at all the time during the cycle. 3) The sterilizer should have inbuilt memory to store at least data of 50 cycles and built-in printer. 4) Sterilizer should have facility of moisture detection, instrument warming, moisture removal & perform system check within 5 - 6 minutes of starting the cycle. 5) Sterilizer should have preprogrammed cycles without any room for human error due to manual programming; total cycle time to sterilize general medical instruments with lumen and non-lumen together should be less than 35 minutes. There should be a separate cycle for flexible endoscope. 6) The quoted model should be indicated for sterilization of metal and non-metal medical devices at low temperature by USFDA/510k or European CE (4 digit notified body). 7) The quoted model should be endorsed by European CE (4 digit notified body) for implementing a quality assurance system for design, manufacture, and final inspection of the sterilizer. 8) The sterilizer should be recommended by minimum three leading IFUs of reputed device manufacturers (e.g. Karl Storz, Olympus, Stryker, Smith & Nephew, Aesculap, Maxer etc.) for sterilization of telescopes and camera heads. 9) Lumen sterilization claims should be validated and endorsed by USFDA/510K or European CE (4 digit notified body). 10) The By-products of the sterilizer should be non-toxic and eco-friendly 11) Sterilant cassette/bottle/cup should be able to store at room temperature 12) Sterilant should be in cassette/bottle/cup form with leak proof indicator to avoid exposure to concentrated H2O2. 13) Manufacturer/bidder shall ensure uninterrupted supply of consumables like cassettes/bottle prefilled with H202(Hydrogen Peroxide), Chemical Indicator strips and tape, Biological Indicator, Trays, Endoscope Holders and Tyvek rolls for wrapping instrument trays and medical devices. 14) The quoted model should have ability to continuously monitor concentration of H2O2 within the sterilization chamber. 15) The quoted model should be tested to assess residual hydrogen peroxide on worst case device materials (known to absorb hydrogen peroxide) following load conditioning in conjunction with a sterilization cycle. The results should demonstrate that mean residual hydrogen peroxide level should be lower than threshold level which should be endorsed by	

	USFDA/510K or European CE (4 digit notified body). 16) Should provide satisfactory performance certificate from at least 5 users of quoted model for installations in India. 17) Supplier should have service center in India with ready availability of spares within 48 hours. Details of nearest service center to be provided with the tender. 18) The quoted model should be endorsed by USFDA or European CE (4 digit notified body)	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have USFDA or European CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Harmonic Generator with accessories

	GMDN Name	Harmonic Generator with accessories
1	Clinical purpose	To cut and coagulate tissue simultaneously, minimizing thermal damage to surrounding tissue.
2	Used by clinical department/ward	Operation Theatres
3	**Technical characteristics (specific to this type of device)**	
	Single Generator Ultrasonic Cutting Coagulation Device with 7mm Vessel Seal device with RF Energy Operational Requirements: • The system should be used for Laparoscopic & open Procedures. The system should have open and laparoscopic probes for both ultrasonic &RF Energy vessel sealing system. **Technical Specifications:** • Universal connector to connect Ultrasonic energy and Advanced RF energy instruments. • Automatic instrument recognition. • USFDA and CE approved. • Touch screen display for fast and setup, operation and on-screen diagnostics. • System should have the ability for software updates via USB memory stick. • Single generator that provides Ultrasonic energy at 55.5kHz and Advanced RF energy technology for soft tissue dissection and vessel sealing • Hand-piece with transducer & silicon cable • Capability of being operated by hand control or foot switch. • Single foot-switch attachment for operating ultrasonic energy or advanced RF energy instruments	

	• System should have on screen warning display system for generator overheating, generator software upgrade, hand piece errors and instrument errors. • Stand-by mode for better safety • System diagnostics and troubleshooting guide • Warning system for malfunctioning cable, probe etc (Audible/ Visual) • Should be capable of sealing vessels at least 7mm in diameter • Should be compatible with coagulation shears for laparoscopic surgery with integrated transducer – 5mm diameter 30 & 45 cm long, capable of sealing of 7mm with pure ultrasonic energy • Should have different audible tone settings for different modes • System should have at least 3-5 power settings levels with power level display for ultrasonic energy Instruments • Should be compatible with articulating RF Energy instruments with articulation of 55 deg either side and total of 110 degree of articulation with 360-degree shaft rotation and can simultaneously seal and transect vessel 7mm, large tissue pedicles and vascular bundles with system feedback • Should have very minimal lateral thermal spread not more than 1 mm • RF energy instruments compatible with generator should have controlled gap mechanism for uniform compression across the instrument jaw for better sealing and transection of vessels and tissue bundles of 7mm simultaneously. • System should have Advanced RF Energy hand instruments with a unique electrode configuration to minimize the lateral thermal spread. • Should provide temperature-controlled energy delivery which should maintain tissue temperature approximately at 100 deg C and hand instruments that provide tissue/vessel seal strength to withstand burst pressure of 7 times the systolic pressure • Should be compatible with pure ultrasonic energy instruments which can simultaneously seal and transect vessels of 7mm, large pedicles and vascular bundles with ultrasonic energy only with system feedback B77 • System should conform to the following international standards EN(IEC), 60601-1, EN (TEC), 60601-1-2, EN (IEC), 60601-2-2, EN(IEC) 60601-1-8 • System should provide Class 1 protection against electric shock **System Configuration Accessories, spares and consumables**: Accessories: • Foot-switch with cable.- 1 • Adapter for ultrasonic instruments. - 1 • Cart for Generator - 1 • Ultrasonic Hand piece (Transducer)- 5 No each – compatible with open and lap hand instruments • Disposable coagulation shears for open surgery – 9cm & 17cm long- 1 Each • Disposable coagulation shears for laparoscopic surgery – 5mm diameter 36 cm long, capable of sealing vessel of 7mm with pure ultrasonic energy- 12 • Disposable coagulation shears for laparoscopic surgery with integrated transducer – 5mm diameter 36 cm long, capable of sealing of 7mm with pure ultrasonic energy- 1	
4	User's interface	Manual
5	Display	Touch Screen
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in

		ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of 4K Laparoscope with hand instruments and Accessories

	GMDN Name	4K Laparoscope with hand instruments and accessories
1	Clinical purpose	Used in minimally invasive surgical procedures, specifically laparoscopy, to visualize and operate on the abdominal and pelvic organs
2	Used by clinical department/ward	Operation Theatres
3	**Technical characteristics (specific to this type of device)**	
	4K LAPAROSCOPIC SYSTEM WITH ACCESSORIES AND HAND INSTRUMENTS A full 4K high definition processor should have native resolution of 3840x2160 pixels. It should have Touch LCD panel operation for easy control. Control of Special Modes from the camera head: Image overlay feature (white-light image integrated with fluorescence in real time, no toggling necessary. Processes two white light images and inserts infrared in between to achieve an overlay on the white light image.) Processor speed of 120fps.Contrast control Should have near Infrared Fluorescent Visualization mode: should displays the image in a grayscale with green overlay. This fluorescence modality provides an enhanced visual assessment of blood flow, tissue perfusion, and biliary ducts when activated. Should provide at least 9 or more individual User preset. The System settings, Colour Tone, contrast visualization of fluorescence, enhancement etc Should have compatibility for selecting 4K or Standard HD output signal 3 Chip Ultra-High Definition CMOS camera technology, with minimum 4 buttons on Camera head Auto-light maintains consistent light using an algorithm, determining optimal lighting levels, auto adjusts light output accordingly. Shutter: 1/60-1/22,478 seconds Outputs: 2 nos HDMI/ DVI [Signal Format: 3840x2160, 1080p] **ADVANCED LED LIGHT SOURCE** Powerful LED Lightsource using three primary color LED lamps (Red, Green & Blue) Inbuilt 830nm Laser for trans illumination of laser fiber Should automatically corrects poor lighting in posterior compartments and self-adjusts based	

	on anatomy Light Source has Technology to ensure the light cable is securely plugged in. There is an illuminated ring around the cable insertion point to indicate cable connection, and power status Designed to reduce the risk of OR fires, automatically shuts off the light source if the fibreoptic cable becomes disengaged from the scope. Class 1M Laser Product Laser product classified per IEC 60825-1:2014 certification & IEC 60825-1:2014 Transparent Fiberoptic Light Cable 3.5mm or more x 300Cms or more Adaptable to provided Telescope **4k 32'' Medical Grade Monitor** 4K Medical grade 32 inch UHD LCD backlit monitor with ultra -high definition resolution of 3840x2160 Aspect ratio: 16:9 Should have multi-image display format - Rotation Image, Side-by-side, Picture-in- picture and flip Pattern to rotate the image On-screen display with customized surgeon profiles Native Resolution: 4096 (H) x 2160 (V) Display colour: 1,073,741,824 colours Response Time: 11ms Brightness: 525 cd/m2 Contrast: 1500:1 Inputs: 1x DVI; 1x HDMI; 1x HDMI 4K; 1x RS-232 (SPI router control); 1x USB UL Listed and C.S.A Certified/ BIS **4K TELESCOPES** 10mm: 30-degree ICG compatible with working length of 30-33 cm or more 5mm: 30-degree ICG compatible with working length of 30-33 cm or more Aspherical Lens Technology for minimized optical distortion Improved light transmission and edge brightness when compared to HD scopes **45L INSUFFLATOR** Provides unparalleled I performance and real time pressure sensing with various modes to operate as per the surgery Integrated tube desIgn manages optimal pressure. heating and flow rates to achieve greater accuracy during procedures Designed to handle a wide variety of cases including pediatrics, bariatrics, and vein harvesting Safely maintains pneumoperitoneum in a range of conditions to bring insufflation in the operating room to a new level Intuitive color LCD touch screen ensures quick and easv navigation through the user menu Specifications: Maximum Gas Flow: 45L or more (per min) Power Requirements: 100-240V, 50/60 Hz **HD IMAGE AND VIDEO MANAGEMENT SYSTEM:** HD Image and Video Management System: Full HD 1920x1080 Video & Image Recording System with 3.5" live view, Playback or GUI for quick set-up and ease of use. Network capable & file transfer via ethernet. Three simultaneous recording possible (Upto 2 external USB Drives & 1 Internal HD). Internal Storage of 500GB. Auto sensing video connections and automatic in & out Video Resolution detection. Share & playback of videos possible. Multiple HD/SD and Inputs/Outputs. Remote

	control, Card/Barcode Reader and Keyboard (Optional). Safe auto-shut down in case of power interruptions. **ENDOSCOPY TROLLEY WITH ARM** Compatible Endoscopy Trolley for accommodating above items **HAND INSTRUMENTS** 5.5mm trocars cannula set 11mm trocars cannula set Maryland curved dissection forceps Debakey Grasping forceps Babcock Grasping Forceps Metzenbaum Scissors L hook monopolar electrodes Knot pusher Atraumatic Grasping forceps 5 mm Instruments (Bipolar)- Maryland curved dissection forceps Suction Irrigation Pump Claw forceps Endo clip applicator(3 in1) Cables- Monopolar cables Cables- Bipolar cables Reducer- 10mm to 5mm Suture passer Verses needle 120mm Electro Surgical Spatula Suction Irrigation trumpet Valve 5mm Verses needle 150mm	
4	User's interface	Manual
5	Monitor Display	32”
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Cautery Pad with Cautery Machine and Accessories

GMDN Name		Cautery Pad with Cautery Machine and Accessories
1	Clinical purpose	Providing a safe and efficient return path for the electrical current used during electrosurgical procedures, preventing burns and ensuring patient safety
2	Used by clinical department/ward	Operation Theatres
3	**Technical characteristics (specific to this type of device)**	
	Reusable Capacitive coupling current quality monitoring electrode 1- Reusable Capacitive coupling current quality monitoring electrode made of viscoelastic polymer. 2- Should have Current limiting nature & hence eliminate Patient pad site burns 3- Should be based on Capacitive coupling principle 4- Should made of akton polymer 5- Can be used for all patient's weight >350 grams 6- Should be Radiolucent & latex free, no adhesive related irritation to patient skin. 7- Should be US FDA approved 8- Should be compatible to any Electrosurgical generator 9- Size: 36" L x 20"W x 1/8"thickness Cautery Machine Microprocessor based IGBT Technology Tissue Response technology ISO 2001:2008, ISO 13485:2003, IEC 60601-1 High Crest factor Cardiac protection circuit Auto on facility for coagulation Endo cut facility Separate Mono polar / Bipolar system (Two different footswitch for both non polar & bipolar for simultaneous use of machine by two user)Louvers & fans for heat dissipation Any accessories compatible (Reusable accessories more prefer)Up gradation facility Less Thermal spread Component level machine manufacturing to avoid problem occurs in SMD level technologies due to service point of view Onsite repairable , component level servicing Stand by machine network at local area Lowest service, purchase price Local service center at local area since 5 years minimum 1000 user , installation in particular region 1 Watt step for calibration Technical Specifications PURE CUT 400 W BLEND 1 250 W BLEND 2 200 W SPRAY 120 W FORCE 150 W SOFT 100 W BIPOLAR CAOG 80 W BIPOLAR CUT 80 W OPERATING FREQUENCY 350 Khz	

	WEIGHT 6.8 KG DIMENSION 300mm X140mm X450 mm DISPLAY DIGITAL	
4	User's interface	Manual
5	Size	36” L x 20”W x 1/8”thickness
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have USFDA Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Debrither with Microdrill and accessories

	GMDN Name	Debrither with Microdrill and accessories
1	Clinical purpose	Used during surgery
2	Used by clinical department/ward	Operation Theatres
3	**Technical characteristics (specific to this type of device)**	
	Console Specification-1 Unit * It Should Be A Multispeciality Console With Provision To Attach Neuro Drill; Ent Shaver (Microdebrider); Small Bone Saws” * It Should Have Touchscreen Capability It Should Have Provision To Attach And Run One Or More Hand Pieces/Motor And Footswitch To Simultanously And Should Be Able To Select Any One Handpiece By A Click Of A Footswtich * Power Supply Should Be 220-240 V Only 50-60hz. * It Should Have Multiple Hand Pieces Like Debrider Hand Piece, High Speed Otological Drill Hand Piece And Microsaw And It Should Identify Different Hand Pieces With Display On Console * It Should Be Programmable As Per Surgeon’ Prefrence. * It Should Have Function Of Controlling Brightness, Contrast And Alarms On The Console * It Should Have The Option Of Control1ng The Speeds And Features Of The Different Types Of Hand Pieces From The Same Unit Should Be Ce(Nb) And Fda (Usa) Approved. Footswitch - 1 No	

	A Footswitch Compatible With The Contorl Unit Should Be Able To Control The Handpiece For Cutting." A. Should Have Fully Programmable Footswitch As Per User Need B. User Should Be.Able To Control Following Functions Via Footswitch For Ward, Reverse, Oscillation Switch Over To High/Low Speed Increase Or Decrease Speed And Increase /Decrease Water Flow Rate Should Be Ce(Nb) And Fda (Usa) Approved. 3. Microdebrider Hand Piece 1 Unit It Should Have: * Motor Should Be Of Maintenance Free * Rotational Speed Ranging From Minimum 12000 Rpm Or More Straight Suction Channel, Control On The Hand Piece Two Or More * Selection Of Rotation:(Clock Wise, Anti- Lock-Wise And Oscillation) * Adjustable Oscillation Rate More Than 3500 Rpm * Flush Feature To Clean Clogged Cutter * Sterilizable Through Steam, Eto And Flash Autoclavable Should Be Ce(Nb) And Fda (Usa) Approved. 4. Essential Consumables 1. Straight Blades Of 11 Cm Long And 4.0 Mm Diameter 2. Curved Blades Of 11 Cm Long And 4.Omm Diameter With 60 Degree Angulation 5. High Speed Micro-Drill Motor * The Drill Should Have An Electric Motor Driven Through A Console * Motor Torque Of The Motor Should Be 50,000 Rpm Or More * The Stall Torque Of The Motor Should Be 4 Or Above * The Motor Should Be Sleek * The Chord Length Should Not Be Less Than 3 Meters * It Should Reduce Thermal Necrosis By Providing Integrated Irrigation * Motor Should Be Able To Run On A Fixed Or A Variable Mode Through The Console Should Be Ce(Nb) And Fda (Usa) Approved. 6. Essentials Attachments- 1 Each 1. 7 Cm Or More Straight Attachment. 2. 7 Cm Or More Angled Attachment 7. Essentials Consumables (Any One Of The Following) 1. Cuttings Burs- 1mm to 6mm (5 Qty.) 2. Diamond Burs-1mm to 6mm (5 Qty). 10. Micro Saw — 1 Qty Each A. Micro Reciprocating Saw: * Should Cut In A Perpendicular Line * Should Have Maximum Speed Of 14000 Rpm *Maintenance Free D.C Brush-Less Inbuilt Motor * Snap-Lock Assembly And Disassembly Of All Attachments * Steriliable Through Steam, Eto And Flash. Should Be Ce(Nb) And Fda (Usa) Approved. B. Micro Oscillating Saw:

	* Should Cut In A Right Angle * Should Have Maximm Speed Of 20000 Rpm *Maintenance Free D.C Brush-Less Inbuilt Motor * Snap-Lock Assembly And Disassembly Of All Attachments * Sterilizable Through Steam, Eto And Flash. Should Be Ce(Nb) And Fda (Usa) Approved. C. Connecting Cord - Qty 1nos. Should Be 10ft Long, 3/8" Diameter Flexible Connecting Cord Dot To Dot Type Push Pull Connectors At Both Ends Autoclavable 11. Cutting Accessories: A. Reciprocating Blades With Cut Edge Or 14.5 Mm, 27 Mm & 33.5m And With Thickness Of 0.38 Mm B. Saggital Blades With Cut Depth Of 4mm, 6mm, 8mm And Cut Edgeof 9mm And Thickness Of 0.38mm C. Saggittal Blades With Cut Depth Of 1 Omm, I2mm And Cut Edge Of 9mm And Thickn Ess Of 0.38mm	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have CE and USFDA Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Smoke Evacuator with Accessories

GMDN Name		Smoke Evacuator with accessories
1	Clinical purpose	To remove harmful surgical smoke, fumes, and particulate matter generated during procedures like electrosurgery and laser surgery
2	Used by clinical department/ward	Operation Theatres
3	**Technical characteristics (specific to this type of device)**	
	The Smoke Evacuator should evacuate, and filter surgical smoke plume and aerosols created in any surgical procedure by an active surgical energy device. • The Smoke Evacuator should simultaneously activate with all Surgical Energy Devices Ultrasonic, Advance Bipolar, Bipolar & Monopolar. • Smoke Evacuator filter should be four stage ULPA grade to captures particulates and micro-organisms from .1 to .2 microns at an efficiency of 99.999%, should able to absorb odors and toxic gases produced in surgery. • Smoke Evacuator should have five different run time setting for suction of residual smoke in different surgical procedures. • System should offer 5 different suction speed for Lap & Open Surgeries. • Filter Life Should be > 34 Hours with filter life indicator. • Suction Speed should be 5 Lt / Minuit - 41 Lt / Minuit for Lap procedures to maintain Pneumoperitoneum, Open Procedures suction speed should be > 70 Lt / Minuit. • The smoke evacuation system should comply with IEC60601.1 electrical specifications & should have Class I protection against electrical shock (UL60601-1, Clause 5.1) • System should comply with electromagnetic emission CISPR11. • Should be US FDA approved. • Technical Specifications: WEIGHT: Less than 30 lbs OPERATING ENV. Temp.: 5o – 55o C Range of operating environment. POWER REQUIREMENTS: 220/240 VAC Frequency, auto sensed: 50/60 Hz Duty Cycle- Continuous Dimensions LWH- 16 X 15 X 7.4 in Vacuum Pressure - 4.95 psi The unit should comprise of following instrument. 1. RF sensor for Simultaneous activation with Monopolar 2. Four Stage ULPA filter 3. Fluid trap 4. Open surgery smoke evacuator pencil with PTFE coated tip (reduce smoke generation) & telescopic length of device allows surgeon to adjust the pencil by a full of 6 inches 5. Laparoscopic tubing 6. Connecting Cable for simultaneous activation with Ultrasonic, Advance Bipolar, Bipolar & Monopolar Devices	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of

		15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have USFDA Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of LSCS Set of 58 Instruments

GMDN Name		LSCS Set of 58 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Gynaec OT and Labor Room
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	B.P. Handle No.3 Round	1
2	B.P. Handle No.4	1
3	Dissecting Forceps Plain 6"	1
4	Dissecting Forceps Toothed 6"	1
5	Dissecting Forceps Plain 8"	1
6	Dissecting Forceps Toothed 8"	1
7	Dissecting Forceps Adson Plain 5"	1
8	Dissecting Forceps Adson Toothed 5"	1
9	Towel Clips	6
10	Mayo. Scissors Curved 6"	1
11	Metz. Scissors Curved 7"	1
12	Metz. Scissors Straight 8"	1
13	Mayo Scissor Straight 6.75"	1
14	Mayo Scissor Curved 8"	1
15	Needle Holder 7"	2
16	Needle Holder 8"	1
17	Artery Forceps Curved 6"	6
18	Allis Forceps 6"	4
19	Allis Forceps 8"	4
20	Babcock Forceps 6"	2
21	Babcock Forceps 8"	2
22	Probe Scissors	1
23	Sponge Holder 10"	4
24	Green Armitage Clamp 8"	4
25	Kocher’s Clamp Curved 8"	2
26	Hysterectomy Clamp 8”	2
27	Sims Speculum Large	1
28	Suture Cutting Scissors	1

	29 Doyen's Retractor 1 30 Silicon Cup Spring Type Medium 1 31 Silicon Cup Spring Type Large 1 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Laparotomy Set of 83 Instruments

	GMDN Name	Laparotomy Set of 83 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	General Surgery Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	B.P. Handle No.3	1
2	B.P. Handle No.4	1
3	Dissecting Forceps Plain 6"(Thick)	1
4	Dissecting Forceps Plain 6"(Fine)	1
5	Dissecting Forceps Toothed 6"	2
6	Dissecting Forceps Plain 8"	1
7	Dissecting Forceps Toothed 8"	1
8	Adson Dissecting Forceps Plain 5"	1
9	Adson Dissecting Forceps Toothed 5"	1
10	Towel Clips 6"	6
11	Ha Metz. Scissors Curved 6"	2
12	Ha Metz. Scissors Curved 7"	2
13	Ha Metz. Scissors Curved 8"	2
14	Ha Mayo Scissors Curved 7"	2
15	Ha Mayo Scissors Straight 6"	2
16	Needle Holder 6" Tc	1
17	Needle Holder 8" Tc	2
18	Artery Forceps Curved 6"	10
19	Artery Forceps Mosquito Curved 5"	10
20	Allis Forceps 6"	6
21	Allis Forceps 8"	6
22	Babcock Tissue Forceps 6"	2
23	Babcock Tissue Forceps 8"	2
24	Tongue Tie	1
25	Sponge Holder 10"	6
26	Suction Tip # 3	1
27	Yankeur Suction Tip	1
28	C- Shaped Retractor	4
29	Double Ended Scoops	1
30	Langenbeck Retractor Medium	2
31	Skin Hooks	2

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
• Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender.
• Manufacturer should have Pollution Certificate (Necessarily provided with the tender.)
• All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company.
• The Hardness of the Instruments Concerning the Lengths and Bands are demanded.
• Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report

4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air	Operating room temp. up to 40°C

	conditioning, humidity, dust)	Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of MTP Set of 15 Instrument

GMDN Name		MTP Set of 15 Instrument
1	Clinical purpose	Instruments used during Operations/procedure
2	Used by clinical department/ward	Gynaec OT and Labor Room
3	**Technical characteristics (specific to this type of device)**	
	Sr.No Particulars Quantity 1 Mayo Scissor Curved 7" 1 2 Needle Holder 7" Tc Inserts 1 3 Sponge Holder 10" 1 4 Sponge Holder 10" Rampley 1 5 Allis Forceps 8" 1 6 Ovum Forceps 1 7 Anterior Vaginal Wall Retractor 1 8 Double Ended Curette Set Of 4 1 9 Uterine Sound 1 10 M.T.P. Cannula 1 11 Sim's Speculum 1 12 Ha Cusco Speculam 1 13 Bull Dog Vallsulum Forceps 2 X 2 Teeth 1 14 Female Dilator Set Of 10 1 15 Pean Artery Forceps Straight 7" 1 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility	All instruments should be washable hard or soft water & autoclavable

	issues	
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Tracheostomy set of 32 Instruments

	GMDN Name	Tracheostomy set of 32 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	ENT Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	Op Scissors 5 1/2" Str SH/BL	1
2	Mayo Dis Sciss Str 63/4 Tc	1
3	Metz Stand Sciss Cvd 7"Tc	1
4	Metz Stand Sciss Cvd 6"Tc	1
5	Halsey Nh Serr Tc 5 1/4"	1
6	Mosquito Forceps Curved 5"	2
7	Crile Fcp Cvd 5 1/2"	4
8	Roch-Pean Fcp Cvd 6 1/4"	4
9	Allis Tiss Fcp 4x5 6	2
10	Foerster Sponge Serr Str 91/2"	1
11	Adson Tiss Fcp 1x2 Del 4 3/4"	1
12	Adson Tiss Fcp Serrated Del 4 3/4"	1
13	Semkin Dress Fcp Del 5" Serr	1
14	Trousseau Dilator 6"(15.2cm)	1
15	Jackson Retr Dbl Prong Bi 7"	1
16	Tracheal Hook Double	1
17	Luer D/E Retractor	1
18	Serrated Dressing Fcps 5"	1
19	Tissue Fcp 1x2.5"	1
20	Roch Pean Str. Del 5 1/2"	2
21	Director & Tongue Tie 5"	1
22	Jackson Tube Orig #7 Stl	1
23	Jackson Tube Orig #8 Stl	1

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
• Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender.
• Manufacturer should have Pollution Certificate (Necessarily provided with the tender.)
• All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company.
• The Hardness of the Instruments Concerning the Lengths and Bands are demanded.
• Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report

4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air	Operating room temp. up to 40°C

	conditioning, humidity, dust)	Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Eye Surgery Set Of 43 Instruments

	GMDN Name	Eye Surgery Set Of 43 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Opthalmic Department
3	**Technical characteristics (specific to this type of device)**	

Particulars	Quantity
Barraquer wire speculum, large	1
Anterior chamber washout cannula 16 G	1
Arruga capsule forceps	1
Baby Jones towel clamp	1
Bard-Parker handle #3 flat	1
Barraquer Iris spatula 0.25mm, angled	1
Barraquer N.Holder short model micro jaws, without lock	1
Barraquer needle holder standard jaws, curved w/o lock	1
Bishop-Harmon tissue forceps delicate 0.8mm	1
Capsule polisher sand blast olive tip,23 G	1
Castroviejo corneoscleral scissors [s] blade right	1
Castroviejo corneoscleral scissors[s] blade left	1
Castroviejo suturing forceps 0.12mm,1 x 2 teeth	1
Colibri forceps 1 x 2 teeth 0.12mm	1
Dastoor superior rectus forceps,1 x 2 teeth	1
Hartman mosquito forceps curved (2)	2
Hartman mosquito forceps straight (2)	2
Iris scissors straight 3.5" length	1
Kalt needle holder straight	1
Kellan Hydrodelineation cannula curved bevel tip 26 G	1
Knolle-Pearce irrigating vectis [4mm wide,7mm long loop]	1
Kuglen Iris hook, angled	1
Lewis lens loop, small	1
McPherson IOL forceps, 11mm angled	1
McPherson tying forceps long handle	1
Micro Iris scissors curved pointed small blades	1
Nightingale capsule polisher, posterior	1
Pearce Hydrodissection cannula 35° angled,25 G	1

	Rycroft air injection cannula, 23 G 1 Serrefine small straight 1 Shepard IOL forceps 1 Silicone bulb with adaptor 1 Sinskey II lens manipulating hook angled 1 Smith lens expressor 1 St.Martin suturing forceps, 1 x 2 teeth 1 Swiss model blade breaker and holder, small 1 Tooke corneal knife 1 Vannas capsulotomy scissors angle forward 11mm 1 Westcott tenotomy scissors 1 Wills hospital utility forceps 1 sterilization box with two silicone mats 1 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Abdominal Tubectomy set of 63 Instrument

	GMDN Name	Abdominal Tubectomy set of 63 Instrument
1	Clinical purpose	Instruments used during Operations/procedure
2	Used by clinical department/ward	Gynaec OT and Labor Room
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	B.P. Handle No.3	2
2	B.P. Handle No.4	2
3	Dissecting Forceps Plain 8"	1
4	Dissecting Forceps Toothed 8"	1
5	Adson Dissecting Forceps Toothed 5''	1
6	Towel Clips 5"	6
7	Metz. Scissors Curved 7"	1
8	Metz. Scissors Curved 8"	1
9	Mayo Scissors Curved 7"	1
10	Mayo Scissors Curved 8"	1
11	Mayo Scissors Straight 8"	1
12	Needle Holder 6"	1
13	Needle Holder 8"	1
14	Artery Forceps Curved 6"	10
15	Artery Forceps Curved 8"	4
16	Mangotts Clamp Curved 8" Non Traumatic Tramuneal Jaws	4
17	Mangotts Clamp Straight 8" Hard Age	2
18	Kocher's Clamps Curved 8"	4
19	Vallsulum	1
20	Allis Forceps 6"	4
21	Allis Forceps 8"	6
22	Babcock Tissue Forceps 8"	2
23	Sponge Holder 10"	2
24	Mayo-Mass Screw	1
25	Yankeur Suction Tip	1
26	Doyen's Retractor	1
27	Bladder Retractor	1

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
• Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender.
• Manufacturer should have Pollution Certificate (Necessarily provided with the tender.)
• All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company.
• The Hardness of the Instruments Concerning the Lengths and Bands are demanded.
• Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report

4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable

9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Abdominal Hysterectomy set

	GMDN Name	Abdominal Hysterectomy set of 88 Instrument
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	B.P. Handle No.3	1
2	B.P. Handle No.4	1
3	Dissecting Forceps Plain 8"	1
4	Dissecting Forceps Toothed 8"	1
5	Dissecting Forceps Plain 6"	1
6	Dissecting Forceps Toothed 6"	1
7	Adson Dissecting Forceps Toothed 5"	1
8	Towel Clips 6"	6
9	Ha Metz. Scissors Curved 7"	1
10	Ha Metz. Scissors Curved 8"	1
11	Ha Mayo Scissors Curved 7"	1
12	Ha Mayo Scissors Curved 8"	1
13	Ha Mayo Scissors Straight 8"	1
14	Needle Holder 6"	1
15	Needle Holder 8"	1
16	Artery Forceps Curved 6"	10
17	Artery Forceps Straight 8"	4
18	Artery Forceps Curved 8"	6
19	Mangotts Clamp Curved 8" Non Traumatic Tramuneal Jaws	6
20	Kocher's Clamps Curved 8"	4
21	Vallsulum Forceps	1
22	Vallsulum Bulldog Clamp	1
23	Allis Forceps 6"	12
24	Allis Forceps 8"	12
25	Babcock Tissue Forceps 8"	2
26	Sponge Holder 10"	4
27	Mayo-Mass Screw	1
28	Yankeur Suction Tip	1
29	C- Shaped Retractor	2
30	Doyen's Retractor	1
31	Bladder Retractor	1

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)

• Manufacturer should have CDSCO Accredited notified body Certificate should be

	necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Vaginal Hysterectomy Set

	GMDN Name	Vaginal Hysterectomy Set of 98 instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	B.P. Handle No.3	1
2	B.P. Handle No.4	1
3	Dissecting Forceps Plain 6"	1
4	Dissecting Forceps Toothed 6"	1
5	Dissecting Forceps Plain 8"	1
6	Dissecting Forceps Toothed 8"	1
7	Towel Clips 6''	6
8	Ha Metz. Scissors Curved 7"	1
9	Ha Mayo Scissors Curved 8"	1
10	Ha Mayo Scissor Straight 6"	1
11	Ha Metz. Scissor Curved 8"	1
12	Needle Holder 8"	2
13	Artery Forceps Curved 6"	12
14	Artery Forceps Straight 6"	6
15	Artery Forceps Straight 8"	6
16	Artery Forceps Curved 8"	12
17	Mangotts Clamp Curved 8" Non Traumatic Tramuneal Jaws	4
18	Kocher's Clamps Curved 8"	4
19	Vallsulum Forceps	1
20	Allis Forceps 8"	12
21	Allis Forceps 6"	12
22	Babcock Tissue Forceps 8"	2
23	Sponge Holder 10"	4
24	Doyen's Retractor	1
25	Sim's Speculum	1
26	Sonawala Speculum	1
27	Landon Retractor	2

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
• Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender.
• Manufacturer should have Pollution Certificate (Necessarily provided with the tender.)
• All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company.
• The Hardness of the Instruments Concerning the Lengths and Bands are demanded.
• Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report

4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable

9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of STSG Set

GMDN Name		STSG Set Of 12 Instruments
1	Clinical purpose	Instruments used during Operations procedure
2	Used by clinical department/ward	plastic surgery and burn surgery departments
3	**Technical characteristics (specific to this type of device)**	
	Sr.No Particulars Quantity 1 Towel Clip Backhaus 1 2 Diseector Mcdonald 2 3 Forceps Dissecting Straight 1/2 Teeth Serrated 150mm 2 4 Forceps Dissecting Straight Plain 145mm 2 5 Forceps Sponge Holding 200-240mm 1 6 Hook Skin Gillies 1 7 Scissors Metzenbaum Straight 140mm 1 8 Humby Skin Graft Knife With Box 1 9 Instrument Container Ss With Cover 1 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing

Technical Specification of Delivery Kit of 20 instruments

	GMDN Name	Delivery Kit of 20 instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Gynaec Department
3	**Technical characteristics (specific to this type of device)**	
	Sr.No Particulars — Quantity 1 Mayo Scissors Curved 7" — 1 2 Mayo Scissors Straight 7" — 1 3 Forceps For Clamping The Cord 8" — 2 4 Sponge Holding Forceps 10" — 4 5 Baby Tray S.S. 12x18" — 1 6 Kelly's Pad Green — 1 7 Needle Holder 6" — 1 8 Artery Forceps -Big 8" — 4 9 Delivery Forceps — 1 10 Kidney Tray S.S. 10" — 1 11 Bowels S.S. Small 4" — 1 12 Wertheim Artery Forceps Straight 8" — 2 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Vasectomy Set of 2 Instrument

GMDN Name		Vasectomy Set of 2 Instrument
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Urology Department
3	**Technical characteristics (specific to this type of device)**	
	Sr.No Particulars Quantity 1 NSV Ring Forceps 1 2 NSV Forceps 1 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Post Mortem Kit

GMDN Name		Post Mortem (PM) Set 22 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Post Mortem Room
3	**Technical characteristics (specific to this type of device)**	
	Sr.No Particulars Quantity 1 Autopsy knife with metal handle, cutting length 195 mm 1 2 Dissecting knife, cutting length 100 mm 1 3 Autopsy knife with metal handle, cutting length 110 mm 1 4 Cartilage knife with metal handle, Cutting length 70 mm 1 5 Incision scissors, 145 mm 2 6 Bowel scissors, 210 mm 1 7 Dissecting forceps, standard, length 160 mm 1 8 Dissecting forceps, 2 x 3 teeth, length 145 mm 1	

	9	Dissecting forceps 1 x 2 teeth, length 250 mm	1
	10	Directors 160 mm	1
	11	Probes 250 mm / 1,5 mm	2
	1 2	Bow Saw, 420 mm incl. Spare saw blade	1
	13	Bone shears 230 mm	1
	14	Tape Dispenser	1
	15	Bone holding forceps, Langenbeck 215 mm	1
	16	Chisel, 245 mm	1
	17.	Metal mallet, Ombredanne, 240 mm, 550 gram	1
	18	Skull breaker 140 mm	1
	19	Saw	1
	20	Stainless Steel Box	1
	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report		
4	User's interface	Manual	
5	Dimensions	As mentioned in para no 3	
6	Mobility, portability	Yes	
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing	
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable	
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)	
10	Warranty	Two Years	

Technical Specification of Chalazion Set of 25 Instruments

GMDN Name		Chalazion Set of 25 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Ophthalmic Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	Scalpel Handle # 9	1
2	Hartmann Mosquito Forceps Curved, Serrated,3 1/2"	2
3	Castroviejo Needle Holder Straight with Lock,5 1/2"	1
4	Iris Scissor Straight, Sharp,4 1/2"	1
5	Backhaus Towel Clamps 3 1/2"	2
6	Stevens Tenotomy Scissor Curved, Blunt/Blunt,4 1/2"	1
7	McPherson Vannas Scissor Straight, 3"	1
8	Westcott Tenotomy Scissor Right, Blunt, 5"	1
9	Westcott Tenotomy Scissor Left, Blunt, 5"	1
10	Barraq Wire Speculum Large, Fenestrated Blades,15mm	1
11	Desmarres Lid Retractors 10mm	2
1 2	Desmarres Lid Retractors 16mm	2
13	Meyhoff Chalazion Curette #0,1.5mm	1
14	Meyhoff Chalazion Curette #1,1.8mm	1
15	Meyhoff Chalazion Curette #2,2.2mm	1
16	Castroviejo Needle Holder Curved with Lock,5 1/2"	1
17.	Desmarres Chalazion Forceps Medium, 3 1/2"	1
18	Lambert Chalazion Forceps 11mm, 31/2"	1
19	Heath Chalazion Forceps 16mm, 31/2"	1
20	Castroviejo Fixation Forceps 1x2 Teeth, 3mm,4"	1
21	Bishop-Harmon Eye Forceps Serrated, 3 1/2"	1
22	Bishop-Harmon Eye Forceps 1x2 Teeth, 3 1/2"	1
23	Castroviejo Suture Forceps 1x2 Teeth, 5mm, 4 1/4"	1
24	Air Injection Cannula 27 Gauge	1
25	Metzenbaum Scissor Straight, 5 3/4"	1

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
• Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender.
• Manufacturer should have Pollution Certificate (Necessarily provided with the tender.)
• All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company.
• The Hardness of the Instruments Concerning the Lengths and Bands are demanded.
• Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report

4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air	Operating room temp. up to 40°C

	conditioning, humidity, dust)	Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Ortho Instruments Set

	GMDN Name	Ortho Instruments Set Of 77 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	Ortho Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Unit
1	Adson Forceps, 1x2 Teeth, 4-3/4"	2
2	Allis Tissue Forceps, 8"	4
3	Backhaus Towel Clamp, Satin Finish, 5-1/4"	6
4	Bone Curette Double Ended 6"	1
5	Crile-Wood Needle Holder, Narrow Jaw, Serrated, 6"	1
6	Crile-Wood Needle Holder, Serrated, 7"	1
7	Cushing Nerve And Vein Retractor, 9"	1
8	Deaver Retractor, 1"	1
9	Deaver Retractor, 2"	1
10	Dressing Forceps, Serrated, 6"	1
11	Dressing Forceps, Serrated, 8"	1
12	Foerster Sponge Forceps, Straight,Serrated, Satin Finish, 9-1/2"	2
13	Frazier Suction Tube, No.3	1
14	Frazier Suction Tube, No.4	1
15	Halsted Mosquito Forceps, Curved, 5"	4
16	Halsted Mosquito Forceps, Straight, 5"	4
17	Joseph Hook, 2 Sharp Prongs, 5mm, 6-1/4"	2
18	Lagenbeck Retractor Large	2
19	Lagenbeck Retractor Medium	2
20	Lagenbeck Retractor Small	2
21	Lister Bandage Scissor, Supercut,Blunt/Blunt, Angled, Serrated, 7-1/4"	1
22	Mastoid Retractor, 6"	1
23	Mayo Scissor, Curved, 7"	1
24	Mayo Scissor, Straight,7"	1
25	Mayo-Hegar Needle Holder, Serrated, 8"	1
26	Metzenbaum Scissors,Curved, 7"	1
27	Operating Scissor,Straight, Sharp/Blunt, 5-1/2"	1
28	Orthopedic Mallet, 700gm	1
29	Pean Forceps, Curved, 6"	4

	30 Pean Forceps, Straight, 6" 2 31 Periostaum Elevator,Curved 1 32 Rochester-Ochsner Forceps, Straight, 1x2 Teeth, 8" 2 33 Rochester-Pean Forceps, Curved, 8" 2 34 Rochester-Pean Forceps, Straight, 8" 2 35 Ruskin Rongeur, Straight, 5mm, 7-1/4" 1 36 Ruskin-Liston Bone Forceps, Straight, 7-1/4" 1 37 Senn Retractor, Double End, 3 Blunt Prongs, 6-1/4" 2 38 Smith Peterson Chisel, Curved, 10mm, 8" 1 39 Smith Peterson Chisel, Straigth, 10mm, 8" 1 40 Smith Peterson Gouge, Curved, 10mm, 8" 1 41 Smith Peterson Gouge, Straigth, 10mm, 8" 1 42 Smith Peterson Osteotome, Curved, 10mm, 8" 1 43 Smith Peterson Osteotome, Straigth, 10mm, 8" 1 44 Tissue Forceps, 1x2 Teeth, 6" 1 45 Tissue Forceps, 1x2 Teeth, 8" 1 46 Volkman Retractor, Ring Handle, 4 Prongs Sharp, 8-1/2" 2 47 Volkman Retractor, Ring Handle, 4 Prongs, Blunt,8-1/2" 2 All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.) • Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender. • Manufacturer should have Pollution Certificate (Necessarily provided with the tender.) • All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company. • The Hardness of the Instruments Concerning the Lengths and Bands are demanded. • Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report	
4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating room temp. up to 40°C Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of ENT Set of 32 Instruments

	GMDN Name	ENT Set of 32 Instruments
1	Clinical purpose	Instruments used during Operation/procedure
2	Used by clinical department/ward	ENT Department
3	**Technical characteristics (specific to this type of device)**	

Sr.No	Particulars	Quantity
1	Allis Forcep, 4x5 Teeth, 6"	2
2	Baron Suction Tube, 5 French	1
3	Baron Suction Tube, 7 French	1
4	Billeau Ear Loop Large, 6 1/2"	1
5	Billeau Ear Loop Medium, 6 1/2"	1
6	Billeau Ear Loop Small, 6 1/2"	1
7	Buck Ear Curette Size 0, Straight, Blunt	1
8	Buck Ear Curette Size 0, Straight, Sharp	1
9	Buck Ear Curette Size 1, Straight, Blunt	1
10	Buck Ear Curette Size 1, Straight, Sharp	1
11	Buck Ear Curette Size 2, Straight, Blunt	1
12	Buck Ear Curette Size 2, Straight, Sharp	1
13	Day Ear Hook Large, 6 1/2"	1
14	Day Ear Hook Small, 6 1/2"	1
15	Hartmann Alligator Ear Forcep, 5 1/2"	1
16	Hartmann Forcep, 2.5mm Round Cup, 3 1/2"	1
17	Iris Scissors, Curved, Sharp, 4 1/2	1
18	Iris Scissors, Straight, Sharp, 4 1/2"	1
19	Lucae Bayonet Forcep 5 1/2"	1
20	Micro Alligator Ear Forcep Cup Type, 1.0 X 0.9mm	1
21	Micro Alligator Ear Forcep Serr, Straight, 0.6mm	1
22	Micro Alligator Ear Forcep Serr, Straight, 0.8mm	1
23	Noyes Alligator Ear Forcep, 3 1/2"	1
24	Shapleigh Ear Curette Medium, Straight, 5 1/4"	1
25	Shapleigh Ear Curette Small, Straight, 5 1/4"	1
26	Strabismus Scissors Curved, B/B, 4 1/2"	1
27	Strabismus Scissors Straight, B/B, 4 1/2"	1
28	Vienna Nasal Speculum Large	1
29	Vienna Nasal Speculum Medium	1
30	Vienna Nasal Speculum Small	1
31	Wilde Ear Dressing Forcep 4 3/4"	1

All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
• Manufacturer should have CDSCO Accredited notified body Certificate should be necessarily provided with the tender.
• Manufacturer should have Pollution Certificate (Necessarily provided with the tender.)
• All instruments should be manufacture by ISO 9001:2015, WHO–GMP certified company.
• The Hardness of the Instruments Concerning the Lengths and Bands are demanded.
• Surgical Instrument made by steel grade AISI 410 and 420, (NABL Accredited Certified Laboratory) Test report

4	User's interface	Manual
5	Dimensions	As mentioned in para no 3
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air	Operating room temp. up to 40°C

	conditioning, humidity, dust)	Storage room temp. up to 60°C Relative Humidity Up to 90% non-condensing
8	User's care, Cleaning. Disinfection & Sterility issues	All instruments should be washable hard or soft water & autoclavable
9	Certificates	All surgical instruments should be CE Four Digit with Notified Body / USFDA (Registered)/ ISO 13485 (Registered with NABCB under medical Devices quality management System.)
10	Warranty	Two Years

Technical Specification of Automated System to Treat Liquid medical Waste

S. No	GMDN Name	Automated System to treat Liquid Medical Waste
1	Purpose / Utility	To pre-treat, disinfect the medical liquid waste before discharge to drainage system as per BMW rules 2016 guidelines.
2	Used by clinical Department/ Ward	Operation Theatres, Laboratory & other such departments where liquid waste is generated.
3	**Technical Characteristics (Specific to this type of device)**	
	• Automated System to treat Liquid Medical Waste at the place of its generation. • Minimum 150Ltrs per cycle capacity. • Capacity to automatically treat minimum waste level between 10 to 150Ltrs at all levels on real-time basis. • The equipment must have a washing / Scrubbing bay as well as specially designed Instrument rinsing facility & the provision to drain other liquids waste as well. • SS-304 Body, Wall Mounted, Minimum bay depth shall be 18" and Width 18.5" or more to avoid splash, separate provision for Instrument rinsing, elbow guided tap for hand washing & rinsing of instruments. • The liquid waste shall get collected directly into WTU having level indicators having real time level reading in Liters to avoid overfilling or spillage & must have at least 7" Touch Screen Display & USB compatible data logging. The user screen must be password protected & shall display the user hospital name on all screens. • The system hardware must be c-UL-us CL1DIV2, C-Tick, KC certified to ensure operational accuracy. • Equipment must store minimum 1000 cycles data records and be compatible for transfer of data to computer. • Audio Visual Alarm for Minimum & Maximum levels of NaCIO and WTU. • The Automatic dosing of NaCIO takes place in the machine at regular intervals of time and the treated waste is discharged automatically to the drain/sewage line at the completion of every treatment cycle. • Facility to manual override to automation in case of requirement or emergency. • The waste must be treated as per the guidelines of Pollution Control Board. • Manufacturer must have MD-5 License for manufacturing of this equipment.	
4	User's Interface	Automatic 7" Touch Screen with Specially designed imbedded system & not PLC controlled
5.	Capacity	150 Liters

6	Washing & Rinsing Bay Dimensions	Depth 18” and Width 18.5” (Minimum)
7.	Material of Construction	S.S 304
8	Data Logging	USB Compatible (1000 Cycles Storage)
9	Mobility, Portability	Fixed
10.	Power Requirements	220V, 50 Hz.
11.	Dozing Ratio & Type	Variable (As Per BMW norms) & Continuous
12.	Protection	Miniature Circuit Breaker
13.	Waste &NaCIO Level Display	Real time display in Liters
14.	Manual Operation	Possible
15.	Quality Certifications	Hardware: c-UL-us CL1DIV2, C-Tick, KC certified Equipment: ISO13485:2016, CE & WHO GMP Certified Manufacturer: Must have MD-5 License to manufacture this equipment.

Technical Specification of Needle Cum Syringe Destroyer

S. No	GMDN Name	Needle Cum Syringe Destroyer
1	Clinical Purpose	To destroy needle & syringe in single action and collect sharp waste in sharp container as per BMW rule 2016
2	Used by clinical Department/ Ward	All Departments & Wards
3	**Technical Characteristics (Specific to this type of device)**	
	Should be able to cut both the hub and needle in a single stroke without the use of any electricity or battery. The cutter should be made of Stainless steel or alloy to be effective for at least 1,00,000 cuts with ergonomic design for easy cuts. The complete unit must have facility to mount on wall or table (Flat Surface). The cutter should be able to fit snugly over the puncture proof, tamper proof sharp container and should be so aligned with the container that the cut hub and needle should drop directly into the container. Should be rectangular in shape & compatible to the sharp container of relevant sizes. The needle and syringe hub destroyer as well as the compatible Sharp containers must be quoted.	
4	User’s Interface	Manual
5	Dimensions (Minimum)	L165mm x W160mm x H 180mm (Excluding Handle)
6	Expected Life	1,00,000 Cuts
7	Material	Body Stainless Steel & Alloy Steel
8	Sharp Container capacity	1500ml compatible to cutter
9	Mobility, Portability	Portable

10	Power Requirements	NIL
11	Accessories (Mandatory)	Sharp Containers
12	Quality Certificates	CE European and ISO 13485:2013 certified & Manufacturer ISO 9001:2015 from notified body.

Technical Specification of Three Segment Waste Segregation Trolley

S. No	GMDN Name	Three Segment Waste Segregation Trolley
1	Clinical Purpose	To segregate the clinical waste at the place of its generation
2	Used by clinical Department/ Ward	All departments & Wards
3	Technical Characteristics (Specific to this type of device)	
	Three bin waste collection & segregation system. •Full body made of stainless steel. •Color coded labels with listing of type of waste on longer sides. •Self-closing lids with color coding. •Autoclavable & pressure cleanable color-coded bins inside. •Bins must be made of environment friendly material, color coded with tilt mechanism to extract the bins for easy cleaning. • Each bin capacity must be at least 74Ltrs & Dimensions not less than L450 mm x W300 mm x H600 mm. •Four castors for easy movement, 02 with lock & 02 without lock.	
4	User's Interface	Manual
5	Dimensions of Complete Unit	L1134mm x W500mm x H1075mm
6	Bins Capacity	74 Liters x 3
7	Color Coding	Red / Yellow / Blue / Black / Green
8	Bins Type	Autoclavable & Pressure Cleanable
9	Mobility, Portability	Mobile
10	Wheels/Castors	Four ABS Castors of 4" (2 With Lock + 2 Without Lock)
11	Quality Certification of Unit	CE European and ISO 13485:2013 from notified body, Manufacturer must be ISO 9001:2015 from notified body & WHO GMP

Technical Specification of Sharp Container

S. No	GMDN Name	Sharp Container
1	Clinical Purpose	To Collect & Dispose Contaminated Needles & other Sharp Waste
2	Used by clinical Department/ Ward	All Departments & wards
3	**Technical Characteristics (Specific to this type of device)**	
	Capacity: 1.5Ltrs The container should be compatible with the above specified needle cum hub cutter. The container should be made of virgin polypropylene and should be white & translucent It should be puncture proof, tamper proof and leak proof for sharp medical wastes with appropriate label as per provisions of Bio Medical waste Management Rules, 2016. Should be a locking snap-top cap to ensure permanent safe locking before disposal and should have temporary locking facility for safety till the container is full. The puncture proof, tamper proof sharp container should be able to fit snugly with the cutter and should be so aligned with the cutter that the cut hub and needle should drop directly into the container. Should be rectangular & compatible to the above cutter size. Shall be autoclavable, and recyclable. Containers should be stackable and compact for easy storage and transportation Maximum fill level must be marked on the container as a clear line Puncture resistant plastic like HDPE (High density Poly ethylene) Clearly visible biohazard symbol + word Biohazard in red should be labeled	
4	User's Interface	Manual
5	Dimensions	L161mm x W150 mm x H 131 mm (compatible to needle cutter)
6	Capacity	1500 ml
7	Mobility, Portability	Portable
8	Protection	Puncture resistant
9	Quality Certifications	CE European and ISO 13485:2016 certified & Manufacturer must be ISO9001:2015 & WHO GMP Certified

Technical Specification of Three Bucket System for Cleaning

S. No	GMDN Name	Three Bin System for Cleaning
1	Clinical Purpose	For Cleaning
2	Used by clinical Department/ Ward	All Departments & wards
3	Technical Characteristics (Specific to this type of device)	

	• High quality Mop Trolley specially designed for hospitals & Healthcare facilities. • High quality down-press wringer for easy squeeze. • Three color coded buckets of 48Ltrs capacity with antimicrobial properties to avoid colonization of microorganisms. • Separate buckets for Rinsing, cleaning & disinfectant.	
4	User's Interface	Manual
5	Capacity	48 liters
6	Mobility, Portability	Portable
7	Protection	UV Stable
8	Quality Certifications	CE European and ISO 13485:2013 certified & Manufacturer must be ISO 9001:2015 & WHO GMP Certified

Technical Specification of Waste Transportation Trolley

S. No	**GMDN Name**	Waste Transportation Trolley
1	Clinical Purpose	For Segregation and Transportation of waste
2	Used by clinical Department/ Ward	All Departments & wards
3	Technical Characteristics (Specific to this type of device)	
	Waste transportation Trolley available in full body color coding as per BMW rules. Made up of good quality UV resistant polymer with built-in foot operation system On the right-hand side of the bin to ensure safety, convenience and long life made up of anti-rusting material. Must be antimicrobial treated to avoid Colonization of microbes must have an inbuilt handle and two smooth castors for easy movement. The bin must have molded top shoulder and pillar type rib design for extra strength. Lids must be interchangeable.	
4	User's Interface	Manual
5	Dimensions	L445xW330xH800mm
6	Capacity	120 liters
7	Mobility, Portability	Portable
8	Protection	UV Stable
9	Quality Certifications	CE European and ISO 13485:2013 certified & Manufacturer must be ISO 9001:2015 & WHO GMP Certified

Technical Specification of Autoclave 4 Drum

	GMDN Name	Autoclave 4 Drum
1	Clinical purpose	An airtight vessel for heating and sometimes agitating its contents under high steam pressure; used for sterilizing, with moist or dry heat at high temperatures.
2	Used by clinical department/ward	CSSD & All wards
3	**Technical characteristics (specific to this type of device)**	
	Operational Parameters:- Working Pressure 15psi Working Temperature : 121ºC Hydraulic test Pressure: Jacket & Steam Generator –2.5 kgf/cm² Chamber-1.9kgf /cm² Material Of Construction: Chamber S.S.304, quality End-ring S.S.304, quality Jacket S.S.304, quality Door plate With ribs S.S.304, 12 mm plate Insulation Fiber glass wool. (50 mm. thick) Outer cover S.S.304, 20 G. sheet – mirror polished Pipe lines S.S.304, quality seamless Fittings / Connections S.S.316, quality, B.S.P. threading Lock / radial arm / hinge Lock C.I. chrome plated, others S.S. Gasket Silicone rubber, jointless square type Stand M.S. Stand– 42 mm Dia. Steam Generator (Boiler) S.S.304 quality, 14 G thick fitted with S.S.304 quality 12mm thick heater plate with S.S. perforated cover. Control & Fittings: **Multi control operating valve** : To carry out all functions of sterilization cycle at one point i.e. Steam to jacket Steam to chamber from Jacket, slow / fast Exhaust and vacuum dryer. **Door**: Single door shall be fitted with radial arms & automatic Pressure licking device so that door cannot be opened till the steam is fully exhausted from the chamber. **Quick vacuum drying- apparatus:** This allows the filtered and sterile air to break the Chamber vacuum which helps in quick drying also. **Accidental vacuum – breaker / jacket air valve**: A safety device for jacket against accidental vacuum And for automatic residual air displacement. **Safety valve** :A safety device against excess pressure-in jacket / Steam generator. **Chamber Temperature gauge**: Fitted with a dial type thermometer at front in discharge line to indicate sterilization temperature **Pressure gauge:** Indicates Steam pressure in jacket & steam generator **Compound Gauge**: Indicates Steam Pressure & Vacuum in Chamber. **Drain line** Connected with 2” N.B haider S.S. funnel junction and water trap arrangement to	

	avoid air contamination. **Pocket for thermometer**: A Provision to interest sensor of time Temperature Recorder (Thermograph) **Plug screen:** A device to prevent large particles from entering chamber drain line. **Chamber condensate-pipe line**. Incorporated with Spirex FT 14 float type thermostatic steam trap and check valve (N.R.V) for through evacuation of air and condensate from the chamber to achieve optimum temperature. 1. Water immersion type industrial heating elements -3k.w. x 3nos. (I.S.I. MARKED) 2. A magnetic automatic water level switch to protect heaters from water level 3. Water level indicating gauge tube with S.S. Guard 4. Water inlet & outlet S.S. ball valve	
4	User's interface	Manual
5	Capacity	225 Liters
6	Dimensions	20” x48”
7	Power Consumption	18 K.W.
8	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through a cooling mechanism
9	Mobility, portability	Fixed
10	Pre-installation requirements: nature, values, quality, tolerance	Required Availability of 440 Volts, 62 Amps, 3 phase.
11	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
12	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
13	Certificates	Manufacturer should have ISO and CE Certificate for standard quality/ BIS.
	Warranty	Two Year

Technical Specification of Three-seater Chair

	GMDN Name	Three-seater Chair
1	Clinical purpose	To Seat a Persons
2	Used by clinical department/ward	All Departments and Wards
3	**Technical characteristics (specific to this type of device)**	
	Dimension: Length 1730mm Height 790mm Width 610mm Weight: 53Kg Design: Simple yet Elegant design that meets quality and comfort Legs: mild steel frame with level adjuster’s maintains greater stability even on un leveled surfaces Material: self-skinned PU Foam seats with steel insert delivers an outstanding performance	

	Variant : 3 seater	
4	User's interface	Manual
5	Weight	53 Kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Cupboard

	GMDN Name	Cupboard
1	Clinical purpose	To store a variety of items.
2	Used by clinical department/ward	All Ward and Departments
3	**Technical characteristics (specific to this type of device)**	
	Overall approx. Size (LxWxH) : 914mm x 508mm x 1828mm. MOC: MS CRCA sheet frame work of 20 guage. Side, Back and Double Door of MS CRCA Sheet of 20 guage. Four MS CRCA Sheet Shelves of 20 guage making five compartments. Door should have 2 Point lock Mechanism with 2 keys. Should have legs with Adjustable Levelers. Finish: All components should be pretreated in separate nine tank process for better finish, good adhesion and corrosion protection. Process includes Hot Degreasing, De-rusting, Activation, Phosphating & No's of Water rinses and then pretreated materials is coated with epoxy powder with film thickness of not less than 60 microns (approx.) and then oven baked at 180 degree centigrade.	
4	User's interface	Manual
5	Size	914mm x 508mm x 1828mm.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be

		capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Medicine Rack

GMDN Name		Medicine Rack
1	Clinical purpose	To store a Medicine.
2	Used by clinical department/ward	Medicine Store Department.
3	**Technical characteristics (specific to this type of device)**	
	Overall approx. Size (LxWxH) : 914mm x 4570mm x 1828mm. MOC: MS CRCA (thickness of 1.2mm for shelves & 1.2mm for stand channels) Each shelf should be made up of MS ERW 25mmx25mm x 1.2mm thick tube with 30x10mm tube intermediately filled across the shelf having equal spacing. Rack should have 4 shelves, 3 side raised on each shelf to avoid fall from rack. All the shelf should be adjustable to any level as required Finish: All components should be pretreated in separate nine tank process for better finish, good adhesion and corrosion protection. Process includes Hot Degreasing, De-rusting, Activation, Phosphating & No's of Water rinses and then pretreated materials is coated with epoxy powder with film thickness of not less than 60 microns (approx.) and then oven baked at 180 degree centigrade.	
4	User's interface	Manual
5	Size	914mm x 4570mm x 1828mm.
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015

		2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Instrument Cabinet

	GMDN Name	Instrument Cabinet
1	Clinical purpose	storing and organizing medical instruments and equipment.
2	Used by clinical department/ward	All wards
3	**Technical characteristics (specific to this type of device)**	
	Overall Approx Size (LxWxH): 610mm x 355mm x 1524mm MOC: MS CRCA Sheet frame work of 20 Guage Back Made up of MS CRCA Sheet of 20 guage. Sides made up of glass. glass door should be made from combination of 40x20x1.2mm Thick and 19x19x1.2mm Thick MS ERW Tube. Four Shalves Made up of Glass Five Compartments. Door should have lock arrangement with 2 Keys. Finish: All components should be pretreated in separate nine tank process for better finish, good adhesion and corrosion protection. Process includes Hot Degreasing, De-rusting, Activation, Phosphating & No's of Water rinses and then pretreated materials is coated with epoxy powder with film thickness of not less than 60 microns (approx.) and then oven baked at 180 degree centigrade. Manufacturer should be ISO 9001, ISO 13485, ISO 14001, ISO 45001, ISO 50001 and CE certified for quality standards.	
4	User's interface	Manual
5	Dimensions	Approx Size (LxWxH): 610mm x 355mm x 1524mm
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)

10	Warranty	Two Years

Technical Specification of Bedside Screen

GMDN Name		Bedside Screen
1	Clinical purpose	To provide privacy and maintain patient dignity during examinations, treatments, and procedures, while also aiding in infection control and facilitating patient monitoring.
2	Used by clinical department/ward	All Ward and Departments
3	**Technical characteristics (specific to this type of device)**	
	Tubular epoxy powder coated frame Curtains The product should be Pretreated and epoxy powder coated with 8 tank process. He manufacturer should have in house 8 tank pretreatment and powder coating process Finish: All components should be pretreated in separate nine tank process for better finish, good adhesion and corrosion protection. Process includes Hot Degreasing, De-rusting, Activation, Phosphating & No's of Water rinses and then pretreated materials is coated with epoxy powder with film thickness of not less than 60 microns (approx.) and then oven baked at 180 degree centigrade. Company should have following certificates for quality standard ISO 9001-2015, ISO13485 from notified certifying body and OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
9	Warranty	Two Years

Technical Specification of Oxygen Cylinder Trolley

GMDN Name		Oxygen Cylinder Trolley
1	Clinical purpose	To easy movement and storage of flat bottomed oxygen gas Cylinders.
2	Used by clinical department/ward	All Ward and Departments
3	**Technical characteristics (specific to this type of device)**	
	Push type with two wheels. Must carry 13.5 kg oxygen cylinder Finish: All components should be pretreated in separate nine tank process for better finish, good adhesion and corrosion protection. Process includes Hot Degreasing, De-rusting, Activation, Phosphating & No's of Water rinses and then pretreated materials is coated with epoxy powder with film thickness of not less than 60 microns (approx.) and then oven baked at 180 degree centigrade The product should be Pretreated and epoxy powder coated with 8 tank process. He manufacturer should have in house 8 tank pretreatment and powder coating process. The manufacturer should submit the Pollution Control Board certificate for the same Company should have following certificates for quality standard ISO 9001-2015, ISO13485 from notified certifying body and OHSAS, 18001 & 14001, CE/USFDA	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
9	Warranty	Two Years

Technical Specification of Video Laryngoscope

GMDN Name		Video Laryngoscope
1	Clinical purpose	To visually examine the airways (trachea, bronchi, and bronchioles) and perform various procedures within the lungs
2	Used by clinical department/ward	Pulmonology, anesthesiology, and critical care departments.
3	**Technical characteristics (specific to this type of device)**	
	• Airways visualization system with Display Monitor TFT /LCD of 2.4 inches screen size • Monitor with Video output capability.	

	• Monitor Work on AAA consumable batteries & runs continuously up to 90 mints with indicator of Batteries replacement, can work on reusable batteries too if required. • Anti-Fog Lens with White LED light source. • Monitor have 1-year warranty. • Supplied with 1 pcs of size 3 channeled &1 pc of size 3 non-channeled blades. • ISO, CE & US FDA Certified.	
4	User's interface	Manual
5	Display	TFT /LCD of 2.4 inches screen size
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily sterilizable using both alcohol and chlorine agents
9	Certificates	Manufacturer should have ISO, CE & USFDA Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Cough Assist Machine

	GMDN Name	Cough Assist Machine
1	Clinical purpose	To help clear mucus and secretions from the lungs when a person's natural cough mechanism is weak or ineffective
2	Used by clinical department/ward	ICU
3	**Technical characteristics (specific to this type of device)**	
	Cough Assist device is a mechanical Insufflator-Exsufflation that removes secretions from patient airways who have ineffective ability to cough. 1. Machine should have manual and automatic modes for adult & pediatrics use. 2. Machine should be US FDA approved. 3. Two - stage centrifugal blower with AC/DC universal motor. 4. Machine should give inhale & exhale pressure from 0 to + 70 cm H20 and 0 to -70 cmH20 with in increment of 1 cmH20 & accuracy +/-2% of full scale.	

	5. Maximum Inhalation Flow: 3.3 liters/second with inhale flow set to minimum; if set to maximum inhalation, the flow is the same as the exhalation 6. Maximum Exhalation Flow Capacity: 10 liters/second; actual flow depends on maximum pressure and on airway resistance 7. Mode of Operation: Automatic and Manual Timing 8. Inhalation / Exhalation Pause Times: 0 to 5 seconds with increments of 0.1 sec. 9. Noninvasive & flexible technique via facemask, mouthpiece, endotracheal & tracheotomy tube. 10. Integrated algorithm to support device titration and patient synchronization, helping both comfort and compliance. 11. Adjustable oscillation levels to enhance mobilization and increase the benefits of therapy. 12. Three customizable therapy setting presets to accommodate different patient conditions or circumstances. 13. Large color monitor for easier to assess treatment and fine-tune device settings to improve therapy efficacy and comfort. Size Min 7 " diagonally 14. Machine should be light weight (below 5 kg.) for portability 15. Display of Peak Cough Flow and Tidal Volume after each cycle 16. External memory card for recording therapy data for extended follow-up and software for a complete view of therapy 17. Accessories a. Pneumatic full-face mask each 1units b. Bacterial Filter 2 units	
4	User's interface	Manual
5	Weight	below 5 kg
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
9	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Blood Warmer

GMDN Name		Blood Warmer
1	Clinical purpose	To warm blood, IV fluids, and blood substitutes before they are administered to patients
2	Used by clinical department/ward	Emergency rooms, operating rooms, and intensive care units (ICUs).
3	**Technical characteristics (specific to this type of device)**	
	Should be dry heat Technology for safe warming. Equipment heat exchanger cassette parylene coated aluminum plate. Should have temperature range: 39°±2°C Cassette or tubing priming volume not more than 5ml. Should have flow range: 5-80ml/min Equipment should have User Friendly Equipment should have Single Switch Operated Equipment should be used neonatal to Adult Should be light weight. Should be supply 20 cassettes/Tubing with each unit. Can be mounted to the Stand or bed rails Weight less than 2.5 kg Should have disposable/cassettes priming Volume less than 5ml Should have patient line 40cm Warming device should have IPX4 rating Should have European CE/FDA approved certificate.	
4	User's interface	Manual
5	Weight	2.5 Kg
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have CE Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of PFT Machine

GMDN Name		PFT Machine
1	Clinical purpose	To assess how well your lungs are working
2	Used by clinical department/ward	Pulmonary Department
3	**Technical characteristics (specific to this type of device)**	
	1. Bi-directional Turbine Cartridge, FVC, Pre/Post Testing, Flow Volume Loop, MVV, SVC waveforms and it should be displayed on inbuilt screen. 2. Portable with bag for easy transport, microprocessor based high resolution module. 3. Color TFT Screen with Touch Keypad 320*240 pixel and 3.5" Screen 4. Weight is not more than 850grams 5. Printer paper size 100 mm wide thermal paper in 20 mm roll. 6. Machine has facility pc connectivity and USB Storage. 7. Flow Detection: Volume Differential 8. Facility to USB interface for data management and waveforms viewing/reporting (PC link software) 9. Infrared Transmitter/ Receiver Turbine Sensor based technology. 10. Machine have Predicted Normal: Indian Predicted equations, Barcelona, ECCS/ERS 93, ITS-Black, ITC-white, Knudson 83 LAM. 11. Air Flow Range (L/Sec): (-)8 L/sec to (+) 12 L/sec 12. Parameter Measured: 31 FVC, 9 SVC and 4 MVV. 13. Built in battery backup with battery capacity 100 or more recordings during fully charge and battery recharge required after ≥3 hours and recharge time 3-4 hours for fully discharge battery. 14. Flexible reporting of stored waveforms and values can be copied for print. 15. Calibration: Using a 3.0L calibration syringe. 16. Machine have internal storage of 200 recordings. 17. The machines have LED indication's Mains connected, Low battery, No paper and Sensor Error. 18. Facility to generate PDF files and can send through email on PC software. 19. Facility of Pre and Post Test comparison. 20. Facility to take Combined Tests printouts. 21. Power supply 9V,3A DC Adapter 22. Machine have serial communication and DC powered. 23. Operating room temp: 0-45 Degree C. 24. Storage room temp: -25-70 Degree C 25. Relative humidity: 5 to 95%RH, non-condensing.	
4	User's interface	Manual
5	Display	Color TFT Screen 3.5 Inch
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have ISO and CDSCO Certificate for standard quality.
10	Warranty	Two Year

Technical Specification of Flow Meter with Spanner

GMDN Name		Flow Meter with Spanner
1	Clinical purpose	To regulate and deliver oxygen to patients
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Material: Plastic Body Display: Analog	

	Easy installation Precision-designed High quality Fine finish Excellent performance Durability	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Patient Warmer

GMDN Name		Patient Warmer
1	Clinical purpose	To maintain or raise a patient's body temperature, particularly during and after medical procedures
2	Used by clinical department/ward	Emergency rooms, operating rooms, and intensive care units (ICUs).
3	**Technical characteristics (specific to this type of device)**	
	Device should deliver warm air uniformly to the patient through disposable blankets. Device should have 4 set temperatures: Ambient, 32°C, 38°C, 43°C. Device should Provide with 5 no of Blanket. Device should have short warm up time not more than 40 second. Device should be quiet (not more than 48 db at all speeds) and light weight not weighing more than 6 kgs. Device should have option for mounting to the infusion pole, bed rails, walls or placed on the floor. Device should be able to start with default temperature setting of 38° C Device should have over temperature alarm, & service indicator alarm. Device should be with Inbuilt Hepa H13 class filter ,Conform EN 1822-1:2009 with alarm for filter replacement. Filter life should be atleast 2000hr with documentary evidence. Device should have option to be supplied with pole stand on wheels & attached basket. Warming blankets: made of non woven material extra wide & should have large tuck in flaps. Blanket should provide equal distribution of warm air throughout the entire blanket and should not float when filled. All blanket must be USFDA certified . Device must meet all convective warming standards. Device should comply with following safety standards:	

	Classification IEC 60601-1,Class I, Body Floating (BF) Classification IEC 60529,IP21 Device should have European CE or US FDA approved certificate	
4	User's interface	Manual
5	Weight	6 Kg
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc.) as per appropriate (or equivalent harmonized symbol)
9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have CE/USFDA Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of MTP High Suction Machine

GMDN Name		MTP High Suction Machine
1	Clinical purpose	To remove unwanted fluids and secretions from a patient's body, particularly from the airway
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Housing: Powder Coated Anti Corrosive MS Jars: Polycarbonate 2 X 2.5-liter capacity with mechanical overflow system. Pump type: Oil Free Twin Headed Piston Pump Capacity: -730mmHg +- 10 at 55~60 LPM Noise Level: <50 dB A +- 3 Almost Whisper Power: 220/230V AC, 50 Hz,180W Vacuum Gauge: 2.0-inch, 0-760 mmHg. Valves: Stainless Steel Features Overflow Protection: Mechanical Type Tubing: Non – collapsible Suction Tubing Maintenance free oil less pump with absolute low noise. Air filter should reduce the environmental contamination. Reusable Bacterial filter.	
4	User's interface	Manual
5	Noise Level	<50 dB A ±3
6	Power Requirements	220/230V AC, 50 Hz, 180W
7	Mobility, portability	Portable
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Storing Condition Information for particular storage condition (temperature, pressure, light, humidity, etc) as per appropriate (or equivalent harmonized symbol)

9	User's care, Cleaning. Disinfection & Sterility issues	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents
10	Certificates	Manufacturer should have ISO and CE Certificate for standard quality.
11	Warranty	Two Years

Technical Specification of Emergency Hydraulic Trolley

GMDN Name		Emergency Hydraulic Trolley
1	Clinical purpose	The safe and efficient transport of patients within a healthcare facility or in emergency situations
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	Emergency Casualty Trolley – Hydraulic: • Overall approximate dimension 2065mm Lx 730mm W • Height adjustment – Min 670mm to Max 980mm • Removable stretcher size 1975mm Lx 595mm W • X-Ray permeable two section top with pushing handle covered with PVC grip • X-Ray permeable top should be made up of 8mm HPL. • Sliding X-Ray cassette holder tray which can slide along the full length of trolley. • Backrest adjustment on ratchet • Height adjustment by imported hydraulically operated type linear actuator pump foot operated actuation • Trendelenburg and reverse Trendelenburg by gas spring mechanism. • Two gas springs of 30kg each should be used in the trendelenburg and reverse trendelenburg mechanism. • Four 125mm-dia, non-rusting body castor wheel, two with brake • Two IV rod location • S.S. Swing away side safety railings • Oxygen cylinder cage • Corner Buffers • Suitable Rexene covered mattress • ISO 13485:2003 ,CE certified	
4	User's interface	Manual
5	Dimensions	Overall approximate dimension 2065mm Lx 730mm W
6	Mobility, portability	Portable
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	1) Operating condition: Capable of operating continuously in ambient temperature of 10 to 40° C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%.

8	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
9	Certificates	Manufacturer should have (ISO 9001:2015, ISO 14001:2015 2004, OHSAS 18001: 2007& ISO 13485:2016 Quality management systems)
10	Warranty	Two Years

Technical Specification of Biomedical Waste Bucket

S. No	GMDN Name	Biomedical Waste Bucket
1	Clinical Purpose	For Collection and Segregation of general waste
2	Used by clinical Department/ Ward	All Departments & wards
3	Technical Characteristics (Specific to this type of device)	
	Capacity: 20 Liters Color: Green, Blue, red, black and Yellow color separate collection available in full body color coding as per BMW rules made a good college virgin PP polymer with built-in foot operation system made up of Anti resting material. The bin must have molded top shoulder and pillar type rib design for extra strength. Must be antimicrobial treated to avoid colonization of microbes.	
4	User’s Interface	Manual
5	Dimensions	L325xW290 x H425 mm
6	Capacity	20 liters
7	Mobility, Portability	Portable
8	Protection	UV Stable
9	Quality Certifications	CE European and ISO13485:2013 certified & Manufacturer must be ISO9001:2015 & WHO GMP Certified

Technical Specification of Lead Apron

	GMDN Name	Lead Apron
1	Clinical purpose	To Protect from Radiation
2	Used by clinical department/ward	Radiology, Orthopedics Departments
3	**Technical characteristics (specific to this type of device)**	
	Front: 0.50 mm Pb Crisscross shoulder design keeps the apron in place. Valcro taps at shoulder and waist allow for quick removal Shoulder pads Pockets Unisex sizes Less Weight Full Protection	
4	Size	Unisex
5	Mobility, portability	Yes
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
7	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
8	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 Certificate for standard quality.
9	Warranty	Two Years

Technical Specification of Digital X Ray Cassette 8x10

	GMDN Name	Digital X Ray Cassette 8x10
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Cassettes to use for General Radiography along with existing CR system, which can be utilized for complete range of radiography examinations with the following Specifications & Configuration. 1. Offered cassettes should be for general radiography usage for existing CR system from Konica Minolta Regius Sigma.. 2. Size of the offered cassettes should be 8” x 10”. 3. Offered cassette should have capability to support high resolution read function of 87.5µm for Regius Sigma.	

	4.Cassette offered should have rigid plate technology as standard.	
4	User's interface	Manual
5	Size	8” x 10”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Digital X Ray Cassette 10x12

	GMDN Name	Digital X Ray Cassette 10x12
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Cassettes to use for General Radiography along with existing CR system, which can be utilized for complete range of radiography examinations with the following Specifications & Configuration. 1. Offered cassettes should be for general radiography usage for existing CR system from Konica Minolta Regius Sigma.. 2. Size of the offered cassettes should be 10” x 12”. 3. Offered cassette should have capability to support high resolution read function of 87.5µm for Regius Sigma. 4.Cassette offered should have rigid plate technology as standard.	
4	User's interface	Manual
5	Size	10” x 12”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Digital X Ray Cassette 14x17

GMDN Name		Digital X Ray Cassette 14x17
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Cassettes to use for General Radiography along with existing CR system, which can be utilized for complete range of radiography examinations with the following Specifications & Configuration. 1. Offered cassettes should be for general radiography usage for existing CR system from Konica Minolta Regius Sigma.. 2. Size of the offered cassettes should be 14" x 17". 3. Offered cassette should have capability to support high resolution read function of 87.5µm for Regius Sigma. 4.Cassette offered should have rigid plate technology as standard.	
4	User's interface	Manual
5	Size	14" x 17"
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Digital X Ray Cassette 11x14

GMDN Name		Digital X Ray Cassette 11x14
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Cassettes to use for General Radiography along with existing CR system, which can be utilized for complete range of radiography examinations with the following Specifications & Configuration. 1. Offered cassettes should be for general radiography usage for existing CR system from Konica Minolta Regius Sigma.. 2. Size of the offered cassettes should be 11" x 14". 3. Offered cassette should have capability to support high resolution read function of 87.5µm	

	for Regius Sigma. 4.Cassette offered should have rigid plate technology as standard.	
4	User's interface	Manual
5	Size	11” x 14”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of X Ray Films 8x10

	GMDN Name	X Ray Films 8x10
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Dry laser film of latest technology should be provided with the system, with the following features: 1. Film supply should be of dry chemistry with laser technology. 2. It should have Konica Minolta SD-E type of films. 3. It should contain 125 films in 1 packet. 4. Size 8x10	
4	User's interface	Manual
5	Size	8” x 10”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of X Ray Films 10x12

GMDN Name		X Ray Films 10x12
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Dry laser film of latest technology should be provided with the system, with the following features: 1. Film supply should be of dry chemistry with laser technology. 2. It should have Konica Minolta SD-E type of films. 3. It should contain 125 films in 1 packet. 4. Size 10x12	
4	User's interface	Manual
5	Size	10” x 12”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of X Ray Films 14x17

GMDN Name		X Ray Films 14x17
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Dry laser film of latest technology should be provided with the system, with the following features: 1. Film supply should be of dry chemistry with laser technology. 2. It should have Konica Minolta SD-E type of films. 3. It should contain 125 films in 1 packet. 4. Size 14x17	

4	User's interface	Manual
5	Size	14” x 17”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of X Ray Films 11x14

GMDN Name		X Ray Films 11x14
1	Clinical purpose	Clinical Radiography
2	Used by clinical department/ward	Radiology Department
3	**Technical characteristics (specific to this type of device)**	
	Dry laser film of latest technology should be provided with the system, with the following features: 1. Film supply should be of dry chemistry with laser technology. 2. It should have Konica Minolta SD-E type of films. 3. It should contain 125 films in 1 packet. 4. Size 11x14	
4	User's interface	Manual
5	Size	11” x 14”
6	Mobility, portability	Yes
7	Atmosphere/Ambiance (air conditioning, humidity, dust)	Capable of being stored continuously in ambient temperature of 0 to 50°C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 °C and relative humidity of 15 to 90%. Enclosure to protect against water ingress; Possible to perform cleaning with

		alcohol or chlorine wipes.
8	User's care, Cleaning. Disinfection & Sterility issues	Not Applicable
9	Certificates	Manufacturer should have ISO 9001:2015, ISO 13485:2016 and CE Certificate for standard quality.
10	Warranty	Two Years

Technical Specification of Ambu Bag Adult

GMDN Name		Ambu Bag Adult
1	Clinical purpose	To provide artificial ventilation to patients who are not breathing or are having difficulty breathing
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	total bag volume (1475 ml), made up of SEBS polymer material, 100 % latex & PVC free, Unique single shutter valve, weight not more than 315 gms including face mask & reservoir 02 tube, hand strap for firm grip. Patient valve swivel type. Port for side stream ETCO2 measurement & quick medication delivery. MR conditional, operating temperature -18 to 50 C.	
4	User's interface	Manual
5	Weight	≤315 Gms
6	Mobility, portability	Portable
7	Operating Temperature	18 to 50°C
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	Certificates	Manufacturer should have ISO and USFDA Certificate for standard quality.

Technical Specification of Ambu Bag Pediatric

GMDN Name		Ambu Bag Pediatric
1	Clinical purpose	To provide artificial ventilation to patients who are not breathing or are having difficulty breathing
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	total bag volume (635 ml), made up of SEBS polymer material, 100 % latex & PVC free, Unique single shutter valve, weight not more than 215 gms including face mask & reservoir 02 tube, hand strap for firm grip. Patient valve swivel type. Port for side stream ETCO2 measurement & quick medication delivery. MR conditional, operating temperature -18 to 50 C.	
4	User's interface	Manual
5	Weight	≤215 Gms
6	Mobility, portability	Portable
7	Operating Temperature	18 to 50°C
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	Certificates	Manufacturer should have ISO and USFDA Certificate for standard quality.

Technical Specification of Rapid test for HPV test

GMDN Name		Rapid test for detection of antibodies to HIV 1 & HIV 2
1	Clinical purpose	To detection of antibodies to HIV 1 & HIV **2**
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. Rapid test for detection antibodies to HIV 1 & HIV 2 device, is an immunoassay for the rapid and visual detection of antibodies for HIV 1 & HIV 2 in human serum, plasma, whole blood for the diagnosis of human immunodeficiency virus infection (HIV). 2. Sample addition a blood sample added to the test device along with the buffer solution. 3. The samples moves across a special pad containing gold particles attached to HIV	

	antigen and moves antibodies. 4. If the sample contains HIV antibodies or antigens, they bind with the gold particals. 5. This complex moves to a strip with seprate lines for HIV 1 and HIV 2 antigens. 6. If HIV antibodies are present, they react with the antigens, forming a colour line on the respective test lines. 7. Unbound gold particles move further and react with another antibody, forming a control line. 8. Contents of kit – Pouches of test, Device with dsiccant, Assay buffer bottle, Plastic dropper, Package insert. 9. Storage at dry place 4°C to 30°C. 10. Shelf life 24 months.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.

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Technical Specification of Rapid test for detection of HbsAg

	GMDN Name	Rapid test for detection of HbsAg
1	Clinical purpose	To detection of Hbsag
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. Rapid test for detection of HbsAg – Device/Cassette is an immunoassay for the rapid and visual detection of Hepatatis B surface antigen in human serum/plasma/whole blood for the diagnosis of Hepatatis B virus infection. 2. The process being with the additions of a serum/Plasma/whole blood sample to the sample well of the device containing test strip. 3. The sample moves onto the conjugate pad, which content colloidal gold particals conjugated with HbsAg – specific antibody and rabit IgG. 4. If the samples content dectable levels of the Hbsag antigen, it reacts with gold conjugated Hbsag – specific antibody to from a complex. 5. This complex moves further and reacts with Hbsag – specific antibody coated as a test line on the nitocellulose membrane to form a colour band (test line). 6. The unbound complex and the rabit IgG coated control area to form a colour band (control line). 7. The apperarance both the test line and control line indicates a poitive results while the appearance only the control line indicates a negative result. 8. The control line acts as a procedural control, insuring that the test is perform correctly and reagents are working properly.	

	9. Contents of kit – Pouches of test, Device with desiccant, Plastic dropper, Assay Buffer bottle, Package Insert. 10. Storage at dry place 4° C to 30° C. 11. Shelf life 24 months.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.

Technical Specification of Rapid test for detection of antibodies to HCV

GMDN Name		Rapid test for detection of antibodies to HCV
1	Clinical purpose	To detection of HCV
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. Rapid test for detection of antibodies to HCV – Device/Cassette is an immunoassay for the rapid and visual detection of antibodies to HCV in human serum/plasma/whole blood for the diagnosis of hepatatis C virus infection. 2. The process begins with the addition of serum/plasma/whole blood and assay buffer to the sample well of the device containing a test strip. 3. The sample moves on to the conjugate pad, which content colloidal gold particals conjugated with recombinant HCV specific antigens and mouse IgG antibody. 4. If the sample contains detectable level of antibodies against combinant HCV specific antigen, it reacts with the gold conjugated recombinant HCV specific antigens to form a complex. 5. This complex moves further and reacts with combinant HCV specific antigens coated as a test line earn the nitocellulose membrane to form a colour band. 6. The unbound complex and the mouse IgG conjugated colloidal gold particals moves further to the goat anti mouse IgG coated control area to form a colour band (control line). 7. The control line acts as a procedural control, insuring that the test is perform correctly and reagents are working properly. 8. Contents of kit – Pouches of test, Device with desiccant, Plastic dropper, Assay buffer bottle, Package Insert. 9. Storage at dry place 4°C to 30°C. 10. Shelf life 24 months.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.
7	User's care, Cleaning.	Sterilization not required.

	Disinfection & Sterility issues	
8	Certificates	Manufacturer should have ISO Certificate for standard quality.

Technical Specification of Rapid Dengue Combo test

	GMDN Name	Rapid Dengue Combo test
1	Clinical purpose	To detection of Dengue
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. Rapid dengue combo (Ag + Ab) test is an immunochromatography assay for the qualitative detection of non structure protein 1 (Ns1) ag and IgG/IgM antibodies to dengue virus in human serum/ plasma. 2. Dengue NS1 Antigen Test: This test is designed to detect the presence of Dengue NS1 antigens in a serum or plasma sample. The process involves adding the sample to a device containing a test strip, which then moves to a gold conjugate pad. This pad contains colloidal gold particles conjugated with Dengue NS1 antigen-specific antibodies and rabbit IgG. If the sample contains detectable levels of Dengue NS1 antigens, it reacts with the gold-conjugated Dengue NS1 antibodies to form a complex. This complex, along with unbound gold particles, moves on to a nitrocellulose membrane where it reacts with Dengue NS1 antibodies coated on the membrane at the test side, forming a colored band (Test Line). The unbound complex and gold conjugate particles further react with goat anti-rabbit IgG coated in the control area, forming another colored band (Control Line). The appearance of both test and control lines indicates a positive result, while only the control line indicates a negative result. 3. Dengue IgG/IgM Test: This test detects the presence of Dengue-specific IgM and/or IgG antibodies in a serum or plasma sample. After adding the sample and assay buffer to the device, the sample moves to a conjugate pad containing colloidal gold particles conjugated with Dengue-specific recombinant antigens and streptavidin. If the sample contains detectable levels of Dengue-specific IgM and/or IgG antibodies, it reacts with the gold-conjugated Dengue-specific recombinant antigens to form a complex. This complex then reacts with anti-human IgM antibodies (IgM test line) and Dengue-specific IgG antibodies (IgG test line) on the nitrocellulose membrane area, forming colored bands. The unbound complex and streptavidin-conjugated colloidal gold particles move further to the Biotin-coated control area, forming a colored band (Control Line). The appearance of test line(s) and control line indicates a positive result, while only the control line indicates a negative result. Dengue Ns1 ag test this test is designed to detect the presence of dengue ns1 antigen in a serum or plasma sample.The process involve adding the sample to a device containing a test strip, which the moves to gold conjugated pad. This pad contains colloidal gold particals conjugated with dengue ns1 antigen 4. Contents of kit – Test device, Package insert, Assay buffer bottle, Desiccant pouch, Plastic dropper. 5. Storage at dry place 4°C to 30°C. 6. Shelf life 24 months.	

4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.

Technical Specification of Rapid syphilis antibody

GMDN Name		Rapid syphilis antibody
1	Clinical purpose	To detection of Rapid syphilis antibody
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. Syphillis is a disease cause by bactrium treponema pallidum the disease is characterized by sorce on body, screen rashed, weigh loss, fever etc. syphillis is diagnosed by serological detection of antibodies to treponema pallidum syphillis antibody test is an immunochromotography assay to detect antibodies to treponema pallidum in human serum/plasma. 2. A dipstick is placed in a container with serum or plasma. 3. The sample moves onto the conjugate pad containing colloidal gold particles conjugated with recombinant Treponema pallidum antigens (17, 47kDA) and rabbit IgG. 4. If the sample contains detectable levels of syphilis antibodies, it reacts with the gold-conjugated recombinant Treponema pallidum antigens to form a complex. 5. This complex moves further and reacts with recombinant Treponema pallidum antigens (17, 47kDA) coated as a test line on the nitrocellulose membrane area to form a colored band (Test band). 6. The unbound complex and the rabbit IgG conjugated colloidal gold particles move further to the goat-anti rabbit IgG coated control area to form a colored band (Control line). 7. The appearance of both test line and control line indicates a positive result. 8. The appearance of only control line indicates a negative result. 9. The control line acts as a procedural control, ensuring that the test is performed correctly and reagents are working properly. 10. Content of kit – Test dipstick, package insert, desiccant pouch. 11. Storage at dry place 4°C to 30°C. 12. Shelf life 24 months.	

4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.

Technical Specification of Rapid/ one step pregnancy test

GMDN Name		One step pregnancy test
1	Clinical purpose	To detection of Pregnancy
2	Used by clinical department/ward	Lab
3	**Technical characteristics (specific to this type of device)**	
	1. One step pegnancy test is a self testing immnuoassay maid for the rapid and visual determination of hcg (human chorionic gonadotropin) harmone from human urine specimen to aid in the early detection of pregnancy. 2. The test utilizes a special membrane placed in front of a reaction pad. This reaction pad contains colloidal gold particles that are coated with monoclonal anti-hCG antibodies. 3. When a urine sample is applied to the test, the colloidal gold particles dissolve in the liquid sample. 4. 3. If the sample contains hCG hormone, it binds to the monoclonal antibodies marked with colloidal gold particles. 5. The dissolved gold particles are then transported through the membrane due to capillary forces. 6. In the area of the Test line (T), anti-hCG antibodies immobilized there form a complex with hCG and colloidal gold. This results in the formation of a colored line, the intensity of which depends on the concentration of hCG in the sample. 7. Any surplus colloidal gold particles and mouse IgG colloidal gold particles move further and bond in the area of the control-line. This control-line is coated with goat anti-mouse IgG antibodies. 8. The control line serves as an internal functional check and must appear in every test, indicating that the test has functioned correctly. 9. If no or only very little hCG is present in the sample (< 10 mIU/ml), the hormone-gold particle complex is either not formed or is formed in insufficient amounts to generate a visible colored line in the area of the test-line. 10. Content of Kit – Test strip, Desiccant pouch, Package insert, Plastic dropper. 11. Storage at dry place 4°C to 30°C. 12. Shelf life 24 monts.	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of

		15 to 80% in ideal circumstances.
7	User's care, Cleaning. Disinfection & Sterility issues	Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.

Technical Specification of Micro Pipettes

	GMDN Name	Micro Pipettes
1	Clinical purpose	To accurately measuring and transferring small volumes of liquid samples, particularly in diagnostic testing and research
2	Used by clinical department/ward	Laboratory
3	**Technical characteristics (specific to this type of device)**	
	Pipette should be supplied along with the pipette stand to hold four pipettes and two racks of pipette tips in single box directly from manufacturer. (Separate box of pipettes, stand and tip boxes will not be considered as a single kit) • Kit should cover Pipette volume range from 0.2-2ul,2-20ul, 20-200ul, 100-1000ul • Should be ultralight pipette designed with the concept which helps to avoid RSI. • Should have piston system with light weight and better chemical resistance. • The positions and shapes of the control buttons/displays should be optimized for stress-free work procedures and intuitive operation. • With spring-loaded tip cone for optimal pipette fit with minimal insertion force for lower volume pipettes • Switch/ Setting from maximum to minimum volume should be possible in just a few turns • The quick lock to make the lower part particularly easy to remove and service for lower volume pipettes	
4	User's interface	Manual
5	Mobility, portability	Portable
6	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
7	User's care, Cleaning. Disinfection & Sterility issues	1) Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) Sterilization not required.
8	Certificates	Manufacturer should have ISO Certificate for standard quality.
9	Warranty	Two Year

Technical Specification of Ambu Bag Neonatal

GMDN Name		Ambu Bag Neonatal
1	Clinical purpose	To provide artificial ventilation to patients who are not breathing or are having difficulty breathing
2	Used by clinical department/ward	All Departments
3	**Technical characteristics (specific to this type of device)**	
	total bag volume (200 ml), made up of SEBS polymer material, 100 % latex & PVC free, Unique single shutter valve, weight not more than 140 gms including face mask & reservoir 02 tube, hand strap for firm grip. Patient valve swivel type. Port for side stream ETCO2 measurement & quick medication delivery. MR conditional, operating temperature -18 to 50 C.	
4	User's interface	Manual
5	Weight	≤140 Gms
6	Mobility, portability	Portable
7	Operating Temperature	18 to 50°C
8	Atmosphere/Ambiance (air conditioning, humidity, dust)	Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
9	Certificates	Manufacturer should have ISO and USFDA Certificate for standard quality.

Signature

Date

Place

Annexure XI: Compliance sheet for Technical Proposal

Compliance Sheet for all Equipments

Sr.no	Technical specifications /composition of tender enquiry	Compliance on each parameter with detailed substantiation how the offered product meets the requirement. (Do not write simply yes or complied or as per licenses mentioned in the bid. If written then bid will be rejected)	Brand name (only For importer)	Medical devices/ import license	MSME/ SSE	Remarks, If any
A	B	C	D	E	F	G

Signature

Date

Place

Appendix XII: Place of delivery

(**District wise place and address of all equipments)**

Sr no	Name of Delivery places
1	District Hospital Thane

Signature

Signature

Date

Place

Annexure-XIII: Self Declaration Affidavit (on Rs.100/- Stamp Paper)

I ..... age ..... address ..... (Authorized signatory to sign the contract), hereby submit, vide this affidavit in truth, that I am the owner of the contracting firm ..... / authorized signatory and I am submitting the documents in envelope no.1 for the purpose of scrutiny of the contract. I hereby agree to the conditions mentioned below: -

a. I am liable for action under Indian Penal Code for submission of any false / fraudulent paper / information submitted in envelope no.1.

b. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information, false bill of purchases supporting proof of purchase, proof of testing submitted by my staff, subletting company or by myself, I will be liable for action under Indian Penal Code.

c. I am liable for action under Indian Penal Code if any paper is found false / fraudulent during contract period and even after the completion of contract (finalisation of final bill).

(Signature of Bidder)

(Seal of company)

Annexure-XIV: Manufacturer's Authorization Form

(Manufacturer's or Producer's Letter head)

To,
The Chief Executive Officer,
Maharashtra Medical Goods Procurement Authority,
1st Floor, Arogya Bhawan,
P.D' Mello Road, Mumbai- 400001.

WHEREAS (*Name of Manufacturer or producer*) (hereinafter, "we" "us") who is established and reputable manufacturer's or producers of (*name and/or description of Goods requiring this authorization*) having production facilities at *(Insert address of the factory)* do hereby authorize (name and address of Bidder) (herein after, the" bidder") to submit a bid, and sign the Contract with you against Request For Proposal ref no. *(Title and reference of RFP)* including the above goods produced by us.

We hereby extend our full guarantee and warranty for the above specified Goods described above in accordance with the terms and conditions of this Request for Proposal and Contract to be executed between the Bidder and Authority.

For and on behalf of the Manufacturer or Producer

Signed: _____

Date: _____

In the capacity of *(Title, position, or other appropriate designation)* and duly authorized to issue Authorization Form on behalf of *(Name of Manufacturer or producer)*

Note:

This Letter /form should be signed by a person competent and having the power of attorney/authority to legally bind the manufacturer. This should be included by the bidder in it's bid.

This Letter /form is required to be provided by Importer and Authorized Distributor.

Annexure-XV: Format for EMD Bank Guarantee

To be submitted in original at MMGPA office

B.G. No. Dated:

1. In consideration of you, Maharashtra Medical Goods Procurement Authority, having its office at 1st Floor, Arogya Bhawan St. George's Hospital Compound, Near C.S.M.T. Railway Station, Mumbai - 400 001 Maharashtra (hereinafter referred to as the "Authority", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns)having agreed to receive the bid of ……(mention nature of entity and acts under which it is registered) and having its registered office at …… (hereinafter referred to as the "Bidder" which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns), for the **Supply, Installation and Commissioning of Equipments for District Hospital** (hereinafter referred to as "the Project") pursuant to the RFP Document dated …… issued in respect of the Project and other related documents (hereinafter collectively referred to as "Bidding Documents"), we (Name of the Bank) having our registered office at …… and one of its branches at …….. (Hereinafter referred to as the "Bank"), at the request of the Bidder, do hereby irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the RFP Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. ……. (Rupees …….. only) as bid security (hereinafter referred to as the "Guarantee") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.

2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive and binding on the Bank.

3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents including failure of the said Bidder to keep its Bid open during the Bid validity period as set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. …… (Rupees ……. only).

4. This Guarantee shall be irrevocable and remain in full force for a period of 240 (two hundred and forty) days from the Bid Due Date inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.

5. We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, *inter alia*, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said

Bidding Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.

6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.

7. In order to give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the Bids or the Bid validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us addressed to [name of Bank along with branch address] and delivered at our above branch which shall be deemed to have been duly authorised to receive the said notice of claim.

10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealised.

11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.

12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Guarantee for and on behalf of the Bank.

13. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. …… (Rupees ……..... only). The Bank shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Bank in accordance with paragraph 9 hereof, on or before [……. (Indicate date falling 240 days after the Bid Due Date)].

Signed and delivered by ……. Bank

By the hand of Mr./Ms ……., its …….. and authorised official.

(Signature of the Authorised Signatory)

(Official Seal)

Annexure-XVI: Format for Performance Security Bank Guarantee

To,
The Chief Executive Officer
Maharashtra Medical Goods Procurement Authority
1st Floor, Arogya Bhawan
P. D'Mello Road, Mumbai- 400001

Dear Sirs.

Whereas you intent to enter into a contract, as per your Letter of Intent, Reference No. _____ dated _____(Hereinafter referred to as "the contract") with M/s _____ as vendor for the supply of_____ defined in contracts schedule, (hereinafter referred to as "the goods / services") and whereas the vendor has undertaken to produce a performance cum warranty bond for amount of Rs _____ being equal to 3% of the total contract value of the goods / services to be delivered as specified contract No _____dated _____ referred to as "contract to secure its obligations to the beneficiary with respect to the goods specified in the invoice.

1. We _____ (Name of the Bank), hereby expressly, irrevocably, and unreservedly undertake and guarantee as principal obligators on behalf of the Seller that in the event that the beneficiary submits a written demand to us stating that the Seller has not performed according to the terms and conditions of the contract, we will pay you on demand and without demur any sum up to a maximum amount of (3% of the contract value). Any claims must bear the confirmation of your bankers that the signatures thereon are authentic. Your written demand shall be conclusive evidence to us that such written demand. For the avoidance of doubt any documents received by way of facsimile or similar electronic means is/are not acceptable for any purpose(s) under this guarantee.
2. We shall not be discharged or released from this undertaking and guarantee by any arrangements, variations made between beneficiary and the seller or any forbearance whether as to payment, time performance or otherwise.
3. In no case shall the amount of the guarantee be increased.
4. Unless a demand under this guarantee is received by us in writing on or before the expiry dates (unless this guarantee is extended by the seller), all your rights under this guarantee shall be forfeited and we shall be discharged from the liabilities hereunder.
5. This guarantee shall be a continuing guarantee (which means guarantee will also be valid if the bank is in under liquidation or bankruptcy) and shall not be discharged by any change in the constitution of the bank or in the constitution of the Seller.
6. Please return this letter of guarantee immediately after our liability thereafter has ceased to be valid.
7. Our liability under this guarantee will cease to be valid even if the guarantee deed is not returned to us.
8. This guarantee is personal to the beneficiary and not assignable to a third party without our prior written consent.
9. This guarantee shall be governed by Indian Law. This guarantee is valid until (Insert date in dd/mm/yyyy)

Signature and Seal of Guarantors _____

Date _____

Address: _____ _____

(Signature of Bidder)

(Seal of company)

Appendix II: Commercial Proposal Templates

I. General

The Bidders are expected to respond to the RFP using the forms given in this section for Commercial Proposal (Envelop - 2).

Annexure XVII: Letter comprising the Commercial Bid

Annexure XVII: PART I

Letter comprising the Commercial Bid

PRICE BID FOR THE CURRENT TENDER) ***(To be kept in Envelope No. 2)***

Item Description	Unit	Qty	Ex-factory cost per unit (In Rs.)	GST applicable for Govt. Supply (In Rs.)	Other incidental charges (Please specify) (In Rs.)	Total landed cost per unit (4+5+6) (In Rs.)	Total Cost Rs. (3x7)
1	2	3	4	5	6	7	8
Thermometer		82					
Examination Light		24					
Height Measurment Scale Wall Mounted		43					
Stethoscope		41					
Weighing Machine Adult		41					
Weighing Machine Pediatric		41					
LED Torch		73					
Sphygmonometer		70					
Otoscope		20					
Tuning fork		20					
Hammer		20					
Tounge Depressor		20					
Examination Table with IV Stand Foot Step		45					
Revolving Stool		760					
LED X-Ray Viewing Box		43					
Fetal Doppler		8					
Fetal Monitor		13					
Fetoscope		8					
Infantometer		18					
Stadiometer		10					
100 M.A X-Ray Machine (Mobile)		1					
ECG Machine		2					
Colour Doppler Ultrasound Machine with 4 Probes: Abdomen, Pediatric		1					
Ultra-Sonogram (obs & gyne)		1					
Portable Ultrasound		1					
EMG Machine		1					
ECHO Machine		1					
Lead Partition		5					
OT Table		1					
OT Light		1					
Laryngosocpes with Blades		54					
Crash Cart Trolley		66					

Medicine Trolley		48					
Surgical Scrub		1					
Anesthesia Workstation		6					
Suction Machine (Electrical)		1					
Autorefractor Keratometry		1					
Digital Lensometer		1					
Non Contact Tonometer		1					
Slitlamp		1					
Digital Phoraptor		1					
Operating Microscope		1					
Operating Microscope Basic		1					
Pheco Machine		1					
Yag Laser		1					
IOL Master		1					
Crossmatch workstatation		1					
Centrifuge		4					
Tube Sealer		1					
Blood Collection Monitor		1					
Doner Coach		1					
Blood bank Refrigerator		1					
Plasma Freezer -80 Degree		1					
Plasma Extractor		1					
VDRL Shakar		1					
Blood Bank Centrifuge 12 Bucket		1					
Composcale		1					
Hand Stripper		1					
Platelet Agitator with Incubator		1					
Portable donar chair		1					
Calorimeter		1					
Elisa reader and washer		2					
Semi Auto analyzer		1					
Electrolyte Analyzer		1					
Reagent Refrigrator		1					
Fully Automatic Biochemistry Analyser High End		1					
Tube Lebling Analyzer		1					
Advance 5 part cell counter with autoloader		1					
Cell Counter		1					
ESR Analyzer		1					
Binocular Microscope		2					
Coagulation Analyzer		1					
HBA1C Analyzer fully automatic		1					
Biosafety Cabinate		1					
Microtom		1					

Tissue processor		1					
Embeding system		1					
Slide stainers		1					
Cytocentrifuge		1					
Grossing station		1					
RTPCR analyzer		1					
Nucleic acid extraction system		1					
Gel documentation system		1					
Laminar flow hood		1					
Deep freezer -20		1					
Deep freezer -80		1					
Chemiluminescence immunology analyzer clia		1					
Incubators		2					
Water Bath for Serology		1					
Hot Air Oven		1					
Rotor/Shaker		1					
Time stop watch		1					
Alarm Clock		1					
HB Meter		1					
PH Meter		1					
Dental Chair with Accessoriess		8					
Dental Xray Machine with RVG		3					
BP Apparatus		17					
Defibrillator		6					
Video Bronchoscope		1					
Audiometer		1					
Tympanometer		1					
Berra Machine		1					
ENT Head light		1					
OAE Screeing Machine		4					
Moterized Labor Table		9					
Infant Weighing Scale		15					
Neonate Pulse Oxymeter Table Top		14					
Vacuum Extractor		9					
Beds with foam Mattress		619					
Bed side Locker Delux		691					
SpO2 Monitor		52					
Nebulizer Ultrasonic		70					
IV Stand		653					
Over Bed Table		706					
Motorized ICU Beds		47					
Syringe Infusion pump		40					
Multipara Monitor with Stands		29					
Strecher on Trolley		24					

Pediatric ICU Beds		13					
Pulse Oximeter with Pediatric Probe		5					
Pediatric Ventilator		3					
ABG Machine		1					
Portable LED Standing Lights		1					
Foot Operated Suction Machine		20					
Bilirubinometer		7					
Bubble Cpap		13					
High Flow Nasal Machine		3					
Open Care Radiant Warmer		44					
Phototherapy Single Surface LED		15					
Transport Incubator		6					
Oxygen Hood		35					
Pulse Oximeter Table Top		5					
Cardiac Markar		1					
Glucometer		20					
Dressing Drum small		45					
Dressing Drum Medium		45					
Dressing Drum Large		45					
Instrument try Small		45					
Instrument try Medium		45					
Instrument try Large		45					
NO2 Cylinder		30					
CO2 Cylinder		30					
Anesthesia Workstation High End with accessories		5					
C Arm Machines flat panel		3					
Neumatic Torniquet		1					
Power Bone Drill Machine		1					
Cautery Machines High End with accessories		5					
Plasma Sterilizer with accessories		5					
Harmonic Generator with accessories		5					
4K Laparoscope with hand instruments and accessories		5					
Cautery Pad with cautery machine with accessories		5					
Debrither with Microdrill with accessories		5					
Smoke Evacuator with accessories		5					
LSCS Set of 58 Instruments		9					
Laparatomy set of 83 Instrument		12					
MTP Set of 15 Instrument		9					
Trachestomy Set of 20 Instruments		12					
Eye surgery Set of 43 Instruments		6					
Abdominal Tubectomy set of 63 Instrument		9					

Abdominal Hysterectomy Set		9					
Vaginal Hysterectomy Set		9					
STSG Set		12					
Delivery kit set of 20 instruments		9					
VASECTOMY SET of 2 Instrument		12					
Post Martum Kit		6					
Chalazion set of 25 Instruments		6					
Ortho Instrument Set		6					
ENT Set 32 instruments		4					
Automated System to Treat Liquid medical Waste		5					
Needle Cum Syringe Destroyer		150					
Three Segment Waste Segreegation Trolley		50					
Sharp Container		1000					
Three Bucket System for Cleaning		50					
Waste Transportation Trolley		20					
Autoclave 4 Drum		6					
Three seater Chair		100					
Cupboard		50					
Medicine Rack		50					
Instrument Cabinate		50					
Bedside Screens		100					
Oxygen Cylinder Trolley		10					
Video Laryngoscope		4					
Cough Assisst Machine		3					
Blood Warmer		10					
PFT Machine		2					
Flow Meter with Spanner		100					
Patient Warmer		10					
MTP High Suction Machine		10					
Emergency Hydraulic Trolley		18					
Biomedical Waste Bucket		912					
Lead Apron		20					
Digital X Ray Cassette 8x10		5					
Digital X Ray Cassette 10x12		5					
Digital X Ray Cassette 14x17		5					
Digital X Ray Cassette 11x14		5					
X Ray Films 8x10		25					
X Ray Films 10x12		25					
X Ray Films 14x17		25					
X Ray Films 11x14		25					
Ambu Bag Adult kit		32					
Ambu Bag Pediatrict kit		40					
Rapid test kit		1					
Micro Pipettes		1					

Ambu bag neonatal		42					
Total							

Total tender price (in words.....)

The price should be quoted only in Indian currency Note:

In case of discrepancy between unit price and total price, the unit price shall prevail. Only total landed cost per unit considered for rate comparison **(column No.7)**

L1 will be decided based on price entered in https://mahatenders.gov.in. **site.**

Signature of the Tenderer

Name

Designation

Business address

To be uploaded in the form of Excel

Annexure XVII: PART II

(Statement showing comparative prices offered by the tenderer in other tenders of the same product)

ONLY FOR ADDITIONAL INFORMATION AS TO RATES OFFERD BY THE TENDERER IN VARIOUS OTHER TENDERS.

Please mention quoted rates of above item of different years for All equipments

Sr. No.	Financial Year	Unit	Unit Price offered in other Bids/ Tenders/Rate contracts (in Rs.)
1.	**2022-23**		
2.	**2023-24**		
3.	**2024-25**		

Additional rows for information of other years can be inserted.

Signature

Seal

Annexure-XVIII Checklist

1.Make and Model with country of origin

Sr. No.	Equipment Name	Make	Model	Country of Origin
1	Thermometer			
2	Examination Light			
3	Height Measurment Scale Wall Mounted			
4	Stethoscope			
5	Weighing Machine Adult			
6	Weighing Machine Pediatric			
7	LED Torch			
8	Sphygmonometer			
9	Otoscope			
10	Tuning fork			
11	Hammer			
12	Tounge Depressor			
13	Examination Table with IV Stand Foot Step			
14	Revolving Stool			
15	LED X-Ray Viewing Box			
16	Fetal Doppler			
17	Fetal Monitor			
18	Fetoscope			
19	Infantometer			
20	Stadiometer			
21	100 M.A X-Ray Machine (Mobile)			
22	ECG Machine			
23	Colour Doppler Ultrasound Machine with 4 Probes: Abdomen, Pediatric			
24	Ultra-Sonogram (obs & gyne)			
25	Portable Ultrasound			
26	EMG Machine			
27	ECHO Machine			
28	Lead Partition			
29	OT Table			
30	OT Light			
31	Laryngosocpes with Blades			
32	Crash Cart Trolley			
33	Medicine Trolley			
34	Surgical Scrub			
35	Anesthesia Workstation			
36	Suction Machine (Electrical)			
37	Autorefractor Keratometry			
38	Digital Lensometer			
39	Non Contact Tonometer			
40	Slitlamp			

41	Digital Phoraptor			
42	Operating Microscope			
43	Operating Microscope Basic			
44	Pheco Machine			
45	Yag Laser			
46	IOL Master			
47	crossmatch workstatation			
48	Centrifuge			
49	Tube Sealer			
50	Blood Collection Monitor			
51	Doner Coach			
52	Blood bank Refrigerator			
53	Plasma Freezer -80 Degree			
54	Plasma Extractor			
55	VDRL Shakar			
56	Blood Bank Centrifuge 12 Bucket			
57	Composcale			
58	Hand Stripper			
59	Platelet Agitator with Incubator			
60	Portable donar chair			
61	Calorimeter			
62	Elisa reader and washer			
63	Semi Auto analyzer			
64	Electrolyte Analyzer			
65	Reagent Refrigrator			
66	Fully Automatic Biochemistry Analyser High End			
67	Tube Lebling Analyzer			
68	Advance 5 part cell counter with autoloader			
69	Cell Counter			
70	ESR Analyzer			
71	Binocular Microscope			
72	Coagulation Analyzer			
73	HBA1C Analyzer fully automatic			
74	Biosafety Cabinate			
75	Microtom			
76	Tissue processor			
77	Embeding system			
78	Slide stainers			
79	Cytocentrifuge			
80	Grossing station			
81	RTPCR analyzer			
82	Nucleic acid extraction system			
83	Gel documentation system			

84	Laminar flow hood			
85	Deep freezer -20			
86	Deep freezer -80			
87	Chemiluminescence immunology analyzer clia			
88	Incubators			
89	Water Bath for Serology			
90	Hot Air Oven			
91	Rotor/Shaker			
92	Time stop watch			
93	Alarm Clock			
94	HB Meter			
95	PH Meter			
96	Dental Chair with Accessoriess			
97	Dental Xray Machine with RVG			
98	BP Apparatus			
99	Defibrillator			
100	Video Bronchoscope			
101	Audiometer			
102	Tympanometer			
103	Berra Machine			
104	ENT Head light			
105	OAE Screeing Machine			
106	Moterized Labor Table			
107	Infant Weighing Scale			
108	Neonate Pulse Oxymeter Table Top			
109	Vacuum Extractor			
110	Beds with foam Mattress			
111	Bed side Locker Delux			
112	SpO2 Monitor			
113	Nebulizer Ultrasonic			
114	IV Stand			
115	Over Bed Table			
116	Motorized ICU Beds			
117	Syringe Infusion pump			
118	Multipara Monitor with Stands			
119	Strecher on Trolley			
120	Pediatric ICU Beds			
121	Pulse Oximeter with Pediatric Probe			
122	Pediatric Ventilator			
123	ABG Machine			
124	Portable LED Standing Lights			
125	Foot Operated Suction Machine			
126	Bilirubinometer			
127	Bubble Cpap			

128	High Flow Nasal Machine			
129	Open Care Radiant Warmer			
130	Phototherapy Single Surface LED			
131	Transport Incubator			
132	Oxygen Hood			
133	Pulse Oximeter Table Top			
134	Cardiac Markar			
135	Glucometer			
136	Dressing Drum small			
137	Dressing Drum Medium			
138	Dressing Drum Large			
139	Instrument try Small			
140	Instrument try Medium			
141	Instrument try Large			
142	NO2 Cylinder			
143	CO2 Cylinder			
144	Anesthesia Workstation High End with accessories			
145	C Arm Machines flat panel			
146	Neumatic Torniquet			
147	Power Bone Drill Machine			
148	Cautery Machines High End with accessories			
149	Plasma Sterilizer with accessories			
150	Harmonic Generator with accessories			
151	4K Laparoscope with hand instruments and accessories			
152	Cautery Pad with cautery machine with accessories			
153	Debrither with Microdrill with accessories			
154	Smoke Evacuator with accessories			
155	LSCS Set of 58 Instruments			
156	Laparatomy set of 83 Instrument			
157	MTP Set of 15 Instrument			
158	Trachestomy Set of 20 Instruments			
159	Eye surgery Set of 43 Instruments			
160	Abdominal Tubectomy set of 63 Instrument			
161	Abdominal Hysterectomy Set			
162	Vaginal Hysterectomy Set			
163	STSG Set			
164	Delivery kit set of 20 instruments			
165	VASECTOMY SET of 2 Instrument			
166	Post Martum Kit			
167	Chalazion set of 25 Instruments			
168	Ortho Instrument Set			
169	ENT Set 32 instruments			

170	Automated System to Treat Liquid medical Waste			
171	Needle Cum Syringe Destroyer			
172	Three Segment Waste Segreegation Trolley			
173	Sharp Container			
174	Three Bucket System for Cleaning			
175	Waste Transportation Trolley			
176	Autoclave 4 Drum			
177	Three seater Chair			
178	Cupboard			
179	Medicine Rack			
180	Instrument Cabinate			
181	Bedside Screens			
182	Oxygen Cylinder Trolley			
183	Video Laryngoscope			
184	Cough Assisst Machine			
185	Blood Warmer			
186	PFT Machine			
187	Flow Meter with Spanner			
188	Patient Warmer			
189	MTP High Suction Machine			
190	Emergency Hydraulic Trolley			
191	Biomedical Waste Bucket			
192	Lead Apron			
193	Digital X Ray Cassette 8x10			
194	Digital X Ray Cassette 10x12			
195	Digital X Ray Cassette 14x17			
196	Digital X Ray Cassette 11x14			
197	X Ray Films 8x10			
198	X Ray Films 10x12			
199	X Ray Films 14x17			
200	X Ray Films 11x14			
201	Ambu Bag Adult kit			
202	Ambu Bag Pediatrict kit			
203	Rapid test kit			
204	Micro Pipettes			
205	Ambu bag neonatal			

2.Documents Checklist

Sr. No.	Documents	Submitted	Not Submitted
1	Tender Fees		
2	EMD		
3	Legal Entity Document		
4	Manufacturer/Importer/Authorized Distributor		

5	Manufacturer's Authorization (Annexure XIV)		
6	Manufacturing License		
7	DPIIT (Foreign Border)		
8	Product used in country of origin		
9	Import Export Certificate for imported equipments		
10	Affidavit of import for last three years imported equipments		
11	Letter comprising Technical Bid (Annexure 1)		
12	Pre-qualification compliance (Annexure II)		
13	Proforma for Production and sale Statement (Annexure III)		
14	Annual Turnover and positive net worth Certificate (Annexure IV)		
15	Supply orders in past 3 years (Govt/State/Pvt)		
16	Details of Manufacturing Unit (Annexure V)		
17	Production capacity		
18	Non-Blacklisting affidavit (Annexure VII)		
19	Mandate Form (Annexure VIII)		
20	Power of Attorney (Annexure IX)		
21	Technical Specifications (Annexure X)		
22	Technical Compliance (Annexure XI)		
23	Brochure / Product Literature		
24	Delivery Place Acknowledgement (Annexure XII)		
25	Self-Declaration Affidavit (Annexure XIII)		
26	Two Service Centres in Maharashtra		
27	GST Registration		
28	PAN		
29	MSME Certificate		
30	EM II for medium Enterprises		
31	BIS/CE/USFDA certificate		
32	CDSCO		
33	ISO 13485		
34	Installation Prerequisites		