



NATIONAL HEALTH MISSION

Government of Meghalaya

No. DHS/MCH&FW/NHM/Civil & Eqpts/120/2022/ 3321
29.11.2022

NOTICE INVITING TENDER

Sealed Tenders in a Two Bid System along with affixed court fee stamp of Rs. 2000/- is invited by the Mission Director, National Health Mission, Meghalaya from registered firms for following works on Turnkey Basis:

- A. Construction of Baljek Integrated Health Complex in Baljek on Turnkey Basis, West Garo Hills District.
- B. Construction of Integrated Public Health Laboratory (IPHL) at Pasteur Hills on Turnkey Basis, Shillong, East Khasi Hills, District.

Technical & Financial Evaluation of the Tender Documents would be evaluated by a Tender Committee duly constituted the Mission Director, Meghalaya.

Detailed tender papers may be obtained from the O/o Mission Director, National Health Mission, Meghalaya_ or downloaded from nhmmeghalaya.nic.in

1. **Cost of Tender Documents:-** Rs. 2000/- in demand draft in favor of Mission Director, National Health Mission, payable at Shillong. If tender document is obtained from the office of the undersigned. No tender fee required if bidder download the tender document from the NHM website.

Name of the Work:-

- A. Construction of Baljek Integrated Health Complex in Baljek on Turnkey Basis, West Garo Hills District.
- B. Construction of Integrated Public Health Laboratory (IPHL) at Pasteur Hills on Turnkey Basis, Shillong, East Khasi Hills, District.

3. **Details of Work:-** Construction of 50 Bedded Field Hospital (RCC Framed Structure) (Baljek), Construction of Critical Care Block (RCC Framed Structure) (G + 1) (Baljek), Construction of Critical Care Block (RCC Framed Structure) (RCC Single Storied) (Baljek), IPHL Block (RCC Framed Structure) (Single Storied Assam Type) (Baljek), Construction of Integrated Public Health Laboratory (IPHL) Block (Shillong), Site Preparation, Supply of equipment sand furnishing of respective centres.

4. **Time of Completion:-** 18 Months

5. **Date or downloading/obtaining the Tender Documents:-** 24th/11/2022

6. **NHM website:** nhmmeghalaya.nic.in

6. **Pre-bid meeting:** 02nd/11/2022 at 3:00pm in the office of the NHM, Shillong and pre-bid query should mail to bryanraphaeldon@gmail.com on 01st/Dec/2022 by 2:00pm positively.

7. **Last date and time for submission of Tender Document:-** 16th/Dec/2022

8. **Tender opening date and time:-** 16th/Dec/2022 at 1:00pm

9. **Approx Tender Value:-** 32 Crores

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Note:

1. The Mission Director, National Health Mission, Meghalaya reserves the right to accept or reject all tender without assigning any reason thereof.
2. Any changes or any further notification in respect to the above Tender documents shall be made available only at the above mentioned website. Hence respective bidders are advised to visit the website regularly for the above purpose.
3. A soft copy of the Annexure-XII, Annexure-B & Annexure-B/II should be provided along with the relevant sealed cover.

**Mission Director
National Health Mission**

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The document is digitally approved. Hence signature is not needed.



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To,

The Mission Director,
National Health Mission,
Meghalaya

Tender for the Work: -

- A) Construction of Baljek Integrated Health Complex in Baljek on Turnkey Basis, West Garo Hills District.
- B) Construction of Integrated Public Health Laboratory (IPHL) at Pasteur Hills on Turnkey Basis, Shillong, East Khasi Hills, District.

Sir,

I/We submit here under the following documents duly attested for favor of your consideration.

1. A Valid company/Firm registration certificate
2. A Valid Trade License Certificate from concerned District council, Meghalaya for Non Tribal firm
3. A Valid GST Registration certificate
4. PAN/TIN Card of the firm or of the person in whose name the Proprietorship, Firm etc. is registered under.
5. Court fee stamp of required amount.
6. Attested Passport size Photograph of the Contractor.
7. Latest attested Income tax Clearance Certificate.
8. Latest attested GST Returns.
9. Latest attested Professional Tax Clearance certificate for the year
10. Schedule Tribe/caste certificate.
11. The Power of Attorney in Original or in court certified copies.
12. Attested copy of Class I Contractor Registration/Renewal letter for 2022-2023
13. Latest attested copy Electrical License & Labour License.
14. Money receipt in Original for purchase of tender papers, if applicable
15. Audited Balance Sheet for the last 5 (Five) years by Chartered Accountant.
16. Original copy of Banker's Solvency Certificate
17. List of Machineries such as Concrete Mixtures, Vibrators, Pumps, Trucks etc with supporting documents.
18. Undertaking from a qualified engineer along with verification of qualification and permission from the Government in case of retired Government Engineer to be employed in this work failing which the tender is liable for cancellation.
19. Attested copy of Construction and Supply Work Orders.
20. And all other document required as per the terms and conditions of the detailed N.I.T.

I/we have gone through the terms and conditions of the detailed N.I.T and agreed to abide by the proposed terms and conditions. I/We therefore sign and return the tender documents in Original in sealed cover A

Yours faithfully,

Enclosed:-Tender document in original and all relevant certificates.

Dated _____

Signature of Contractor/firm

Name in block letter _____

Registration No. _____

Labour License No. _____ valid up to _____

Electrical License No. _____ valid up to _____

Complete Postal Address _____

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A. ELIGIBILITY CRITERIA:-

1. All Annexure should be duly filled and complete in all respects.
2. Submission of EMD amount shall be 2% of Tender Value in case of Non-Tribals/ Firms & 1% in case of Tribal Contractors having valid SC/ST certificate in the form of Demand Draft/BG/FDR in favor of Mission Director, National Health Mission, Meghalaya. EMD should be valid for a minimum period of 180 days from date of Tender opening.
3. In Addition to the above, the bidder should furnish the following:-
 - i. A Valid company/Firm registration certificate
 - ii. A Valid Trade License Certificate from Concerned District council, Meghalaya or Non Tribal firm
 - iii. A Valid GST Registration certificate
 - iv. PAN/TIN Card of the firm or of the person in whose name the Proprietorship, Firm etc. is registered under.
 - v. Court fee stamp of required amount.
 - vi. Attested Passport size Photograph of the Contractor.
 - vii. Latest attested Income tax Clearance Certificate.
 - viii. Latest attested GST Returns.
 - ix. Latest attested Professional Tax Clearance certificate for the year
 - x. Schedule Tribe/caste certificate.
 - xi. The Power of Attorney in Original or in court certified copies.
 - xii. Attested copy of Class I Contractor Registration/Renewal letter for 2022-2023
 - xiii. Latest attested copy Electrical License & Labour License.
 - xiv. Money receipt in Original for purchase of tender papers, if applicable.
 - xv. Audited Balance Sheet for the last 5 (Five) years by Chartered Accountant.
 - xvi. Original copy of Banker's Solvency Certificate
4. Affidavit to be submitted on Non-Judicial Stamp paper attested by Public Notary that there is no vigilance/ CBI case or arbitration cases pending.
5. The Applicant should Provide accurate information on any pending litigation or arbitration resulting from completed or under execution over the last 5 (five) years. A consistent history of awards against the applicant or any partner of a joint venture may be liable for rejection of the bid.
6. The tenders received after the due date and time specified or unsealed or incomplete, or by facsimile or email will be summarily rejected.
7. Bidder average annual turnover for the last 5 years should be minimum 80% of the Tender Value.

B. SUBMISSION OF TENDER:

The tender shall be Submitted in the following order: -

1. The Pre-qualification Bid/ Technical Bid shall be super- Scribed "SEALED COVER A" and shall consist of the following: -
 - 1.1 A covering letter from the tender.
 - 1.2 A list of documents accompanying the Tender.
 - 1.3 Tender fee if Tender document is obtained from the office of the undersigned.
 - 1.4 Tender document duly filled and signed by the authorized person in all pages.
 - 1.5 Duly executed power of Attorney in case of partnership/ firm.
 - 1.6 Latest attested copies of Labour license, Electrical license, GST Clearance, Income tax clearance, PAN card and professional Clearance certificates.
 - 1.7 Detailed outline report on the tender's methodology for execution of the work with a note on his Program work.
 - 1.8 Certificate and proforma as required in the detailed N.I.T document duly signed - list of past work already executed and work orders thereof is to be enclosed.
 - 1.9 Non-refundable Court Fee Stamps of ₹ 2000/- (Rupees Two Thousand Only.) only Purchased in hard copy has to be affixed in the tenders while submitting the same.
 - 1.10 The detailed N.I.T document duly signed on every page as a token of acceptance by the intending Bidder.
 - 1.11 Attested copy of the contractor's Photograph.
 - 1.12 Relevant OEM Authorization as per Annexure IX

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Office of Mission Director, National Health Mission

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Directorate of Health Services, Health Complex, Upper New Colony, Laitumkrah, Shillong - 793003

Phone: (0364) 2504532 Email: nrhnmegh@gmail.com



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- 1.13 Compliance of Specification as per Appendix -II
- 1.14 Any other information required to be submitted in according with the detailed N.I.T document.
- 1.15 Audited Balance Sheet for the last 5 (five) years & Average Annual turnover to be indicated as per Annexure A (III)
- 1.16 Original copy of Banker's Solvency certificate.
- 1.17 Attested copies of past Work Orders
- 1.18 Affidavit to be submitted on Non-Judicial Stamp paper attested by Public Notary that there is no vigilance/ CBI case or arbitration cases pending
- 1.19 The Applicant should Provide accurate information on any pending litigation or arbitration resulting from completed or under execution over the last 5 (five) years. A consistent history of awards against the applicant or any partner of a joint venture may be liable for rejection of the bid.
- 1.20 Bidder Turnover for the last 5 years.

2. The Price bid/tender showing the total cost for of work shall be given separately in Annexure- B enclosed in the detailed N.I.T. The Annexure- B shall be detached from the detailed N.I.T document and shall be submitted in a separate sealed cover super - scribed "SEALED COVER B (RATES)".

2.1 The rates shall be quoted both in figure and in words. The discrepancy between the amount in figure and in words, the amount in words shall govern.

3. Both the **Sealed Cover A and Sealed Cover B** shall be submitted together in another cover.

3.1 The inner and outer envelope (Sealed Cover) Shall: -

3.1.1 Be address to the Mission Director, National Health Mission, Meghalaya

3.1.2 Bear the following identifications:-

3.1.2.1 Particular description of the work.

3.1.2.2 Name and complete postal address of the Bidder(s) to enable to return the unopened tender in case it is declared as received late or is otherwise, unaccepted.

4. The Mission Director National Health Mission, Meghalaya will not take any responsibility for non-Receipt or delay in receipt of detailed N.I.T.

5. RATES:

5.1 Rates for the work mentioned in the fore-going clauses are to be quoted on Annexure B. Rates quoted in words and figure shall be inclusive of all prevailing Taxes in the State of Meghalaya.

6. The Bidders shall prior to submitting this tender for the work, examine drawings, conditions of contract and the specification of work. They shall also inspect the site and satisfy themselves on their own as to the physical conditions prevailing at site, the nature, extent and practicability of the work existing access to the site, power supply and other facilities, The availability of different materials and their adequacy for the execution of the work, Labour and probable Site for Labour camp, stones, go-down etc. They shall take into consideration the local conditions, obstructions in work; if any over the entire period required for completion of the work. They shall themselves obtain the necessary information as to risk contingencies and the circumstances which may affect or influence their tender. Other change consequence on any misunderstanding of otherwise shall not be allowed after casting their tender.

7. The Bidders shall be deemed to have full knowledge of the site, whether he inspects it or not, Extra charge consequence on any misunderstanding or otherwise shall not be allowed.

C. GENERAL TERMS AND CONDITIONS (For Construction Works)

1. Bidders who meet the minimum qualification criteria will be eligible only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:-

Assessed available Bid Capacity = (A X N X 2 - B)

Where,

A = Maximum value of works executed in any 1 (one) year during the last 5 (five) years (updated to 2022-23 price level) taking into account the completed as well as work in progress.

N= Number of years prescribed for completion of the works for which bids are invited.

B= Value at 2022-23 price level of existing commitments and on - going works for which bids are invited)



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Note: The statements showing the value of existing commitments and on-going works as well the stipulated period of completion remaining for each of the works listed should be countersigned by the engineer-in-Charge not below the rank of an Executive Engineer or equivalent.

2. For any clarifications the same may be obtained from the office of the Mission Director, National Health Mission, Meghalaya during office hours.

3. The Bidder must ensure that all copies of the documents to be submitted are duly attested.

4. All corrections, interpolations or cutting in these tenders must be attested in ink/dot pen by the Bidder or his authorize representative with his dated signature in ink/dot. No erasers should be used in the Tender.

5. Any tender containing any erasers or containing any corrections which are not in conformity with the above shall be rejected.

6. It will be obligatory for the Bidders to keep the offer of their tender valid for a period of 180 (One Hundred Eighty) days from the due date for receipt of tender. If any Bidder withdraws the tender before the said period makes any modification in the terms and conditions not acceptable to the departments, then the department shall without any prejudice to any other right or remedy is at liberty to forfeit the earnest money absolutely.

7. All works shall have to be carried out as per specification conforming to the latest relevant IS Codes/BIS and Specifications of Building work of P.W.D.

8. The rates to be quoted as per the P.W.D. Schedule of Rates for Plinth area, for the year 2021-22 and BOQ of Supply items thereof.

9. The agreement shall be subsequently drawn up in the P.W.D. F-2 form and this Detailed Notice Inviting Tender document shall form part of the agreement. The terms and conditions of these detailed tender documents shall supersede those of the P.W.D. F-2 form wherever the former are at variance with the latter.

10. The tender is liable to cancellations, if either the contractors himself or any of his employee is found to be a person who previously belong to gazette rank in any Governmental department but retired and has not obtained necessary permission from the government for such contractor's employment. Technically qualified and experienced person (s) as well be approved by the Engineer In-Charge Health Engineering Wing shall have to be kept at site by the contractor to supervise the work.

11. Canvassing in connection with the acceptance of the tender is strictly prohibited and is liable to disqualify the tender without assigning any reason thereof.

12. Joint Ventures (JV) shall not be permitted.

13. MATERIALS, PERSONNEL AND EQUIPMENT:

13.1 Constructions materials like cement and steel shall have to be procured by the contractor/firm themselves at their own arrangement. The constructions materials conforming to IS specifications shall be procured by the contractor/firm from any of the registered/authorized dealers/manufacturers. Documents proof of purchase like cash memo, sales Tax certificate, test report etc should be submitted to the Mission Director concerned for his necessary verification and subsequent acceptance/rejection which is final.

(a) HYSD Steel (Grade Designation 415) conforming to IS: 1786.) Yield stress F_y - 415;

(b) Cement Ordinary Portland cement conforming to IS: 269 and IS: 456

(c) Bricks - First Class Brick Conforming to IS Code.

13.2 The Contractors shall employ the key personnel and use the equipment identified in its Bid to carry out the functions stated in the Schedule or other personnel and equipment approved by the Engineer In-Charge Health Engineering Wing shall approve any proposed replacement of key personnel and equipments only if their relevant qualifications or characteristics are substantially equal to or before than those proposed in the bid List of Key Equipment as per Annexure- VII.

14. STORAGE:

14.1 Materials required for the work shall be procured by the contractor and shall be stored by the contractor only at approximately and safe places, storage and safe custody of the materials shall be the responsibility of the contractor. If during construction, it becomes necessary to preserve or shift the stored materials, shed, workshops etc to facilities construction of the building or the approach roads, the contractors shall have to do so at his own cost as directed by the Engineer in Charge.

14.2 The contractor shall exercise utmost care while using an inflammable material so as not to endanger life and property and he/she shall be solely responsible for any and all damages resulting from the use of such materials. Further he/she shall identify the department and its

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officers and employment against any claim or liability arising out of accident or violation of any law, rules, orders etc enforces regarding use of such materials.

15. SAMPLING AND TESTING:

15.1 The contractor, using the field-Testing Laboratory Equipment shall conduct the following tests on construction materials: -

15.1.1 TESTING OF COARSE AND FINE AGGREGATE:

- 15.1.1.1 Sieve analysis as per IS: 2386 (Part-1) -1963
- 15.1.1.2 Deleterious materials as per IS: 2386 (Part - II) - 1963.
- 15.1.1.3 Specific gravity, density, voids and absorption as per IS: 2386 (Part - III) - 1963.
- 15.1.1.4 Soundness as per IS: 2386 (Part-V) - 1963.

15.1.2 TESTING OF COARSE AGGREGATE:

- 15.1.2.1 Aggregate crushing value as per IS: 2386 (Part-IV) - 1963
- 15.1.2.2 Elongation and flakiness index as per IS 2386 (Part-1) - 1963.

15.1.3 TESTING OF FINE AGGREGATE:

- 15.1.3.1 Silt content as per IS: 2386 (Part-1) - 1963.
- 15.1.3.2 Materials finer than 75 micron as per IS: 2386 (Part-1) - 1963
- 15.1.3.3 Organic impurities as per IS: 2386 (Part-II) - 1963
- 15.1.3.4 Bulking as per IS: 2386 (Part-III) - 1963.

15.1.4 TESTING OF CEMENT AS PER IS: 4031:

- 15.1.4.1 Fineness of cement by dry sieving.
- 15.1.4.2 Determination of soundness by le-chatelier method.
- 15.1.4.3 Determination of consistency and setting time.
- 15.1.4.4 Determination of compressive strength.

15.1.5 CONCRETE MIX DESIGN

15.1.6 TESTING OF FRESH CONCRETE:

- 15.1.6.1 Test for workability as per IS: 1199-1959
- 15.1.6.2 Determination of density, yield, cement factor and air content as per IS: 1199-1959
- 15.1.6.3 Casting of cubes as per IS: 516-1959
- 15.1.6.4 Test for water/cement ratio and concrete 28 days compressive strength in 15 minutes of any grade of cement, so that any concrete batch discharge from the mixer found sub-standard should not be allowed for placing.

15.1.7 TESTING OF HARDENED CONCRETE.

- 15.1.7.1 Compressive strength as per IS: 516-1959
- 15.1.7.2 Density

15.1.8 TESTING OF CONCRETE ADMIXTURES AS PER IS: 2645 AND IS: 9103

- 15.1.8.1 Workability test.
- 15.1.8.2 Permeability test by capillary absorption method
- 15.1.8.3 Setting time
- 15.1.8.4 Compressive strength
- 15.1.8.5 Bleeding.

15.1.9 TESTING OF BRICKS

- 15.1.9.1 Compressive strength as per IS: 3495 (Part-I) - 1976
- 15.1.9.2 Water absorption as per IS: 3495 (Part-II) -1976
- 15.1.9.3 Efflorescence as per IS: 3495 (Part-III)- 1976

15.1.10 TESTING OF TARFELT AS PER IS: 1322- 1982

- 15.1.10.1 Pliability test
- 15.1.10.2 Storage sticking test
- 15.1.10.3 Heat resistance test
- 15.1.10.4 Water absorption test

15.1.11 TESTING OF GLAZED TILES AS PER IS: 777-1970

- 15.1.11.1 Impact strength test
- 15.1.11.2 Water absorption test

15.1.12 TESTING OF MARBLE AS PER IS 1124-1974

- 15.1.12.1 Water absorption test .
- 15.1.12.2 Specific gravity test

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15.1.13 TESTING OF WOOD AS PER IS: 287-1973

15.1.13.1 Compressive strength

15.1.13.2 Moisture content

15.1.13.3 Density

Cost of all the field tests is deemed to be included in the Rates quoted by the contractor and nothing extra is payable. Routine tests shall be carried as per the requirement for quality control and as directed by the Engineer In-Charge Health Engineering Wing. Any test which cannot at the field lab and directed by Engineer In-Charge Health Engineering Wing, shall be got done from the approved laboratory.

15.2 The contractor shall at his own expense and without delay, supply to the Engineer In-Charge Health Engineering Wing samples/ cubes of materials proposed to be used in this work. The Engineer In-Charge Health Engineering Wing within 21 (twenty one) days of supply of sample/cubes or within such further period as may be required intimate to the contractor in writing whether samples are approved by him or not.

15.3 If samples are not approved the contractor shall forth with arrange to supply to the Engineer In-Charge Health Engineering Wing for his approval of fresh samples complying with the specification laid down with the Contract.

15.4 The Engineer In-Charge Health Engineering Wing shall be entitled to have test carried out as specified in the contract for any materials supply by the contractor other than that for which satisfactory proof has already been furnished, at the cost of the contractor and the contractor shall provide at his expenses all facilities which the Engineer In-Charge Health Engineering Wing may be required for the purpose.

15.5 If any tests other than those specified in the contract are required by the Engineer In-Charge Health Engineering Wing, the contractor shall provide all facilities required for the purpose and the charge for such tests shall be borne by the Department.

15.6 The cost of the materials consumed in tests shall be borne by the contractor in all cases.

16. DEFECTIVE MATERIALS:

16.1 All materials used in construction work without prior inspection (and where necessity testing) and without approval of the Engineer In-Charge Health Engineering Wing is liable to be considered un-authorized and defective.

16.2 The Engineer In-Charge Health Engineering Wing shall have full powers to remove any or all of the materials brought to the Site by the contractor but are not in accordance with the contract specification or do not conform in character or quality to the samples approved by him or do not conform to the relevant I.S./B.I. S specifications. In case of defaults on the part of the contractor in removing the rejected materials, the Engineer In-Charge Health Engineering Wing shall be at liberty to have them remove by other means at the cost of the contractor.

16.3 The Engineer In-Charge Health Engineering Wing shall have power to utilize proper materials at the site and he may ask the contractor to replace the rejected materials to maintain proper specification without compromising to the inferior quality of work.

17. PROGRAMME OF WORK/CONSTRUCTION:

17.1 Time is the essence of the contract and it shall be clearly understood that the contractor is bound to complete the work in all respects within the time period as specified vide clauses of the contract agreement.

17.2 The work shall be carried/executed as per the detailed Programme of Work drawn up by the Contractor/Bidder and submitted along with the tender/bid. The Programme of work shall give the forecast of the schedule dates of commencement and progress of the various construction stages of the work till completion as per the time allowed. It shall also indicate the time schedule for all preliminary arrangement, the contractor intend to make before starting the work. The progress schedule after modifications, if any during the progress of seeking the clarifications while examining the tender shall be form a part of the contract agreement. In absence in such programme of work, a detailed Programme shall be drawn up by the Engineer In-Charge Health Engineering Wing which shall be binding on the contractor and shall form a part of the contract agreement.

17.3 The progress schedule of work may be amended, as and when necessary by agreement between the Engineer In-Charge Health Engineering Wing and the contractor within the limitations of the contract agreement prior to the approval of the competent authority.

17.4 Any major changes in the Programme of Work shall be intimated by the contractor to the Engineer In-Charge Health Engineering Wing in writing and subsequently to be approved by the competent authority. Minor changes will only be recorded in work register which shall be maintained

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at the contractor's Site office throughout the period of execution of work, open for inspection by the Engineer In-Charge Health Engineering Wing or his representative.

17.5 The work may be carried out only during the day irrespective of Sundays and Holidays as considered by the contractor. For work on Sundays, Holidays and night, the contractor shall have to give prior notice in writing to the Engineer In-Charge Health Engineering Wing or his representative, so that Supervisory staffs can be deputed in time. The Contractor shall not be allowed to executed any permanent nature of work in absence of the supervisory staff of Engineer In-Charge Health Engineering Wing, no work shall be kept suspended for more than 48hrs (forty eight hours) on reason of inspection or delay in taking measurements.

18. PROGRAMME OF WORK

18.1 If any time during the progress of the work, the Engineer In-Charge shall be of the opinion that the Contractor is not executing the work with diligence, it shall be lawful on part of the Engineer In-Charge Health Engineering Wing in writing to call upon the contractor to complete the specified portion (s) of the work by a date to be appointed in the notice, and in case the contractor does not comply even after 1(one) Month notice in writing from the Engineer In-Charge Health Engineering Wing, the contractor will render himself to action as per clause.

19. EXTENSION OF TIME:

19.1 If the work (s) be delayed by: -

- 19.1.1 Force majeure, or
- 19.1.2 Abnormally bad weather, or
- 19.1.3 Serious loss or damage by fire, or
- 19.1.4 Civil commotion local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- 19.1.5 Delay on the part of other contractors or tradesmen engaged by the Government/Department, in executing work not forming part of the Contract, or
- 19.1.6 Non-availability of stores, which are the responsibility of Government to supply or
- 19.1.7 Any other cause which, in the absolute discretion of the authority is beyond the contractor's control, then upon the happening of any such event cause delay, the Contractors shall immediately give notice thereof in writing to the Engineer In-Charge Health Engineering Wing but shall never the less pursue constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of Engineer In-Charge Health Engineering Wing to proceed with the work.
- 19.1.8 Request for the necessity of extension of time, to be eligible for consideration shall be intimated by the Contractors in writing within 14 (fourteen) days of the happening of the event causing delay on the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 19.1.9 In any case, the accepting competent authority may give a reasonable extension of time for completion of the work which shall be intimated to the contractor by the Engineer In-Charge Health Engineering Wing in writing within 30 (thirty) days from the date of receipt of such request.
- 19.1.10 Formal request for extension of time for a specified period shall be submitted to the Engineer In-Charge Health Engineering Wing at least 6(six) months before the expiry of the contract period in proper form. The request for extension of time shall be accompanied with justifiable reasons for the request.
- 19.1.11 Extension of time shall also be advisable in the case of temporary suspension of the work order in writing by the Engineer In-Charge Health Engineering Wing.

20 SUB- LETTING OF CONTRACT:

20.1 The contract or any part therefore shall not be assigns, transfer, sublets (engagement of labour on a piece work basis or of labour with materials not to be incorporated in the work shall not be deemed to be sub-letting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the competent authority.



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21 SETTING OUT OF WORK:

21.1 The contractor shall be responsible for the true and proper setting out of work. Also, shall be responsible for proper maintenance of all references/existing structures etc and other evidences existing in the field required in connection with the setting out of work at the contractor's own cost till physical completion of all the items of the work or prior to that if agree to by the Engineer In-Charge Health Engineering Wing.

21.2 All such references etc established by the contractors shall be subjected to check and approval of the Engineer In-Charge Health Engineering Wing or his authorized representative at all times. Any variations notice in the work as a result of improper establishment or maintenance of these shall be at risk and expense of the contractor.

22 INSPECTIONS OF WORK:

22.1 The contractor shall either himself supervise the execution of the work or competent Site Engineer/ Technical expertise /Supervisory staff as per the supporting documents submitted by the contractor along with the Technical/ Pre-qualification bid and as approved by the competent Authority. If the Contractor fails to comply, then the Engineer In-Charge Health Engineering Wingshall have full power to suspend the execution of the work until such date a Technical expert is appointed subjected to the approval of the Engineer In-Charge Health Engineering Wing and the contractor shall be held responsible for the delay so caused to the work.

22.2 The Engineer In-Charge Health Engineering Wing or the Sub-Division officer or the officer In-Charge is to have at all times access to the works which are to be entirely under his control. The Engineer In-Charge Health Engineering Wing shall intimate or confirm his instruction to the contractor in respect of the execution of work in a "Work Site Order Book" and the contractor or his authorized representative shall confirm receipt of such instruction by signing relevant entries in his book. The contractor shall allow inspection of the register and other documents by the inspection officer and the Engineer In-Charge Health Engineering Wing or his authorized representative at any time.

22.3 One copy of the approved drawings furnished to the contractors, shall be kept by the contractor at the Site and the same shall be at all reasonable time available for inspections and for references by the Engineer In-Charge Health Engineering Wing

22.4 All works shall be subjected to examining and approval by the Engineer In-Charge Health Engineering Wing, no work shall be covered up or put out of view prior to such approval and the contractor shall give due notice to the Engineer In-Charge Health Engineering Wing or his authorized representative without unreasonable delay, attend for the purpose of inspection of the works.

22.5 Any other extra work (s) which is/are not included in the contract of work and agreement, such work (s) shall not be executed without prior information and approval of the competent authority in writing.

23 MEASUREMENTS AND RECORDS:

23.1 The Engineer In-Charge Health Engineering Wing shall ascertain and determined by measurement the quantum of work in accordance with the contract of agreement and as per specifications.

23.2 For measurement of any part of the work, the Engineer In-Charge Health Engineering Wing shall intimate the contractor who shall forthwith attend or send his authorized representative to assist the Engineer In-Charge Health Engineering Wing /authorized representative in taking measurement and shall furnish all particulars and details as required.

23.3 Should the contractor not attend neglect or decline to send his authorized representative, then the measurement taken by the Engineer In-Charge Health Engineering Wing or approved by him shall be considered as correct and accurate measurement of the work. Measurement taken jointly shall be with dated signature by both parties for each day of measurement. The quantum of work under additional items, if ordered and approved by the competent authority for execution shall be ascertained by measurement.

24 DISPUTE:

24.1 In case of any dispute, question or different etc which may arise between the parties of the contract, it has to be brought to the notice of the Mission Director National Health Mission whose decision shall be final, conclusive and binding to the contractor.

25 FINAL CERTIFICATE:

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25.1 Within 10(ten) days after the work is completed, the contractor shall intimate of such completion to the Engineer In-Charge Health Engineering Wing and subsequently within 30(thirty) days of receipt of such notice, the Engineer In-Charge Health Engineering Wing shall inspect the work and if there is no defect in the executed work, shall furnish the contractor a Completion Certificate indicating the date of completion. If however, there are defects in the work which in the opinion of the Engineer In-Charge Health Engineering Wing do not need re-construction and can be rectified, then a certificate may be issued indicating the date of completion defects to be rectified by the contractor as may require for rectification of defects.

25.2 No Certificate of completion shall be issued nor shall the work be considered as completed till the Site is finally cleared as provided for in clause of this document, Except for such materials and equipments which may be required for rectification of defects.

26 FINAL CLEARANCE OF SITE:

On completion of the work, the contractor shall clear and remove from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor (s) and cleaned off the dirt from all wood work, doors, window, wall, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof. If the contractor shall fail to comply with the possession for the purpose of the execution thereof. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, Engineer In-Charge Health Engineering Wing may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc, and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

27 DEFECT LIABILITY

27.1 The contractor shall be responsible to make good and remedied, at his own expenses with in such a period as may be stipulated by the Engineer In-Charge Health Engineering Wing any defect which may develop or may be noticed before the expiry of a period of 12 (twelve) months herein after referred to as the Defect Liability Period from the certificate of completion and intimate in writing of which shall be sent to the contractor in person or by registered post.

27.2 In the event whereby the contractor fails to rectify the defect or damage within the stipulated period as notified by the Engineer In-Charge Health Engineering Wing in his aforesaid notice, then the Engineer In-Charge Health Engineering Wing may rectify or remove or re-execute the work and replace with other materials/articles complained of as the case may be by other means at the risk and expenses of the contractor

28 CANCELLATION OF CONTRACT IN FULL OR PART:

28.1 If the contractor:

28.1.1 fails to complete the works or items of works with individuals dates of completion on or before the date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer In-Charge Health Engineering Wing/Competent authority; or

28.1.2 Commits default to complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is served to him in that behalf by the Engineer In-Charge Health Engineering Wing/competent authority; or:

28.1.3 If contractor at any time makes default in processing with the works or any part of the work with the due diligence and continues to do so after a notice in writing of 7 days from the Engineer In-Charge Health Engineering Wing/competent authority.

In such cases, the Competent/Accepting Authority without prejudice to any other right or remedy which may have occurred or shall occur thereafter by written notice cancel the contract in whole or in part.

28.2 The competent/Accepting Authority shall on such cancellation have power to:

28.2.1 Take possession of the site and any materials, constructional plants, implements, stores, etc, thereon and

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28.2.2 Carry out the incomplete work by and means at risk and expenses of the contractor.

28.3 On cancellation of the contract in full or in part, the Engineer In-Charge Health Engineering Wing shall determine what amount if any is recoverable from the contractor for the completion of the entire work and for the losses or damage suffered by the Department. In determining the amount, credit shall be given to the contractor for the quantum/value of the work, executed by him up to the time of cancellation, the value of contractor's, materials taken over and in-corporate in the work and use of machinery belonging to the contractor.

29 LABOUR REGULATION

29.1 The contractor shall employ skilled and experienced labourers in sufficient numbers to maintain the required rate of progress and quality to ensure workmanship or the degree specified in the contract and to the satisfaction of the Engineer In-Charge Health Engineering Wing. The contractor shall not employ in connection with the work any person(s) who is below 14 (fourteen) years of age. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act 1986. Failure to fulfill this requirement shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

29.2 The contractor shall furnish to the Engineer In-Charge Health Engineering Wing fortnightly the distribution return of the number and description by the trades of work in which people are employed on the work.

29.3 The contractor shall not employ labour or staff of doubtful integrity of the state. If anti-State or anti-social elements are employed by the contractor, the contract agreement will be cancelled and no claim whatsoever will be entertained for any use losses or damage.

29.4 For the purpose of all labour laws, the contractor shall be deemed as "Employer" in respect of the labourers employed by him for the contracted work. The department shall not take any liabilities whatsoever in this respect.

29.5 The contractor shall pay to the labourers employed by him adequate wages and shall be as per the rules and regulations framed by the Department/Government from time to time. The register of workmen and as register of wage-cum-muster roll shall be maintained and kept at the work Site.

29.6 The contractors shall see that sufficient numbers of technically qualified staffs are always at the site of the work during working hours, personally checking all the items of the work and paying extra attention to the specification and quality of work. For this purpose, the Bidder(s) contractor should mention their own technical qualification/qualified technical supervisory staff with experienced during submitting the tender as credentials

29.7 The Contractor shall have to provide Personal Protective Equipment's to their workers as per site/work requirements

29.8 As per the Notification No.1.C/BCWWC-25/2011/Pt-1/785-98 Dated 10th March 2016 from Labour Commissioner & Secretary, Meghalaya Building & Other Construction Workers Welfare Board, Shillong, the Contractor should furnish either a copy of applicable License/registration or proof of applying for obtaining labour license, registration with EPFO, ESIC & BOCW registration and to Register the labourers with the Meghalaya Building & other Construction Workers Welfare Board.

30 MATERIAL SOURCES:

30.1 Quarry for stones, sand, earth etc. has to be ascertained from the site and approved by the Engineer In-Charge.

30.2 The Bidder/contractor shall make their own independent investigation as to the availability as well as suitability of the various materials required for the construction subjected to the approval of the Engineer In-Charge

30.3 Payment of Forest Royalty on the forest products such as stone, sand, earth etc., will be recovered from the contractor's running bill. The rates of royalty shall be as per the prevailing rates of the State. However, recovery of the Forest Royalty will be exempted from those contractors who can furnish evidence that they have already paid the royalty at the time of purchase from the dealers/quarry owners and on such proof, no deduction will be made.

31 SPECIFICATIONS OF THE BUILDING:

31.1 The contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards to materials and otherwise in every respect strictly in accordance with the specifications. The contractor shall also conform exactly, full and faithfully to the

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design, drawings and instructions (in writing) in respect of the work signed by the Mission Director, National Health Mission, Meghalaya and 1 (One) copy of the detail drawing together with specifications, and instructions which can be downloaded from the NHM website nhmmeghalaya.nic.in shall be furnished free of charge to the contractor included in the standard specifications of Meghalaya Public Works Department or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

31.2 The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

32 GST (Goods and Service Tax), LABOUR CESS.

32.1 GST (Goods and Service Tax) and Labour Cess will be deducted from the Contractor's Running Bills as per latest Government Rates and Notifications.

33 List of Machineries such as Concrete Mixtures, Vibrators, Pumps, Trucks etc with supporting documents.

34 Undertaking from a qualified engineer along with verification of qualification and permission from the Government in case of retired Government Engineer to be employed in this work failing which the tender is liable for cancellation.

D. GENERAL TERMS AND CONDITIONS (For Equipment & Furnishing Supply and Installation)

1. Valid Authorization letter (Tender specific) mentioning the above Tender no. from the Relevant Manufacturer for supply & participation in Tender as per Annexure IX

2. High Quality Standards/ISO certificate and other certificates as specified in Appendix II.

3. If required, Qualified Bidders shall arrange a demonstration of the equipment, preferably in the office of Mission Director, NHM Meghalaya. The Bidder shall demonstrate the Equipment at office of Mission Director, NHM on date fixed by the technical committee duly constituted by competent authority. Failure to arrange for a demonstration on the given date may lead to cancellation of the bid. Cost of organizing such demonstration shall be borne by the bidder.

4. Tenders should be quoted only by the actual manufacturer or their authorized distributor. The bidder is responsible for the supply of stores.

5. The model of the equipment offered should not be obsolete /out of production for next 5 years.

6. Warranty period (Onsite Warranty including Spare Parts & Labour etc.)

13.1 Bidder and Manufacturer should give an undertaking stating that "The equipment being offered is the latest model as per the specifications and the spares for the equipment will be available for a period of at least 3 years after the warranty period.

13.2 Guarantee/warranty to the effect that before going out of production of spares parts, the manufacturers and/or Bidders will give adequate advance notice to the purchaser of the equipment so that the later may undertake to procure the balance of the life time requirements of spare parts.

13.3 The supplier warrants comprehensively for Onsite Warranty including Spare Parts & Labour etc. that the Equipment/Stores supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the Equipment/stores supplied under the contract shall have no defect arising from design, materials (except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications) or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied Equipment under the conditions prevailing in India

13.4 No conditional warranty like mishandling, manufacturing defects etc. will be acceptable

13.5 Comprehensive Warranty should be inclusive of all accessories and Turnkey work.

13.6 Replacement and repair will be under taken for the defective Equipment/Stores

13.7 Proper marking has to be made for all spares for identification like printing of installation and repair dates.

13.8 The firm will be required to warranty/guarantee that during the warranty period as well as during the service contract period, the equipment including the accessories will be maintained in good working condition for a period of 347 days out of a period of 365 days (i.e. 95% uptime).



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14 Undertaking from the manufacturer is required to assure that the items manufactured are complied with the specification mentioned in the tender.

15 Upon receipt of such notice, the supplier shall, within 48 hours on a 24 X 7 X 365 basis respond to take action to repair or replace the defective Equipment/Stores or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts,/Equipment/stores after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/Equipment/stores thereafter. The penalty clause for non- replacement will be applicable as per tender conditions mentioned above or as decided by the Mission Director, National Health Mission.

16 The Bidder hereby declares that the goods/equipment/stores/articles supplied to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and the particulars contained./mentioned in the clauses here of and the Bidder hereby guarantee/ warranty that the said goods /equipment / stores/ articles conform to the description and quality aforesaid. The purchaser will be entitled to reject the said goods/equipment/stores/articles or such portion thereof as may be discovered not to conform to the said description and quality as follows:-

16.1 Bidder should state categorically whether they have fully trained technical staff for installation/commissioning of the equipment and efficient after sales services.

16.2 It is specifically required that the Bidder will supply all the operating and service manuals along with blue-prints and drawings including circuit diagram of the equipment supplied as well as its components

16.3 If the supplier, having been notified, fails to respond to take action to replace the defect(s) within 48 hours on a 24 X 7X 365 basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier

16.4 During Warranty period, the supplier is required to visit at consignee's site at least once in 3 months commencing from the date of the installation for preventive maintenance of the Equipment/Stores.

17 Onsite GUARANTEE/WARRANTY inclusive of all Spares and Labour: - The bidder will give an onsite guarantee/ warranty for trouble free functions and maintenance of the equipments including spares and labour from the date of installation, commissioning and acceptance of the equipments.

18 Bidders are required to quote strictly as per specification of the equipment. Deviation to specification must be brought out clearly giving deviation statement in Annexure-XII.

19 The rates quoted by the successful bidder may be used for procurement of individual items in other hospital/institution across the state as and when required.

20 Additional features (in case of equipment), if any, should be listed separately in the offer.

21 The Firm should confirm that the equipment is brand New, is of latest technology and have facility for up gradation, if necessary

22 The minor nature in works like minor Electrical/Civil Works, if required for Equipment installation, will carried out and borne by the Successful bidder, and for this purpose no extra payment, what so ever will not be paid by Mission Director, NHM Meghalaya to any bidder.

Note: All bidders should quote equipment/items with following approved standards/requirement:-

- a) All equipment should be as per the approved quality standard.
- b) Manufacturer/Suppliers should have ISO certification for quality standards
- c) Manufacturer should have USFDA/CE certification.
- d) Quality Certificates as per product specification is to be provided.
- e) Electrical safety conforms to standards for electrical safety.
- f) All Literature (Log Book Maintenance Record/Troubleshooting/Operation Manuals etc.) supplied with each of equipment by Principal Manufacturer should be in Original
- g) All consumables required for installation and standardization of equipment should be supplied free of cost with Equipment.
- h) All required Training to the associated concerned staff at Client should be organized by the Bidder on his cost.
- i) As stated in the detailed specification of individual items in Appendix II.



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E. OPENING OF TENDER

1. **Bids will be open in two stages.**
 - 1.1 Sealed Cover A: Technical Bid
 - 1.2 Sealed Cover B: Financial/Price Bid
2. At the time of opening only first cover (Sealed Cover A) containing the Technical bid shall be opened at the first stage and the second cover (Sealed cover B) containing financial bid shall be opened after qualifying the Technical bid. The date, time and venue for second stage opening will be intimated separately by the Tender Inviting Authority (TIA) only to selected/qualified bidders
3. The tender document in Sealed Cover A will be opened by the Mission Director, National Health Mission Meghalaya or such officer as may be authorized on his behalf in the office of the Mission Director National Health Mission Meghalaya as mentioned in the NIT in the presence of the Bidder or their authorized representative as may be present. In case the above date is declared as holiday, the tenders will be opened on the following working days at the same time as stated above.
4. The Mission Director National Health Mission Meghalaya reserves the right to open or not to open the priced Bid in Sealed Cover B of any reason (s) thereof.
5. **Venue of Tender Opening:**
 - 5.1 **Office of The Mission Director, National Health Mission, Meghalaya,**
6. The validity of the tender shall remain valid for 180 Days from the date of opening of the tender.

F. GENERAL GUIDELINES:

1. **EMD Amount:**

Bidder needs to deposit the EMD Amount in the form of DD/FDR/Bank Guarantee in favor of "Mission Director, National Health Mission", Payable at Shillong and a copy of EMD in Sealed envelope should be submitted along with pre-qualification/technical documents in the Technical Envelope.

 - 1.1 The EMD shall be returned back to unsuccessful bidders within a period of eight (8) weeks from the date of execution of the agreement subject to the receipt of a written application addressed to the "Mission Director, National Health Mission, Meghalaya. The return of EMD shall not carry any interest Component.
 - 1.2 The EMD / Security Deposit shall liable to be forfeited in the following circumstance when the,
 - a) Tender is rejected due to failure to furnish the requisite documents in the proper format or giving any misleading statement or submission of false affidavit or fabricated does.
 - b) Party fails to sign the agreement for entering into contract in case the offer is accepted, due to any reason whatsoever.
 - c) Party fails to supply the goods/items as per the orders/ Rate Contract (R.C) placed by Mission Director, National Health Mission, Meghalaya. Within the delivery period so stipulated.
 - d) Party fails to replace correct the supplied materials pre-printed stationers declared to be wrong/ different from specification and RC holder/ successful bidder have to refund the cost of such goods.
2. **Instructions:**
 - 2.1 Please mention clearly on each sealed cover the annexure, meant for.
 - 2.2 The main cover should be addressed to the O/o Mission Director, National Health Mission, Meghalaya.
 - 2.3 The Bid should be dropped in the box provided for this purpose in the office of Mission Director, National Health Mission, Meghalaya.
 - 2.4 All documents submitted should be properly page numbered. Signed and should have appropriate and relevant contents.
 - 2.5 Index sheet of each document should be submitted for ease and fast documentations verifications.
 - 2.6 Bid documents that do not provide complete information and/or that are submitted after the above specified date or time shall be rejected
 - 2.7 Bidder should quote their prices in the schedule format supplied in this tender (Annexure B & B/II) form giving the breakup of prices. Tender received in any other form will not be entertained.

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3. SECURITY DEPOSIT:
 - 3.1 The Successful Bidders EMD will be retained as security deposit until the completion of the work/contract. The security deposit may be refunded on a receipt of written application addressed to The Mission Director, National Health Mission, Meghalaya.

4. Prices:
 - 4.1 The price offered in the tender should be as per the structure requested in the Tender document Annexure-B&B/II
 - 4.2 All Quotes shall be in Indian Rupees and duly attested in case of any corrections. All freight costs & Transit insurance are to be borne by the bidder.
 - 4.3 In case of imports, all duties and any other costs (foreseen or unforeseen) have to be borne by the bidder and to be clearly indicated in the quote.

5. Evaluation of Bids:
 - 5.1 Technical evaluation of the items tendered will be done by a Technical Committee constituted by the Mission Director, National Health Mission Meghalaya
 - 5.2 Specifications for each of the items will be as detailed in the respective Appendix I and II
 - 5.3 Tenders submitted with technical and commercial bid will alone be considered for evaluation.
 - 5.4 The commercial bids of Bidder who are successful in Technical Evaluation only would be considered.
 - 5.5 The decision of the Committee formed by Purchaser would be final.
 - 5.6 The criteria of award shall be QCBS and marks shall be allotted as mentioned below: -

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Sl. No.	Category	Description	Maximum Marks	Criteria
1	Work Experience	Previous Experience in Construction Works	15	Bidder having highest experience shall get full marks while others will get marks according to pro-rata basis.
2	Financial Competence	Financial data of the last three years in the format. Audited Balance Sheets, Profit & Loss Accounts Income Tax Clearance Certificate and Original Bankers Solvency Certificate also need to be enclosed.	15	1.Average Turn-over of last 5 years 80% of tender value or above – 5 marks 2.Net Profit positive for last 3 financial year – 5 marks 3.Bankers Solvency Certificate of above 50% of Tender Value- 5 marks.
3	OEM Authorizations	Authorization as per format shall be required by the bidder for quoting of the products.	15	If all Authorizations submitted by the bidder, it shall be awarded highest marks. However, if any authorizations are missing 5 points shall be deducted for each missing authorization.
4	Quality Certifications	In-case of Furnishing and Equipping Quality and Standard Certifications obtained by OEM and the product being offered as mentioned in the detailed specification.	20	If all specifications and certifications matched, bidder shall be awarded highest marks. However, if any certification is not available or specification is deviated 5 marks shall be deducted for every omission/ deviation.
5	Supply Experience	Previous Experience in Supply medical equipment or relevant items	15	Bidder having highest supply shall get full marks while others will get marks according to pro-rata basis.
*6.	Project Presentation	Detailed Project Presentation to the Department	20	Marks will be allotted to the bidders on the basis of their Presentation to the O/o Mission Director, NHM and it shall be based on the evaluation of the Department.
		Total	100	

*Presentation should contain the following points:

- ❖ Experience in relevant work
- ❖ Details of the project
- ❖ Presentation Time limit 10mins maximum.

Qualifying Marks for Technical Bids: 60/100 overall. Only commercial bids of those bidders will be opened whose score 60 marks or above. Further, for the purpose of determining of successful bidder, 70% weightage shall be given to the technical score and 30% weightage shall be given to financial proposal. The bidder with the highest Final Score shall be awarded the contract.

5.7 The rates quoted in this tender can be used for any future works of similar nature and can be awarded to the successful bidder as the case may be.

6. Quality Standards:

6.1 The Bidder/Manufacturers are to meet the approved Quality Standards or any other reputed standard by the Country of Origin. The evaluation would be done by the technical committee at the time of technical evaluation

6.2 During period of the contract, Bidder shall confirm to the approved quality standards wherever applicable and would be given priority over others.

6.3 Bidder should supply equipment/goods which comply with the approved quality standard failing which payment of the same will not be made.



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7. Sample Evaluations:

- 7.1 Samples whenever required, for valuation shall be provided by the Bidder at free of Cost.
- 7.2 The product should fulfill technical specification as per the approval quality standard or any other reputed standard by the Country of Origin.
- 7.3 In case bidder quoted more than one item for a particular item, during Technical round the Tender committee will select one item only according to quality satisfaction & the price bid of the selected item only shall be taken into account.
- 7.4 The Tender committee has the right to reject any sample in case the sample quality is found unsatisfactory and bidder has no right for any objection.

8. Quantity Division:

- 8.1 Each delivery schedule of requirement incorporate in the tender enquiry document will be ordered from the responsive successful bidder. However, it is the purchaser's decision to assess the capacity of the successful bidder to support the requirement.

9. Authority for signing Tender Documents:

- 9.1 A person signing the Tender Form or any document, forming pair of the contract on behalf of the Bidder, shall carry the authorization letter stating his/her authority to sign such documents from the respective organization.
- 9.2 Any Agent who is participating on behalf of a manufacturer shall have the Valid authorization Letter from the manufacturer to sell the goods in the area where the tender is meant for, without which the bid will not be considered as valid

10. Responsibility for Performance of Contract

- 10.1 The Bidder shall be entirely responsible for the performance of the contract in all respects in accordance with the terms and conditions as specified in the Contract. The Bidder shall not sublet, subcontract, transfer or assign the contract.

11. Quality Inspection:

- 11.1 For every unit supplied by the Bidder, the conformance to the Specifications mentioned in the Tender shall be established by the Bidder.

11.2 Bidder represents and warrants that it shall fully comply with all written quality assurance requirements or instructions of the Mission Director, National Health Mission, Meghalaya, and as amended from time to time at the sole discretion of the Mission Director, National Health Mission, Meghalaya. Bidder further represents and warrants that the Product supplied by the Bidder in strict compliance with all applicable central, state and local laws.

11.3 The Bidder shall maintain the highest standard of quality in the Product. Bidder shall follow and abide by all directions, requests, suggestions or instructions of Mission Director, National Health Mission, Meghalaya regarding the quality standards required by Mission Director, National Health Mission, Meghalaya in connection with the manner of Packaging, storage and delivery of the Product.

11.4 The Bidder shall facilitate in-process and/or Pre-delivery inspection by the Representatives of the Purchaser, as and when, the same is required by the Purchaser

11.5 Notification by Bidder-Incase of inspection at the Bidder's premises, notice in writing shall be sent by the Bidder, sufficiently in advance, to the Purchaser when the items to be supplied, are ready for inspection.

11.6 Rejections -At delivery, Mission Director, National Health Mission, Meghalaya in its sole discretion may reject any Product produced or manufactured by Bidder for any reason, including Non-compliance with standard quality or any other reputed standard, but not limited to defects, or failure to meet approved quality standards, etc.

11.7 Removal of Rejections - Any supplies inspected and rejected at the Purchaser's premises must be removed by the Bidder, within 7 days from date of receipt of intimation of rejection of supplies in case of indigenous Bidder & 8 days in case of foreign Bidder. If the rejected goods have already been paid for (partly or fully), the Bidder shall before removal of rejected goods, either deliver correct replacement goods at Purchaser's premises completely free of cost (including cost of goods, freight, taxes, duties etc) or refund the payment received as well as make full compensation for freight taxes, duties etc. Such rejected items shall lie at Bidder's risk from the time of such rejections and if not removed within the above time limit. The Purchaser shall have the right to dispose-off the said rejected materials as he may deem fit without any financial obligation to the Bidder.



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11.8 If found that the Successful Bidder is incompetent to complete the works as requested, in such a situation, the proposal may be reviewed for award of the contract to the next qualifying bidder or go for a fresh bid depending on the circumstance. No form of compensation shall be payable in any form whatsoever to the forfeited firm. In case it is decided to go for the next qualifying bidder, negotiation maybe considered to bring down their price nearer to the originally Evaluated or Lowest bidder

12. Bidders Responsibility:

12.1 Under any circumstances, no Bidder shall supply the goods, in which recycled materials are used /used-disposables to Mission Director, National Health Mission, Meghalaya. If Mission Director, National Health Mission, Meghalaya finds any such instance, it will lead to cancellation of Purchase Order and subsequent severe punitive (legal and financial) actions by Mission Director, National Health Mission, Meghalaya. However, all the consequential costs are to be borne by the Bidder to Mission Director, National Health Mission, Meghalaya.

12.2 The Bidder is responsible for the delivery of the goods in satisfactory condition and without any loss or damage at the final destination and until the same is actually received by the Purchaser at its works or other place of final destination. For this purpose, goods carried by the roadway or other carrier shall be deemed to be carried at the risk of the Bidder. If on inspection at final destination the Purchaser discovers any discrepancy, the Purchaser will be entitled (not-with-standing that the property of goods shall have passed on to the company) to refuse acceptance of the goods altogether and claim damages and/or cancel the contract and buy its requirement in the open market at the risk and cost of the Bidder, reserving always to itself, the right of forfeiture of any amount found due and payable or the deposit, if any, placed by the Bidder for the due fulfillment of the contract as also to recover any amount, if already paid.

13. Responsibility for proper packing, wherever required:

13.1 The Bidder shall be responsible for the items being sufficient and properly packed, for transport by rail/road/sea/air/ or any combination of the above, so as to ensure their being free from loss or damage on arrival at the destination.

13.2 In case if a bidder has got successful or more than one item, the supply shall be packed in lot, as per the instructions of Mission Director, National Health Mission, Meghalaya.

13.3 Marking of Packages, packing: Each package delivered under the contract shall bear the following:-

- 13.3.1 Name of the Bidder
- 13.3.2 PO Number
- 13.3.3 Consignee's name and address
- 13.3.4 Description and quantity of contents
- 13.3.5 Gross weight, Net weight,
- 13.3.6 Distinctive number or mark which is also to be shown, for the purpose of Identification, on the Bidder's packing list.
- 13.3.7 Govt. Supply, National Health Mission, Meghalaya

14. Delivery:

14.1 Timely delivery is the essence of the contract & must be completed as per the dates specified therein.

14.2 The Bidder shall deliver the items in strict accordance with the delivery terms indicated on the Purchase Order issued to the successful bidder.

14.3 Notification of delivery or dispatch in regard to each and every consignment shall be made by the Bidder to the authorities named in the Contract.

15. Risk Purchase:

15.1 If the Bidder fails to deliver the items either in full or in part, within the prescribed delivery period, the Purchaser shall be entitled at his option to take alternate procurement action, at the risk & cost of the Bidder for the unsupplied portion of the goods/items without cancelling the contract in respect of the items not yet due for delivery, or to cancel the contract based on progress of work, including items not due for delivery, and, if thought fit/necessary, to purchase the items at the risk and cost of the Bidder. The price differential in the case of higher cost to Purchaser, if any, shall have to be borne by the defaulting Bidder. Moreover, the defaulting Bidder shall have no claim over the quantity,



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which they

failed to supply.

16. Addendum & Corrigendum:

16.1 At any time prior to the date of submission of the Bids, the Tender Inviting Authority may, for any reason whatsoever, whether on his own initiative or in response to a clarification requested by prospective bidders, modify the Tender Documents by an act of amendment there after referred to as an Addendum for Addition & Corrigendum for Correction. All prospective bidders who have received the bid documents will be notified of the Addendum/ Corrigendum and that will be binding on them. In order to provide reasonable time to take the Amendment into account, the Tender Inviting Authority may at its discretion extend the date and time for submissions of Bids. The bidders should check for such amendments or Corrigendum on the NHM website. No separate intimation will be issued to them.

17. Ethics:

Any attempt by a Bidder to obtain confidential information. Enter into unlawful agreements with competitors or influence the committee or the Contracting Authority during the process of examining clarifying evaluating and comparing tenders shall make the tender submitted by that Bidder liable for rejection.

18. Quantity of Delivered Items:

18.1 If the quantity received by the Target Delivery date is less than the P.O Scheduled quantity, then the physical quantity received will be the quantity certified by the Purchaser.

18.2 If the quantity received is more than the P.O quantity, the excess quantity shall not be paid for, by the Purchaser.

19. Taxes, Duties and Levies:

19.1 Bidders must clearly mention their GST Registration in their offers and invoices.

19.2 GST shall be clearly mentioned in the offer indicating the applicable rates.

19.3 In case if there is a decrease in the Statutory Taxes/Duties/Levies, the same has to be passed to The Purchaser

20. Guarantee:

20.1 The Bidder must take the entire responsibility to supply the Quality-oriented products to Mission Director- NHM, Meghalaya. In case of distributors, the responsibility lies with the distributor to ensure the supply of right quality materials to Mission Director-NHM, Meghalaya.

21. Indemnity:

21.1 The Bidder shall at all times indemnify the Purchaser against all claims which may be made in respect of the items, for infringement of any right protected by Patent, registration of design or Trade Mark and shall take of accidents or damage which may occur or failure of the supply arising. The Bidder shall be entirely responsible for the sufficiency of all the means used by them for the fulfillment of the contract. Bidder shall agree to indemnify, defend and hold Mission Director, National Health Mission, Meghalaya and its Officers, Directors, Employees, its parent and assigns harmless from and against any and all liability, losses, damages, claims, liens, expenses or causes of action including, but not limited to reasonable legal fees and expenses that may be incurred by Mission Director, National Health Mission, Meghalaya, arising directly or indirectly out of, or in connection with, Bidder's violation or breach of any of the terms of this Agreement or any or commission to act by Bidder in violation of the Agreement. Mission Director, National Health Mission, Meghalaya Shall provide the Bidder with prompt written notice of any claim for which indemnification is sought and shall have the right to participate in the defense of any such claim.

22. Compliance of the Laws of the land:

22.1 The Bidder shall comply with all state and local laws and regulations shall obtain all necessary licensing for the operation of its business and shall further comply with all quality control standards promulgated by Mission Director, National Health Mission, Meghalaya from time to time.

23. Documentation requirement:

23.1 A Bidder has to submit the following documents along with the shipment.

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- 23.1.1 Invoice in original along with two additional copies, both duly signed and stamped by the Bidder,
- 23.1.2 Original packing list.
- 23.1.3 A copy of Purchase order raised by Mission Director, Nation Health Mission, Meghalaya

24. Product Withdrawal:

24.1 If it is deemed necessary any time by either Mission Director, National Health Mission, Meghalaya or Bidder or any local state, or central government agency or other authority to recall or withdraws the product produced by Bidder/ Manufacture and being Supplied to Mission Director, National Health Mission, Meghalaya, either as a result of failure of the Product or Bidder to strictly comply with Mission Director , National Health Mission, Meghalaya quality standard or any government health rule or regulation, or shall fail to comply with any other government authority or agency having jurisdiction, Bidder shall bear all cost and expenses incurred by it and/or in complying with the recall or withdrawal procedures, unless such recall or withdrawal is solely the result of the negligence or misuse by Mission Director , National Health Mission, Meghalaya.

24.2 If Bidder fails or refuses to promptly comply with the recall or withdrawal of the product upon request by the purchase, Mission Director, National Health Mission, Meghalaya shall take such action as it deems necessary to recall or withdraw the product and Bidder shall immediately reimburse for the costs and expenses incurred.

24.3 If the Product Supplied is not as per the specification on analysis of the samples by appropriate approved authority, then the rejection and available quantities have to be lifted back by the Bidder. All cost and consequences of such rejected quantities shall be borne by the Bidder.

25. Product Allocation and stocking:

25.1 In the event there is an emergency shortage of the product, as announced by Bidder or its designated representatives, Bidder shall stand ready to stock adequate quantities of the Product so that scheduled Bidder to Mission Director, Nation Health Mission, Meghalaya should not suffer for the full contract period. In an event of Bidder failing to supply the materials in order quantities and as per time schedules, Mission Director, National Health Mission, Meghalaya, reserves the right to produce the product of same of Bidder quality at same or higher price from an alternate supply source and any difference in cost of procurement shall be debited to the Bidder.

26. Trademarks:

26.1 The Bidder shall nor, without prior written consent of Mission Director, National health Mission, Meghalaya use the trademarks or service marks or sales marks of Mission Director, National Health Mission, Meghalaya in any manner whatsoever, unless, and then only to the extent, such use is authorized by mission director, National Health Mission, Meghalaya in writing and then only in accordance with Mission Director, National Health Mission, Meghalaya directions or specification.

27. Infringements:

27.1 The Bidder agrees to fully cooperate with Mission Director, National Health Mission, Meghalaya in the prosecution of any such suit against a third party and shall execute all papers, testify on all matters, and otherwise cooperate in every way necessary and desirable for the prosecution of any such lawsuit.

28. Governing Law; Dispute Resolution:

28.1 This Agreement shall be governed by, and construed in accordance with, the laws of the India; without regard to conflict of law principles, and under the jurisdiction of Meghalaya and language shall be English

29. Notice:

29.1 Any notice required to be given pursuant to this Agreement shall be in writing and delivered personally or by a nationally recognized overnight courier service, or mailed by certified or registered mail, return receipt requested, to the other party at its address as set forth at the top of this Agreement.

29.2 All such notices shall be effective upon delivery or upon refusal to accept delivery.

29.3 Either party may change the address to which notice is to be sent by written notice to the other in accordance with the provisions of this paragraph.

30. Miscellaneous:

30.1 If any term, clause or provision hereof is held invalid or unenforceable by a court of competent

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jurisdiction, such invalid or unenforceability shall not affect the validity or operation of any other term, clause or provision, and such invalid or unenforceable term, clause provision shall be deemed to be severed from the Agreement.

30.2 This Agreement constitutes the entire understanding of the parties, and revokes and supersedes all prior agreements between the parties, and is intended as a final expression of their agreement. It shall not be modified or amended except in writing signed by the parties here to and specifically referring to this Agreement.

30.3 Bidders or employees of bidder cannot claim or construed as employees of Mission Director, National Health Mission, Meghalaya.

31. Force Majeure:

If at any time during the validity of the Contract, the performance in whole or in part by either party of any obligation under this Contract shall be prevented or delayed by reasons of War, Hostility, Acts of Public Enemy, Civil Commotion(s), Sabotage, Fire(s), Flood(s), Explosion(s), Epidemic, Quarantine Restrictions, Acts of State or Acts of God, hereinafter referred to as eventualities, then the Contract period will get extended for the period of Force Majeure, provided Notice of the happenings of any such eventualities is given, supported by a certificate of appropriate authority or Chamber of Commerce by either party to the other within 15 days from the date of occurrence thereof. Neither party shall by reason of such eventualities be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance. Should one or both parties be prevented from fulfilling their contractual obligations by state of Force Majeure lasting continuously for a period of at least three months, the parties shall consult each other regarding further continuation of the Contract.

32. Dispute Redressal Committee:

All disputes can be addressed by amicable settlement by a committee constituted by Mission Director, National Health Mission, Meghalaya.

33. Declaration by the Bidder:

The Bidder shall be required to declare whether the proprietor or any partner of the firm or Director of their company as the case may be, has any relation to any employee working with the Purchaser and if so, give the name of the employee and the relationship.

34. Waiver:

Failure to operate or to enforce any condition under this Contract shall not operate as a waiver of the condition itself or any subsequent breach thereof.

35. Payment Terms:

Payment will be made after submission of running bills of the works and after inspection, acceptance and Receipts of the Goods. The bidder should submit the bills/invoices with a copy of photographs, delivery Challans and installations - duly acknowledged by the Purchaser and order copy with a satisfactory inspection report of the designated Technical Committee after Delivery duly signed and accepted should be submitted at Mission Director, National Health Mission, Meghalaya in original. Three copies of each document should be made and one copy handed over to the authority at the delivery site.

36. FALL CLAUSE:

The prices quoted for the material supplied under this tender by the Bidder shall in no event exceed the lowest price at which the Bidder sells or offers to sell similar material in similar volume of identical description to any person(s)/organization(s) including the Purchaser or any other Mission Director, National Health Mission, office located at any other place in India. If at any time during the said period, the Bidder reduces the sale price, sells or offers to sell such stores to any person(s)/organization(s) including the Purchaser or any Statutory Undertaking of the Central or a State Government, as the case may be, at a price lower than the price chargeable under this contract, he shall forthwith notify such reduction or sale or offer to sale to the Purchaser and the price payable under the contract for the material supplied after the date of coming into force of such reduction or sale or offer of sale stand correspondingly reduced.

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37. Blacklisted:

An Affidavit on a Non Judicial Stamp Paper of Rs. 10/-, attested by a Notary Public (In Original) that there is no vigilance / CBI Case or arbitration cases pending with the Government of Meghalaya or any State against the Form/Bidder that the Proprietor/Director/Members of the Board of Directors of the Bidder and the Principal Manufacturer on whose behalf they have quoted has never been blacklisted by any Institution (Government or Public).

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Appendix -I

1. GENERAL SPECIFICATION FOR BUILDING: -

S/No	DESCRIPTION	SPECIFICATION
1	Foundations	As per structural Design based on soil investigation.
(b)	Columns, Beams and Slabs	Rcc framed structure as per design
	Plinth Wall	350mm Thick stone masonry in Cement mortar 1:6
(c)	Floor	
(d)	Ground Floor	CC flooring over PCC1:4:8, and 100mm thick stone soling
(e)	Other's floor	
	Walls	250mm/125 mm thick Brick wall with cement mortar Plaster including distemping inside and outside over cement primer
(f)	Roof	Rcc slab as per structure design and roof treatment
	Window/Clerestory window	As per Architectural with aluminum casement windows and necessary fitting.
	Doors	First class Local wood Framed/ paneled/ factory made paneled/ Flush doors with necessary fitting
	Miscellaneous	Door Frame shutters window grill to be painted with one coat of primer and two or more coat of enamel paint of approved shade
	Height of plinth	450mm for Residential:750mm for Office Institutional/Public Buildings

II. DESCRIPTION AND QUANTITY: -

1. 50 Bedded Field Hospital (RCC Framed Structure) (Baljek)

S/No	Description	Unit	Quantity
1	Rcc Building (Two Storied)		
	Floor Height up to 3.30mtr		
(i)	Ground Floor	Sqm	1642.63
(ii)	First Floor (Assam Type)	Sqm	1424.61
2	EXTRA FOR		
(i)	For Tile	Sqm	
(ii)	For marble Flooring	Sqm	
(iii)	For Anodised Aluminum Windows & Doors	Sqm	3067.24
(iv)	For Plastic Paint	Sqm	
(v)	For weather coat s for External finish	Sqm	3067.24
3	Services		

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(i)	For Internal electrification	L/s	8.50 %
(ii)	For Internal Water supply & sanitary installation	L/s	8.50 %
4	Additional Rate for carriage of Building Materials (Beyond 8 Km)	L/s	

2. Critical Care Block (RCC Framed Structure) (G + 1) (Baljek)

S/No	Description	Unit	Quantity
1	Rcc building (Two Storied)		
	Floor Height up to 3.30mtr		
(i)	Ground Floor	Sqm	543.34
(ii)	First Floor (Assam Type)	Sqm	538.78
2	EXTRA FOR		
	Floor Height - 3.6 mtr.		
	For Extra for Every 300mm in Height of Building beyond normal Height of 3300 mm		
	Additional Height-3.6-3.3=0.3 mtr		
(i)	For Tile	Sqm	
(ii)	For marble flooring	Sqm	
(iii)	For Anodised Aluminum windows & Doors	Sqm	1082.12
(iv)	For plastic paint	Sqm	
(v)	For weather coat s for External finish	Sqm	1082.12
3	Services		
(i)	For Internal electrification	L/s	8.50%
(ii)	For Internal Water supply & sanitary installation	L/s	8.50%
4	Additional Rate for carriage of building Materials (Beyond 8 Km)	L/s	

3. Critical Care Block (RCC Framed Structure) (RCC Single Storied) (Baljek)

S/No	Description	Unit	Quantity
1	Rcc building (Single Storied)		
	Floor Height up to 3.30mtr		
(i)	Ground Floor	Sqm	171.65
2	EXTRA FOR		
	Floor Height - 3.6 mtr.		
	For Extra for Every 300mm in Height of Building beyond normal Height of 3300 mm		
	Additional Height-3.6-3.3=0.3 mtr		
(i)	For Tile	Sqm	
(ii)	For Anodised Aluminum windows & Doors	Sqm	171.65
(iii)	For plastic paint	Sqm	
(iv)	For Weather coat s for External finish	Sqm	171.65

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3	Services		
(i)	For Internal electrification	L/s	8.50%
(ii)	For Internal Water supply & sanitary installation	L/s	8.50%
4	Additional Rate for carriage of Building Materials (Beyond 8 Km)	L/s	

4. IPHL Block (RCC Framed Structure) (Single Storied Assam Type) (Baljek)

S/No	Description	Unit	Quantity
1	Rcc building (Single Storied) Floor Height up to 3.30mtr		
(i)	Ground Floor (Assam Type)	Sqm	696.00
2	EXTRA FOR Floor Height - 3.6 mtr. For Extra for Every 300mm in Height of Building beyond normal Height of 3300 mm Additional Height-3.6-3.3=0.3 mtr		
(i)	For Anodised Aluminum Windows & Doors	Sqm	696.00
(ii)	For Tile		
(iii)	For plastic paint	Sqm	
(iv)	For weather coat s for External finish	Sqm	696.00
3	Services		
(i)	For Internal electrification	L/s	8.50%
(ii)	For Internal water supply & sanitary installation	L/s	8.50%
4	Additional Rate for carriage of Building Materials (Beyond 8 Km)	L/s	

5. IPHL Block (RCC Framed Structure) (Single Storied Assam Type) (Shillong)

S/No	Description	Unit	Quantity
1	Rcc building (Single Storied) Floor Height up to 3.30mtr		
(i)	Ground Floor (Assam Type)	Sqm	696.00
2	EXTRA FOR Floor Height - 3.6 mtr. For Extra for Every 300mm in Height of Building beyond normal Height of 3300 mm Additional Height-3.6-3.3=0.3 mtr		
(i)	For Anodised Aluminum Windows & Doors	Sqm	696.00
(ii)	For Tile		
(iii)	For plastic paint	Sqm	
(iv)	For weather coat s for External finish	Sqm	696.00
3	Services		
(i)	For Internal electrification	L/s	8.50%

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(ii)	For Internal water supply & sanitary installation	L/s	8.50%
4	Additional Rate for carriage of Building Materials (Beyond 8 Km)	L/s	

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Appendix II

LIST OF ITEM WITH SPECIFICATION:

A. Hybrid (ICU/HDU-16 bed Unit)

1. MOTORIZED ICU BED4 SECTION WITH MATTRESS

Sl No	Specification
1.	Overall Size Should be (Approx.): 2140L × 1060W MM± 100mm (without mattress)
2.	Three section 1.2mm (18G) CRCA M.S perforated sheet top for easy breathing of mattress.
3.	Bed should have X-Ray permeable backrest with cassette holder.
4.	Bed should have dust protective wheel cover made up of ABS for both ends.
5.	Electrical adjustment: Backrest, knee rest, Trendlenburg/Reverse trendlenburg, Hi - Low, Auto CPR through wired Handset
6.	Raised Backrest Angle - 75°
7.	Raised Knee rest Angle - 30°
8.	Trendelenburg and reverse Trendelenburg should be 13° ± 2
9.	Height of bed should be adjustable 450mm-750mm ± 50 without mattress
10.	Bed frame made from 50mm × 30mm × 1.6mm (16G) Thick ERW tube shall have proper support.
11.	Should have one touch CPR Position & Emergency head down position Facility on attendant control panel.
12.	Individual locking of positions shall be allowed from the attendant control panel.
13.	ICU Bed should have moulded head and foot boards easily removable by hand without need of any tool.
14.	ICU Bed should have polymer moulded collapsible Railing on both side assisted by gas spring, should have angle indicator on side railings (inside as well as outside)
15.	ICU Bed should have four positions IV Pole of good quality SS Steel mounts to be supplied with outer converting tube with a knob to mount syringe pump.
16.	ICU Bed should have Urine bag hooks provided 2 on each side.
17.	ICU Bed should have central locking of castors. Twin wheels: the base frame will be fitted with non-rusting swivel castor wheels of 125mm dia.
18.	ICU Bed should have corner roller bumpers.
19.	ICU Bed should have mattresses of 40 density or better fit on the bed covered with PVC, foam should be plain and should have cube cut design.
20.	Should have manual backup system for head end elevation with dual side lever.
21.	Should be liquid ingress protection: IPX4 or better.
22.	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.
23.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
24.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
25.	ISO 13485 should be issued by NABCB accredited body.

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26.	Quoted Bed should be IEC 60601-1:2005, 60601-2-52:2009, EMI/EMS (60601-1-2) certified through any NABL approved Lab (relevant certificate should be attached).
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2. MANUAL BED 4 SECTION WITH MATTRESS

Sl No	Specification
1.	Overall Size (Approx.): 2170L x 980W x 550-730H MM (without mattress)
2.	Four section 1.2mm (18G) CRCA M.S perforated sheet top for easy breathing of mattress.
3.	Screw mechanism welded with ERW MS tube 31.75mm x 1.2mm.
4.	Backrest should have double support system beneath the mattress platform.
5.	Manual adjustment: Backrest, knee rest, Trendelenburg/Reverse Trendelenburg & Hi - low through screw systems individually manoeuvred by SS folding handles.
6.	Raised Backrest Angle - 75°
7.	Raised Knee rest Angle - 30°
8.	Trendelenburg/Reverse Trendelenburg: 7°/6°
9.	Bed frame made from 50mm x 30mm x 1.6mm (16G) Thick ERW tube shall have proper support.
10.	The bottom trolleys are provided 125mm dia non rusting twin castors, 2 with brakes.
11.	The bed has PP head & Foot panels detachable by hand without need of any tool.
12.	Four corner rubber buffers of 100 MM dia
13.	There are four locations on the bed platform to hold stainless steel Telescopic Saline rod 12mm dia with 19mm dia x 1.2mm (18G) stainless steel outer covering tube with a knob
14.	Collapsible Side Railings ; SS pipes attached to aluminium made side arms.
15.	Provided with four section mattress 4" thick PU Foam of 40 density covered PVC.
16.	Patient Working Load-125 kg.
17.	Safe Working Load-150 kg.
18.	Urine/ Drainage Bag Holder should be provided at both side of the bed.
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.	M.S tubular parts, linkages, flats are to be In-house, pre-treated and Epoxy powder coated with coating thickness 50 to 100 microns.
21.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
22.	ISO 13485 should be issued by NABCB accredited body.

3. BEDSIDE LOCKER

Sl No	Specification
1.	Overall Size: 410Lx410Wx840H mm.
2.	Drawer having inbuilt sliding channel connected from bottom (no ball bearing channels allowed). Should be provided with recess to serve as handle

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Office of Mission Director, National Health Mission

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3.	Locker box made from machine pressed 0.8mm CRCA M.S. Sheet. Should be provided with recess to serve as handle
4.	Fitted with single piece die pressed, Seamless, stainless Steel top with raised edges on three sides.
5.	Gap should be provided between the drawer and Cabinet unit for storage
6.	Legs frame made of 25mm square × 1.2mm thick CRC tube fitted with 2 pcs PVC stumps/ Rubber shoe in front and 2 pcs wheel at rear.
7.	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.
8.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
9.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
10.	ISO 13485 should be issued by NABCB accredited body.

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4. OVERBED TABLE

Sl No	Specification
1.	Overall dimensions should be 1000L x 435W x 825-1180H mm.
2.	The top should be made of ABS having size of 880L x 435W x 28H mm.
3.	Aluminium extruded telescopic section fitted with smooth gear mechanism for height adjustment
4.	It should have MS base frame covered with durable high impact ABS Base cover.
5.	For ease in mobility, it should have castors of 50mm dia.
6.	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.
7.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
8.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
9.	ISO 13485 should be issued by NABCB accredited body.

5. IV STAND WITH SS ROD AND CASTOR BASE

Sl No	Specification
1.	Adjustable height – 1395 mm to 2290 mm.
2.	Strong S.S 304 tubular diameter 31.75 mm x 1.2 mm (18 G) thick mounted on five pronged rectangular 20 mm X 40 mm X 1.6 mm (16 G) thick SS 304 tubular base.
3.	50mm diameter castor w/o brake.
4.	Saline Stand is provided with S.S 304 rod 12 mm diameter with 4 hooks , one Knob at side and PVC cap at bottom
5.	Weighing bearing capacity 5 kgs per Hook
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.



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6. BED SIDE STOOL

SI No	Specification
1.	Four legs base made of 25mm x 1.2mm SS Tubes thick fitted with PVC Stumps.
2.	Centre tube made of 38mm x 1.2mm SS tube
3.	Height adjustable by machine screw from 460mm to 655mm.
4.	Footrest ring support made of 16mm SSTube.
5.	300mm dia SS Top supported with 1mm MS Sheet.
6.	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.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

7. BIOMEDICAL WASTE BIN- SMALL SET OF 3

SI No	Specification
1.	Foot operated
2.	SS Frame (set of 3 pcs)
3.	20 Litre's
4.	Available in Red / Blue / Black / Yellow
5.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
6.	ISO 13485 should be issued by NABCB accredited body.

8. MULTI PARA MONITOR WITH CENTRAL STATION

SI No	Specification
1.	The Monitor should be for all three patient categories-Adult, paediatric and neonatal.
2.	The monitor should measure and display 5 Lead ECG, Respiration, Dual Temp, SpO2, NIBP, and Dual IBP & EtCo2 Monitoring.
3.	Monitor should have defibrillation protection, pacer detection, ST segment analysis of all leads simultaneously, QT/QTc and arrhythmia analysis feature. Machine should have at least 24 arrhythmia detection.
4.	Machine should have 24 hrs HR Summary including HR(max and min) and ST,QT
5.	Monitor should have Power Full Data Storage 120 Hours of graphical and tabular trends and 100 events storage and minitrends display on main screen up to 8 hours.
6.	The monitor should have highly visible, bright 12.1" LED/TFT display or More for easy viewing from distance.
7.	Machine should also have large font display to view from distance.
8.	The monitor should have View Other Bed Function without need of Central Station.



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9.	The Monitor should have USB Port to Allow to Transfer Patient data to a PC and user settings.
10.	Machine should also have VGA port to connect to slave display directly w/o need of additional convertor and should have Fan less design to prevent dust and contamination.
11.	There should be alarm limit setting for every parameter.
12.	Monitor should display at least 8 Wave Forms.
13.	The monitor should have oxy CRG monitoring.
14.	It should have drug dosage and hemodynamic calculation.
15.	Machine should have up minimum 4 hours battery backup with no external power supply module requirement for charging.
16.	Machine should have standard LAN connection for central station and option for wireless connection.
17.	Scope of supply should Include:
a.	5 lead ECG cable- 1 No
b.	NIBP cuff and cable for adult ,ped and neonatal- 1 No each
c.	Spo2-Adult and pediatric probe -1 No each
d.	Temp- esopharangeal/rectal probe 1 No.
e.	Cabinet for storing accessories.
f.	EtCo2 Sampling Kit with Water Trap – 2 Nos.
g.	IBP Extension Cable – 2 Nos.
h.	IBP Disposable Domes – 5 Nos.
18.	Monitor should have US FDA /European CE certified.

9. ICU VENTILATOR

Sl No	Specification
1.	Advanced microprocessor based time cycled volume constant pressure controlled ventilator with innovative features and upgradeable with software/ hardware for additional or future functions. <ul style="list-style-type: none"> o Suitable for Adult & Paediatric patients (20ml – 1500 ml) o Large touch-screen user interface of minimum 12.1inches touch (TFT Colour). Screen should be freely configurable.
2.	Ventilator should have Advance In-Built Turbine based technology for use.
3.	The ventilator should have the following ventilation modes as standard: <ul style="list-style-type: none"> o Volume Control with and w/o Assist o Pressure Control with and w/o Assist o SIMV – VCV o SIMC-PCV o CPAP with/without Pressure Support o BIPAP / Duopap/ Duolevel or equivalent - with/ without Pressure support o APRV – Airway pressure release ventilation o PRVC or equivalent - Pressure Regulated Volume controlled Ventilation o ATC – Automatic Tube compensation o NIV – Non Invasive Ventilation o Apnoea backup ventilation mode



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4.	<p>Should have settings for :</p> <p>Tidal Volume in Volume modes 20ml to 2000 ml</p> <p>Inspiratory Rate 1 - 150 bpm</p> <p>Inspiratory Time 0.1 - 10 sec</p> <p>Inspiratory flow 2 - 180 lpm</p> <p>Peak Inspiratory Pressure 1 - 100 cmH2O</p> <p>CPAP/PEEP 1 - 45 cmH2O</p> <p>Pressure support 0 - 100 cmH2O</p> <p>Rise time 0 - 2 sec.</p> <p>Flow Trigger 0.5 - 20 lpm</p> <p>Pressure Trigger -10 -0.5cmH2O</p> <p>FI02 21 - 100%</p>
5.	<p>Should have real time monitoring of:</p> <ul style="list-style-type: none"> o Pressure - Peak, Plateau, Mean, CPAP/PEEP o Tidal Volume - Set (Inspired) , Monitored (expired) o Minute Volume - expired, spontaneous, leakage o Frequency/ Rate - Set (Inspiratory), Spontaneous, Total , I:E Ratio o FI02 o Lung Mechanics - Resistance (Rinsp , Rexp) , Compliance (Static & Dynamic) o Lung mechanics indicators - NIF, RSBI, WOB o Special Manoeuvres - P0.1(Occlusion) pressure and Intrinsic (Auto) PEEP
6.	<p>Should have following alarm management including corrective help messages on the screen -</p> <ul style="list-style-type: none"> o High/low Pressure o High/low Minute Volume o High Rate o High Tidal Volume o Apnoea / apnoea alarm time o High/low O2 % (automatic settings) o Oxygen line failure o Compressed air failure o Electronic failure (with error code)
7.	Ventilator should have Optional Upgradable Facility with integrated EtCO2 & Spo2
8.	Ventilator should have all 3 type of waveform (Pressure, flow and volume) and all 3 types of loops (PV, VF and PF) monitoring
9.	Ventilator should have facility for quick start ventilation with help of IBW factor in emergency
10.	Ventilator should have inbuilt O2 therapy feature
11.	Ventilator should provide Servo controlled Humidifier with Adult , Pead & Neonates reusable auto cleavable patient with each one no.
12.	Ventilator should have integrated Inspiration synchronized Nebulizer facility
13.	Each ventilator should be supplied with Imported Modular corrosion free trolley and Hinged arm for support patent
14.	Ventilator should have Inbuilt battery back up for 60 min



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15.	Ventilator should be US FDA / European CE Approved with notified body. Certificate must be enclosed
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10. SYRINGE PUMP

SI No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation
4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml
5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus atuo/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility 5/10/20/30/50/60ml syringe with automatic recognition of size
9.	Machine should have battery backup minimum 6hrs to 12hrs
10.	Should have level of resistance to water and dust IP34
11.	Should be European CE/US FDA approved product

11. LARYNGOSCOPE

SI No	Specification
1.	Should be Single Use Video Laryngoscope
2.	Should Have Macintosh Blade for both Video & Direct Laryngoscopy.
3.	Should have an optical View in Variety of Light Conditions
4.	Should have a focal distance of 75mm
5.	Should have a resolution of 320H*240V Pixels
6.	Should have an viewing angle up to 120 degree
7.	Should have ISO and CE/USFDA Certificate.

12. THERMOMETER- INFRARED TYPE

SI No	Specification
1.	Non-Contact Infrared Forehead Thermometer.
2.	Large LCD 38 X 28 mm
3.	Measuring Localization; Forehead and Object Surface
4.	Measurement Range: Body mode 32.0°C ~43.0°C (89.6°F~109.4°F)
5.	Object mode: 0.0~100.0°C (32.0°F~212.0°F);

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6.	Temperature Unit: °C/°F (C & F Switchable)
7.	Display Resolution : 0.1°C/0.1°F
8.	Accuracy: +0.2°C/+0.4°F (within 36.0°C~39.0°C / 96.8°F~102.2°F)
9.	Automatic Power Off: In 1 minute
10.	Battery Life : Could be used for 500 times for normal condition
11.	Temperature : -20°C~+55°C / -4.0°F~+122.0°F
12.	Humidity: 15%~95% RH
13.	Should have ISO and CE/USFDA Certificate

13. AMBU BAG ADULT

SI No	Specification
1.	Bello Capacity: 1600ml
2.	Reservoir Bag Capacity: 2600ml
3.	Mask Size: 4 or 5 no.
4.	Oxygen Tube Length: 2mtr
5.	Should have ISO and CE/USFDA Certificate

14. ANEROID BP APPARTUS

SI No	Specification
1.	It Should be a manual device
2.	Should be used to measure blood pressure, composed of an inflatable cuff to collapse and then release the artery under the cuff in a controlled manner
3.	Should have a mechanical manometer to measure the pressure.
4.	Should be used to measure blood pressure for Pediatric & Adult.
5.	Should have ISO and CE/USFDA Certificate.

15. OPHTHALMOSCOPE

SI No	Specification
1.	Ophthalmoscope should include: 1 Ophthalmoscope head with lens selection wheel (+0 to +20 and -0 to -30) 33 dioptres single large circle, 1 Battery handle with rheostat button
2.	Should have ISO and CE/USFDA Certificate.

16. ECG MACHINE 12 CHANNEL

SI No	Specification
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1.	The ECG Machine should be able to acquire all 12 Leads simultaneously and interpret them
2.	Should acquire simultaneous 12 lead ECG for both adult and pediatric patients
3.	Should have Real Time Colour Display of ECG waveforms with signal quality indication for each lead
4.	Should have Artifact, AC and low and high pass frequency filters
5.	Should have storage memory of at least 100 ECGs with easy transfer by optional modem and data card
6.	Should have full screen preview of ECG report for quality assessment checks prior to print
7.	Should have interpretation facility of the amplitudes, durations and morphologies of ECG waveforms and associated rhythm for adult and pediatric patients
8.	Should have alpha numeric /qwerty Keyboard for patient data entry on main unit
9.	It should have function of paper less recording and reanalysis for saving papers
10.	Machine should have inbuilt algorithm for interpretation in main unit ,it should not be on patient cables
11.	Should have High Resolution inbuilt thermal A4 size printer
12.	Should have report format of 3 x 4; 6 x 2; 12X1 Rhythm for up to 12 selected leads; 12 lead extended measurements, 1 minute of continuous waveform data for 1 selected lead
13.	Should have battery capacity of at least 400 ECG reports or 1 hour of continuous paper recording or 3.5 hours of paper less recording on single charge
14.	It should measure and display vent rate,PRinterval,QRSduration,QT/Qtinterval,P/QRS/T axes on report
15.	Should be able to be connected to HIS / LAN / Wireless LAN
16.	Should display ECG on LCD / TFT Display of 8inch with 800 x 480 pixel resolution (optional touch screen)
17.	USB output for taking out patient ECG reports on external printer
18.	Machine should be light weight with less than 5kg weight including main unit,battery and recorder.
19.	System Configuration Accessories, Spares and Consumables : 1. ECG Machine 12 Leads with Interpretation - 01. 2. Patient Cable - 01 3. bulb Electrodes Pediatric-(Set of Six) - 01set 4. Limb Electrodes (Set of 4)-01 set 5. Thermal Paper A4 Size for 100 Patients. 6. ECG Machine should be supplied with Imported Trolley from the same manufacturer - 01 No
20.	The unit shall be capable of being stored continuously in ambient temperature of 0 - 50 deg C and relative humidity of 15 - 90%.
21.	The unit shall be capable of operating continuously in ambient temperature of 10 - 40 deg C and relative humidity of 15 - 90%.
22.	Should be ISO and US-FDA/European CE approved product



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23.	Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-51 Safety of Electrocardiograms
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17. PORTABLE ULTRASOUND

SI No	Specification
1	The latest model portable USG Doppler unit should be quoted. This machine should be capable and will be required to function clinically as standalone systems.
2	Fully digital portable ultrasound machine with provision for Doppler examinations.
3	The unit should be compact, lightweight and portable. Weight should not exceed 5kg including battery (excluding cart and accessories).
4	It should be suitable for abdominal, small parts and vascular applications in adults and paediatric patients. Multiple preloaded as well as user configurable application presets should be available.
5	Minimum grey scale resolution to be 256
6	Scanning depth to be 38 cm or more
7	The system to have a dynamic range of 220 decibels or more.
8	The system should support adult and paediatric TEE probe.
9	Transducers (Frequency tolerance ± 1 MHz)
A	Convex transducer: 2-6 MHz for abdominal imaging.
B	Linear transducer: 3-13MHz for vascular and small part imaging.
C	Paediatric Cardiac probe (2-8MHz) with Tissue Harmonic Imaging.
10	All transducers should be lightweight digital broadband type transducers
11	The system should have a frame rate of at least 300 frames per second (fps) in B mode.
12	The system should have an ergonomic full alphanumeric soft keys keyboard with easy access scans controls and trackball/track pad or the system should have touch panel screen .
13	The system must have integrated high resolution LCD/LED of 15" or more with additional gesture control facilities.
14	The system should have cine loop review facility of not less than 20 sec or minimum 1000 frames.
15	The system should have the facility of digital storage and retrieval of B/W and colour image data on USB and LAN transfer of data should also be present.
16	Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler and Power (energy) Doppler, Tissue Harmonic Imaging and spatial compounding
17	Controls for 2D mode: Total gain, depth, TGC, dynamic range, acoustic power output.
18	Controls for Colour Doppler: PRF, colour gain, position and size of ROI, steering of ROI, colour maps and colour invert.
19	Controls for pulsed Doppler: variable sample volume size from 1 to 5mm or more, steer, PRF, baseline, gain angle correction, spectral invert, duplex on/off.
20	Measurements for 2D mode: Multiple distances, area and volume.
21	Measurements for Doppler modes: Stenosis quantification in area percentage, diameter, PSV, EDV, mean, PI, RI, acceleration time and index. Automatic and manual measurements and display of pulsed Doppler calculations should be possible.
22	System should have multiline AMM, 2D Strain with GLS, TDI with TDI quantification and DICOM 3.0.
23	The system should have integrated storage of at least 1 TB HDD.

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24	Unit should function with 200-240 V, 50 Hz AC, 5 amp power outlet.
25	In built battery backup should be atleast 90 minutes
	Essential accessories:
26	B&W Thermal Printer
27	Suitable carry bag for machine, Mobile cart with transducer holder, jelly bottle holder and space for printer.
28	50 nos. roll of Thermal Printer Paper should be provided with the unit.
	Certification:
29	Offered system should be ISO and European CE /USFDA certified.
SI No	Accessories Should include
1	Portable Ultrasound Scanner with 5 years warranty, as specified : 1 No
2	Convex transducer: 2-6 MHz for abdominal imaging. 1 no
3	Linear transducer: 3-13MHz for vascular and small part imaging. 1 no
4	Paediatric Cardiac probe 2-8MHz with Tissue Harmonic Imaging. 1 no
5	B&W Thermal Printer : 1 No
6	Mobile cart and suitable carry bag for machine : 1 No
7	Thermal Printer Paper (Rolls) : 50 Nos

18. BIPHASIC DEFIBRILLATOR

SI No	Specification
1	Should be compact 4-in-one integrated design: monitoring, Manual Defib function, AED and pacer.
2	Light Weight : <6.0 kg
3	Should have 7" TFT display (800x480) with 3 waveforms for ECG and SPO2 viewing
4	Should have Defibrillation with Biphasic technology, Synchronized cardioversion and AED functions
5	Machine should monitor and display ECG, SPO2 and NIBP
6	Machine should be able to monitor ECG through paddles, pads and monitoring electrodes and defibrillate through pads and paddles
7	Machine should have non invasive pacing with both demand and fixed modes
8	Machine should have built in 50 mm thermal recorder to print ECG
9	Machine should have facility for self test /check before usage
10	Should have Li-ion battery power supply supporting 2.5h-monitoring with continuous ECG and Spo2 monitoring/ 100 shocks with 360 J discharge /2h-pacing with 50 ohm load impedance
11	1-2-3 step guidance for fast and safety defibrillation
12	Machine should have Wide range of output energy (1~360J) suitable for different patients
13	Should have Rapid charging time saving time for every rescue (200J <=5s)

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14	Machine should have Energy selection buttons on paddles to make shock delivery quick and convenient by one operator
15	Machine should output patient data through plug-and-play USB disk
16	Machine should have data storage as below <ul style="list-style-type: none"> o 100 patients' profiles o 1000 events for each patient o 24h consecutive ECG waveform storage o 72h tabular trends
17	System accessories and consumables: <ul style="list-style-type: none"> • Defibrillator with AED, external pacing and monitoring • Adult with built in pead paddles;1 no • ECG cables:1 no • ECG rolls:50 nos • Adult reusable Spo2 sensor: 1no • Adult reusable NIBP cuff:1 no • Pead reusable Spo2 sensor:1 No • Pead reusable NIBP cuff:1 No • Pacing cable:1 No • Adult pads: 5 Nos • Pead Pad:5 Nos.
18	Machine should have ISO and European CE/US FDA approval
19	Should have Degree of protection against dust and water: IP44, ready to be used in different environments
20	Machine should meet IEC-60601-1-2 for safety and electromagnetic Compatibility
21	Machine should meet the requirement of 21.102.ISO9919 for shock and vibration for transport
22	Machine should meet requirement of 6.3.4.3,EN 1789 for free fall safety
23	Machine should meet requirement of 6.3.4.2,EN 1789 for medical devices used in road ambulance
24	Machine should be able to operating continuously in ambient temperature of 5-45 degree C and relative humidity of up to 95%

19. ABG MACHINE WITH ISE

Sl. No.	Technical Specifications
1	Principle: Direct measurement with ion selective & Amperometric electrodes.
2	Parameters: Easy parameter selection.
3	Sample Type: Whole blood (Arterial & Venous), serum plasma, CSF and diluted urine.
4	Sample Volume: 180 µl.
5	Analysis Time: 90 Seconds
6	Storage: Unlimited storage
7	Display: 7 inch high definition LCD with capacitive touch
8	Printer: 2 inch 24 column in-built thermal printers.
9	Dimensions: 32cm D x 15.5cm W x 30.5cm H, Weight: 5.8 Kg.
10	Operating System: Android.



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11	Measured Parameter: pH, pCO ₂ , pO ₂ , Hct, Na, K, iCa, Cl.
12	Calculated Parameters: SO ₂ %, Hb, HCO ₃ , TCO ₂ , SBC, pO ₂ %, BE, BE-B, BE-ECF, AG(Na), AG(K), AaDO ₂ , a/A, O ₂ Ct.
13	Quality control program with Levey-Jennings. Quality Standards of ISO and CE/USFDA.
14	Excellent precision and reliability.
15	Smart compact reagent pack with RFID.
16	Numeric and Alpha numeric input option with 15 digit operator & patient ID.
17	Peripheral options: External bar code scanner, mouse and keypad interfacing option.
18	Sample probe with self wiping.
19	Power input: 100/112-V AC, 50-60 Hz, or 220V AC, 50-60 Hz, 0.75 amp.
20	Communication ports: Two USB, LIS & software upgradation.
21	System should have friendly android operating systems
22	Separate dedicated electrolyte sample analysis mode. For low cost electrolyte sample analysis.

20. ELECTRONIC WEIGHING SCALE- ADULT

SI No	Specification
1.	The outer body should be made of Glass in Round Shape
2.	The scale should tell you the accurate weight with the help of advanced high precision strain gauge sensors system.
3.	The Capacity of Digital bathroom Scale should be 150 Kg and the accuracy should be 0.1 Kg.
4.	It should have Auto zero – auto off
5.	These digital scales should have an LCD display with 25 mm digits.
6.	Should have ISO and CE/USFDA Certificate.

21. ELECTRICAL SUCTION APPARTUS

SI No	Specification
1.	Ward care Suction Unit
2.	Powder Coated MS chassis
3.	Noise level of suction apparatus is 50 Db ±03 DB
4.	Electric requirement – 220 ~230VAC, 50Hz, 1 Phase
5.	Ideal for medical & Surgical procedures
6.	Rotary Vane or Diaphragm Vacuum Pump
7.	With -710+/. 10mm Hg



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8.	Free air displacement 30 ~ 35 Ltrs / min
9.	Heavy duty HN - 50 antistatic castors
10.	180watt, 1440 RPM, 0.25 H.P. Electric Motor
11.	76mm Vacuum Gauge
12.	Non collapsible PVC tubing
13.	2 x 1.5 Ltrs. Polycarbonate jars with overflow safety
14.	Bacterial filter fitted on top
15.	All parts coming into Contact with secretion are autoclave safe
16.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001)and CE/USFDA/WHO-GMP should be available
17.	ISO 13485should be issued by NABCB accredited body.

22. PATIENT STRETCHER (FULLY SS)

SI No	Specification
1.	Overall size: 2030 mm L x 570 mm W x 820 mm H. Mattress Platform : 1810 mm L x 560 mm W.
2.	Frame work of Trolley is consists of vertical tube size diameter 31.75 mm x 1.2 mm (18 G) thick , with reinforced at bottom with diameter 34.92 mm x 1.2 mm (18 G) thick tube for flitting castors. The Frame work is mounted on 150 mm castors two with brakes and two without brakes.
3.	All horizontal stays are made of tube diameter 25.4 mm X 1.2 mm (18 G).
4.	SS flat size 32 mm x 5 mm is welded to frame work to support stretcher.
5.	Removable Stretcher Top made from SS tube diameter 25.4 mm x 1.2 mm (16 G) thick with epoxy coated 1.2 mm (18 G) SS, swing away side railings
6.	Handle is made of SS tube size diameter 25.4 mm x 1.2 mm
7.	Four stump legs made of 25.4 mm 1.2 mm ERW tube shall be welded at the bottom of the removable stretcher frame and should be provided with PVC material having nylon reinforced. Safe working load of 135 kgs and patient load bearing capacity of 130 kgs
8.	Rexine covered Mattress 50 mm (2") thick with single section.
9.	I.V. Rod with 2 Hooks.
10.	All SS should be 304G, test report submitted at the time of delivery.
11.	The treated Metal Surface should have coating of Epoxy Polyester Powder with paint film thickness of 60 microns (minimum) and oven baked at 180 degree to 200 degree Centigrade to avoid contamination of the clean metal surface from dust particles.
12.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001)and CE/USFDA/WHO-GMP should be available
13.	ISO 13485should be issued by NABCB accredited body.

23. WHEEL CHAIR - FOLDABLE

SI No	Specification
1.	Epoxy Powder Coated Sturdy Ms Frame.

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2.	Fixed Padded Armrests.
3.	Height Adjustable Footrests.
4.	Cushioned Armrests for Maximum Comfort.
5.	Nylon Fork In Front Wheel For Higher Strength & Rust Proofing.
6.	Bearings In All Four Wheels and Forks.
7.	High-Quality Treaded Rubber Tyre for Long Life and Grip.
8.	Adjustable Seat Belt & Calf Support.
9.	Durable Plastic Foot Rest.
10.	Should be ISO and European CE/USFDA approved product

24. CRASH CART

Sl No	Specification
1.	Overall Size: 960 mm L x 480 mm W X 1545 mm H.
2.	The crash cart should have 25.4 mm x 1.2 mm (18 G) Stainless steel tubular frame work.
3.	The emergency equipment cart should have the following facilities: 6 Nos. hand out bins to keep important supplies easily accessible of size approx 110 mm W x 125 mm D x 75 mm H.
4.	Two lockable box units made of high impact polystyrene with 3 drawers should have dimension 305 mm L x 380 mm D x 320 mm H.
5.	The three drawers each to hold emergency medicines, ambu. bags, IV solutions, catheters, etc.
6.	Facility to carry monitors, ECG, suction apparatus on open areas at top centre and bottom shelves.
7.	Stainless steel saline rod made of 12 mm dia. 304 grade S.S. approx. 750 mm long and bent at top to have an arm of 400 mm approx. at the end of which of 6 mm dia. S.S. hook shall be welded with TIG process.
8.	Crash cart with 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
9.	Provided with round rubber buffer, one on each corner.
10.	The size of middle and bottom shelf is 620 mm L x 388 mm W made from SS 304 0.9 mm (20 G) sheet. The shelves are provided with railing on three sides.
11.	The size of top shelf is 670 mm L x 225 mm W made from SS 304 0.9 mm (20 G) sheet.
12.	Pull-out cardiac massage board.
13.	Oxygen cylinder cage epoxy powder coated, on one side. Handle for pushing the crash cart is made from SS 304 tube size 25.4 mm x 1.2 mm (18 G) and SS flat size 25 mm x 5 mm thick, provided on other side.
14.	Safe Working Load & Patient bearing capacity - 50 kg.
15.	All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish.
16.	M.S. tubular parts, linkages are to be in house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
17.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
18.	ISO 13485 should be issued by NABCB accredited body.

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25. DRESSING TROLLEY

SI No	Specification
1.	Overall size: 1010L x510W x 900H MM.
2.	Shelf Size: 750 mm Lx 500mm W
3.	Verticals tubes made of 31.7mm OD x 18 G tube. Horizontal stays of 19 mm OD x 18 G tube on all four sides to support.
4.	Two 304 grade stainless steel shelves 20G over with 10 mm dia rod stainless steel railings shall be provided on all four sides.
5.	The trolley shall hold seamless stainless steel bucket with S. S. lid at lower lever and S.S. bowl at top lever respectively.
6.	Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley.
7.	The trolley shall be in buff finish.
8.	It shall be mounted on 125mm dia non-rusting castor wheels two with brakes and two without inside the reinforced socket sleeves.
9.	Castor made from high grade non floor- staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
10.	SS parts finished with Matt Polish.
11.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001)and CE/USFDA/WHO-GMP should be available
12.	ISO 13485should be issued by NABCB accredited body.

26. DRUG TROLLEY/MEDICINE CART

SI No	Specification
1.	Overall Size (Approx): 760L x 460W x 950H mm.
2.	Top Size (Approx): 710L x 460W mm. Frame work made of 25mm square x 1.2mm thick MS, CRC tube mounted on 100mm (4") Diagonal Locking Castors.
3.	Two 304 grade 1.0mm thick SS shelves fitted with three side railing on both shelves.
4.	Two 0.8 mm thick M.S., CRC sheet Drawer under the each shelf.
5.	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.
6.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001)and CE/USFDA/WHO-GMP should be available
8.	ISO 13485should be issued by NABCB accredited body.

27. ECG MACHINE TROLLEY

SI No	Specification
1.	Framework made of Tubular M.S. pipe.
2.	Two S.S. Shelves
3.	One M.S. Drawer

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4.	Trolley mounted on 100mm (4") Diagonal locking Castors
5.	Provided with S.S. I.V. Rod.
6.	Overall Size (Approx.): 520L x 450W x 940H mm.
7.	Top Size (Approx.): 450L x 450W mm
8.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
9.	ISO 13485 should be issued by NABCB accredited body.

28. INSTRUMENT TROLLEY

SI No	Specification
1.	Overall Approximate Size: 750mm L x 450mm W x 810mm H.
2.	Frame work made of 25mm x 1.2mm thick vertical 304 grade S.S. Tubes & supporting SS Flat strip made of 25x2 mm.
3.	Two 304 grade SS 0.9mm thick S.S. Shelves with three sides railing.
4.	The trolley mounted on 100mm (4") Diagonal Locking castors
5.	Finish: S.S. Frame with S.S. Shelves
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

29. OXYGEN CYLINDER TROLLEY

SI No	Specification
1.	Framework made of M.S. CRC tube mounted on 100mm castors at rear.
2.	Finish: Pre-treated and Epoxy powder coated
	a. For D type cylinder (Big Cylinder)
	b. For B type cylinder (Small Cylinder)
3.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
4.	ISO 13485 should be issued by NABCB accredited body.

30. GLUCOMETER

SI No	Specification
1	It should be based on Enzyme Type - GDH
2	It should only require blood Sample Size - 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range - 20 - 600 mg/dL

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5	It should have a Hematocrit Range - 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - $\pm 5\%$ with respect to standard
7	It should have an Accuracy - $\pm 15\text{mg/dL}$ if $< 100\text{mg/dl}$ $\pm 15\%$ if > 100
8	It Should indicate Ketone Warning
9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average -7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms
12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.
15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.

31. STETHOSCOPE

SI No	Specification
1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should have ISO and CE/US-FDA Certification.

B. OPERATION THEATRE-1

1. OT TABLE

SI No	Specification
1.	The operating table top should be divided into four sections: head plate, Back plate, Seat Plate and Leg plate.
2.	The table should be electrically hand operated by cabled remote control and Auxiliary Control on Column.
3.	Entire table frame should be made of stainless steel sheet metal; thickness should be 2mm or more for strength. 8mm or more radio translucent tabletop for Clear imaging and high strength.
4.	Should have enhanced weight bearing casters fitted with ball bearing.
5.	Table should have a stable braking position with single lever foot operated brake pedal.
6.	Column cover should be made of Stainless-Steel with SS 304 Grade mm thickness cover which should be resistant to breakage and infection.
7.	Base Cover should be made of ABS.
8.	Should have provision for X ray cassette inserted from the head end up to till pelvis section.
9.	Mattress should be 5 - 7cm thick, antibacterial, antiseptic, latex free, fluid proof.

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10.	Stainless steel side rails with clamps accepts all standard accessories
11.	<p>1. Measurements (Approx.):</p> <p>A. Length of the table at least 1830 mm.</p> <p>B. Width of the table at least 500 mm without side rails.</p> <p>C. Minimum Height (Without Mattress) 725mm</p> <p>D. Maximum Height (Without Mattress) 980mm</p> <p>E. Trendelenburg /Reverse Trendelenburg: 25-18 degree</p> <p>F. Lateral Tilt: 20/20 degree</p> <p>G. Sliding Top 250mm</p> <p>H. Back Plate Adjustable.</p> <p>I. Kidney Bridge 125mm</p> <p>J. Leg Plate: Divided and Adjustable.</p> <p>K. Head Section Adjustable +40/90 degree</p> <p>L. Leg Section Adjustable +10/90</p> <p>M. Weight Bearing Capacity 150 ±10 kg.</p>
12.	<p>1. Accessories:</p> <p>A. 1 Set Mattress for the complete table top in sections</p> <p>B. 2 Nos. padded armrest with straps with clamps.</p> <p>C. 2 Nos. padded shoulder supports with clamps.</p> <p>D. 2 Nos. padded knee crutches with clamps.</p> <p>E. 2 Nos. padded Lateral support with clamp</p> <p>F. 2 Nos. sliding cassette trays with rod.</p> <p>G. 1 Pair wrist strap.</p> <p>H. 1 No. Anesthetic screen with clamp (L- shaped)</p> <p>I. 1 No. IVpole, telescopic.</p>
13.	Power Supply: Power input; 220-240V/50 Hz AC single phase power supply. Inbuilt battery backup of at least 30 minutes should be provided.
14.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
15.	ISO 13485 should be issued by NABCB accredited body.
16.	Quoted Bed should be IEC 60601-1:2005 certified through any NABL approved Lab (relevant certificate should be attached).

2. OT LIGHT

SI No	Specification
1.	Single dome of 500-600mm with integrated multi lens system
2.	No of LED'S should be 30 in each dome
3.	Dome should have 6 modules having 5 LED in each Modules
4.	Intensity control in 9 steps for individual domes
5.	Height adjustable of dome through spring suspension
6.	Possible Movements; Radial Angular & Axial
7.	Colour Temperature : 4500K and above
8.	LED technology : minimum 40,000 hours lamp life
9.	Intensity, Brightness and power switch to be made available separately on dome .
10.	Focal distance (d1+d2)=0.8 to 12m
11.	Temperature rise on the keep of surgeries to be less than 10 degree
12.	CR+ approx. 95 or more



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13.	Intensity should be 150,000 lux in each dome
14.	Single LED should be replaceable
15.	Should maintain nominal temp and the heat should be disbursed through an cooling mechanism
16.	Input voltage-220V-240V AC, 50Hz, Voltage +/- 10% Frequency +/- 2%, Supplied with good quality SMPS
17.	Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstance Storage condition : capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90% deg
18.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001)and CE/USFDA/WHO-GMP should be available
19.	ISO 13485 should be issued by NABCB accredited body.
20.	Quoted Bed should be IEC 60601-1:2005, IEC 60601-2-41 certified through any NABL approved Lab (relevant certificate should be attached).

3. ANESTHESIA WORK STATION

SI No	Specification
1.	The unit should be integrated anesthesia workstation comprising of anesthesia delivery system, compact re-breathing system, two agent specific vaporizers & ICU quality ventilator for adult & children with advanced modes like VCV with Tidal Volume Compensation, Pressure Controlled Mode.
2.	The system should be ergonomically designed with colored TFT Touch Screen Display for at least 10 inch graphic user interface
3.	Unit should have primary connection for central gas supply with pressure gauges indicating pipe line pressure of all three gases i.e. Air, Oxygen & Nitrous oxide.
4.	As a backup machine should also have provision for connecting oxygen & Nitrous oxide pin index cylinders.
5.	Machine should have Dual Cascade flow meters for all three Oxygen , Nitrous Oxide & Air (6 Rotameters Tubes).
6.	Should have Audio Visual alarm for failure of oxygen.
7.	Should have built in safety features Viz Minimum 25% oxygen in fresh gas, Oxygen failure alarm, Nitrous oxide cut off in case of Oxygen failure.
8.	Machine should have Auxiliary Oxygen flow meter.
9.	Machine should have independent Auxiliary common gas outlet to connect Bain, Jackson circuits.
10.	Breathing System: Compact device for semi-closed system. It should be easy to disassemble and assemble all the components and should be autoclavable at 134 degree Centigrade. Circle Absorber should have quick release Single canister of at least 1.5 ltr capacity. Breathing system should have internal heating assembly w/o need of manual ON/OFF to avoid condensation
11.	Integrated Ventilator: a) Microprocessor based integrated anesthesia ventilator suitable for adult & children b) Automatic breathing Circuit compliance correction, light weight bellow of ascending type, single bellows for both adult and Pediatric o Volume Controlled Ventilation with Tidal Volume Compensation o Pressure Controlled Mode o Upgradable to SIMV & Pressure support Ventilation, Price should be quoted separately o High peak gas flow upto 100 LPM o Tidal volume adjustment range 20 ml to 1500 ml o PEEP from OFF, 4 - 30 cm H2O electronically adjustable o Resp Frequency from 4 to 100 BMP o I:E from 4:1 to 1: 8 o On line FiO2 Measurment o Spirometry Loops should be available as standard

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12.	Anaesthesia ventilator should also display for Pressure- time, flow-time and volume –time graphic display Atleast two waveforms should get displayed simultaneously
13.	There should be display of monitored parameters on a large color screen of oxygen concentration (FiO2), Breathing Frequency, Ppeak, PEEP, MV, Tidal Volume , I:E ratio, Compliance and Resistance
14.	Integrated display of ETCO2 & AGM Monitoring on Ventilator Screen through Plug-n – Play Module
15.	Ventilator should have battery backup for at least One hour
16.	Ventilator should have Trend Chart & Trend Table for latest 24 hrs
17.	Vaporizers: Temperature/ Pressure compensated & flow independent Isoflurane & Sevoflurane Vaporizers. Vaporizer should be maintainance free (no calibration required) The Vaporizer design should be selectatec type
18.	Anaesthesia Work Station should be European CE/US-FDA approved

4. SURGICAL DIATHERMY

SI No	Specification
1.	Power input 220 volts +-5%
2.	Power consumption 150 Watts
3.	Frequency 2 MHz
4.	HF Monopolar 150Watts on 400 ohm load
5.	HF Bipolar 100 Watts on 100 ohm load
6.	Fulguration 100 Watts on 1000 ohm
7.	Size: 8 1/2" X 7 1/2" X 4"
8.	Weight: 3.5 Kgs
9.	Standard Accessories: Monopolar Handle 1No. Patient plate 1No. Electrodes Set 1No. Foot Switch 1No. Carrying Case 1No. Hand Switch 1No. Bipolar Cable 1No. Bipolar Forcep 1No.
10.	It should be ISO and CE/USFDA Certified.

5. SYRINGE PUMP

SI No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation

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4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml
5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus auto/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility 5/10/20/30/50/60ml syringe with automatic recognition of size
9.	Machine should have battery backup minimum 6hrs to 12hrs
10.	Should have level of resistance to water and dust IP34
11.	Should be ISO and European CE/USFDA approved product

6. INFUSION PUMP

SI No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation
4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml
5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus auto/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility with diameter 3.4mm to 4.5mm size
9.	Machine should have battery backup minimum 4hrs to 8hrs
10.	Should have level of resistance to water and dust IP34
11.	Should be ISO and European CE/USFDA approved product

7. BIPHASIC DEFIBRILLATOR

SI No	Specification
1	Should be compact 4-in-one integrated design: monitoring, ManualDefibfunction, AED and pacer.
2	Light Weight : <6.0 kg
3	Should have 7" TFT display (800x480) with 3 waveforms for ECG and SPO2 viewing
4	Should have Defibrillation with Biphasic technology,Synchronized cardioversion and AED functions
5	Machine should monitor and display ECG,SPO2 and NIBP
6	Machine should be able to monitor ECG through paddles, pads and monitoring electrodes and defibrillate through pads and paddles
7	Machine should have non invasive pacing with both demand and fixed modes
8	Machine should have built in 50 mm thermal recorder to print ECG

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9	Machine should have facility for self test /check before usage
10	Should have Li-ionbattery power supply supporting 2.5h-monitoring with continuous ECG and Spo2 monitoring/ 100 shocks with 360 J discharge /2h-pacing with 50 ohm load impedance
11	1-2-3 step guidance for fast and safety defibrillation
12	Machine should have Wide range of output energy (1~360J) suitable for different patients
13	Should have Rapid charging time saving time for every rescue (200J <=5s)
14	Machine should have Energy selection buttons on paddles to make shock delivery quick and convenient by one operator
15	Machine should output patient data through plug-and-play USB disk
16	Machine should have data storage as below <ul style="list-style-type: none"> o 100 patients' profiles o 1000 events for each patient o 24h consecutive ECG waveform storage o 72h tabular trends
17	System accessories and consumables: <ul style="list-style-type: none"> • Defibrillator with AED, external pacing and monitoring • Adult with built in pead paddles;1 no • ECG cables:1 no • ECG rolls:50 nos • Adult reusable Spo2 sensor: 1no • Adult reusable NIBP cuff:1 no • Pead reusable Spo2 sensor:1 No • Pead reusable NIBP cuff:1 No • Pacing cable:1 No • Adult pads: 5 Nos • Pead Pad:5 Nos.
18	Machine should have European CE or US FDA approval
19	Should have Degree of protection against dust and water: IP44, ready to be used in different environments
20	Machine should meet IEC-60601-1-2 for safety and electromagnetic Compatibility
21	Machine should meet the requirement of 21.102.ISO9919 for shock and vibration for transport
22	Machine should meet requirement of 6.3.4.3,EN 1789 for free fall safety
23	Machine should meet requirement of 6.3.4.2,EN 1789 for medical devices used in road ambulance
24	Machine should be able to operating continuously in ambient temperature of 5-45 degree C and relative humidity of up to 95%

8. INSTRUMENT SET - OT Instrument Set

SI No	List of Instruments
1.	Scissors, Nelson-Metzenbaum, 23cm, Curved - 1 No.
2.	Kidney Dish, Lg, 170mm, Stainless Steel - 1 No.
3.	Scalpel, Handle, No 3 (four blades 10/11/15) - 1 No.
4.	Scalpel, handle, No. 4 (for blades 20) - 1 No.
5.	Scissors, Mayo, 17 cm, curved - 1 No.
6.	Scissors, Metzenbaum, 18cm, curved - 1 No.



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7.	Forceps, dressing, standard, 20cm, straight - 2 Nos.
8.	Forceps, tissue, standard, straight, 2-3 teeth, 20cm - 2 Nos.
9.	Needle holder, Mayo-Hegar, 15cm, standard - 1 No.
10.	Forceps, haemostatic, H-mosquito, 12.5cm, curved - 6 Nos.
11.	Forceps, haemostatic, crile, 14cm, straight - 6 Nos.
12.	Forceps, haemostatic, crile, 14cm, curved - 6 Nos.
13.	Forceps, hemostatic, R- ochsner, 16 cm / 1x 2Teeth, straight - 2 Nos.
14.	Forceps, towel clamp, backaus, 13cm - 6 Nos.
15.	Forceps, sponge, Foerster, 24cm, serrated jaws, Straight - 2 Nos.
16.	Retractor, Volkman, 22cm, 3 sharp prongs, 10mm curve - 2 Nos.
17.	Retractor, Volkman, 22cm, 4 blunt prongs, 10mm curve - 1 No.
18.	Retractor, Langenbeck, 21cm, 16 x 28 mm - 2 Nos.
19.	Retractor, Self-Ret., Weitlaner, 16cm, 3x4 Blunt Prongs - 1 No.
20.	Retrac., Self-Ret., Adson, 31cm, 4x5 Blunt Pr., Laminect - 1 No.
21.	Bowl, Round, 120ml, 75mm, Stainless Steel - 1 No.
22.	Forceps, Tissue, Allis, 15cm/4x5 Teeth, Standard- 2 Nos.
23.	Basket, Sterilizing, 240x300x50mm, With Cover and Handles - 1 No.

9. LARYNGOSCOPE

SI No	Specification
1.	Should be Single Use Video Laryngoscope
2.	Should Have Macintosh Blade for both Video & Direct Laryngoscopy.
3.	Should have an optical View in Variety of Light Conditions
4.	Should have a focal distance of 75mm
5.	Should have a resolution of 320H*240V Pixels
6.	Should have an viewing angle up to 120 degree
7.	Should have ISO and CE/USFDA Certificate.

10. AMBU BAG ADULT

SI No	Specification
1.	Bello Capacity: 1600ml
2.	Reservoir Bag Capacity: 2600ml
3.	Mask Size: 4 or 5 no.

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4.	Oxygen Tube Length: 2mtr
5.	Should be ISO and European CE/USFDA approved product

11. ELECTRICAL SUCTION APPARTUS

SI No	Specification
1.	Ward care Suction Unit
2.	Powder Coated MS chassis
3.	Noise level of suction apparatus is 50 Db \pm 03 DB
4.	Electric requirement – 220 ~230VAC , 50Hz, 1 Phase
5.	Ideal for medical & Surgical procedures
6.	Rotary Vane or Diaphragm Vacuum Pump
7.	With -710+/. 10mm Hg
8.	Free air displacement 30 ~ 35 Ltrs / min
9.	Heavy duty HN – 50 antistatic castors
10.	180watt, 1440 RPM, 0.25 H.P. Electric Motor
11.	76mm Vacuum Gauge
12.	Non collapsible PVC tubing
13.	2 x 1.5 Ltrs. Polycarbonate jars with overflow safety
14.	Bacterial filter fitted on top
15.	All parts coming into Contact with secretion are autoclave safe
16.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
17.	ISO 13485 should be issued by NABCB accredited body.

12. PATIENT STRETCHER (FULLY SS)

SI No	Specification
1.	Overall size: 2030 mm L x 570 mm W x 820 mm H. Mattress Platform : 1810 mm L x 560 mm W.
2.	Frame work of Trolley is consists of vertical tube size diameter 31.75 mm x 1.2 mm (18 G) thick , with reinforced at bottom with diameter 34.92 mm x 1.2 mm (18 G) thick tube for fitting castors. The Frame work is mounted on 150 mm castors two with brakes and two without brakes.
3.	All horizontal stays are made of tube diameter 25.4 mm X 1.2 mm (18 G).
4.	SS flat size 32 mm x 5 mm is welded to frame work to support stretcher.
5.	Removable Stretcher Top made from SS tube diameter 25.4 mm x 1.2 mm (16 G) thick with 1.2 mm (18 G) SSsheet. With SS Swing away Side railings
6.	Handle is made of SS tube size diameter 25.4 mm x 1.2 mm
7.	Four stump legs made of 25.4 mm 1.2 mm SS tube shall be welded at the bottom of the removable stretcher frame and should be provided with PVC material

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	having nylon reinforced. Safe working load of 135 kgs and patient load bearing capacity of 130 kgs
8.	Rexine covered Mattress 50 mm (2") thick with single section.
9.	I.V. Rod with 2 Hooks.
10.	All SS should be 304G, test report submitted at the time of delivery
11.	The treated Metal Surface should have coating of Epoxy Polyester Powder with paint film thickness of 60 microns (minimum) and oven baked at 180 degree to 200 degree Centigrade to avoid contamination of the clean metal surface from dust particles.
12.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
13.	ISO 13485 should be issued by NABCB accredited body.

13. WHEEL CHAIR – FOLDABLE

SI No	Specification
1.	Epoxy Powder Coated Sturdy Ms Frame.
2.	Fixed Padded Armrests.
3.	Height Adjustable Footrests.
4.	Cushioned Armrests for Maximum Comfort.
5.	Nylon Fork In Front Wheel For Higher Strength & Rust Proofing.
6.	Bearings in All Four Wheels and Forks.
7.	High-Quality Treaded Rubber Tyre for Long Life and Grip.
8.	Adjustable Seat Belt & Calf Support.
9.	Durable Plastic Foot Rest.
10.	Should be ISO and European CE/USFDA approved product

14. CRASH CART

SI No	Specification
1.	Overall Size: 960 mm L x 480 mm W X 1545 mm H.
2.	The crash cart should have 25.4 mm x 1.2 mm (18 G) Stainless steel tubular frame work.
3.	The emergency equipment cart should have the following facilities: 6 Nos. hand out bins to keep important supplies easily accessible of size approx 110 mm W x 125 mm D x 75 mm H.
4.	Two lockable box units made of high impact polystyrene with 3 drawers should have dimension 305 mm L x 380 mm D x 320 mm H.
5.	The three drawers each to hold emergency medicines, ambu. bags, IV solutions, catheters, etc.
6.	Facility to carry monitors, ECG, suction apparatus on open areas at top centre and bottom shelves.
7.	Stainless steel saline rod made of 12 mm dia. 304 grade S.S. approx. 750 mm long and bent at top to have an arm of 400 mm approx. at the end of which of 6 mm dia. S.S. hook shall be welded with TIG process.
8.	Crash cart with 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with

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	integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
9.	Provided with round rubber buffer, one on each corner.
10.	The size of middle and bottom shelf is 620 mm L x 388 mm W made from SS 304 0.9 mm (20 G) sheet. The shelves are provided with railing on three sides.
11.	The size of top shelf is 670 mm L x 225 mm W made from SS 304 0.9 mm (20 G) sheet.
12.	Pull-out cardiac massage board.
13.	Oxygen cylinder cage epoxy powder coated, on one side. Handle for pushing the crash cart is made from SS 304 tube size 25.4 mm x 1.2 mm (18 G) and SS flat size 25 mm x 5 mm thick, provided on other side.
14.	Safe Working Load & Patient bearing capacity - 50 kg.
15.	All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish.
16.	M.S. tubular parts, linkages, flats aluminium base are to be In house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
17.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
18.	ISO 13485 should be issued by NABCB accredited body.

15. DRESSING TROLLEY

Sl No	Specification
1.	Overall size: 1010L x 510W x 900H MM.
2.	Shelf Size: 750 mm L x 500mm W
3.	Verticals tubes made of 31.7mm OD x 18 G tube. Horizontal stays of 19 mm OD x 18 G tube on all four sides to support.
4.	Two 304 grade stainless steel shelves 20G over with 10 mm dia rod stainless steel railings shall be provided on all four sides.
5.	The trolley shall hold seamless stainless steel bucket with S. S. Lid at lower lever and S.S. bowl at top lever respectively.
6.	Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley.
7.	The trolley shall be in buff finish.
8.	It shall be mounted on 125mm dia non-rusting castor wheels two with brakes and two without inside the reinforced socket sleeves.
9.	Castor made from high grade non floor- staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
10.	SS parts finished with Matt Polish.
11.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
12.	ISO 13485 should be issued by NABCB accredited body.

16. DRUG TROLLEY/MEDICINE CART

Sl No	Specification
1.	Overall Size (Approx): 760L x 460W x 950H mm.
2.	Top Size (Approx): 710L x 460W mm. Frame work made of 25mm square x 1.2mm thick MS, CRC tube mounted on 100mm (4") Diagonal Locking Castors.
3.	Two 304 grade 1.0mm thick SS shelves fitted with three side railing on both shelves.

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4.	Two 0.8 mm thick M.S., CRC sheet Drawer under the each shelf.
5.	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.
6.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

17. INSTRUMENT TROLLEY

SI No	Specification
1.	Overall Approximate Size: 750mm L x 450mm W x 810mm H.
2.	Frame work made of 25mm x 1.2mm thick vertical 304 grade S.S. Tubes & supporting SS Flat strip made of 25x2 mm.
3.	Two 304 grade SS 0.9mm thick S.S. Shelves with three sides railing.
4.	The trolley mounted on 100mm (4") Diagonal Locking castors
5.	Finish: S.S. Frame with S.S. Shelves
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

18. OXYGEN CYLINDER TROLLEY

SI No	Specification
1.	Framework made of M.S. CRC tube mounted on 100mm castors at rear.
2.	Finish: Pre-treated and Epoxy powder coated
	a. For D type cylinder (Big Cylinder)
	b. For B type cylinder (Small Cylinder)
3.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
4.	ISO 13485 should be issued by NABCB accredited body.

19. MAYO TROLLEY

SI No	Specification
1.	Overall Size (Approx.) 600 L x 400W x 900-1200 H mm.
2.	Tray Size. (Approx.) 625 L x 440 W mm
3.	Adjustable height by gear handles from the side of the trolley.
4.	Frame work made of 50 x 50 x 1.2 mm rectangular S.S. tubes.
5.	Tray made of 0.9 mm thick S.S. 304 Grade sheet.

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6.	Table mounted on 50 mm (2") diagonal locking castors.
7.	Finish S.S. Frame with S.S. Removable tray
8.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
9.	ISO 13485 should be issued by NABCB accredited body.

20. GLUCOMETER

SI No	Specification
1	It should be based on Enzyme Type - GDH
2	It should only require blood Sample Size - 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range - 20 - 600 mg/dL
5	It should have a Hematocrit Range - 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - ± 5% with respect to standard
7	It should have an Accuracy - ± 15mg/dL if < 100mg/dl ± 15% if > 100
8	It Should indicate Ketone Warning
9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average - 7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms
12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.
15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.

21. STETHOSCOPE

SI No	Specification
1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should be ISO and European CE/USFDA approved product

C. Minor OT-1

1. OT TABLE



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SI No	Specification
1.	The operating table top should be divided into four sections: head plate, Back plate, Seat Plate and Leg plate.
2.	The table should be electrically hand operated by cabled remote control and Auxiliary Control on Column.
3.	Entire table frame should be made of stainless steel sheet metal; thickness should be 2mm or more for strength. 8mm or more radio translucent tabletop for Clear imaging and high strength.
4.	Should have enhanced weight bearing casters fitted with ball bearing.
5.	Table should have a stable braking position with single lever foot operated brake pedal.
6.	Column cover should be made of Stainless-Steel with SS 304 Grade mm thickness cover which should be resistant to breakage and infection.
7.	Base Cover should be made of ABS.
8.	Should have provision for X ray cassette inserted from the head end up to till pelvis section.
9.	Mattress should be 5 - 7cm thick, antibacterial, antiseptic, latex free, fluid proof.
10.	Stainless steel side rails with clamps accepts all standard accessories
11.	<p>1. Measurements (Approx.):</p> <p>A. Length of the table at least 1830 mm.</p> <p>B. Width of the table at least 500 mm without side rails.</p> <p>C. Minimum Height (Without Mattress) 725mm</p> <p>D. Maximum Height (Without Mattress) 980mm</p> <p>E. Trendelenburg /Reverse Trendelenburg: 25-18 degree</p> <p>F. Lateral Tilt: 20/20 degree</p> <p>G. Sliding Top 250mm</p> <p>H. Back Plate Adjustable.</p> <p>I. Kidney Bridge 125mm</p> <p>J. Leg Plate: Divided and Adjustable.</p> <p>K. Head Section Adjustable +40/90 degree</p> <p>L. Leg Section Adjustable +10/90</p> <p>M. Weight Bearing Capacity 150 ±10 kg.</p>
12.	<p>1. Accessories:</p> <p>A. 1 Set Mattress for the complete table top in sections</p> <p>B. Nos. padded armrest with straps with clamps.</p> <p>C. Nos. padded shoulder supports with clamps.</p> <p>D. 2 Nos. padded knee crutches with clamps.</p> <p>E. 2 Nos. padded Lateral support with clamp</p> <p>F. 2 Nos. sliding cassette trays with rod.</p> <p>G. 1 Pair wrist strap.</p> <p>H. 1 No. Anaesthetic screen with clamp (L- shaped)</p> <p>I. 1 No. IV pole, telescopic.</p>
13.	Power Supply: Power input; 220-240V/50 Hz AC single phase power supply. Inbuilt battery backup of at least 30 minutes should be provided.
14.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
15.	ISO 13485 should be issued by NABCB accredited body.
16.	Quoted Bed should be IEC 60601-1:2005 certified through any NABL approved Lab (relevant certificate should be attached).

2. OT LIGHT

SI No	Specification
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1.	Single dome of 500-600mm with integrated multi lens system
2.	No of LED'S should be 30 in each dome
3.	Dome should have 6 modules having 5 LED in each Modules
4.	Intensity control in 9 steps for individual domes
5.	Height adjustable of dome through spring suspension
6.	Possible Movements; Radial Angular & Axial
7.	Colour Temperature : 4500K and above
8.	LED technology : minimum 40,000 hours lamp life
9.	Intensity, Brightness and power switch to be made available separately on dome .
10.	Focal distance (d1+d2)=0.8 to 12m
11.	Temperature rise on the keep of surgeries to be less than 10 degree
12.	CR+ approx. 95 or more
13.	Intensity should be 150,000 lux in each dome
14.	Single LED should be replaceable
15.	Should maintain nominal temp and the heat should be disbursed through an cooling mechanism
16.	Input voltage-220V-240V AC, 50Hz, Voltage +/- 10% Frequency +/- 2%, Supplied with good quality SMPS
17.	Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstance Storage condition : capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90% deg
18.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
19.	ISO 13485 should be issued by NABCB accredited body.
20.	Quoted Bed should be IEC 60601-1:2005, IEC 60601-2-41 certified through any NABL approved Lab (relevant certificate should be attached).

3. SYRINGE PUMP

Sl No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation
4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml
5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus atuo/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility 5/10/20/30/50/60ml syringe with automatic recognition of size
9.	Machine should have battery backup minimum 6hrs to 12hrs



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10.	Should have level of resistance to water and dust IP34
11.	Should be USFDA/ European CE approved product

4. DRESSING TROLLEY

Sl No	Specification
1.	Overall size: 1010L x 510W x 900H MM.
2.	Shelf Size: 750 mm Lx 500mm W
3.	Verticals tubes made of 31.7mm OD x 18 G tube. Horizontal stays of 19 mm OD x 18 G tube on all four sides to support.
4.	Two 304 grade stainless steel shelves 20G over with 10 mm dia rod stainless steel railings shall be provided on all four sides.
5.	The trolley shall hold seamless stainless steel bucket with S. S. lid at lower lever and S.S. bowl at top lever respectively.
6.	Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley.
7.	The trolley shall be in buff finish.
8.	It shall be mounted on 125mm dia non-rusting castor wheels two with brakes and two without inside the reinforced socket sleeves.
9.	Castor made from high grade non floor- staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
10.	SS parts finished with Matt Polish.
11.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
12.	ISO 13485 should be issued by NABCB accredited body.

D. EMERGENCY UNIT 5 bed

1. MANUAL BED 4 SECTION WITH MATTRESS

Sl No	Specification
1.	Overall Size (Approx.): 2170L x 980W x 550-730H MM (without mattress)
2.	Four section 1.2mm (18G) CRCA M.S perforated sheet top for easy breathing of mattress.
3.	Screw mechanism welded with ERW MS tube 31.75mm x 1.2mm.
4.	Backrest should have double support system beneath the mattress platform.
5.	Manual adjustment: Backrest, knee rest, Trendelenburg/Reverse Trendelenburg & Hi - low through screw systems individually maneuvered by SS folding handles.
6.	Raised Backrest Angle - 75°
7.	Raised Knee rest Angle - 30°
8.	Trendelenburg/Reverse Trendelenburg: 7°/6°
9.	Bed frame made from 50mm x 30mm x 1.6mm (16G) Thick ERW tube shall have proper support.
10.	The bottom trolleys are provided 125mm dia non rusting twin castors, 2 with brakes.
11.	The bed has PP head & Foot panels detachable by hand without need of any tool.

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12.	Four corner rubber buffers of 100 MM dia
13.	There are four locations on the bed platform to hold stainless steel Telescopic Saline rod 12mm dia with 19mm dia × 1.2mm (18G) stainless steel outer covering tube with a knob
14.	Collapsible Side Railings; SS pipes attached to aluminium made side arms.
15.	Provided with four section mattress 4" thick PU Foam of 40 density covered PVC.
16.	Patient Working Load-125 kg.
17.	Safe Working Load-150 kg.
18.	Urine/ Drainage Bag Holder should be provided at both side of the bed.
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.	M.S tubular parts, linkages, flats are to be In-house, pre-treated and Epoxy powder coated with coating thickness 50 to 100 microns.
21.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
22.	ISO 13485 should be issued by NABCB accredited body.

2. BEDSIDE LOCKER

SI No	Specification
1.	Overall Size: 410L×410W×840H mm.
2.	Drawer having inbuilt sliding channel connected from bottom (no ball bearing channels allowed) . Should be provided with recess to serve as handle
3.	Locker box made from machine pressed 0.8mm CRCA M.S. Sheet. Should be provided with recess to serve as handle
4.	Fitted with single piece die pressed, Seamless, stainless Steel top with raised edges on three sides.
5.	Gap should be provided between the drawer and Cabinet unit for storage
6.	Legs frame made of 25mm square × 1.2mm thick CRC tube fitted with 2 pcs PVC stumps/ Rubber shoe in front and 2 pcs wheel at rear.
7.	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.
8.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
9.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
10.	ISO 13485 should be issued by NABCB accredited body.

3. IV STAND WITH SS ROD AND CASTOR BASE

SI No	Specification
1.	Adjustable height - 1395 mm to 2290 mm.
2.	Strong S.S 304 tubular diameter 31.75 mm x 1.2 mm (18 G) thick mounted on five pronged rectangular 20 mm X 40 mm X 1.6 mm (16 G) thick SS 304 tubular base.
3.	50mm diameter castor w/o brake.
4.	Saline Stand is provided with S.S 304 rod 12 mm diameter with 4 hooks , one Knob at side and PVC cap at bottom



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5.	Weighing bearing capacity 5 kgs per Hook
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

4. BIOMEDICAL WASTE BIN- SMALL SET OF 3

SI No	Specification
1.	Foot operated
2.	SS Frame (set of 3 pcs)
3.	20 Litre's
4.	Available in Red / Blue / Black / Yellow
5.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
6.	ISO 13485 should be issued by NABCB accredited body.

5. MULTI PARA MONITOR

SI No	Specification
1.	The Monitor should be for all three patient categories-Adult, pediatric and neonatal.
2.	The monitor should measure and display 5 Lead ECG, Respiration, Dual Temp, SpO2, NIBP, and Dual IBP & EtCo2 Monitoring.
3.	Monitor should have defibrillation protection, pacer detection, ST segment analysis of all leads simultaneously, QT/QTc and arrhythmia analysis feature. Machine should have at least 24 arrhythmia detection.
4.	Machine should have 24 hrs HR Summary including HR(max and min) and ST,QT
5.	Monitor should have Power Full Data Storage 120 Hours of graphical and tabular trends and 100 events storage and mintrends display on main screen up to 8 hours.
6.	The monitor should have highly visible, bright 12.1" LED/TFT display or More for easy viewing from distance.
7.	Machine should also have large font display to view from distance.
8.	The monitor should have View Other Bed Function without need of Central Station.
9.	The Monitor should have USB Port to Allow to Transfer Patient data to a PC and user settings.
10.	Machine should also have VGA port to connect to slave display directly w/o need of additional convertor and should have Fan less design to prevent dust and contamination.
11.	There should be alarm limit setting for every parameter.
12.	Monitor should display at least 8 Wave Forms.
13.	The monitor should have oxy CRG monitoring.
14.	It should have drug dosage and hemodynamic calculation.
15.	Machine should have up minimum 4 hours battery backup with no external power supply module requirement for charging.
16.	Machine should have standard LAN connection for central station and option for wireless connection.

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17.	Scope of supply should include:
a.	5 lead ECG cable- 1 No
b.	NIBP cuff and cable for adult ,pead and neonatal- 1 No each
c.	Spo2-Adult and pediatric probe -1 No each
d.	Temp- esopharangeal/rectal probe 1 No.
e.	Cabinet for storing accessories.
f.	EtCo2 Sampling Kit with Water Trap – 2 Nos.
g.	IBP Extension Cable – 2 Nos.
h.	IBP Disposable Domes – 5 Nos.
18.	Monitor should have US FDA / European CE certified.

6. ICU VENTILATOR

SI No	Specification																
1.	Advanced microprocessor based time cycled volume constant pressure controlled ventilator with innovative features and upgradeable with software/ hardware for additional or future functions. <ul style="list-style-type: none"> o Suitable for Adult & Paediatric patients (20ml – 1500 ml) o Large touch-screen user interface of minimum 12.1 inches touch (TFT Colour). Screen should be freely configurable. 																
2.	Ventilator should have Advance In-Built Turbine based technology for use.																
3.	The ventilator should have the following ventilation modes as standard: <ul style="list-style-type: none"> o Volume Control with and w/o Assist o Pressure Control with and w/o Assist o SIMV – VCV o SIMC-PCV o CPAP with/without Pressure Support o BIPAP / Duopap/ Duolevel or equivalent – with/ without Pressure support o APRV – Airway pressure release ventilation o PRVC or equivalent - Pressure Regulated Volume controlled Ventilation o ATC – Automatic Tube compensation o NIV – Non Invasive Ventilation o Apnoea backup ventilation mode 																
4.	Should have settings for : <table border="0" style="width: 100%;"> <tr> <td>Tidal Volume in Volume modes</td> <td>20ml to 2000 ml</td> </tr> <tr> <td>Inspiratory Rate</td> <td>1 - 150 bpm</td> </tr> <tr> <td>Inspiratory Time</td> <td>0.1 – 10 sec</td> </tr> <tr> <td>Inspiratory flow</td> <td>2 - 180 lpm</td> </tr> <tr> <td>Peak Inspiratory Pressure</td> <td>1 – 100 cmH2O</td> </tr> <tr> <td>CPAP/PEEP</td> <td>1 – 45 cmH2O</td> </tr> <tr> <td>Pressure support</td> <td>0 – 100 cmH2O</td> </tr> <tr> <td>Rise time</td> <td>0 - 2 sec.</td> </tr> </table>	Tidal Volume in Volume modes	20ml to 2000 ml	Inspiratory Rate	1 - 150 bpm	Inspiratory Time	0.1 – 10 sec	Inspiratory flow	2 - 180 lpm	Peak Inspiratory Pressure	1 – 100 cmH2O	CPAP/PEEP	1 – 45 cmH2O	Pressure support	0 – 100 cmH2O	Rise time	0 - 2 sec.
Tidal Volume in Volume modes	20ml to 2000 ml																
Inspiratory Rate	1 - 150 bpm																
Inspiratory Time	0.1 – 10 sec																
Inspiratory flow	2 - 180 lpm																
Peak Inspiratory Pressure	1 – 100 cmH2O																
CPAP/PEEP	1 – 45 cmH2O																
Pressure support	0 – 100 cmH2O																
Rise time	0 - 2 sec.																

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	Flow Trigger Pressure Trigger FiO2	0.5 - 20 lpm -10 -0.5cmH2O 21 - 100%
5.	Should have real time monitoring of: <ul style="list-style-type: none"> o Pressure - Peak, Plateau, Mean, CPAP/PEEP o Tidal Volume - Set (Inspired) , Monitored (expired) o Minute Volume - expired, spontaneous, leakage o Frequency/ Rate - Set (Inspiratory), Spontaneous, Total , I:E Ratio o FiO2 o Lung Mechanics – Resistance (Rinsp , Rexp) , Compliance (Static & Dynamic) o Lung mechanics indicators - NIF, RSBI, WOB o Special Manoeuvres - P0.1(Occlusion) pressure and Intrinsic (Auto) PEEP 	
6.	Should have following alarm management including corrective help messages on the screen - <ul style="list-style-type: none"> o High/low Pressure o High/low Minute Volume o High Rate o High Tidal Volume o Apnoea / apnoea alarm time o High/low O2 % (automatic settings) o Oxygen line failure o Compressed air failure o Electronic failure (with error code) 	
7.	Ventilator should have Optional Upgradable Facility with integrated EtCO2 & Spo2	
8.	Ventilator should have all 3 type of waveform (Pressure, flow and volume) and all 3 types of loops (PV, VF and PF) monitoring	
9.	Ventilator should have facility for quick start ventilation with help of IBW factor in emergency	
10.	Ventilator should have inbuilt O2 therapy feature	
11.	Ventilator should provide Servo controlled Humidifier with Adult , Pead & Neonates reusable auto cleavable patient with each one no.	
12.	Ventilator should have integrated Inspiration synchronized Nebulizer facility	
13.	Each ventilator should be supplied with Imported Modular corrosion free trolley and Hinged arm for support patent	
14.	Ventilator should have Inbuilt battery back up for 60 min	
15.	Ventilator should be US FDA / European CE Approved with notified body. Certificate must be enclosed	

7. SYRINGE PUMP

SI No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation
4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml



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5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus auto/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility 5/10/20/30/50/60ml syringe with automatic recognition of size
9.	Machine should have battery backup minimum 6hrs to 12hrs
10.	Should have level of resistance to water and dust IP34
11.	Should be US-FDA/European CE approved product

8. LARYNGOSCOPE

SI No	Specification
1.	Should be Single Use Video Laryngoscope
2.	Should Have Macintosh Blade for both Video & Direct Laryngoscopy.
3.	Should have an optical View in Variety of Light Conditions
4.	Should have a focal distance of 75mm
5.	Should have a resolution of 320H*240V Pixels
6.	Should have an viewing angle up to 120 degree
7.	Should have ISO and CE/ US-FDA Certificate.

9. THERMOMETER- INFRARED TYPE

SI No	Specification
1.	Non-Contact Infrared Forehead Thermometer.
2.	Large LCD 38 X 28 mm
3.	Measuring Localization: Forehead and Object Surface
4.	Measurement Range: Body mode 32.0°C ~43.0°C (89.6°F~109.4°F)
5.	Object mode: 0.0~100.0°C (32.0°F~212.0°F);
6.	Temperature Unit: °C/°F (C & F Switchable)
7.	Display Resolution : 0.1°C/0.1°F
8.	Accuracy: +0.2°C/+0.4°F (within 36.0°C~39.0°C / 96.8°F~102.2°F)
9.	Automatic Power Off: In 1 minute
10.	Battery Life : Could be used for 500 times for normal condition
11.	Temperature : -20°C~+55°C / -4.0°F~+122.0°F
12.	Humidity: 15%/o ~95%/o RH
13.	Should have ISO and CE/ US-FDA Certificate.

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10. AMBU BAG ADULT

Sl No	Specification
1.	Bello Capacity: 1600ml
2.	Reservoir Bag Capacity: 2600ml
3.	Mask Size: 4 or 5 no.
4.	Oxygen Tube Length: 2mtr
5.	Should have ISO and CE/ US-FDA Certificate.

11. ANEROID BP APPARTUS

Sl No	Specification
1.	It Should be a manual device
2.	Should be used to measure blood pressure, composed of an inflatable cuff to collapse and then release the artery under the cuff in a controlled manner
3.	Should have a mechanical manometer to measure the pressure.
4.	Should be used to measure blood pressure for Paediatric & Adult.
5.	Should have ISO and CE/ US-FDA Certificate.

12. OPHTHALMOSCOPE

Sl No	Specification
1.	Ophthalmoscope should include: 1 Ophthalmoscope head with lens selection wheel (+0 to +20 and -0 to -30) 63ioptres single large circle, 2 Battery handle with rheostat button
2.	Should have ISO and CE/ US-FDA Certificate.

13. ECG MACHINE 12 CHANNEL

Sl No	Specification
1.	The ECG Machine should be able to acquire all 12 Leads simultaneously and interpret them
2.	Should acquire simultaneous 12 lead ECG for both adult and paediatric patients
3.	Should have Real Time Colour Display of ECG waveforms with signal quality indication for each lead
4.	Should have Artifact, AC and low and high pass frequency filters
5.	Should have storage memory of at least 100 ECGs with easy transfer by optional modem and data card
6.	Should have full screen preview of ECG report for quality assessment checks prior to print
7.	Should have interpretation facility of the amplitudes, durations and morphologies of ECG waveforms and associated rhythm for adult and paediatric patients
8.	Should have alpha numeric /qwerty Keyboard for patient data entry on main unit

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9.	It should have function of paper less recording and reanalysis for saving papers
10.	Machine should have inbuilt algorithm for interpretation in main unit ,it should not be on patient cables
11.	Should have High Resolution inbuilt thermal A4 size printer
12.	Should have report format of 3 x 4; 6 x 2; 12X1 Rhythm for up to 12 selected leads; 12 lead extended measurements, 1 minute of continuous waveform data for 1 selected lead
13.	Should have battery capacity of at least 400 ECG reports or 1 hour of continuous paper recording or 3.5 hours of paper less recording on single charge
14.	It should measure and display vent rate,PRinterval,QRSduration,QT/QTcinterval,P/QRS/T axes on report
15.	Should be able to be connected to HIS / LAN / Wireless LAN
16.	Should display ECG on LCD / TFT Display of 8inch with 800 x 480 pixel resolution (optional touch screen)
17.	USB output for taking out patient ECG reports on external printer
18.	Machine should be light weight with less than 5kg weight including main unit,battery and recorder.
19.	System Configuration Accessories, Spares and Consumables : 1. ECG Machine 12 Leads with Interpretation – 01. 2. Patient Cable – 01 3. bulb Electrodes Pediatric-(Set of Six) – 01set 4. Limb Electrodes (Set of 4)-01 set 5. Thermal Paper A4 Size for 100 Patients. 6. ECG Machine should be supplied with Imported Trolley from the same manufacturer – 01 No
20.	The unit shall be capable of being stored continuously in ambient temperature of 0 – 50 deg C and relative humidity of 15 – 90%.
21.	The unit shall be capable of operating continuously in ambient temperature of 10 – 40 deg C and relative humidity of 15 – 90%.
22.	Should be ISO and US-FDA or European CE approved product
23.	Electrical safety confirms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-51 Safety of Electrocardiograms

14. PORTABLE MONITOR

SI No	Specification
1.	The Monitor should be for all three patient categories-Adult, pediatric and neonatal.
2.	The monitor should measure and display 5 Lead ECG, Respiration, Dual Temp, SpO2, NIBP, and Dual IBP & EtCo2 Monitoring.
3.	Monitor should have defibrillation protection, pacer detection, ST segment analysis of all leads simultaneously, QT/QTc and arrhythmia analysis feature. Machine should have at least 24 arrhythmia detection.
4.	Machine should have 24 hrs HR Summary including HR(max and min) and ST,QT



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5.	Monitor should have Power Full Data Storage 120 Hours of graphical and tabular trends and 100 events storage and minitrends display on main screen up to 8 hours.
6.	The monitor should have highly visible, bright 12.1" LED/TFT display or More for easy viewing from distance.
7.	Machine should also have large font display to view from distance.
8.	The monitor should have View Other Bed Function without need of Central Station.
9.	The Monitor should have USB Port to Allow to Transfer Patient data to a PC and user settings.
10.	Machine should also have VGA port to connect to slave display directly w/o need of additional convertor and should have Fan less design to prevent dust and contamination.
11.	There should be alarm limit setting for every parameter.
12.	Monitor should display at least 8 Wave Forms.
13.	The monitor should have oxy CRG monitoring.
14.	It should have drug dosage and hemodynamic calculation.
15.	Machine should have up minimum 4 hours battery backup with no external power supply module requirement for charging.
16.	Machine should have standard LAN connection for central station and option for wireless connection.
17.	Scope of supply should Include:
a.	5 lead ECG cable- 1 No
b.	NIBP cuff and cable for adult ,pead and neonatal- 1 No each
c.	Spo2-Adult and pediatric probe -1 No each
d.	Temp- esopharangeal/rectal probe 1 No.
e.	Cabinet for storing accessories.
f.	EtCo2 Sampling Kit with Water Trap - 2 Nos.
g.	IBP Extension Cable - 2 Nos.
h.	IBP Disposable Domes - 5 Nos.
18.	Monitor should have ISO and US FDA/European CE certified.

15. PORTABLE VENTILATOR

Sl No	Specification
1.	Advanced microprocessor based time cycled volume constant pressure controlled ventilator with innovative features and upgradeable with software/ hardware for additional or future functions. <ul style="list-style-type: none"> o Suitable for Adult & Paediatric patients (20ml - 1500 ml) o Large touch-screen user interface of minimum 12.1inches touch (TFT Colour). Screen should be freely configurable.
2.	Ventilator should have Advance In-Built Turbine based technology for use.
3.	The ventilator should have the following ventilation modes as standard: <ul style="list-style-type: none"> o Volume Control with and w/o Assist o Pressure Control with and w/o Assist o SIMV - VCV o SIMC-PCV o CPAP with/without Pressure Support



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	<ul style="list-style-type: none"> ○ BIPAP / Duopap/ Duolevel or equivalent - with/ without Pressure support ○ APRV - Airway pressure release ventilation ○ PRVC or equivalent - Pressure Regulated Volume controlled Ventilation ○ ATC - Automatic Tube compensation ○ NIV - Non Invasive Ventilation ○ Apnoea backup ventilation mode
4.	<p>Should have settings for :</p> <p>Tidal Volume in Volume modes 20ml to 2000 ml</p> <p>Inspiratory Rate 1 - 150 bpm</p> <p>Inspiratory Time 0.1 - 10 sec</p> <p>Inspiratory flow 2 - 180 lpm</p> <p>Peak Inspiratory Pressure 1 - 100 cmH2O</p> <p>CPAP/PEEP 1 - 45 cmH2O</p> <p>Pressure support 0 - 100 cmH2O</p> <p>Rise time 0 - 2 sec.</p> <p>Flow Trigger 0.5 - 20 lpm</p> <p>Pressure Trigger -10 -0.5cmH2O</p> <p>FiO2 21 - 100%</p>
5.	<p>Should have real time monitoring of:</p> <ul style="list-style-type: none"> ○ Pressure - Peak, Plateau, Mean, CPAP/PEEP ○ Tidal Volume - Set (Inspired) , Monitored (expired) ○ Minute Volume - expired, spontaneous, leakage ○ Frequency/ Rate - Set (Inspiratory), Spontaneous, Total , I:E Ratio ○ FiO2 ○ Lung Mechanics - Resistance (Rinsp , Rexp) , Compliance (Static & Dynamic) ○ Lung mechanics indicators - NIF, RSBI, WOB ○ Special Manoeuvres - P0.1 (Occlusion) pressure and Intrinsic (Auto) PEEP
6.	<p>Should have following alarm management including corrective help messages on the screen -</p> <ul style="list-style-type: none"> ○ High/low Pressure ○ High/low Minute Volume ○ High Rate ○ High Tidal Volume ○ Apnoea / apnoea alarm time ○ High/low O2 % (automatic settings) ○ Oxygen line failure ○ Compressed air failure ○ Electronic failure (with error code)
7.	Ventilator should have Optional Upgradable Facility with integrated EtCO2 & Spo2
8.	Ventilator should have all 3 type of waveform (Pressure, flow and volume) and all 3 types of loops (PV, VF and PF) monitoring
9.	Ventilator should have facility for quick start ventilation with help of IBW factor in emergency



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10.	Ventilator should have inbuilt O2 therapy feature
11.	Ventilator should provide Servo controlled Humidifier with Adult , Pead & Neonates reusable auto cleavable patient with each one no.
12.	Ventilator should have integrated Inspiration synchronized Nebulizer facility
13.	Each ventilator should be supplied with Imported Modular corrosion free trolley and Hinged arm for support patent
14.	Ventilator should have Inbuilt battery back up for 60 min
15.	Ventilator should be ISO and US FDA / European CE Approved with notified body. Certificate must be enclosed

16. BIPHASIC DEFIBRILLATOR

SI No	Specification
1	Should be compact 4-in-one integrated design: monitoring, Manual Defibfunction, AED and pacer.
2	Light Weight : <6.0 kg
3	Should have 7" TFT display (800x480) with 3 waveforms for ECG and SPO2 viewing
4	Should have Defibrillation with Biphasic technology, Synchronized cardioversion and AED functions
5	Machine should monitor and display ECG, SPO2 and NIBP
6	Machine should be able to monitor ECG through paddles, pads and monitoring electrodes and defibrillate through pads and paddles
7	Machine should have non invasive pacing with both demand and fixed modes
8	Machine should have built in 50 mm thermal recorder to print ECG
9	Machine should have facility for self test /check before usage
10	Should have Li-ion battery power supply supporting 2.5h-monitoring with continuous ECG and Spo2 monitoring/ 100 shocks with 360 J discharge /2h-pacing with 50 ohm load impedance
11	1-2-3 step guidance for fast and safety defibrillation
12	Machine should have Wide range of output energy (1~360J) suitable for different patients
13	Should have Rapid charging time saving time for every rescue (200J <=5s)
14	Machine should have Energy selection buttons on paddles to make shock delivery quick and convenient by one operator
15	Machine should output patient data through plug-and-play USB disk
16	Machine should have data storage as below <ul style="list-style-type: none"> o 100 patients' profiles o 1000 events for each patient o 24h consecutive ECG waveform storage o 72h tabular trends
17	System accessories and consumables: <ul style="list-style-type: none"> • Defibrillator with AED, external pacing and monitoring • Adult with built in pead paddles; 1 no • ECG cables: 1 no • ECG rolls: 50 nos • Adult reusable Spo2 sensor: 1 no • Adult reusable NIBP cuff: 1 no • Pead reusable Spo2 sensor: 1 No • Pead reusable NIBP cuff: 1 No • Pacing cable: 1 No • Adult pads: 5 Nos

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Office of Mission Director, National Health Mission

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	• Pead Pad:5 Nos.
18	Machine should have European CE or US FDA approval
19	Should have Degree of protection against dust and water: IP44, ready to be used in different environments
20	Machine should meet IEC-60601-1-2 for safety and electromagnetic Compatibility
21	Machine should meet the requirement of 21.102.ISO9919 for shock and vibration for transport
22	Machine should meet requirement of 6.3.4.3,EN 1789 for free fall safety
23	Machine should meet requirement of 6.3.4.2,EN 1789 for medical devices used in road ambulance
24	Machine should be able to operating continuously in ambient temperature of 5-45 degree C and relative humidity of up to 95%

17. ELECTRONIC WEIGHING SCALE- ADULT

Sl No	Specification
1.	The outer body should be made of Glass in Round Shape
2.	The scale should tell you the accurate weight with the help of advanced high precision strain gauge sensors system.
3.	The Capacity of Digital bathroom Scale should be 150 Kg and the accuracy should be 0.1 Kg.
4.	It should have Auto zero - auto off
5.	These digital scales should have an LCD display with 25 mm digits.
6.	Should have ISO and CE/ US-FDA Certificate.

18. ELECTRICAL SUCTION APPARTUS

Sl No	Specification
1.	Ward care Suction Unit
2.	Powder Coated MS chassis
3.	Noise level of suction apparatus is 50 Db \pm 03 DB
4.	Electric requirement - 220 ~230VAC , 50Hz, 1 Phase
5.	Ideal for medical & Surgical procedures
6.	Rotary Vane or Diaphragm Vacuum Pump
7.	With -710+/. 10mm Hg
8.	Free air displacement 30 ~ 35 Ltrs / min
9.	Heavy duty HN - 50 antistatic castors
10.	180watt, 1440 RPM, 0.25 H.P. Electric Motor
11.	76mm Vacuum Gauge
12.	Non collapsible PVC tubing
13.	2 x 1.5 Ltrs. Polycarbonate jars with overflow safety

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14.	Bacterial filter fitted on top
15.	All parts coming into Contact with secretion are autoclave safe
16.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
17.	ISO 13485 should be issued by NABCB accredited body.

19. PATIENT STRETCHER (FULLY SS)

Sl No	Specification
1.	Overall size: 2030 mm L x 570 mm W x 820 mm H. Mattress Platform : 1810 mm L x 560 mm W.
2.	Frame work of Trolley is consists of vertical tube size diameter 31.75 mm x 1.2 mm (18 G) thick , with reinforced at bottom with diameter 34.92 mm x 1.2 mm (18 G) thick tube for fitting castors. The Frame work is mounted on 150 mm castors two with brakes and two without brakes.
3.	All horizontal stays are made of tube diameter 25.4 mm X 1.2 mm (18 G).
4.	SS flat size 32 mm x 5 mm is welded to frame work to support stretcher.
5.	Removable Stretcher Top made from SS tube diameter 25.4 mm x 1.2 mm (16 G) thick with 1.2 mm (18 G) SSsheet. With SS Swing away Side railings
6.	Handle is made of SS tube size diameter 25.4 mm x 1.2 mm
7.	Four stump legs made of 25.4 mm 1.2 mm SS tube shall be welded at the bottom of the removable stretcher frame and should be provided with PVC material having nylon reinforced. Safe working load of 135 kgs and patient load bearing capacity of 130 kgs
8.	Rexine covered Mattress 50 mm (2") thick with single section.
9.	I.V. Rod with 2 Hooks.
10.	All SS should be 304G, test report submitted at the time of delivery
11.	The treated Metal Surface should have coating of Epoxy Polyester Powder with paint film thickness of 60 microns (minimum) and oven baked at 180 degree to 200 degree Centigrade to avoid contamination of the clean metal surface from dust particles.
12.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
13.	ISO 13485 should be issued by NABCB accredited body.

20. WHEEL CHAIR - FOLDABLE

Sl No	Specification
1.	Epoxy Powder Coated Sturdy Ms Frame.
2.	Fixed Padded Armrests.
3.	Height Adjustable Footrests.
4.	Cushioned Armrests for Maximum Comfort.
5.	Nylon Fork In Front Wheel For Higher Strength & Rust Proofing.
6.	Bearings in All Four Wheels and Forks.
7.	High-Quality Treaded Rubber Tyre for Long Life and Grip.

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8.	Adjustable Seat Belt & Calf Support.
9.	Durable Plastic Foot Rest.
10.	Should be ISO and European CE/USFDA approved product

21. CRASH CART

Sl No	Specification
1.	Overall Size: 960 mm L x 480 mm W X 1545 mm H.
2.	The crash cart should have 25.4 mm x 1.2 mm (18 G) Stainless steel tubular frame work.
3.	The emergency equipment cart should have the following facilities: 6 Nos. Hand out bins to keep important supplies easily accessible of size approx 110 mm W x 125 mm D x 75 mm H.
4.	Two lockable box units made of high impact polystyrene with 3 drawers should have dimension 305 mm L x 380 mm D x 320 mm H.
5.	The three drawers each to hold emergency medicines, ambu. Bags, IV solutions, catheters, etc.
6.	Facility to carry monitors, ECG, suction apparatus on open areas at top centre and bottom shelves.
7.	Stainless steel saline rod made of 12 mm dia. 304 grade S.S. approx. 750 mm long and bent at top to have an arm of 400 mm approx. At the end of which of 6 mm dia. S.S. hook shall be welded with TIG process.
8.	Crash cart with 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
9.	Provided with round rubber buffer, one on each corner.
10.	The size of middle and bottom shelf is 620 mm L x 388 mm W made from SS 304 0.9 mm (20 G) sheet. The shelves are provided with railing on three sides.
11.	The size of top shelf is 670 mm L x 225 mm W made from SS 304 0.9 mm (20 G) sheet.
12.	Pull-out cardiac massage board.
13.	Oxygen cylinder cage epoxy powder coated, on one side. Handle for pushing the crash cart is made from SS 304 tube size 25.4 mm x 1.2 mm (18 G) and SS flat size 25 mm x 5 mm thick, provided on other side.
14.	Safe Working Load & Patient bearing capacity – 50 kg.
15.	All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish.
16.	M.S. tubular parts, linkages, flats aluminium base are to be In house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
17.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
18.	ISO 13485 should be issued by NABCB accredited body.

22. DRESSING TROLLEY

Sl No	Specification
1.	Overall size: 1010L x 510W x 900H MM.
2.	Shelf Size: 750 mm L x 500mm W
3.	Verticals tubes made of 31.7mm OD x 18 G tube. Horizontal stays of 19 mm OD x 18 G tube on all four sides to support.

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4.	Two 304 grade stainless steel shelves 20G over with 10 mm dia rod stainless steel railings shall be provided on all four sides.
5.	The trolley shall hold seamless stainless steel bucket with S. S. Lid at lower lever and S.S. bowl at top lever respectively.
6.	Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley.
7.	The trolley shall be in buff finish.
8.	It shall be mounted on 125mm dia non-rusting castor wheels two with brakes and two without inside the reinforced socket sleeves.
9.	Castor made from high grade non floor- staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
10.	SS parts finished with Matt Polish.
11.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
12.	ISO 13485 should be issued by NABCB accredited body.

23. DRUG TROLLEY/MEDICINE CART

Sl No	Specification
1.	Overall Size (Approx): 760L x 460W x 950H mm.
2.	Top Size (Approx): 710L x 460W mm. Frame work made of 25mm square x 1.2mm thick MS, CRC tube mounted on 100mm (4") Diagonal Locking Castors.
3.	Two 304 grade 1.0mm thick SS shelves fitted with three side railing on both shelves.
4.	Two 0.8 mm thick M.S., CRC sheet Drawer under the each shelf. No. of drawers under each shelf : 02 ; total of 4 drawers
5.	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.
6.	M.S tubular parts, linkages, flats are to be in-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

24. ECG MACHINE TROLLEY

Sl No	Specification
1.	Framework made of Tubular M.S. pipe.
2.	Two S.S. Shelves
3.	One M.S. Drawer
4.	Trolley mounted on 100mm (4") Diagonal locking Castors
5.	Provided with S.S. I.V. Rod.
6.	Overall Size (Approx.): 520L x 450W x 940H mm.
7.	Top Size (Approx.): 450L x 450W mm
8.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
9.	ISO 13485 should be issued by NABCB accredited body.

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25. INSTRUMENT TROLLEY

SI No	Specification
1.	Overall Approximate Size: 750mm L × 450mm W × 810mm H.
2.	Frame work made of 25mm × 1.2mm thick vertical 304 grade S.S. Tubes & supporting SS Flat strip made of 25x2 mm.
3.	Two 304 grade SS 0.9mm thick S.S. Shelves with three sides railing.
4.	The trolley mounted on 100mm (4") Diagonal Locking castors
5.	Finish: S.S. Frame with S.S. Shelves
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

26. OXYGEN CYLINDER TROLLEY

SI No	Specification
1.	Framework made of M.S. CRC tube mounted on 100mm castors at rear.
2.	Finish: Pre-treated and Epoxy powder coated
	a. For D type cylinder (Big Cylinder)
	b. For B type cylinder (Small Cylinder)
3.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
4.	ISO 13485 should be issued by NABCB accredited body.

27. GLUCOMETER

SI No	Specification
1	It should be based on Enzyme Type - GDH
2	It should only require blood Sample Size - 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range - 20 ~ 600 mg/dL
5	It should have a Hematocrit Range - 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - ± 5% with respect to standard
7	It should have an Accuracy - ± 15mg/dL if < 100mg/dl ± 15% if > 100
8	It Should Indicate Ketone Warning
9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average -7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms

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12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.
15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.

28. STETHOSCOPE

SI No	Specification
1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should have ISO and CE/ US-FDA Certificate.

E. DIALYSIS ROOM- 2 bed

1. MANUAL BED 4 SECTION WITH MATTRESS

SI No	Specification
1.	Overall Size (Approx.): 2170L x 980W x 550-730H MM (without mattress)
2.	Four section 1.2mm (18G) CRCA M.S perforated sheet top for easy breathing of mattress.
3.	Screw mechanism welded with ERW MS tube 31.75mm x 1.2mm.
4.	Backrest should have double support system beneath the mattress platform.
5.	Manual adjustment: Backrest, knee rest, Trendelenburg/Reverse Trendelenburg & Hi - low through screw systems individually maneuvered by SS folding handles.
6.	Raised Backrest Angle - 75°
7.	Raised Knee rest Angle - 30°
8.	Trendelenburg/Reverse Trendelenburg: 7°/6°
9.	Bed frame made from 50mm x 30mm x 1.6mm (16G) Thick ERW tube shall have proper support.
10.	The bottom trolley are provided 125mm dia non rusting twin castors, 2 with brakes.
11.	The bed has PP head & Foot panels detachable by hand without need of any tool.
12.	Four corner rubber buffers of 100 MM dia
13.	There are four locations on the bed platform to hold stainless steel Telescopic Saline rod 12mm dia with 19mm dia x 1.2mm (18G) stainless steel outer covering tube with a knob
14.	Collapsible Side Railings; SS pipes attached to aluminium made side arms.
15.	Provided with four section mattress 4" thick PU Foam of 40 density covered PVC.
16.	Patient Working Load-125 kg.

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17.	Safe Working Load-150 kg.
18.	Urine/ Drainage Bag Holder should be provided at both side of the bed.
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.	M.S tubular parts, linkages, flats are to be In-house, pre-treated and Epoxy powder coated with coating thickness 50 to 100 microns.
21.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
22.	ISO 13485 should be issued by NABCB accredited body.

2. BEDSIDE LOCKER

SI No	Specification
1.	Overall Size: 410L×410W×840H mm.
2.	Drawer having inbuilt sliding channel connected from bottom (no ball bearing channels allowed) . Should be provided with recess to serve as handle
3.	Locker box made from machine pressed 0.8mm CRCA M.S. Sheet. Should be provided with recess to serve as handle
4.	Fitted with single piece die pressed, Seamless, stainless Steel top with raised edges on three sides.
5.	Gap should be provided between the drawer and Cabinet unit for storage
6.	Legs frame made of 25mm square × 1.2mm thick CRC tube fitted with 2 pcs PVC stumps/ Rubber shoe in front and 2 pcs wheel at rear.
7.	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.
8.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
9.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
10.	ISO 13485 should be issued by NABCB accredited body.

3. OVERBED TABLE

SI No	Specification
1.	Overall dimensions should be 1000L x 435W x 825-1180H mm.
2.	The top should be made of ABS having size of 880L x 435W x 28H mm.
3.	Aluminium extruded telescopic section fitted with smooth gear mechanism for height adjustment
4.	It should have MS base frame covered with durable high impact ABS Base cover.
5.	For ease in mobility, it should have castors of 50mm dia.
6.	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.
7.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
8.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
9.	ISO 13485 should be issued by NABCB accredited body.

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4. IV

STAND WITH SS ROD AND CASTOR BASE

Sl No	Specification
1.	Adjustable height - 1395 mm to 2290 mm.
2.	Strong S.S 304 tubular diameter 31.75 mm x 1.2 mm (18 G) thick mounted on five pronged rectangular 20 mm X 40 mm X 1.6 mm (16 G) thick SS 304 tubular base.
3.	50mm diameter castor w/o brake.
4.	Saline Stand is provided with S.S 304 rod 12 mm diameter with 4 hooks , one Knob at side and PVC cap at bottom
5.	Weighing bearing capacity 5 kgs per Hook
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

5. HEMO DIALYSIS MACHINE

Sl No	Specification
1.	Unit should be operable on mains 220-240AC.
2.	Unit should be capable to perform Acetate and Bi-carb Dialysis
3.	Unit should have more than 12 inch LCD touch screen with customization facility
4.	Unit should be sleek, user friendly interface and should not weigh more than 65 kgs.
5.	Unit should be facilitated to view the flow diagram of the hydraulic circuit and function of each part.
6.	Unit should have safety features with continuous monitoring for discharge precision of pumps to ensure UF security.
7.	Unit should be facilitated with TMP auto forecasting and Conductivity monitoring for Bicarbonate solution and dialysate
8.	Unit should have facilities for Chemical, heat and citric acid/heat disinfection and consumption per use should be less than 40ml.
9.	Unit should have dialysis flow between 300-700ml/min and should be able to adjust every 10ml.
10.	Unit should have safety feature with continuous monitoring of pumps and valves during treatment
11.	Unit should have facility to store treatment settings data upto 16 patients
12.	Unit should have options to add bio-feed back NIBP module anytime.
13.	Unit should have battery backup facility for blood pump.
14.	Unit Should be certified European CE/USFDA/MOH Japan Certification

6. DIALYSIS REPROCESSOR

Sl No	Specification
1.	Should be fully automated for cleaning of minimum two dialyzers at a time. Should be able to reprocess 8-10 dialyzers per hour.
2.	Should have 5 to 6 inches colour LCD touch screen display for quick input of instructions.
3.	Should be able to automatically rinse, clean and disinfect the dialyzer and should be able to reprocess varied brands of hemodialyzers available in India.

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4.	R.O. or DI water in accordance with AAMI standard for hemodialysis. Water Consumption - 14-16 ltr / cycle of 2 dialyzers
5.	System should have automatic pressure leak test for the dialyzer membrane integrity; automatic fiber bundle volume test for the dialyzer.
6.	System should have built in printer for printing result on paper as well as adhesive label.
7.	Should have patient data storage system
8.	Input pressure - 25 - 55 psi
9.	Voltage requirement - 110/220VAC, 50/60 HZ, 2A ; 140 W power ; Temperature : 5 - 40°C ; Humidity - 10-80%
10.	Should be able to use locally manufactured W.H.O. GMP certified Peracetic Acid based disinfectant.
11.	The equipment should have CE mark / ERTL (ELECTRONICS REGIONAL TEST LABORATORY)/USFDA certificate and should have ISO Certification
12.	Operating and detailed Service Manual should be supplied

7. MULTI PARA MONITOR

Sl No	Specification
1.	The Monitor should be for all three patient categories-Adult, pediatric and neonatal.
2.	The monitor should measure and display 5 Lead ECG, Respiration, Dual Temp, SpO2, NIBP, and Dual IBP & EtCo2 Monitoring.
3.	Monitor should have defibrillation protection, pacer detection, ST segment analysis of all leads simultaneously, QT/QTc and arrhythmia analysis feature. Machine should have at least 24 arrhythmia detection.
4.	Machine should have 24 hrs HR Summary including HR(max and min) and ST,QT
5.	Monitor should have Power Full Data Storage 120 Hours of graphical and tabular trends and 100 events storage and minitrends display on main screen up to 8 hours.
6.	The monitor should have highly visible, bright 12.1" LED/TFT display or More for easy viewing from distance.
7.	Machine should also have large font display to view from distance.
8.	The monitor should have View Other Bed Function without need of Central Station.
9.	The Monitor should have USB Port to Allow to Transfer Patient data to a PC and user settings.
10.	Machine should also have VGA port to connect to slave display directly w/o need of additional convertor and should have Fan less design to prevent dust and contamination.
11.	There should be alarm limit setting for every parameter.
12.	Monitor should display at least 8 Wave Forms.
13.	The monitor should have oxy CRG monitoring.
14.	It should have drug dosage and hemodynamic calculation.
15.	Machine should have up minimum 4 hours battery backup with no external power supply module requirement for charging.
16.	Machine should have standard LAN connection for central station and option for wireless connection.
17.	Scope of supply should Include:
a.	5 lead ECG cable- 1 No
b.	NIBP cuff and cable for adult ,pead and neonatal- 1 No each

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c.	Spo2-Adult and pediatric probe -1 No each
d.	Temp- esopharangeal/rectal probe 1 No.
e.	Cabinet for storing accessories.
f.	EtCo2 Sampling Kit with Water Trap – 2 Nos.
g.	IBP Extension Cable – 2 Nos.
h.	IBP Disposable Domes – 5 Nos.
18.	Monitor should have ISO and US FDA/ European CE certified.

8. SYRINGE PUMP

Sl No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation
4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml
5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus auto/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility 5/10/20/30/50/60ml syringe with automatic recognition of size
9.	Machine should have battery backup minimum 6hrs to 12hrs
10.	Should have level of resistance to water and dust IP34
11.	Should be ISO and European CE/US-FDA approved product

9. LARYNGOSCOPE

Sl No	Specification
1.	Should be Single Use Video Laryngoscope
2.	Should Have Macintosh Blade for both Video & Direct Laryngoscopy.
3.	Should have an optical View in Variety of Light Conditions
4.	Should have a focal distance of 75mm
5.	Should have a resolution of 320H*240V Pixels
6.	Should have an viewing angle up to 120 degree
7.	Should have ISO and CE/US-FDA Certificate.

10. THERMOMETER- INFRARED TYPE

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SI No	Specification
1.	Non-Contact Infrared Forehead Thermometer.
2.	Large LCD 38 X 28 mm
3.	Measuring Localization: Forehead and Object Surface
4.	Measurement Range: Body mode 32.0°C ~43.0°C (89.6°F~109.4°F)
5.	Object mode: 0.0~100.0°C (32.0°F~212.0°F);
6.	Temperature Unit: °C/°F (C & F Switchable)
7.	Display Resolution : 0.1°C/0.1°F
8.	Accuracy: +0.2°C/+0.4°F (within 36.0°C~39.0°C / 96.8°F~102.2°F)
9.	Automatic Power Off: In 1 minute
10.	Battery Life : Could be used for 500 times for normal condition
11.	Temperature : -20°C~+55°C / -4.0°F~+122.0°F
12.	Humidity: 15%/o ~95%/o RH
13.	Should have ISO and CE/ US-FDA Certificate.

11. AMBU BAG ADULT

SI No	Specification
1.	Bello Capacity: 1600ml
2.	Reservoir Bag Capacity: 2600ml
3.	Mask Size: 4 or 5 no.
4.	Oxygen Tube Length: 2mtr
5.	Should have ISO and CE/ US-FDA Certificate.

12. RO PLANT SYSTEM

SI No	Specification
1.	Single stage water purification for system Type 2water.
2.	Should have Deionization Technology to Remove Ions As Contaminants from Type 2 water Constant quality & continuous performance
3.	Tank level sensors should be there
4.	System should only have one high purity cartridge apart from RO to reduce the consumables cost
5.	Provision to prevent back flow on Reverse Osmosis must be there
6.	Recirculation Loop from tank to DI is required for keeping the tank water clean
7.	Automatic rinse and flush with automatic Sanitization
8.	Provision of conductivity and resistivity meters

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9.	Conductivity cells are carefully calibrated prior to each measurement via built-in reference resistance with cell constants at 0.01 cm-1
10.	Measurement of inlet pressure, pressure on RO cartridge, water level in tank, flush/rinsing /standby /operate mode with auto test of all measurements
11.	Tank must be there with recirculation facility to keep the Type 2 water fresh
11.	Alarm at low pressure, quality below set point, exchange pack
12.	Floor top/Wall mounting / table top mounting facility
13.	Provision for softener included (if required)
14.	Pre-treatment should be there with activated carbon with 5 micron pre with hardness stabilizer
15.	Imported reservoir with the conical base with complete recirculation to avoid stagnancy with volume of 30 Ltr at least.
16.	Production rate for Type 2 water should be 20Ltr/Hour or more
17.	System should be both ISO & CE (European CE)/US-FDA certified to ensure quality. Certificate copies should be enclosed in technical bid.

13. ELECTRONIC WEIGHING SCALE- ADULT

Sl No	Specification
1.	The outer body should be made of Glass in Round Shape
2.	The scale should tell you the accurate weight with the help of advanced high precision strain gauge sensors system.
3.	The Capacity of Digital bathroom Scale should be 150 Kg and the accuracy should be 0.1 Kg.
4.	It should have Auto zero – auto off
5.	These digital scales should have an LCD display with 25 mm digits.
6.	Should have ISO and CE/ US-FDA Certificate.

14. WHEEL CHAIR - FOLDABLE

Sl No	Specification
1.	Epoxy Powder Coated Sturdy Ms Frame.
2.	Fixed Padded Armrests.
3.	Height Adjustable Footrests.
4.	Cushioned Armrests for Maximum Comfort.
5.	Nylon Fork In Front Wheel For Higher Strength & Rust Proofing.
6.	Bearings in All Four Wheels and Forks.
7.	High-Quality Treaded Rubber Tyre for Long Life and Grip.
8.	Adjustable Seat Belt & Calf Support.
9.	Durable Plastic Foot Rest.
10.	Should be ISO and European CE/USFDA approved product

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15. CRASH CART

SI No	Specification
1.	Overall Size: 960 mm L x 480 mm W X 1545 mm H.
2.	The crash cart should have 25.4 mm x 1.2 mm (18 G) Stainless steel tubular frame work.
3.	The emergency equipment cart should have the following facilities: 6 Nos. hand out bins to keep important supplies easily accessible of size approx 110 mm W x 125 mm D x 75 mm H.
4.	Two lockable box units made of high impact polystyrene with 3 drawers should have dimension 305 mm L x 380 mm D x 320 mm H.
5.	The three drawers each to hold emergency medicines, ambu. bags, IV solutions, catheters, etc.
6.	Facility to carry monitors, ECG, suction apparatus on open areas at top centre and bottom shelves.
7.	Stainless steel saline rod made of 12 mm dia. 304 grade S.S. approx. 750 mm long and bent at top to have an arm of 400 mm approx. at the end of which of 6 mm dia. S.S. hook shall be welded with TIG process.
8.	Crash cart with 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
9.	Provided with round rubber buffer, one on each corner.
10.	The size of middle and bottom shelf is 620 mm L x 388 mm W made from SS 304 0.9 mm (20 G) sheet. The shelves are provided with railing on three sides.
11.	The size of top shelf is 670 mm L x 225 mm W made from SS 304 0.9 mm (20 G) sheet.
12.	Pull-out cardiac massage board.
13.	Oxygen cylinder cage epoxy powder coated, on one side. Handle for pushing the crash cart is made from SS 304 tube size 25.4 mm x 1.2 mm (18 G) and SS flat size 25 mm x 5 mm thick, provided on other side.
14.	Safe Working Load & Patient bearing capacity - 50 kg.
15.	All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish.
16.	M.S. tubular parts, linkages, flats aluminium base are to be In house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
17.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
18.	ISO 13485 should be issued by NABCB accredited body.

16. DRESSING TROLLEY

SI No	Specification
1.	Overall size: 1010L x 510W x 900H MM.
2.	Shelf Size: 750 mm L x 500mm W
3.	Verticals tubes made of 31.7mm OD x 18 G tube. Horizontal stays of 19 mm OD x 18 G tube on all four sides to support.
4.	Two 304 grade stainless steel shelves 20G over with 10 mm dia rod stainless steel railings shall be provided on all four sides.
5.	The trolley shall hold seamless stainless steel bucket with S. S. lid at lower lever and S.S. bowl at top lever respectively.
6.	Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley.
7.	The trolley shall be in buff finish.

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8.	It shall be mounted on 125mm dia non-rusting castor wheels two with brakes and two without inside the reinforced socket sleeves.
9.	Castor made from high grade non floor- staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
10.	SS parts finished with Matt Polish.
11.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
12.	ISO 13485 should be issued by NABCB accredited body.

17. DRUG TROLLEY/MEDICINE CART

Sl No	Specification
1.	Overall Size (Approx): 760L x 460W x 950H mm.
2.	Top Size (Approx): 710L x 460W mm. Frame work made of 25mm square x 1.2mm thick MS, CRC tube mounted on 100mm (4") Diagonal Locking Castors.
3.	Two 304 grade 1.0mm thick SS shelves fitted with three side railing on both shelves.
4.	Two 0.8 mm thick M.S., CRC sheet Drawer under the each shelf.
5.	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.
6.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

18. GLUCOMETER

Sl No	Specification
1	It should be based on Enzyme Type - GDH
2	It should only require blood Sample Size - 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range - 20 - 600 mg/dL
5	It should have a Hematocrit Range - 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - ± 5% with respect to standard
7	It should have an Accuracy - ± 15mg/dL if < 100mg/dl ± 15% if > 100
8	It Should indicate Ketone Warning
9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average - 7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms
12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.

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15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.
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19. STETHOSCOPE

Sl No	Specification
1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should have ISO and CE/ US-FDA Certificate.

F. MCH-02 Beds

1. WARD BED (2 SECTION) WITH MATTRESS

Sl No	Specification
1.	Overall Size (Approx.): 2170L × 915W × 600H MM (without mattress)
2.	Four section 1.2mm (18G) CRCA M.S perforated sheet top for easy breathing of mattress.
3.	Screw mechanism welded with ERW MS tube 31.75mm × 1.2mm.
4.	Backrest should have double support system beneath the mattress platform.
5.	Manual adjustment: Backrest, knee rest through two screw systems individually manoeuvred by SS folding handles.
6.	Raised Backrest Angle - 75°
7.	Raised Knee rest Angle - 30°
8.	Bed frame made from 50mm × 30mm × 1.6mm (16G) Thick ERW tube shall have proper support. This frame is fitted on H leg made from ERW tubes diameter 31.75mm × 1.2mm (18G) thick and support tube of diameter 25mm × 1.2mm (18G) thick
9.	The bottom ends of the H leg are provided 125mm dia non rusting castors, 2 with brakes.
10.	The bed has PP head & Foot panels detachable by hand without need of any tool.
11.	Four corner rubber buffers of 100 MM dia
12.	There are four locations on the bed platform to hold stainless steel Telescopic Saline rod 12mm dia with 19mm dia × 1.2mm (18G) stainless steel outer covering tube with a knob
13.	Collapsible Side Railings; SS pipes attached to aluminium made side arms.
14.	Provided with four section mattress 4" thick PU Foam of 40 density covered PVC.
15.	Patient Working Load-125 kg.
16.	Safe Working Load-150 kg.
17.	Urine/ Drainage Bag Holder should be provided at both side of the bed.
18.	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.

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19.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
20.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
21.	ISO 13485 should be issued by NABCB accredited body.

2. BEDSIDE LOCKER

Sl No	Specification
1.	Overall Size: 410L×410W×840H mm.
2.	Drawer having inbuilt sliding channel connected from bottom (no ball bearing channels allowed). Should be provided with recess to serve as handle
3.	Locker box made from machine pressed 0.8mm CRCA M.S. Sheet. Should be provided with recess to serve as handle
4.	Fitted with single piece die pressed, Seamless, stainless Steel top with raised edges on three sides.
5.	Gap should be provided between the drawer and Cabinet unit for storage
6.	Legs frame made of 25mm square × 1.2mm thick CRC tube fitted with 2 pcs PVC stumps/ Rubber shoe in front and 2 pcs wheel at rear.
7.	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.
8.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
9.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
10.	ISO 13485 should be issued by NABCB accredited body.

3. IV STAND WITH SS ROD AND CASTOR BASE

Sl No	Specification
1.	Adjustable height - 1395 mm to 2290 mm.
2.	Strong S.S 304 tubular diameter 31.75 mm x 1.2 mm (18 G) thick mounted on five pronged rectangular 20 mm X 40 mm X 1.6 mm (16 G) thick SS 304 tubular base.
3.	50mm diameter castor w/o brake.
4.	Saline Stand is provided with S.S 304 rod 12 mm diameter with 4 hooks , one Knob at side and PVC cap at bottom
5.	Weighing bearing capacity 5 kgs per Hook
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

4. BIOMEDICAL WASTE BIN- SMALL SET OF 3

Sl No	Specification
1.	Foot operated
2.	SS Frame (set of 3 pcs)
3.	20 Litre's

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4.	Available in Red / Blue / Black / Yellow
5.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
6.	ISO 13485 should be issued by NABCB accredited body.

5. INSTRUMENT TROLLEY

SI No	Specification
1.	Overall Approximate Size: 750mm L x 450mm W x 810mm H.
2.	Frame work made of 25mm x 1.2mm thick vertical 304 grade S.S. Tubes & supporting SS Flat strip made of 25x2 mm.
3.	Two 304 grade SS 0.9mm thick S.S. Shelves with three sides railing.
4.	The trolley mounted on 100mm (4") Diagonal Locking castors
5.	Finish: S.S. Frame with S.S. Shelves
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available

6. GLUCOMETER

SI No	Specification
1	It should be based on Enzyme Type - GDH
2	It should only require blood Sample Size - 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range - 20 ~ 600 mg/dL
5	It should have a Hematocrit Range - 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - ± 5% with respect to standard
7	It should have an Accuracy - ± 15mg/dL if < 100mg/dl ± 15% if > 100
8	It Should indicate Ketone Warning
9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average -7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms
12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.
15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.

7. STETHOSCOPE

SI No	Specification
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1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should have ISO and CE/ US-FDA Certificate.

G. LDR-1 Bed

1. LDR Bed

Sl No	Specification
1.	Overall Size (Approx.): 2000L x 950W MM ± 100mm (without mattress)
2.	Table should have Three section high pressure laminate mattress platform top.
3.	Electrical adjustment: Backrest, Trendlenburg/Reverse trendlenburg, Hi - Low through wired Handset
4.	Raised Backrest Angle : 75°
5.	Trendelenburg and reverse Trendelenburg should be 9°/10° ± 2
6.	Height of bed should be adjustable 680mm- 960mm ± 50 without mattress
7.	Bed frame made from 50mm x 30mm x 1.6mm (16G) Thick ERW tube shall have proper support.
8.	Table should have moulded head boards easily removable by hand without need of any tool.
9.	Table should have polymer moulded collapsible Railing on both side assisted by gas spring.
10.	Table should have two positions IV Pole of good quality SS Steel mounts to be supplied with outer converting tube with a knob to mount syringe pump.
11.	Table should have Urine bag hooks provided 2 on each side.
12.	Table should have central locking of castors. Twin wheels: the base frame will be fitted with non-rusting swivel castor wheels of 125mm dia.
13.	Table should have suitable mattresses of 40 density or better fit on the bed covered withxine.
14.	Detachable SS Tray to be provided
15.	Should be liquid ingress protection: IPX4 or better.
16.	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.
17.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
18.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
19.	ISO 13485should be issued by NABCB accredited body.
20.	Quoted Bed should be IEC 60601-1:2005, 60601-2-52:2009, EMI/EMS (60601-1-2) certified through any NABL approved Lab (relevant certificate should be attached).
21.	Table should have ABS dust protective base wheel cover on both ends , head and foot end for bottom trolley

2. Foetal Doppler Machine

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Sl No	Specification
1.	Screen: 4.50 cm TFT screen
2.	Heart Rate Range:50-240 bpm
3.	Heart Rate Accuracy:±1% or ±1bpm whichever is greater
4.	Ultrasound Frequency:2.5MHz
5.	Ultrasound Sensor Size: Φ2.5cm
6.	Ultrasound Sensitivity: >110dB
7.	Speaker: Φ40mm built-in speaker
8.	Auto Shut Off: 2 minutes no signal
9.	Battery Type: 1 set Li-ion rechargeable battery
10.	Waterproof Grade:IPX1
11.	Interface: 35cm earphone output
12.	Weight: around 215g (including probe, excluding battery)
13.	Dimensions:14.2(H) x 6.8(W) x 2.8(D)cm
14.	Should have ISO and CE/ US-FDA Certificate.

3. Radiant Warmer

Sl No	Specification
1.	Should have The Manual / Servo two function control modes providing more flexibility while optimizing the thermal environment
2.	It Should have Digital Display of Baby Temperature / Set Temperature
3.	Baby Bed should be Spacious and can be incorporated easily with drop down sides for maximum access to the baby
4.	The system should be fitted with 50mm high quality castors having brakes in front 2 castors
5.	The Control Panel should be able to do complete integrated alarm system with both audible and visual Indicators in the event of • Probe Fail • Skin High • Skin Low • Power Fail
6.	Electrical Specifications * Power Supply 220V/50Hz * Heater Power 650 Watts * Fuse 5 Amp
7.	Product Dimensions (Approx) * Height- 192cm * Length- 89cm * Width- 86cm
8.	Should have 2 Trays below the baby bed for keeping consumables
9.	It should have ISO and CE/US-FDA Certification.

4. BEDSIDE LOCKER

Sl No	Specification
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1.	Overall Size: 410L×410W×840H mm.
2.	Drawer having inbuilt sliding channel connected from bottom (no ball bearing channels allowed) . Should be provided with recess to serve as handle
3.	Locker box made from machine pressed 0.8mm CRCA M.S. Sheet. Should be provided with recess to serve as handle
4.	Fitted with single piece die pressed, Seamless, stainless Steel top with raised edges on three sides.
5.	Gap should be provided between the drawer and Cabinet unit for storage
6.	Legs frame made of 25mm square × 1.2mm thick CRC tube fitted with 2 pcs PVC stumps/ Rubber shoe in front and 2 pcs wheel at rear.
7.	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.
8.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
9.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
10.	ISO 13485 should be issued by NABCB accredited body.

5. IV STAND WITH SS ROD AND CASTOR BASE

Sl No	Specification
1.	Adjustable height – 1395 mm to 2290 mm.
2.	Strong S.S 304 tubular diameter 31.75 mm x 1.2 mm (18 G) thick mounted on five pronged rectangular 20 mm X 40 mm X 1.6 mm (16 G) thick SS 304 tubular base.
3.	50mm diameter castor w/o brake.
4.	Saline Stand is provided with S.S 304 rod 12 mm diameter with 4 hooks , one Knob at side and PVC cap at bottom
5.	Weighing bearing capacity 5 kgs per Hook
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

6. BIOMEDICAL WASTE BIN- SMALL SET OF 3

Sl No	Specification
1.	Foot operated
2.	SS Frame (set of 3 pcs)
3.	20 Liter's
4.	Available in Red / Blue / Black / Yellow
5.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
6.	ISO 13485 should be issued by NABCB accredited body.

7. CRASH CART

Sl No	Specification
1.	Overall Size: 960 mm L x 480 mm W X 1545 mm H.

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2.	The crash cart should have 25.4 mm x 1.2 mm (18 G) Stainless steel tubular frame work.
3.	The emergency equipment cart should have the following facilities: 6 Nos. Hand out bins to keep important supplies easily accessible of size approx 110 mm W x 125 mm D x 75 mm H.
4.	Two lockable box units made of high impact polystyrene with 3 drawers should have dimension 305 mm L x 380 mm D x 320 mm H.
5.	The three drawers each to hold emergency medicines, ambu. Bags, IV solutions, catheters, etc.
6.	Facility to carry monitors, ECG, suction apparatus on open areas at top centre and bottom shelves.
7.	Stainless steel saline rod made of 12 mm dia. 304 grade S.S. approx. 750 mm long and bent at top to have an arm of 400 mm approx. At the end of which of 6 mm dia. S.S. hook shall be welded with TIG process.
8.	Crash cart with 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
9.	Provided with round rubber buffer, one on each corner.
10.	The size of middle and bottom shelf is 620 mm L x 388 mm W made from SS 304 0.9 mm (20 G) sheet. The shelves are provided with railing on three sides.
11.	The size of top shelf is 670 mm L x 225 mm W made from SS 304 0.9 mm (20 G) sheet.
12.	Pull-out cardiac massage board.
13.	Oxygen cylinder cage epoxy powder coated, on one side. Handle for pushing the crash cart is made from SS 304 tube size 25.4 mm x 1.2 mm (18 G) and SS flat size 25 mm x 5 mm thick, provided on other side.
14.	Safe Working Load & Patient bearing capacity - 50 kg.
15.	All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish.
16.	M.S. tubular parts, linkages, flats aluminium base are to be In house, pre-treated and Epoxy powder coated with coating thickness 50 to 100 microns.
17.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
18.	ISO 13485 should be issued by NABCB accredited body.

8. INSTRUMENT TROLLEY

SI No	Specification
1.	Overall Approximate Size: 750mm L x 450mm W x 810mm H.
2.	Frame work made of 25mm x 1.2mm thick vertical 304 grade S.S. Tubes & supporting SS Flat strip made of 25x2 mm.
3.	Two 304 grade SS 0.9mm thick S.S. Shelves with three sides railing.
4.	The trolley mounted on 100mm (4") Diagonal Locking castors
5.	Finish: S.S. Frame with S.S. Shelves
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

9. GLUCOMETER

SI No	Specification
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1	It should be based on Enzyme Type – GDH
2	It should only require blood Sample Size – 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range – 20 ~ 600 mg/dL
5	It should have a Hematocrit Range – 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - ± 5% with respect to standard
7	It should have an Accuracy - ± 15mg/dL if < 100mg/dl ± 15% if > 100
8	It Should indicate Ketone Warning
9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average -7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms
12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.
15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.

10. STETHOSCOPE

SI No	Specification
1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should have ISO and CE/ US-FDA Certificate.

H. WARD-24 bed

1. WARD BED (2 SECTION) WITH MATTRESS

SI No	Specification
1.	Overall Size (Approx.): 2170L × 915W × 600H MM (without mattress)
2.	Four section 1.2mm (18G) CRCA M.S perforated sheet top for easy breathing of mattress.
3.	Screw mechanism welded with ERW MS tube 31.75mm × 1.2mm.
4.	Backrest should have double support system beneath the mattress platform.
5.	Manual adjustment: Backrest, knee rest through two screw systems individually maneuvered by SS folding handles.
6.	Raised Backrest Angle - 75°



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7.	Bed frame made from 50mm × 30mm × 1.6mm (16G) Thick ERW tube shall have proper support. This frame is fitted on H leg made from ERW tubes diameter 31.75mm × 1.2mm (18G) thick and support tube of diameter 25mm × 1.2mm (18G) thick
8.	The bottom ends of the H leg are provided 125mm dia non rusting castors, 2 with brakes.
9.	The bed has PP head & Foot panels detachable by hand without need of any tool.
10.	Four corner rubber buffers of 100 MM dia
11.	There are four locations on the bed platform to hold stainless steel Telescopic Saline rod 12mm dia with 19mm dia × 1.2mm (18G) stainless steel outer covering tube with a knob
12.	Collapsible Side Railings ; SS pipes attached to aluminium made side arms.
13.	Provided with four section mattress 4" thick PU Foam of 40 density covered PVC.
14.	Patient Working Load-125 kg.
15.	Safe Working Load-150 kg.
16.	Urine/ Drainage Bag Holder should be provided at both side of the bed.
17.	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.
18.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
19.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
20.	ISO 13485 should be issued by NABCB accredited body.

2. BEDSIDE LOCKER

Sl No	Specification
1.	Overall Size: 410L×410W×840H mm.
2.	Drawer having inbuilt sliding channel connected from bottom (no ball bearing channels allowed) . Should be provided with recess to serve as handle
3.	Locker box made from machine pressed 0.8mm CRCA M.S. Sheet. Should be provided with recess to serve as handle
4.	Fitted with single piece die pressed, Seamless, stainless Steel top with raised edges on three sides.
5.	Gap should be provided between the drawer and Cabinet unit for storage
6.	Legs frame made of 25mm square × 1.2mm thick CRC tube fitted with 2 pcs PVC stumps/ Rubber shoe in front and 2 pcs wheel at rear.
7.	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.
8.	M.S tubular parts, linkages, flats are to be In-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
9.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
10.	ISO 13485 should be issued by NABCB accredited body.

3. IV STAND WITH SS ROD AND CASTOR BASE

Sl No	Specification
1.	Adjustable height - 1395 mm to 2290 mm.

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2.	Strong S.S 304 tubular diameter 31.75 mm x 1.2 mm (18 G) thick mounted on five pronged rectangular 20 mm X 40 mm X 1.6 mm (16 G) thick SS 304 tubular base.
3.	50mm diameter castor w/o brake.
4.	Saline Stand is provided with S.S 304 rod 12 mm diameter with 4 hooks , one Knob at side and PVC cap at bottom
5.	Weighing bearing capacity 5 kgs per Hook
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

4. BIOMEDICAL WASTE BIN- SMALL SET OF 3

SI No	Specification
1.	Foot operated
2.	SS Frame (set of 3 pcs)
3.	20 Litre's
4.	Available in Red / Blue / Black / Yellow
5.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
6.	ISO 13485 should be issued by NABCB accredited body.

5. PULSE OXIMETER

SI No	Specification
1.	Display Type : OLED display
2.	SpO2 Measurement Range : 70%~99%, Accuracy : ±2% on the stage of 80%~99% ±3% (when SpO2 value is 70%~79%) Below 70% no Requirement Resolution ±3%
3.	PR Measurement Range : 30BPM-240BPM, (the resolution is 1bpm) Accuracy : ±1BPM or ±1% (the larger one)
4.	PI Index : Measurement Scope : 0~20
5.	Power : AAA 1.5V alkaline batteries
6.	Power Consumption : below 30mA
7.	Automatic Power- off : the product shuts off by itself when no finger is in the product ≥8 seconds
8.	Automatic Startup : every 5 s instrument will automatically detect the signal, after the hole with my finger, timely automatically boot
9.	Accelerometer Function : finger movement, the screen display will change with the accelerometer changes
10.	Dimension : 58mm x 36mm x 33mm
11.	Operating Environment : Operation Temperature : 5°C~40°C Storage Temperature : -10°C~40°C Ambient Humidity : 15%~80% on operation 10%~80% in operation Air Pressure : 70kPa~106kPa

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12.	Should have ISO and CE/ US-FDA Certificate.
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6. SYRINGE PUMP

SI No	Specification
1.	Should have flow 0.1 to 1500ml/hr
2.	Should have 2.5" inch LCD display
3.	Should have Rate mode for operation
4.	Should have preset volume(VTBI) 0.1-9999ml, Increment is 0.1ml
5.	Should have increment 0.1ml(0.1-999.9ml/hr); 1ml(1000-2000ml/hr)
6.	Should have KVO 0.5ml/hr
7.	Should have bolus atuo/manual 0.1-1500ml/hr And should have anti bolus feature
8.	It should have compatibility 5/10/20/30/50/60ml syringe with automatic recognition of size
9.	Machine should have battery backup minimum 6hrs to 12hrs
10.	Should have level of resistance to water and dust IP34
11.	Should be ISO and European CE/US-FDA approved product

7. LARYNGOSCOPE

SI No	Specification
1.	Should be Single Use Video Laryngoscope
2.	Should Have Macintosh Blade for both Video & Direct Laryngoscopy.
3.	Should have an optical View in Variety of Light Conditions
4.	Should have a focal distance of 75mm
5.	Should have a resolution of 320H*240V Pixels
6.	Should have an viewing angle up to 120 degree
7.	Should have ISO and CE/ US-FDA Certificate.

8. THERMOMETER- INFRARED TYPE

SI No	Specification
1.	Non-Contact Infrared Forehead Thermometer.
2.	Large LCD 38 X 28 mm
3.	Measuring Localization: Forehead and Object Surface
4.	Measurement Range: Body mode 32.0°C ~43.0°C (89.6°F~109.4°F)
5.	Object mode: 0.0~100.0°C (32.0°F~212.0°F);

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6.	Temperature Unit: °C/°F (C & F Switchable)
7.	Display Resolution : 0.1°C/0.1°F
8.	Accuracy: +0.2°C/+0.4°F (witin 36.0°C~39.0°C / 96.8°F~102.2°F)
9.	Automatic Power Off: In 1 minute
10.	Battery Life : Could be used for 500 times for normal condition
11.	Temperature : -20°C~+55°C / -4.0°F~+122.0°F
12.	Humidity: 15%/o ~95%/o RH
13.	Should have ISO and CE/ US-FDA Certificate.

9. AMBU BAG ADULT

SI No	Specification
1.	Bello Capacity: 1600ml
2.	Reservoir Bag Capacity: 2600ml
3.	Mask Size: 4 or 5 no.
4.	Oxygen Tube Length: 2mtr
5.	Should have ISO and CE/ US-FDA Certificate.

10. ANEROID BP APPARTUS

SI No	Specification
1.	It Should be a manual device
2.	Should be used to measure blood pressure, composed of an inflatable cuff to collapse and then release the artery under the cuff in a controlled manner
3.	Should have a mechanical manometer to measure the pressure.
4.	Should be used to measure blood pressure for Pediatric& Adult.
5.	Should have ISO and CE/ US-FDA Certificate.

11. ELECTRONIC WEIGHING SCALE- ADULT

SI No	Specification
1.	The outer body should be made of Glass in Round Shape
2.	The scale should tell you the accurate weight with the help of advanced high precision strain gauge sensors system.
3.	The Capacity of Digital bathroom Scale should be 150 Kg and the accuracy should be 0.1 Kg.
4.	It should have Auto zero - auto off
5.	These digital scales should have an LCD display with 25 mm digits.
6.	Should have ISO and CE/ US-FDA Certificate.

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12. ELECTRICAL SUCTION APPARTUS

Sl No	Specification
1.	Ward care Suction Unit
2.	Powder Coated MS chassis
3.	Noise level of suction apparatus is 50 Db \pm 03 DB
4.	Electric requirement - 220 ~230VAC , 50Hz, 1 Phase
5.	Ideal for medical & Surgical procedures
6.	Rotary Vane or Diaphragm Vacuum Pump
7.	With -710+/. 10mm Hg
8.	Free air displacement 30 ~ 35 Ltrs / min
9.	Heavy duty HN - 50 antistatic castors
10.	180watt, 1440 RPM, 0.25 H.P. Electric Motor
11.	76mm Vacuum Gauge
12.	Non collapsible PVC tubing
13.	2 x 1.5 Ltrs. Polycarbonate jars with overflow safety
14.	Bacterial filter fitted on top
15.	All parts coming into Contact with secretion are autoclave safe
16.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
17.	ISO 13485 should be issued by NABCB accredited body.

13. PATIENT STRETCHER (FULLY SS)

Sl No	Specification
1.	Overall size: 2030 mm L x 570 mm W x 820 mm H. Mattress Platform : 1810 mm L x 560 mm W.
2.	Frame work of Trolley is consists of vertical tube size diameter 31.75 mm x 1.2 mm (18 G) thick , with reinforced at bottom with diameter 34.92 mm x 1.2 mm (18 G) thick tube for fitting castors. The Frame work is mounted on 150 mm castors two with brakes and two without brakes.
3.	All horizontal stays are made of tube diameter 25.4 mm X 1.2 mm (18 G).
4.	MS flat size 32 mm x 5 mm is welded to frame work to support stretcher.
5.	Removable Stretcher Top made from MS tube diameter 25.4 mm x 1.2 mm (16 G) thick with epoxy coated 1.2 mm (18 G) MS, CRCA sheet.
6.	Handle is made of SS tube size diameter 25.4 mm x 1.2 mm
7.	Four stump legs made of 25.4 mm 1.2 mm SS tube shall be welded at the bottom of the removable stretcher frame and should be provided with PVC material having nylon reinforced. Safe working load of 135 kgs and patient load bearing capacity of 130 kgs
8.	Rexine covered Mattress 50 mm (2") thick with single section.
9.	I.V. Rod with 2 Hooks.

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10.	All SS should be 304G, test report submitted at the time of delivery
11.	The treated Metal Surface should have coating of Epoxy Polyester Powder with paint film thickness of 60 microns (minimum) and oven baked at 180 degree to 200 degree Centigrade to avoid contamination of the clean metal surface from dust particles.
12.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
13.	ISO 13485 should be issued by NABCB accredited body.

14. WHEEL CHAIR – FOLDABLE

SI No	Specification
1.	Epoxy Powder Coated Sturdy Ms Frame.
2.	Fixed Padded Armrests.
3.	Height Adjustable Footrests.
4.	Cushioned Armrests for Maximum Comfort.
5.	Nylon Fork In Front Wheel For Higher Strength & Rust Proofing.
6.	Bearings in All Four Wheels and Forks.
7.	High-Quality Treaded Rubber Tyre for Long Life and Grip.
8.	Adjustable Seat Belt & Calf Support.
9.	Durable Plastic Foot Rest.
10.	Should be ISO and European CE/USFDA approved product

15. CRASH CART

SI No	Specification
1.	Overall Size: 960 mm L x 480 mm W X 1545 mm H.
2.	The crash cart should have 25.4 mm x 1.2 mm (18 G) Stainless steel tubular frame work.
3.	The emergency equipment cart should have the following facilities: 6 Nos. hand out bins to keep important supplies easily accessible of size approx 110 mm W x 125 mm D x 75 mm H.
4.	Two lockable box units made of high impact polystyrene with 3 drawers should have dimension 305 mm L x 380 mm D x 320 mm H.
5.	The three drawers each to hold emergency medicines, ambu. bags, IV solutions, catheters, etc.
6.	Facility to carry monitors, ECG, suction apparatus on open areas at top centre and bottom shelves.
7.	Stainless steel saline rod made of 12 mm dia. 304 grade S.S. approx. 750 mm long and bent at top to have an arm of 400 mm approx. at the end of which of 6 mm dia. S.S. hook shall be welded with TIG process.
8.	Crash cart with 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
9.	Provided with round rubber buffer, one on each corner.
10.	The size of middle and bottom shelf is 620 mm L x 388 mm W made from SS 304 0.9 mm (20 G) sheet. The shelves are provided with railing on three sides.

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11.	The size of top shelf is 670 mm L x 225 mm W made from SS 304 0.9 mm (20 G) sheet.
12.	Pull-out cardiac massage board.
13.	Oxygen cylinder cage epoxy powder coated, on one side. Handle for pushing the crash cart is made from SS 304 tube size 25.4 mm x 1.2 mm (18 G) and SS flat size 25 mm x 5 mm thick, provided on other side.
14.	Safe Working Load & Patient bearing capacity - 50 kg.
15.	All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish.
16.	M.S. tubular parts, linkages, flats aluminium base are to be in house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
17.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
18.	ISO 13485 should be issued by NABCB accredited body.

16. DRESSING TROLLEY

SI No	Specification
1.	Overall size: 1010L x 510W x 900H MM.
2.	Shelf Size: 750 mm L x 500mm W
3.	Verticals tubes made of 31.7mm OD x 18 G tube. Horizontal stays of 19 mm OD x 18 G tube on all four sides to support.
4.	Two 304 grade stainless steel shelves 20G over with 10 mm dia rod stainless steel railings shall be provided on all four sides.
5.	The trolley shall hold seamless stainless steel bucket with S. S. lid at lower lever and S.S. bowl at top lever respectively.
6.	Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley.
7.	The trolley shall be in buff finish.
8.	It shall be mounted on 125mm dia non-rusting castor wheels two with brakes and two without inside the reinforced socket sleeves.
9.	Castor made from high grade non floor- staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly.
10.	SS parts finished with Matt Polish.
11.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
12.	ISO 13485 should be issued by NABCB accredited body.

17. DRUG TROLLEY/MEDICINE CART

SI No	Specification
1.	Overall Size (Approx): 760L x 460W x 950H mm.
2.	Top Size (Approx): 710L x 460W mm. Frame work made of 25mm square x 1.2mm thick MS, CRC tube mounted on 100mm (4") Diagonal Locking Castors.
3.	Two 304 grade 1.0mm thick SS shelves fitted with three side railing on both shelves.
4.	Two 0.8 mm thick M.S., CRC sheet Drawer under the each shelf. No. of drawers under each shelf : 02 ; total of 4 drawers
5.	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.

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6.	M.S tubular parts, linkages, flats are to be in-house, pretreated and Epoxy powder coated with coating thickness 50 to 100 microns.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

18. INSTRUMENT TROLLEY

Sl No	Specification
1.	Overall Approximate Size: 750mm L × 450mm W × 810mm H.
2.	Frame work made of 25mm × 1.2mm thick vertical 304 grade S.S. Tubes & supporting SS Flat strip made of 25x2 mm.
3.	Two 304 grade SS 0.9mm thick S.S. Shelves with three sides railing.
4.	The trolley mounted on 100mm (4") Diagonal Locking castors
5.	Finish: S.S. Frame with S.S. Shelves
6.	All SS parts are of 304 grade with buffed and matt finished.
7.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
8.	ISO 13485 should be issued by NABCB accredited body.

19. OXYGEN CYLINDER TROLLEY

Sl No	Specification
1.	Framework made of M.S. CRC tube mounted on 100mm castors at rear.
2.	Finish: Pre-treated and Epoxy powder coated
	a. For D type cylinder (Big Cylinder)
	b. For B type cylinder (Small Cylinder)
3.	All Process Parameters as per documented IMS Procedures for Quality Assurance (ISO 9001, ISO 14001, ISO 45001) and CE/USFDA/WHO-GMP should be available
4.	ISO 13485 should be issued by NABCB accredited body.

20. GLUCOMETER

Sl No	Specification
1	It should be based on Enzyme Type - GDH
2	It should only require blood Sample Size - 0.5 µL
3	It should have a Reaction Time - 5 Seconds
4	It should have a Measurement Range - 20 ~ 600 mg/dL
5	It should have a Hematocrit Range - 35%-60% (HIC: Hematocrit Interference Correction)
6	It should have Precision - ± 5% with respect to standard
7	It should have an Accuracy - ± 15mg/dL if < 100mg/dl ± 15% if > 100
8	It Should indicate Ketone Warning

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9	It should have an Memory Capacity of 450 sets
10	It Should have a Day Average -7 , 14,21,28,60, 90 days
11	It should Have 4 daily alarms
12	Preferred Dimension 96.2(L)x61.2(W)x15.2(H) mm
13	Preferred Weight 52 g (without battery)
14	It should work on Operating Condition 10°C-40°C, below 85% R.H.
15	It Should be certified by ISO 15197:2013, ISO 13485:2013, CE/USFDA and NIB Evaluated.

21. STETHOSCOPE

SI No	Specification
1.	Stethoscope Dual Head Adult is an acoustic medical instrument used to hear sounds made by the heart, lungs, and intestines. It typically Should have a small disc-shaped resonator that is placed against the chest, and two tubes connected to earpieces. It is often used to listen to lung and heart sounds.
2.	Stethoscope Dual Head should have chest piece of 42mm Dia
3.	Stethoscopes should have earpieces, which aid comfort and create a seal with the ear, improving the acoustic function of the device.
4.	Should have ISO and CE/ US-FDA Certificate.

I. AHU (Air Handling Unit)

SI No	Specification
1	Air Handling Unit: Air Handling Unit, CFM-2500, Double Skin, G.I casing 6mm outer and inside layer, with 25mm polyurethane insulation, with mixing chambers, 6 RD cooling coil , double circuit, 0.1mm thickness aluminum fins , filters with 50 mm aluminum /washable pre and fine filter , belt drive motor of 50 Hz , 3 phase AC supply , drain connection . Make Zeco Condensing Unit: Outdoor Unit Capacity: 8.5Tr to 11 Tr. Micro processor controlled Air Cooled. Hermetically sealed scroll compressor for R-22, refrigerant, complete with motor, condenser, fan of 3 phase connection. Electric Panel for AHU & Condensing Unit and heating circuit. Copper piping, insulations, MCB panels , Electric control panel for interlocking all components of AHU and condensing unit
2	Planair 304 Graded Stainless Steel :- Planar Ceiling constructed out of 1.6mm thick extruded 304 stainless sheet of size 1800 X 1800mm or 2400 X 2400mm having HEPA filters of class H14 each. The HEPA filters having dust spot efficiency of 99.99% for 0.3 micron. Air & Light diffuser made out of two layer of mono filament precision woven polyester for the plan air ceiling to give a "LAMINAR FLOW" of filtered air. It also provides a diffused shadow less lighting system with a control on the intensity of luminance by using high frequency electronic LDEs and ballasts.
3	Pressure Release Damper:- Cascade type Pressure release damper having multi 304 Graded stainless steel blades to control room air pressure.
4	Return Air Grill:- Return Air Grill for return Air from the OT. Sleeve and Grill 4 Return Air grill in each corner.
5	Pressure Differential Gauge: Magnahelic Pressure Gauge 0-10 mm with sensor to monitor the pressure difference Ducting, Return Air Path and Installation:-

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	Ducting: 24 Gauge Aluminum sheet with 13mm XPE thick insulation for thermal insulation for supply line and return ducts. Joints will be lapped with Nitrile rubber tape for better insulation UPTO AHU. Aluminum curves and bends are ensured to be air tight by applying silicon sealant after fabrication for easy flow of air. Hangers shall be suspended by means of G.I coated rods and these shall be 2.5mts apart.
6.	Should have ISO and CE/ US-FDA Certificate.

J. MGPS

SI No	Specification
1	All material should be as per specification (CE/US-FDA, ISO Certified), Copper Pipe Medical Grade Llyods Marked. BS EN:13348
2	Colour Code - Pipeline Colour Coding as per Indian Standard Colour Code IS152379:1990
3	Medical Oxygen System Should Include: <ul style="list-style-type: none"> • 4+4 Oxygen Manifold System along with pigtails pipes NRV • Oxygen Semi Automatic Control Panel • 2+2 Oxygen Manifold Emergency System • Oxygen Emergency HP Regulator • B.S. Oxygen gas outlet • BPC oxygen flowmeter with adapter
4	Nitrous System Should include: 2+2 Nitrous Cylinder with Heavy Duty Regulator 1 Cylinder Emergency line N ₂ O Nitrous Gas Outlet CO ₂ 2 Cylinder Capacity with HP Regulator
5	Vacuum System Should include: 5 HP Vacuum Pump Vacuum Receiver 500 Ltr Vacuum Filter Vacuum Accessories Vacuum gas Outlet Ward Vacuum Unit OT suction Trolley
6	Air Compressor System: 5HP Base mounted Oil Free Air compressor Pump 3HP Base mounted Oil Free Air compressor Pump 500 Ltr Air Receiver Air Dryer Air Filter Air Online Regulator Air Gas Outlet
7	Copper Pipe EN : 13348 (Inside Room and Corridor) Copper Pipe 12mm Dia 0.6mm Copper Pipe 15mm Dia 0.9mm Copper Pipe 22mm Dia 0.9mm Copper Pipe 28mm Dia 0.9mm Copper Pipe EN : 13348 (Outside Room and Manifold) 54mm Dia 1.2 (vacuum) 35mm Dia 1.2 (Oxygen) 22mm Dia 0.9mm (N ₂ O) 15mm Dia 0.9mm (Inside Manifold Room) 3Nos Gas Line Pressure alarm 2Nos Gas Line Pressure alarm Medical Area 5 Gas Valve Box (O ₂ , N ₂ O, Air, CO ₂ , Vacuum) 15mm Isolation Valve with Brass Adaptor 22mm Isolation Valve with Brass Adaptor 28mm Isolation Valve with Brass Adaptor 54mm Isolation Valve with Brass Adaptor

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K. ADMIN FURNITURE



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Sl No	Name of Items
1	Examination Couch
2	Patient Stool
3	Bedside Screen
4	Surgeon Chair
5	Waste Bin
6	Foot Step Stage
7	Doctor's Chair
8	Visitor Chair
9	Instrument Cabinet
10	First Aid Cabinet
11	Doctor's Table
12	Waiting Chair - 3 Seater
13	Wall Clock
14	Tables With Drawers
15	Sofa Set
16	Office Cabinets
17.	Superintendent's Table
18.	Revolving Chair for Superintendent
19.	Conference Table - 12 Seater
20.	Conference Chairs
17.	All Items Should have ISO and CE/ US-FDA Certificate.

L. MOBILE TABLET PC

Sl No	Name of Items
1	Processor - Powerful Octa-Core ARM Cortex™ A55 1.6 GHz + 1.2 GHz, GPU IMG8322
2	Storage - 4 GB RAM, 64 GB built-in storage, Micro SD support, expandable up to 256 GB
3	Design & Display - 25.5 cm (10.1) IPS FHD (1200*1920), Capacitive Multi-Touch
4	Battery - 7000 mAh Li-Polymer Battery
5	Operating System - Android™ 9 Pie
6	Camera - 13 MP AF Rear Camera with LED Flash, 8 MP AF Front Camera
7	Network <ul style="list-style-type: none"> • VoLTE Support • Single Micro SIM Slot • 4G FDD LTE B1 / B3 / B5 / B8 • 4G TDD LTE B40 / B41



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	<ul style="list-style-type: none">• 3G WCDMA 900 / 2100 MHz• 2G EDGE / GPRS / GSM• 850 / 900 / 1800 / 1900 MHz
8	GPS <ul style="list-style-type: none">• GPS & A-GPS Connectivity• Dual Band Wi-Fi 802.11a/b/g/n/ac (2.4 GHz and 5 GHz)• Bluetooth V5.0• USB OTG support
9	Certification - ISO, BIS, CE, ROHS should be available.

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Annexure - I

GENERAL INFORMATION



All individuals' firms and contractors applying for pre-qualification are requested to complete the information in this form. The nationality information should be provided for all owners of applicants who are partnership or individually owned firms.

1. Name of Contractors / Firm _____
2. Head Office Address _____

3. Telephone _____
4. Fax _____
5. Place of Registration _____
6. Year of Registration _____
7. Registration Number _____
8. Organization under whom the applicant is registered.

9. Electrical License Number _____ valid up to _____
10. Labour License Number _____ valid up to _____

Note:-(i) Enclose attested copy of Registration Certificate of any Meghalaya State/Central Institution.
(ii) Enclose attested copy of photograph of the applicants.
(iii) Enclose attested copy of electrical license and Labour License.

Signature of Bidder/Firm

Name in Block Letter _____

Complete Postal Address _____



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Annexure - II

STRUCTURE AND ORGANISATION

1. The applicant is:-

- (a) An individual
- (b) A proprietary firm
- (c) A firm in Partnership
- (d) A limited company or corporation
- (e) A group of firms/joint venture

(Give complete information in respect of each partner)

2. Attach the organization Chart indicating the Structure of organization, including the name of the Director and position of others members.

3. Number of years of experience

(a) as a Prime Contractor (contractor shouldering Major responsibility)

(i) in own State _____

(ii) Other States _____

(Specify State):

4. For how many years has your organization been in business of construction & supply works? _____

5. Has any work been withdrawn? Yes/No

(If yes, give details and reasons thereof) _____

6. Has any work been abandon and left incomplete? Yes/No

(If yes, give name of the project and reasons for not completing the work) _____

Have you ever sublet any work at any time? Yes/No

(If yes, specify name of work and extent of subletting) _____

Note: Enclose a certified copy of your constitution /Articles of Association

Signature of Bidder/Firm

Name in Block Letter _____

Complete Postal Address _____

Office of Mission Director, National Health Mission PE-103
Directorate of Health Services, Health Complex, Upper New Colony, Laitumkhrah, Shillong - 793003
Phone: (0364) 2504532 Email: nrhnmegh@gmail.com



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Annexure - III

GENERAL EXPERIENCE

Name of the applicant:-

ANNUAL TURNOVER		
Sl. No	Year	Turnover (in Indian Rupees)
1	2017-2018	
2	2018-2019	
3	2019-2020	
4	2020-2021	
5	2021-2022	
Average		

Note: - Supporting documents, such as audited reports, balance sheet, In-come Tax returns, certificates from Chartered Accountant/Competent Authority should be enclosed to substantiate information.

Signature of Bidder/firm

Name in block letter _____

Complete Postal Address _____

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Annexure - IV

DETAILED OF EXPERIENCE IN CONSTRUCTION WORKS (DETAILS OF WORK DURING THE LAST 5 (FIVE) FINANCIAL YEAR)							
Sl. No	Name of Work	Name of Employer and address	Value of work (In lakhs)	Time of completion As per agreement	Date of contract award	Actual date of completion	Reasons for delay, if any
1	2	3	4	5	6	7	8

Signature of Bidder/firm

Name in block letter _____

Complete Postal Address _____

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Annexure - V

SUMMARY SHEET CURRENT CONTRACT COMMITMENT/WORKS IN PROGRESS

Name of the Applicant: -

Applicant and each partner to an application should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or contracts approaching completion, but for which an unqualified full completion certificate is yet to be issued.

Sl No	Name of Contract Client	Name of Work	Contract value (in lakhs)	Stipulated date of Completion	Value outstanding of work (in lakhs)	Estimated completion date
1	2	3	4	5	6	7

Signature of Bidder/firm

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Annexure - VI

SOLVENCY CERTIFICATE

This is to certify that Shri/Smt/Ms _____
_____ is a reputed contractor/firm with adequate financial Standing. If
the contract for the work, namely "Construction of Baljek Integrated Health Complex in Baljek, West
Garo Hills District on Turnkey Basis and Construction of Integrated Public Health Laboratory (IPHL)
on Turnkey Basis at Pasteur Hills, Shillong, East Khasi Hills, District" is awarded to the above
contractor/firm, we shall be able to provide overdraft/credit facilities to the extent Rs. _____

_____ (Rupees _____) only

To meet his/her/their working capital requirement for the execution of the above mentioned work.

Signature of Bank Authority
Name of the Bank

Designation _____
Complete Address _____

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Annexure - VII

LIST OF KEY EQUIPMENT AND FIELD TESTING EQUIPMENT TO BE DEPLOYED ON CONTRACT WORK

Key equipment

No	Equipment Type and Characteristics	Min. Number Required
1	Excavator cum Loader	
2	Concrete Vibrator	2(Two) No
3	Concrete Mixer	1(one)No
4	Water Tankers	2(Two) No
5	Trucks/Tipppers	1(one)No
6	Tubular scaffolding with 40mm diameter pipes of 6m length with necessary bracings where ever required and Steel centering	50sq.m

Signature of Bidder/firm

Name in Block letter _____

Complete Postal Address _____

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Annexure - VIII

**INFORMATION REGARDING CURRENT LITIGATION, DEBARRING / EXPELLING OF TENDER OR
ABANDONMENT OF WORK BY TENDERER**

1. (a) Does the applicant or its constituent partners have a consistent history of litigation awarded against him? Yes / No
(b) If yes, give details.
2. (a) Has the Applicant been debarred / expelled by any Agency in India, during the last five years, expecting on account of reasons other than non- performance? Yes / No
(b) If yes, give details.
3. (a) Has the applicant during the last 5 years abandoned any contract work in India? Yes / No
(b) If yes, give details.
4. (a) Has the applicant been declared bankrupt during the last 5 years. Yes / No
(b) If yes, give details, including present status.

Note: *If any information in this schedule is found to be incorrect or concealed, prequalification application will be summarily rejected.*

Signature of Bidder/Firm

Name in Block Letter _____

Complete Postal Address _____



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Government of Meghalaya

Annexure - IX

Date:
Tender No.:

To,

The Mission Director
National Health Mission
Meghalaya_____

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize _____ to submit a Bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General Guidelines of Contract, with respect to the Goods offered by the above firm.

Signed:*[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name:*[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title:*[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

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Annexure -X

LETTER OF UNDERTAKING

To,
 Mission Director, NHM
 Meghalaya _____
 Tender No:-
 Tender Date:-
 For:-
 Sir,

- I, _____, on behalf of _____, having its registered office at _____ and its branch office at _____ do hereby declare to comply with all the Terms and Condition as specified in the NIT. The rates quoted by me/ us are valid and binding on me/us for acceptance for a period of one year minimum from the date of award of contract to us.
- We agree to the condition of the tender under which the Earnest Money Deposit shall be forfeited by us.
- The tender inviting authority has the right to accept or reject any or all the tenders without assigning any reason thereof.
- We understand all the Terms and Conditions of the Contract and bind myself / ourselves to abide by them.
- I hereby furnish the following details as specified by the NIT.

FIRM DETAILS	Firm Name	
	Proprietorship / Entrepreneurship/Holding Company, Partnership Firm	
	Name of Proprietor/Director/CEO/Others	
	Address	
	Telephone Number	
	Fax Number	
	Mobile Number	
	Email Id	
	Bank Name	
	Address	
BANK DETAILS	Account Number	
	IFSC Code	
	NEFT Code	

- We hereby declare that as per the attached Affidavit, there is no vigilance /CBI or Court Case pending / Contemplated against us at the moment.
- All information provided is True & Accurate. If at any time it is found that any information provided is proven false, I agree to the Cancellation / Termination of the Tender / Agreement leading up to blacklisting of the Said firm under the Government of Meghalaya or in any other organisation for a period of three years.

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SIGNATURE
NAME & ADDRESS OF BIDDER

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Office of Mission Director, National Health Mission pg. 112
Directorate of Health Services, Health Complex, Upper New Colony, Laitumkhrah, Shillong - 793003
Phone: (0364) 2504532 Email: nrhnmegh@gmail.com
www.nrhnmeghalaya.nic.in Nhm Meghalaya @iecbccnhnmegh IECBCC NHM Meghalaya



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Annexure - XI

BID SECURITY FORM

Whereas _____, (hereinafter called " the Bidder") has submitted its bid dated ____ for _____ vide Tender No. _____ dated ____ KNOW ALL MEN by these presents that We _____, having our office at _____ (hereinafter called "the Bidder") are bond unto National Health Mission, _____ (hereinafter called "the Purchaser") the sum of Rs. _____ vide DD no. _____ for which payment will and truly to be made of the said Purchaser, the Bidder binds itself, its successors and assigns by these present.

THE CONDITION of the obligation is:

1. If the Bidder withdraws his bid during the period of bid validity specified by the Bidder on the Bid from OR
2. If the Bidder, having been notified of the acceptance of his bid by the purchase during the Period of bid validity
 - a) fails or refuses to execute the Contract, if required; or
 - b) fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided that in its demand, the purchaser will note that the amount claimed by it is due to it owning the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force as to the bidders of the Bid Document up to and including Ninety (90) days from date of opening the Tender and any demand in respect thereof should reach the Bidder not later than date to be specified.

Signature of the Bidder
Name
Signed in Capacity of
Full address of Office
Tel No. of Office

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Annexure - XII

Sl. no.	Name of the Item	Name of Manufacturer	Indian/Imported/Country Of Origin	Samples/Catalogues and Compliance certificate YES/NO	Deviation to Specifications if any with reason	CMC Period minimum 5yrs
Hybrid (ICU/HDU-16 bed Unit)						
1	MOTORIZED ICU BED4 SECTION WITH MATTRESS					
2	MANUAL BED 4 SECTION WITH MATTRESS					
3	BEDSIDE LOCKER					
4	OVERBED TABLE					
5	IV STAND WITH SS ROD AND CASTOR BASE					
6	BED SIDE STOOL					
7	BIOMEDICAL WASTE BIN- SMALL SET OF 3					
8	MULTI PARA MONITOR WITH CENTRAL STATION					
9	ICU VENTILATOR					
10	SYRINGE PUMP					
11	LARYNGOSCOPE					
12	THERMOMETER- INFRARED TYPE					
13	AMBU BAG ADULT					
14	ANEROID BP APPARTUS					
15	OPHTHALMOSCOPE					
16	ECG MACHINE 12 CHANNEL					
17	PORTABLE ULTRASOUND					
18	BIPHASIC DEFIBRILLATOR					
19	ABG MACHINE WITH ISE					
20	ELECTRONIC WEIGHING SCALE- ADULT					

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21	ELECTRICAL SUCTION APPARTUS					
22	PATIENT STRETCHER (FULLY SS)					
23	WHEEL CHAIR - FOLDABLE					
24	CRASH CART					
25	DRESSING TROLLEY					
26	DRUG TROLLEY/MEDICINE CART					
27	ECG MACHINE TROLLEY					
28	INSTRUMENT TROLLEY					
29	OXYGEN CYLINDER TROLLEY					
30	GLUCOMETER					
31	STETHOSCOPE					
OPERATION THEATRE-1						
1	OT TABLE					
2	OT LIGHT					
3	ANESTHESIA WORK STATION					
4	SURGICAL DIATHERMY					
5	SYRINGE PUMP					
6	INFUSION PUMP					
7	BIPHASIC DEFIBRILLATOR					
8	INSTRUMENT SET					
9	LARYNGOSCOPE					
10	AMBU BAG ADULT					
11	ELECTRICAL SUCTION APPARATUS					
12	PATIENT STRETCHER (FULLYSS)					
13	WHEEL CHAIR - FOLDABLE					
14	CRASH CART					
15	DRESSING TROLLEY					



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16	DRUG TROLLEY/MEDICINE CART					
17	INSTRUMENT TROLLEY					
18	OXYGEN CYLINDER TROLLEY					
19	MAYO TROLLEY					
20	GLUCOMETER					
21	STETHOSCOPE					
Minor OT-1						
1	OT TABLE					
2	OT LIGHT					
3	SYRINGE PUMP					
4	DRESSING TROLLEY					
EMERGENCY UNIT 5 bed						
1	MANUAL BED 4 SECTION WITH MATTRESS					
2	BEDSIDE LOCKER					
3	IV STAND WITH SS ROD AND CASTOR BASE					
4	BIOMEDICAL WASTE BIN- SMALL -SET OF 3					
5	MULTI PARA MONITOR					
6	ICU VENTILATOR					
7	SYRINGE PUMP					
8	LARYNGOSCOPE					
9	THERMOMETER- INFRARED TYPE					
10	AMBU BAG ADULT					
11	ANEROID BP APPARTUS					
12	OPHTHALMOSCOPE					
13	ECG MACHINE 12 CHANNEL					
14	PORTABLE MONITOR					
15	PORTABLE VENTILATOR					
16	BIPHASIC DEFIBRILLATOR					



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Government of Meghalaya

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17	ELECTRONIC WEIGHING SCALE-ADULT					
18	ELECTRICAL SUCTION APPARTUS					
19	PATIENT STRETCHER (FILLY SS)					
20	WHEEL CHAIR - FOLDABLE					
21	CRASH CART					
22	DRESSING TROLLEY					
23	DRUG TROLLEY/MEDICINE CART					
24	ECG MACHINE TROLLEY					
25	INSTRUMENT TROLLEY					
26	OXYGEN CYLINDER TROLLEY					
27	GLUCOMETER					
28	STETHOSCOPE					
DIALYSIS ROOM- 2 bed						
1	MANUAL BED 4 SECTION WITH MATTRESS					
2	BEDSIDE LOCKER					
3	OVERBED TABLE					
4	IV STAND WITH SS ROD AND CASTOR BASE					
5	HEMO DIALYSIS MACHINE					
6	RO PLANT SYSTEM					
7	DIALYSIS REPROCESSOR					
8	MULTI PARA MONITOR					
9	SYRINGE PUMP					
10	LARYNGOSCOPE					
11	THERMOMETER- INFRARED TYPE					
12	AMBU BAG ADULT					



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13	ELECTRONIC WEIGHING SCALE- ADULT					
14	WHEEL CHAIR - FOLDABLE					
15	CRASH CART					
16	DRESSING TROLLEY					
17	DRUG TROLLEY/MEDICINE CART					
18	GLUCOMETER					
19	STETHOSCOPE					
MCH-02 Beds						
1	WARD BED (2 SECTION) WITH MATTRESS					
2	BEDSIDE LOCKER					
3	IV STAND WITH SS ROD AND CASTOR BASE					
4	BIOMEDICAL WASTE BIN- SMALL - SET OF 3					
5	INSTRUMENT TROLLEY					
6	GLUCOMETER					
7	STETHOSCOPE					
LDR-1 Bed						
1	LDR Bed					
2	Foetal Doppler Machine					
3	Radiant Warmer					
4	BEDSIDE LOCKER					
5	IV STAND WITH SS ROD AND CASTOR BASE					
6	BIOMEDICAL WASTE BIN-SMALL - SET OF 3					
7	CRASH CART					
8	INSTRUMENT TROLLEY					
9	GLUCOMETER					
10	STETHOSCOPE					
WARD-24 bed						



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1	WARD BED (2 SECTION) WITH MATTRESS					
2	BEDSIDE LOCKER					
3	IV STAND WITH SS ROD AND CASTOR BASE					
4	BIOMEDICAL WASTE BIN- SMALL -SET OF 3					
5	PULSE OXIMETER					
6	SYRINGE PUMP					
7	LARYNGOSCOPE					
8	THERMOMETER - NON CONTACT TYPE					
9	AMBU BAG ADULT					
10	ANEROID BP APPARTUS					
11	ELECTRONIC WEIGHING SCALE- ADULT					
12	ELECTRICAL SUCTION APPARATUS					
13	PATIENT STRETCHER (FULLY SS)					
14	WHEEL CHAIR - FOLDABLE					
15	CRASH CART					
16	DRESSING TROLLEY					
17	DRUG TROLLEY/MEDICINE CART					
18	INSTRUMENT TROLLEY					
19	OXYGEN CYLINDER TROLLEY					
20	GLUCOMETER					
21	STETHOSCOPE					
AHU						
1	Air Handling Unit					
MGPS						
2	MGPS SYSTEM FOR HOSPITAL-					
ADMIN FURNITURE						



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3	ADMIN FURNITURE					
	TABLET PC					
1	MOBILE TABLET PC					

Note:

1. All information in the above format are mandatory and bidders are requested to furnish the same without fail.
2. All bidders should furnish a catalogue, a physical sample to be furnished as and when requested by the tender committee failing which bidder will be disqualified.
3. Equipments will be procure as per requirement
4. Payment of CMC cost will be made at the end of each CMC period and subject to service satisfactory
5. All payment is subject to availability of fund.

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Annexure- XIII

PERSONNEL IN THE EMPLOYMENT OF THE TENDERER

Sl No.	Personnel	Min. Qualification required	Min Requirement (numbers)
1	Project Manager	B.E (Civil)	1
2	Site Engineer	B.E (Civil)/Diploma Civil	1
3	Electrical Engineer	B.E (Electrical)/Diploma (Electrical)	1
4	Supervisor	Diploma (Civil)	2
5	Biomedical Engineer	BE/B.Tech (Electronic & Telecommunication)	1
6	Biomedical Supervisor	Diploma/Degree (Biomedical Equipment Engineering)	1

Signature of Bidder/Firm

Name in Block Letter _____

Complete Postal Address _____

Notes:

1. Undertaking from the technical personnel to be enclosed.
2. Educational qualification certificates of technical personnel to be enclosed.

Draft #1 of File DHS/MCH&FW/NHM/Civil & Eqpts/120/2022/ Approved by Mission Director on 29-Nov-2022 02:49 PM - Page 123

Office of Mission Director, National Health Mission

pg. 121

Directorate of Health Services, Health Complex, Upper New Colony, Laitumkhrah, Shillong - 793003

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www.nrhmeghalaya.nic.in

Nhm Meghalaya

@tecbccnhmmech

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Annexure-B

PRICE BID

Sl. no.	Name of Work/Items	Quantity	Basic Rate (Including all expenses and charges excluding GST) In Figure to be entered by the Bidder in (INR)	SGST in Percentage In Figures To be entered by the Bidder in (INR)	CGST in Percentage In Figures To be entered by the Bidder in (INR)	IGST in Percentage @.....In Figures To be entered by the Bidder in (INR)	Total Price (3+4+5) or (3+6)	Combined Rate (INR) (A)
1	2		3	4	5	6	7	8
	FOR CONSTRUCTION WORKS							
A	Construction of Bajlek Integrated Health Complex in Bajlek, West Garo Hills District, on Turnkey Basis							
1	50 Bedded Field Hospital (RCC Framed Structure)	as per appendix - I						
2	Construction of Critical Care Block (RCC Framed Structure) (G + 1)	as per appendix - I						
3	Construction of Critical Care Block (RCC Framed Structure) (RCC Single Storied)	as per appendix - I						
4	IPHL Block (RCC Framed Structure) (Single Storied Assam Type)	as per appendix - I						
5	BOUNDARY WALL	as per site						



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6	SITE PREPARATION	as per site						
B	Construction of Integrated Public Health Laboratory (PHL) at Pasteur Hills, Shillong, East Khasi Hills, District, on Turnkey Basis							
1.	Integrated Public Health Laboratory (PHL) Block							
	FOR SUPPLY WORKS							
	Hybrid (ICU/HDU-16 bed Unit)							
1	MOTORIZED ICU BED4 SECTION WITH MATTRESS	Each						
2	MANUAL BED 4 SECTION WITH MATTRESS	Each						
3	BEDSIDE LOCKER	Each						
4	OVERBED TABLE	Each						
5	IV STAND WITH SS ROD AND CASTOR BASE	Each						
6	BED SIDE STOOL	Each						
7	BIOMEDICAL WASTE BIN- SMALL SET OF 3	Each						
8	MULTI PARA MONITOR WITH CENTRAL STATION	Each						
9	ICU VENTILATOR	Each						



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39	INSTRUMENT SET	Each								
40	LARYNGOSCOPE	Each								
41	AMBU BAG ADULT	Each								
42	ELECTRICAL SUCTION APPARATUS	Each								
43	PATIENT STRETCHER (PULLYSS)	Each								
44	WHEEL CHAIR - FOLDABLE	Each								
45	CRASH CART	Each								
46	DRESSING TROLLEY	Each								
47	DRUG TROLLEY/MEDICINE CART	Each								
48	INSTRUMENT TROLLEY	Each								
49	OXYGEN CYLINDER TROLLEY	Each								
50	MAYO TROLLEY	Each								
51	GLUCOMETER	Each								
52	STETHOSCOPE	Each								
	Minor OT-1									

Office of Mission Director, National Health Mission
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123	IV STAND WITH SS ROD AND CASTOR BASE	Each							
124	BIOMEDICAL WASTE BIN- SMALL -SET OF 3	Each							
125	PULSE OXIMETER	Each							
126	SYRINGE PUMP	Each							
127	LARYNGSCOPE	Each							
128	THERMOMETER - NON CONTACT TYPE	Each							
129	AMBU BAG ADULT	Each							
130	ANEROID BP APPARTUS	Each							
131	ELECTRONIC WEIGHING SCALE- ADULT	Each							
132	ELECTRICAL SUCTION APPARATUS	Each							
133	PATIENT STRETCHER (FULLY SS)	Each							
134	WHEEL CHAIR - FOLDABLE	Each							
135	CRASH CART	Each							
136	DRESSING TROLLEY	Each							
137	DRUG TROLLEY/MEDICINE CART	Each							



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138	INSTRUMENT TROLLEY	Each							
139	OXYGEN CYLINDER TROLLEY	Each							
140	GLUCOMETER	Each							
141	STETHOSCOPE	Each							
	AHU								
142	AIR HANDLING UNIT	Each							
	MGPS								
143	4+4 Oxygen Manifold System along with pigtails pipes NRV	Set							
144	Oxygen Semi Automatic Control Panel	Set							
145	2+2 Oxygen Manifold Emergency System	Set							
146	Oxygen Emergency HP Regulator	Set							
147	B.S. Oxygen gas outlet	Nos							
148	BPC oxygen flowmeter with adapter	Nos							
149	2+2 Nitrous Cylinder with Heavy Duty Regulator	Set							
150	1 Cylinder Emergency line N2O	Set							

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166	Air Gas Outlet	Nos							
167	Copper Pipe 12mm Dia 0.6mm	Mtr							
168	Copper Pipe 15mm Dia 0.9mm	Mtr							
169	Copper Pipe 22mm Dia 0.9mm	Mtr							
170	Copper Pipe 28mm Dia 0.9mm	Mtr							
171	54mm Dia 1.2 (vacuum)	Mtr							
172	35mm Dia 1.2 (Oxygen)	Mtr							
173	22mm Dia 0.9mm (N2O)	Mtr							
174	3Gas Line Pressure alarm	Each							
175	2Gas Line Pressure alarm	Each							
176	15mm Isolation Valve with Brass Adaptor	Nos							
177	22mm Isolation Valve with Brass Adaptor	Nos							
178	28mm Isolation Valve with Brass Adaptor	Nos							
179	54mm Isolation Valve with Brass Adaptor	Nos							
180	Gas Valve Box (O2, N2O, Air, CO2, Vacuum)	Each							



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	ADMIN FURNITURE								
181	Examination Couch	Each							
182	Patient Stool	Each							
183	Bedside Screen	Each							
184	Surgeon Chair	Each							
185	Waste Bin	Each							
186	Foot Step Stage	Each							
187	Doctor's Chair	Each							
188	Visitor Chair	Each							
189	Instrument Cabinet	Each							
190	First Aid Cabinet	Each							
191	Doctor's Table	Each							
192	Waiting Chair -3 Seater	Each							
193	Wall Clock	Each							
194	Tables With Drawers	Each							

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195	Sofa Set	Each								
196	Office Cabinet	Each								
197	Superintendent's Table	Each								
198	Revolving Chair for Superintendent	Each								
199	Conference Table - 12 Seater	Each								
200	Conference Chairs	Each								
	TABLET PC	Each								
201	Mobile Tablet PC	Each								



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		CMC - CHARGES					Annexure-B/II		
Item No.	Name of Equipments	Rate of CMC					Total CMC Cost for a number of CMC Period	Taxes (IF ANY)	Total CMC cost inclusive of Tax amount (B)
		1st Year	2nd Year	3rd Year	4th Year	5th Year			
	Hybrid (ICU/HDU-16 bed Unit)								
1	MULTI PARA MONITOR WITH CENTRAL STATION								
2	ICU VENTILATOR								
3	SYRINGE PUMP								
4	ECG MACHINE 12 CHANNEL								
5	PORTABLE ULTRASOUND								
6	ABG MACHINE WITH ISE								
	OPERATION THEATRE-1								
7	ANESTHESIA WORK STATION								
8	SYRINGE PUMP								
9	INFUSION PUMP								
	Minor OT-1								
10	SYRINGE PUMP								
	EMERGENCY UNIT 5 bed								
11	MULTI PARA MONITOR								
12	ICU VENTILATOR								
13	SYRINGE PUMP								
14	ECG MACHINE 12 CHANNEL								
15	PORTABLE MONITOR								
16	PORTABLE VENTILATOR								
	DIALYSIS ROOM- 2 bed								
17	HEMO DIALYSIS MACHINE								
18	RO PLANT SYSTEM								
19	DIALYSIS REPROCESSOR								
20	MULTI PARA MONITOR								

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NOTES

1. This drawing should not be used for any purpose for which it has been intended for.
2. The markings on this drawing are for the purpose of identification only. They should not be copied, duplicated or used for any other purpose or any other method. This will be treated as breach of normal contract.
3. The drawing should be read and interpreted in accordance with the notes on the drawing.
4. All dimensions are in feet and inches.
5. The drawing should be read in conjunction with other relevant structural, electrical, plumbing, etc. drawings.
6. The drawing represents all work shown in the region in its design, except the architect's work.
7. The drawing is for the purpose of construction and is not to be used for any other purpose.
8. The drawing is for the purpose of construction and is not to be used for any other purpose.
9. The drawing is for the purpose of construction and is not to be used for any other purpose.
10. The drawing is for the purpose of construction and is not to be used for any other purpose.

PROJECT TITLE
INTEGRATED BALJEK
HEALTH COMPLEX

KEY PLAN

SITE DETAILS
 LOCATION: BALJEK
 STATE: MEGHALAYA
 SITE AREA (in) : 37824 SQM

DRAWING DETAILS
 NUMBER: LAYOUT SITE PLAN
 DRAWN BY: MEM, 60M
 CHECKED BY: MEM, 80M
 DATE OF ISSUE: 24-12-2022
 SIGNATURE: [Signature]

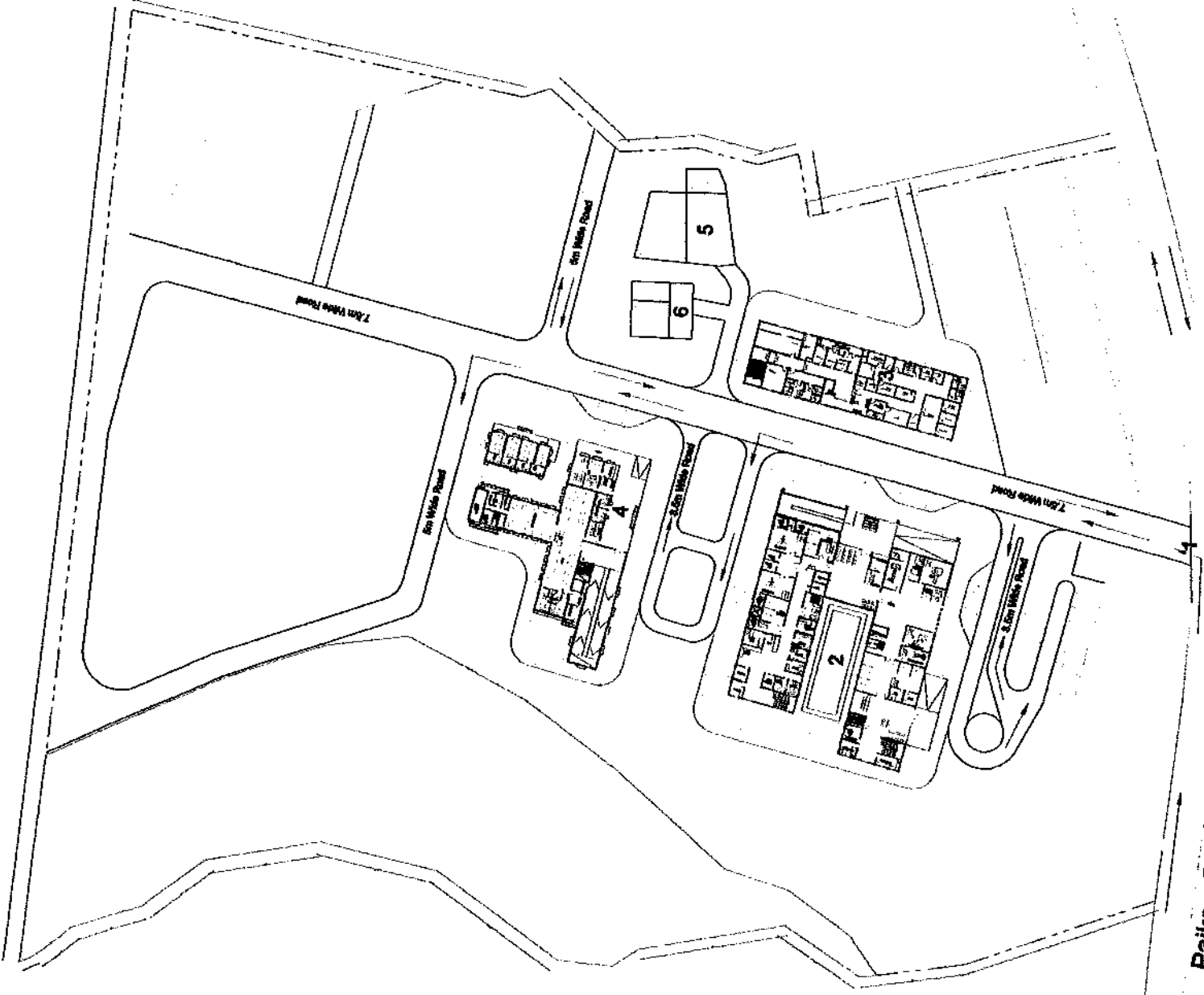
PREPARED BY
 Health Engineering Manager
 Meghalaya Health Systems Strengthening
 Meghalaya
 NAME: ANTRIEK THAKJANG
 DESIGNATION: MEM, MHESP
PREPARED BY

COUNTERSIGNED BY
 [Signature]
 CHIEF ENGINEER, ZENAR
 HEALTH ENGINEERING DIVISION
 NAME: [Name]
 DESIGNATION: [Designation]

APPROVED BY
 Executive Engineer,
 Health Engineering Wing
 Directorate of Health Service
 Meghalaya, Shillong
 NAME: [Name]
 DESIGNATION: EXECUTIVE ENGINEER, HE

APPROVED BY
 [Signature]
 National Health Mission
 Meghalaya, Shillong
 NAME: [Name]
 DESIGNATION: MISSION DIRECTOR, NHM

- Legend**
- 1 Main Access
 - 2 Critical Care Hospital 50 Bedded
 - 3 IPHL / Blood Bank
 - 4 Covid Care Block
 - 5 Existing SC to Training Centre
 - 6 Oxygen Tank



NOTES

1. This drawing should not be used for purposes for which it has been intended for.
2. The contents of this drawing (in part, whole or otherwise) shall not be copied, reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the architect.
3. The drawing should be read and not a discrepancy in the drawing should be the notice of the architect at the outset.
4. All dimensions are in feet and inches.
5. The drawing should be read in conjunction with the specifications, schedule, and other drawings.
6. This drawing supersedes all other drawings in this regard. If in doubt, consult the architect.
7. The Drawing holds good for construction of the Project Property, unless otherwise stated.
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100. The Drawing holds good for construction of the Project Property, unless otherwise stated.

50 BEDDED FIELD HOSPITAL

PROJECT TITLE

SITE DETAILS
 LOCATION: SAJEEK
 STATE: MEGHALAYA
 PLINTH AREA (SQM):
 GROUND FLOOR: 4
 FIRST FLOOR: 5

DRAWING DETAILS
 NUMBER: LAYOUT SITE PLAN
 DRAWN BY: HEW, GOM
 CHECKED BY: HEW, GOM
 DATE OF ISSUE: 24.12.2022
 SIGNATURE: (with stamp and date)

PREPARED BY:
Health Engineering Man,
Meghalaya Health Service Strength
Meghalaya Shillong

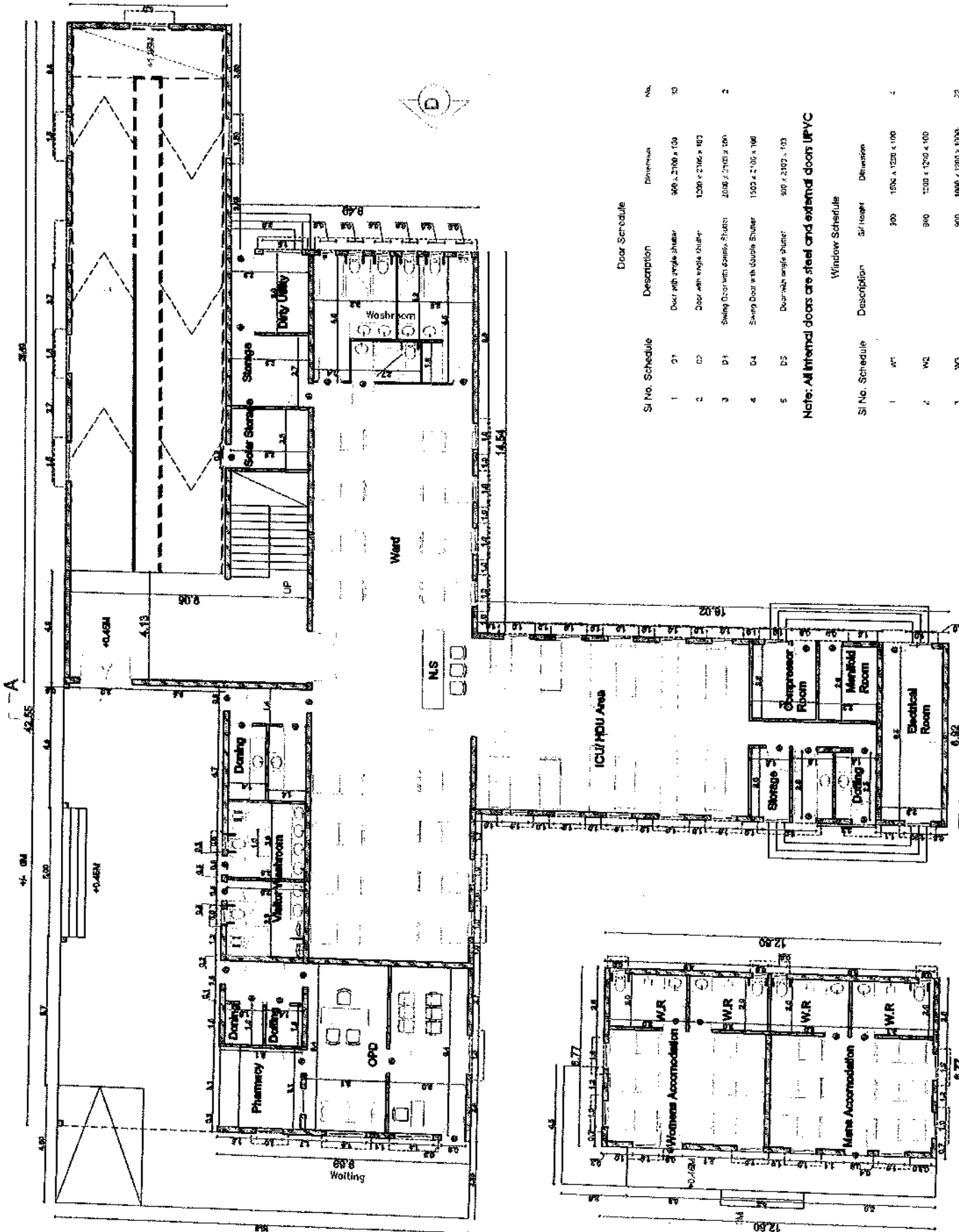
NAME: ARTREID TARLANG
 DESIGNATION: HEM, MHSSP
 PREPARED BY:

NAME: (Signature)
 DESIGNATION: HEALTH ENGINEERING MAN
 COURTESIGNED BY:

Executive Engineer,
 Health Engineering Wing
 Directorate of Health Service
 Meghalaya, Shillong
 S. WANGLANG

DESIGNATION: EXECUTIVE ENGINEER,
 APPROVED BY:

(Signature)
 Health Engineering Man,
 Meghalaya Shillong



Door Schedule

Sl No.	Schedule	Description	Dimension	No.
1	D1	Door with triple shutter	900 x 2100 x 100	13
2	D2	Door with single shutter	1200 x 2100 x 100	2
3	D3	Swing Door with double shutter	2000 x 2100 x 100	
4	D4	Swing Door with double shutter	1500 x 2100 x 100	
5	D5	Door with single shutter	900 x 2100 x 100	

Note: All internal doors are steel and external doors UPVC

Window Schedule

Sl No.	Schedule	Description	Sl height	Dimension	No.
1	W1		900	1000 x 1200 x 100	4
2	W2		900	1200 x 1200 x 100	
3	W3		900	1000 x 1200 x 100	22
4	W4		1100	900 x 800 x 100	12

ND FLOOR PLAN

NOTES

1. This drawing should not be used for purposes for which it has been intended for.
2. The contents of this drawing, in parts, should not be copied, duplicated or reproduced in any other manner without the consent of the architect.
3. The drawing should be read and not of discrepancy in this drawing should be brought to the attention of the architect at the earliest.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with other relevant drawings, structural, plumbing, electrical, etc.
6. This drawing supersedes all other drawings for the project, unless otherwise stated.
7. This drawing holds good for construction of the project, subject to the approval of the architect.
8. This drawing holds good for construction of the project, subject to the approval of the architect.
9. This drawing holds good for construction of the project, subject to the approval of the architect.
10. This drawing holds good for construction of the project, subject to the approval of the architect.

PROJECT TITLE

50 BEDDED FIELD HOSPITAL

KEY PLAN

SITE DETAILS
 LOCATION: RAJIB
 STATE: MEGHALAYA
 PLOT AREA: GROUND FLOOR-68 (approx)
 BEST FLOOR-452.7

DRAWING DETAILS
 LAYOUT SITE PLAN NUMBER: NEW, GOM
 DRAWN BY: NEW, GOM
 CHECKED BY: NEW, GOM
 DATE OF ISSUE: 24.22.2022
 SIGNATURE: (WITH STAMP AND USE)

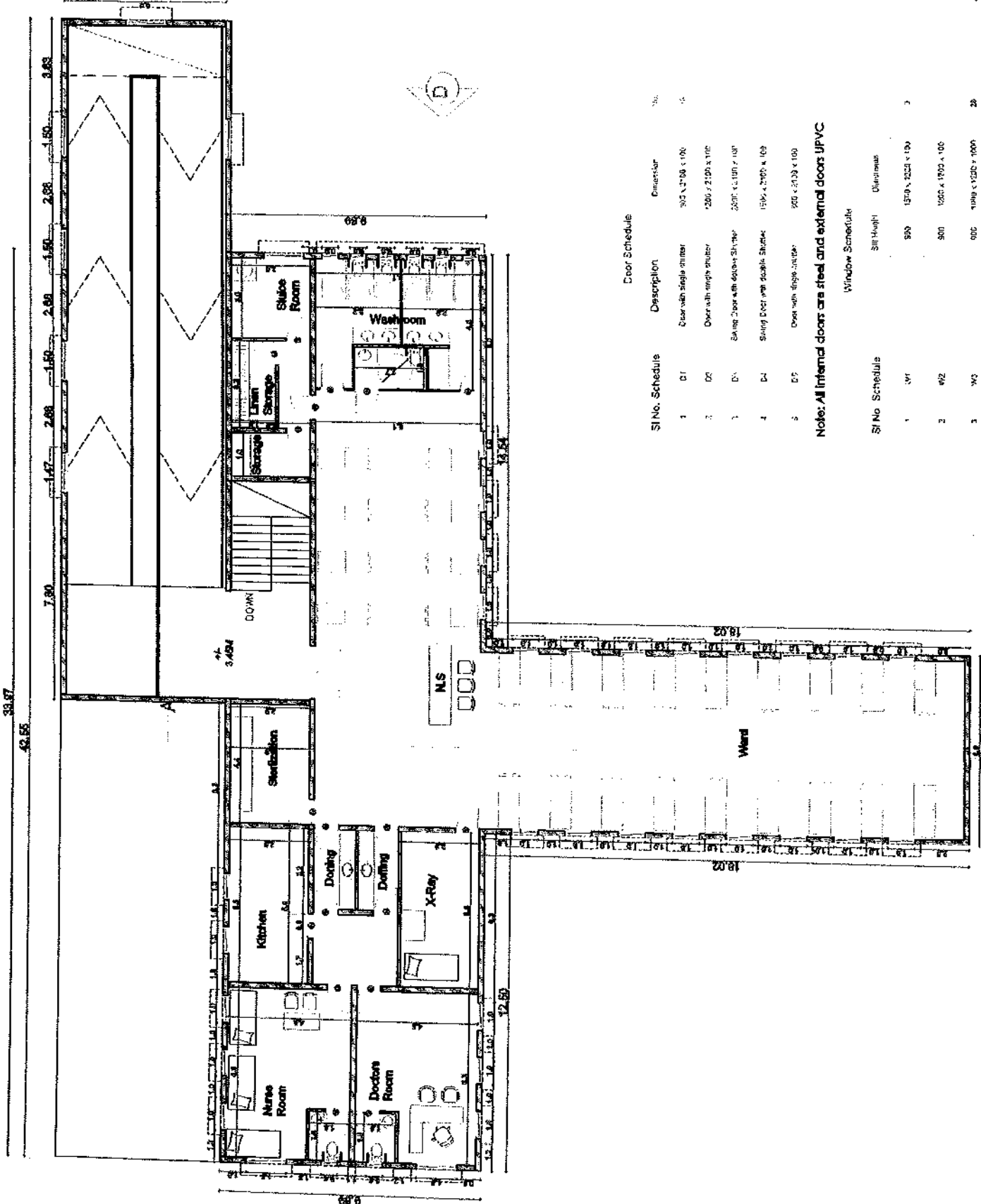
PREPARED BY
 Health Engineering Mafia
 Meghalaya Health Services, Shillong
 Meghalaya, Shillong

NAME: ARTREK TUKANG
DESIGNATION: HEM, MINSEP
PREPARED BY

NAME: KYRASHANDEEN DEBAR
DESIGNATION: HEALTH ENGINEERING CONSULTANT
COUNTERSIGNED BY

Executive Engineer,
 Health Engineering Wing
 Directorate of Health Services
 Meghalaya, Shillong
A. MARGANG
DESIGNATION: EXECUTIVE ENGINEER, I

APPROVED BY
 Mission Director
 National Bedded Hospital
 Meghalaya Shillong
RANJAN S. TIAS
NAME



Door Schedule

S/No.	Schedule	Description	Quantity
1	D1	Door with single shutter	902 x 2100 x 100
2	D2	Door with single shutter	2000 x 2100 x 100
3	D3	Sliding Door with double shutter	2000 x 1500 x 100
4	D4	Sliding Door with double shutter	1500 x 2000 x 100
5	D5	Door with single shutter	900 x 2100 x 100

Note: All internal doors are steel and external doors UPVC

Window Schedule

S/No.	Schedule	Description
1	W1	900 x 1500 x 100
2	W2	1000 x 1900 x 100
3	W3	1000 x 1500 x 1000
4	W4	800 x 800 x 100

1ST FLOOR PLAN

NOTES

1. This drawing should not be used for any purpose for which it has been intended for.
2. The contents of this drawing (in parts or whole) should not be copied, duplicated or used in whole or in part for any other method, without the written consent of the architect. This will be treated as breach of normal contract and conditions.
3. The drawing should be read and not scale. Any discrepancy in the drawing should be brought to the attention of the architect at the earliest.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with the structural, electrical, plumbing and mechanical drawings.
6. This drawing supplements all other drawings in this project. If in doubt, consult the architect.
7. This drawing holds good for construction or the client/contractor. The architect does not accept any liability for any errors or omissions. By the execution of this drawing, the architect's responsibility is limited to the design and construction of the building and not to the foundation, which shall be the responsibility of the contractor. The architect is not responsible for the validity of any rules and regulations in force at the time of the design and construction.

PROJECT TITLE

50 BEDDED FIELD HOSPITAL

KEY PLAN

SITE DETAILS
LOCATION BAJUX
STATE MEGHALAYA
PLINTH AREA GROUND FLOOR-688
 (SQM) FIRST FLOOR-152.77

DRAWING DETAILS

NUMBER LAYOUT SITE PLAN
DRAWN BY HEW, GOM
CHECKED BY HEW, GOM
DATE OF ISSUE 24.12.2022
SIGNATURE (with stamp and LUR)

PREPARED BY

Health Engineering Manal
 Meghalaya Health Systems Strengthening
 Meghalaya, Shillong

DESIGNATION

HEM, MHSP

PREPARED BY

ARTRECK TARIANG

NAME

NYRANSHIKHEM BHAP

DESIGNATION

HEALTH SUPERVISOR (CD) HD

COUNTERSIGNED BY

MH

NAME

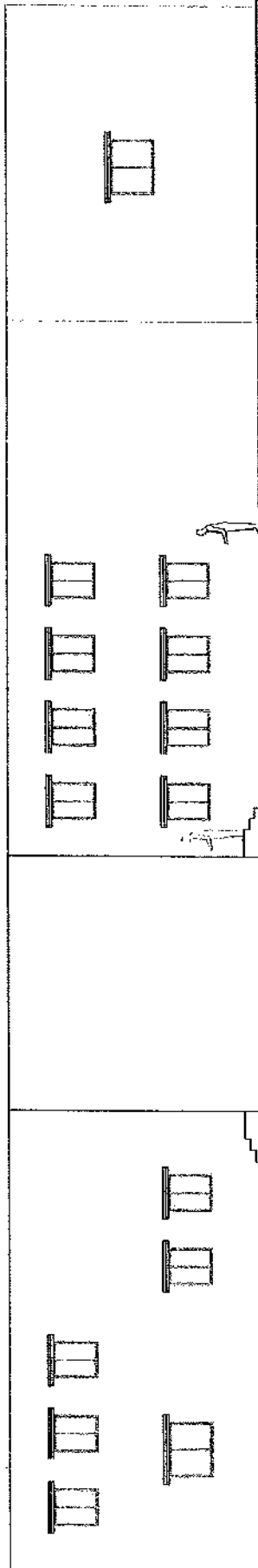
Executive Engineer,
 Health Engineering Wing,
 Directorate of Health Service
 Meghalaya, Shillong

DESIGNATION

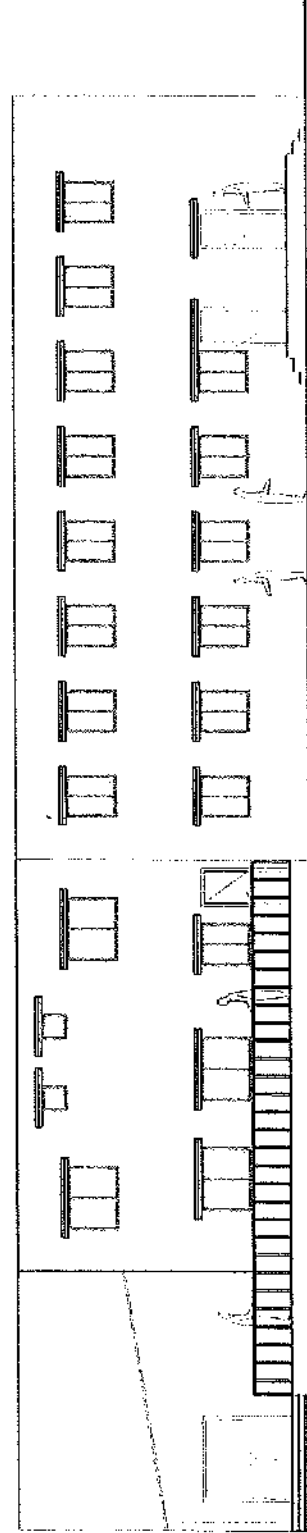
EXECUTIVE ENGINEER, I

APPROVED BY

Mission Director,
 National Health Mission
 Meghalaya Shillong



ELEVATION A



ELEVATION B

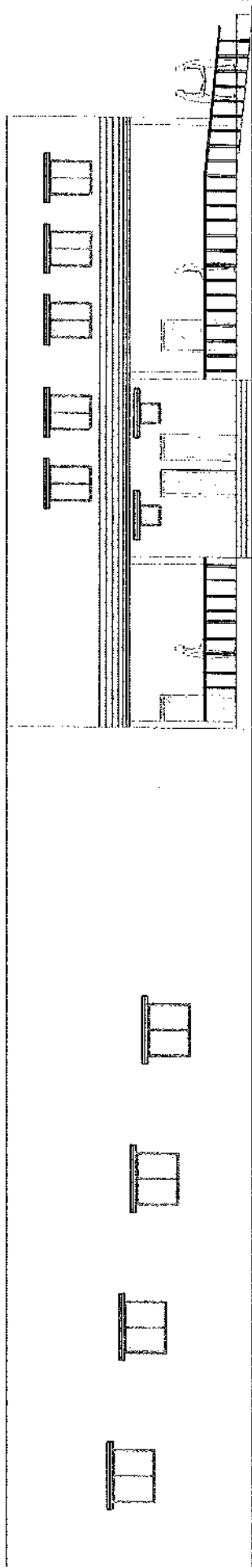
NOTES

1. This drawing should not be used for any purpose for which it has been intended.
2. The contents of this drawing (in part or in whole) should not be copied, duplicated or reproduced in any form without the written consent of the architect.
3. All dimensions are in feet and inches.
4. This drawing should be read in conjunction with the structural, electrical, mechanical and plumbing drawings.
5. This drawing should be read and interpreted in conjunction with the specifications and contract documents.
6. This drawing supersedes all other drawings of the same date or earlier date.
7. This drawing is for the architect's use only. It is not to be used for construction.
8. The drawing is not to be used for any other purpose without the written consent of the architect.

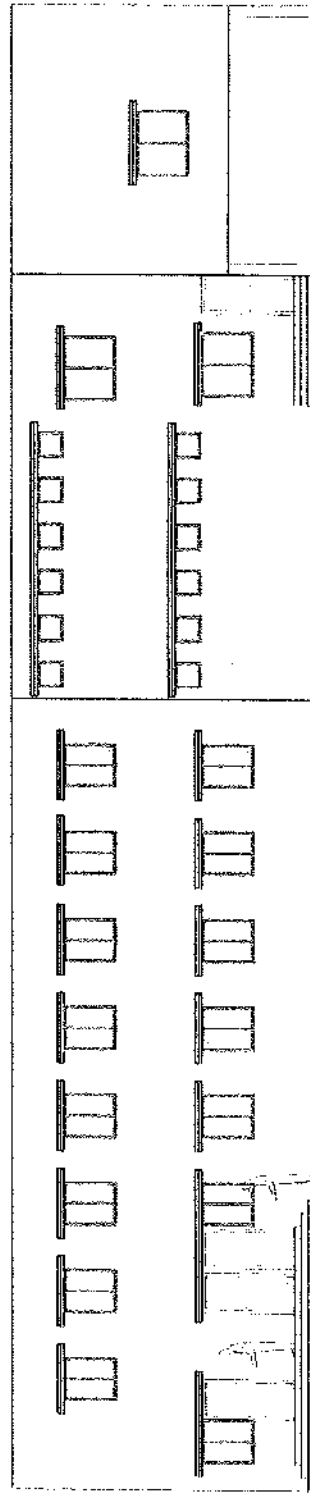
PROJECT TITLE

50 BEDDED FIELD HOSPITAL

KEY PLAN



ELEVATION C



ELEVATION D

SITE DETAILS	
LOCATION	SALLJEK
STATE	MEGHALAYA
PLINTH AREA (sqm)	GROUND FLOOR
	FIRST FLOOR
DRAWING DETAILS	
NUMBER	LAYOUT SITE P
DRAWN BY	HEW, EGM
CHECKED BY	HEW, GOM
DATE OF ISSUE	24.12.2023
SIGNATURE (IN STAFF AND USE)	

PREPARED BY
 Health Engineering M
 Meghalaya Health Services Station
 Meghalaya, Shillong

NAME: ARTRIKI TARJANG
 DESIGNATION: HEW, PHESP

PREPARED BY

NAME: KYSHANKARSHAN D
 DESIGNATION: HEALTH ENGINEERING C
 COUNTY DESIGNED BY

Executive Engineer,
 Health Engineering Wfpi,
 Directorate of Health Services,
 Meghalaya, Shillong

NAME: R. WANZANG
 DESIGNATION: EXECUTIVE ENGINEER

APPROVED BY
 Mission Director
 Health Engineering Wfpi,
 Directorate of Health Services,
 Meghalaya, Shillong

1. This drawing should not be used for purposes for which it has been intended.
2. The contents of this drawing (in part) should not be copied, duplicated or manual or electronic or any other method this will be treated as breach of normal conditions.
3. The drawing should be read and not discrepancy in the drawing should be the notice of the architect at the earliest.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with other relevant structural, electrical, plumbing and sanitary drawings.
6. This drawing supersedes all other drawings in regard. If in doubt, consult the architect.
7. This drawing holds good for construction by the client. Project Proposals/ Conditions/ drawings from concerned authorities obtained all necessary approvals in this drawing for execution or implementation. Foundation will not be held responsible for violation of any rules and regulations in respect to obtaining the required permits.

PROJECT TITLE
50 BEDDED FIELD HOSPITAL

KEY PLAN

SITE DETAILS
 LOCATION: PALDEK
 STATE: MEGHALAYA
 PLINTH AREA (SQM):
 GROUND FLOOR:
 FIRST FLOOR: 45

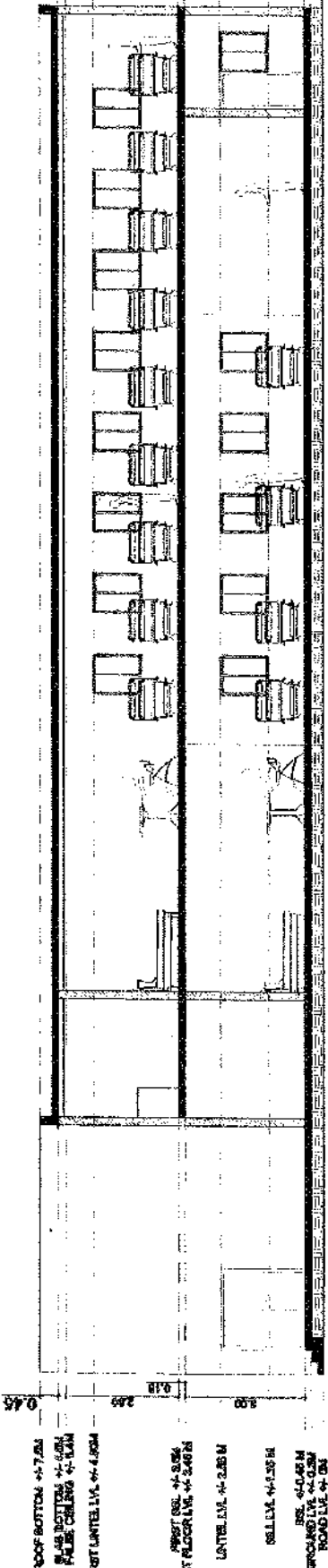
DRAWING DETAILS
 NUMBER: LAYOUT SITE PLJ
 DRAWN BY: HEW, GOM
 CHECKED BY: HEW, GOM
 DATE OF ISSUE: 24.12.2022
 SIGNATURE: (MR SHAM AND US)

PREPARED BY
 Health Engineering Man
 Meghalaya Health Service Strength
 Meghalaya, Shillong

NAME: ARTREK TARDANG
 DESIGNATION: HEW, MHSSP
 PREPARED BY

NAME: KATHANSHHEM DHI
 DESIGNATION: HEALTH ENGINEERING CO. MRM
 COUNTERSIGNED BY

NAME: Executive Engineer,
 Health Engineering Wing
 Directorate of Health Service
 Meghalaya, Shillong
 DESIGNATION: EXECUTIVE ENGINEER
 APPROVED BY



SECTION A-A'

ROOF BOTTOM: +7.2M
 PLINTH BOTTOM: +1.50M
 FLOOR CHILING: +1.50M
 1ST FLOOR LVL: +4.100M
 2ND FLOOR LVL: +4.200M
 3RD FLOOR LVL: +4.300M
 4TH FLOOR LVL: +4.400M
 5TH FLOOR LVL: +4.500M

NOTES

1. This drawing should not be used for construction unless it has been intended for such purpose.
2. The contents of this drawing (in part or in whole) should not be copied, duplicated, or reproduced in any form without the written consent of the Engineer.
3. This drawing should be read and interpreted in conjunction with the contract documents and specifications.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with the specifications, contract documents, and other relevant documents.
6. The drawing includes all other drawings and specifications.
7. The drawing includes all other drawings and specifications.
8. The drawing includes all other drawings and specifications.
9. The drawing includes all other drawings and specifications.
10. The drawing includes all other drawings and specifications.

PROJECT TITLE

**CRITICAL CARE BLOCK
CCB**

KEY PLAN

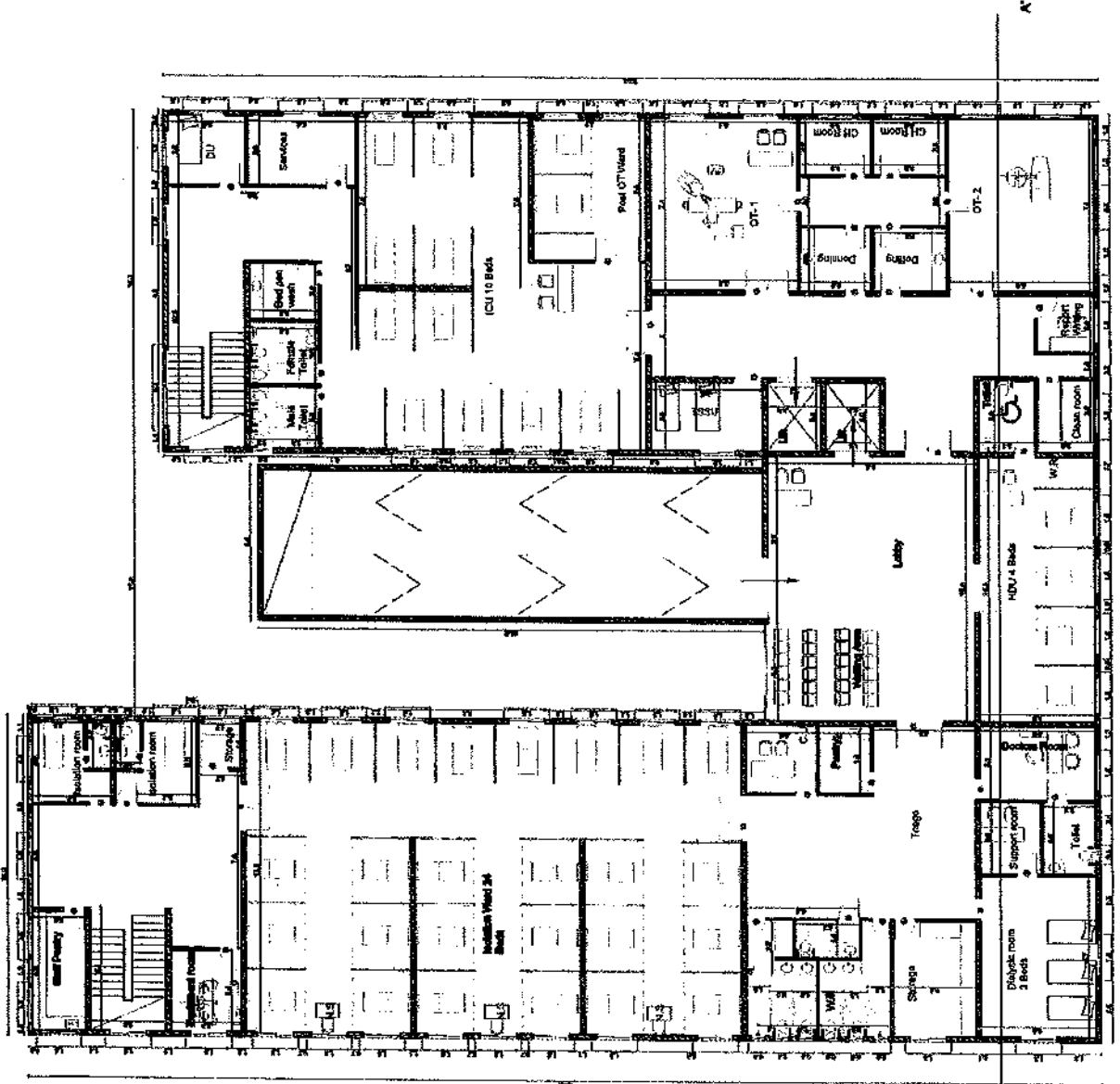
SITE DETAILS
 LOCATION: BALDEK
 STATE: MEGHALAYA
 PLINTH AREA: GROUND FLOOR (1st FLOOR)
DRAWING DETAILS
 LAYOUT SITE P
 NUMBER: HEM, 60M
 DRAWN BY: HEM, 60M
 CHECKED BY: HEM, 60M
 DATE OF ISSUE: 24.12.2022
 SIGNATURE: (Signature) HEM, 60M

PREPARED BY: Health Engineering Ma
 Meghalaya Health Systems Society
 Meghalaya, Shillong
 NAME: ARCHITECT TARLANG
 DESIGNATION: HEM, MISSP
 PREPARED BY:

NAME: (Signature)
 DESIGNATION: HEALTH ENGINEERING
 COUNTRISIGNED BY: (Signature)
 EXECUTIVE ENGINEER
 Health Engineering
 Directorate of Health Services
 Meghalaya, Shillong
 NAME: R. WANNIANG
 DESIGNATION: EXECUTIVE ENGINEER

APPROVED BY: (Signature)
 DESIGNATION: (Signature)
 APPROVED BY: (Signature)
 DESIGNATION: (Signature)

APPROVED BY: (Signature)
 DESIGNATION: (Signature)
 APPROVED BY: (Signature)
 DESIGNATION: (Signature)



Window Schedule

Sl. No.	Schedule	Description	Quantity	Number
1	W1	Window 10' x 6'	10	10
2	W2	Window 12' x 6'	10	10
3	W3	Window 10' x 6'	10	10
4	W4	Window 12' x 6'	10	10

Note: All window doors are steel and external door (MVC)

Window Schedule

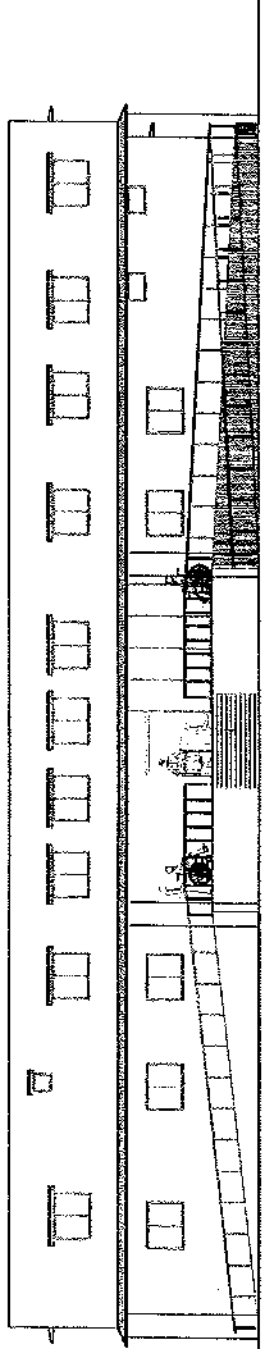
Sl. No.	Schedule	Description	Quantity	Number
1	W1	Window 10' x 6'	10	10
2	W2	Window 12' x 6'	10	10
3	W3	Window 10' x 6'	10	10
4	W4	Window 12' x 6'	10	10

1. This drawing should not be used for any purpose for which it has been intended for.
2. The contents of this drawing (in parts or in whole) should not be copied, duplicated, or reproduced in any manual or electronic or any other method. Where this will be treated as breach of normal contract and conditions.
3. The drawing should be read and not so discrepancy in the drawing should be brought to the notice of the architect at the earliest.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with other relevant structural, electrical, plumbing and sanitary drawings.
6. This drawing supersedes all other drawings in this regard. If in doubt, consult the architect.
7. This Drawing holds good for construction by the client/ Project Proprietor/ Contractor obtained all necessary approvals and clearances from concerned authorities. By this drawing for execution or implementation. Foundation will not be held responsible for violation of any rules and regulations in respect to obtaining the required permission.

PROJECT TITLE

**CRITICAL CARE BLOCK
CCB**

KEY PLAN



ELEVATION C

SITE DETAILS
 LOCATION BALJEK
 STATE MEGHALAYA
 PLINITY AREA
 (IN SQM)
 GROUND FLOOR - 1
 FIRST FLOOR - 142

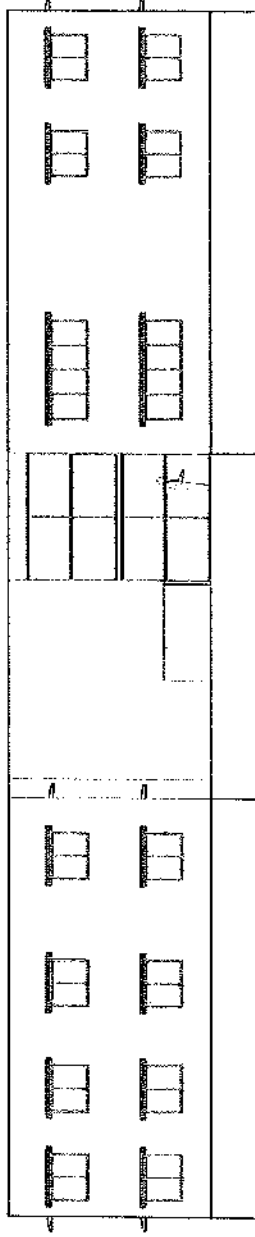
DRAWING DETAILS
 LAYOUT SITE PLAN
 NUMBER
 DRAWN BY HEW, GOM
 CHECKED BY HEW, GOM
 DATE OF ISSUE 24.22.2022
 SIGNATURE (With Stamp and Use)

PREPARED BY
 Health Engineering Manab
 Meghalaya Health Systems Strengthening
 Meghalaya Shillong
 NAME ARTASAKI TARELANG
 DESIGNATION HEPI, MHSSP
 PREPARED BY

COUNTERSIGNED BY
 NAME
 DESIGNATION
 HEALTH ENGINEERING OFFICER
 (HEW)

Executive Engineer,
 Health Engineering Wing
 Directorate of Health Services
 Meghalaya Shillong
 NAME A. WAINJANG
 DESIGNATION EXECUTIVE ENGINEER

APPROVED BY Mission Director
 National Health
 Mission
 Meghalaya Shillong



ELEVATION D

1. This drawing should not be used for any other purpose for which it has been intended for.
2. The contents of this drawing (in parts or whole) should not be copied, duplicated or modified by manual or electronic or any other method, violation of this will be treated as breach of normal contract terms and conditions.
3. The drawing should be read and not scaled. Any discrepancy in the drawing should be brought to the notice of the architect at the earliest.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with all other relevant structural, electrical, plumbing and sanitary drawings.
6. This drawing supercedes all other drawings issued in this regard. In any doubt, consult the architect.
7. This Drawing holds good for construction only after the client, Project Proprietary, Contractor have obtained all necessary approvals and statutory clearance from concerned authorities. By following this drawing for execution or implementation, the Foundation will not be held responsible for any violation of any rules and regulations in force with respect to obtaining the required permission.

PROJECT TITLE

**CRITICAL CARE BLOCK
CCB**

KEY PLAN



SITE DETAILS

LOCATION	BALJEK
STATE	MEGHALAYA
PLINTH AREA (sq.ft)	GROUND FLOOR - 1670.44
	FIRST FLOOR - 1431.09

DRAWING DETAILS

NUMBER	LAYOUT SITE PLAN
DRAWN BY	HEW, GOM
CHECKED BY	HEW, GOM
DATE OF ISSUE	24.12.2022
SIGNATURE	(FOR STAMP AND USE)

PREPARED BY

Health Engineering Manager
Meghalaya Health Systems Strengthening Project
Meghalaya Shillong

NAME

ARTRECK TARZANG

DESIGNATION

HEW, MHSSP

PREPARED BY

NAME

RYEZHANSKHER DHAR

DESIGNATION

HEALTH ENGINEERING COORDINATOR
MHM

COUNTERSIGNED BY

Executive Engineer,
Health Engineering Wing
Directorate of Health Services
Meghalaya, Shillong

NAME

R. WANKANG

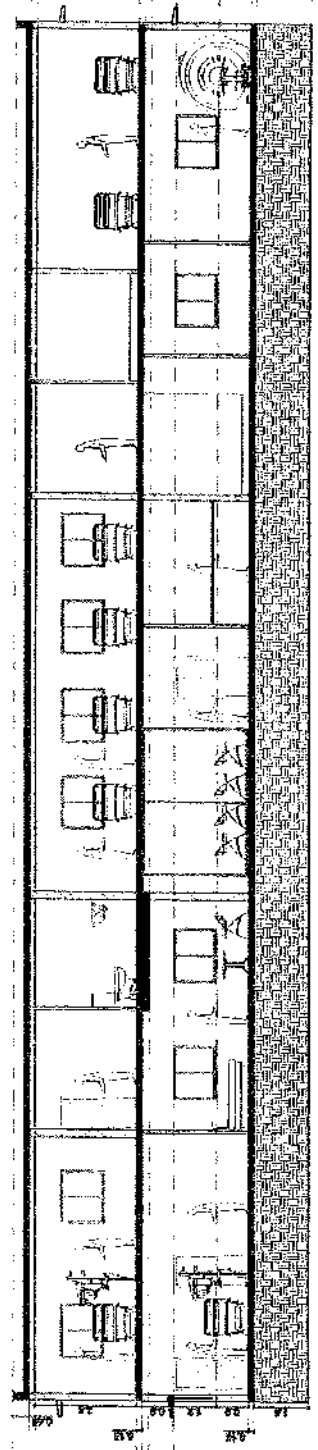
DESIGNATION

EXECUTIVE ENGINEER, HEW

APPROVED BY

Mission Director

Meghalaya Shillong



CROSS SECTION A-A'

- ROOF BOTTOM +1.40M
- FLOOR FINISH +1.00M
- CEILING FINISH +0.90M
- INTERIOR FINISH +0.80M
- WALL TOP +0.60M
- FINISH +0.50M
- WARTY TOP +0.40M
- GROUND LVL +0.00

NOTES

1. This drawing should not be used for any purpose for which it has been intended for.
2. The contractor shall be responsible for showing the location of all doors, windows, stairs, etc. on the drawing.
3. The drawing should be read in conjunction with the other drawings.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with the other drawings.

1. This drawing should be read in conjunction with the other drawings. It includes all other drawings in this project. It does not constitute a contract. This drawing is for the use of the client. The contractor shall be responsible for obtaining all necessary approvals and clearances from concerned authorities. By the drawing for execution or implementation. The contractor shall be held responsible for violation of any rules and regulations in force with respect to obtaining the required permission.

PROJECT TITLE

INTEGRATED PUBLIC HEALTH LABORATORY

KEY PLAN

SITE DETAILS
LOCATION RAJIB
STATE MEGHALAYA
PLINTH AREA (sq. ft.) GROUND FLOOR- 600.1
 FIRST FLOOR-463.2

DRAWING DETAILS

LAYOUT SITE PLAN
NUMBER HEW_60M
DRAWN BY HEW_90M
CHECKED BY HEW_90M
DATE OF ISSUE 24.23.2023
SIGNATURE (NO. STAMP AND SEAL)

PREPARED BY

Health Engineering Manager
 Meghalaya Health Systems Strengthening
 Meghalaya Shillong

NAME

AIRTRIC TAGUANG

DESIGNATION

HEM, MHESSP

PREPARED BY

HEALTH ENGINEERING CONSULTANT
 MHESSP

NAME

HEALTH ENGINEERING CONSULTANT
 MHESSP

DESIGNATION

HEALTH ENGINEERING CONSULTANT
 MHESSP

NAME

A. WANIZANG

DESIGNATION

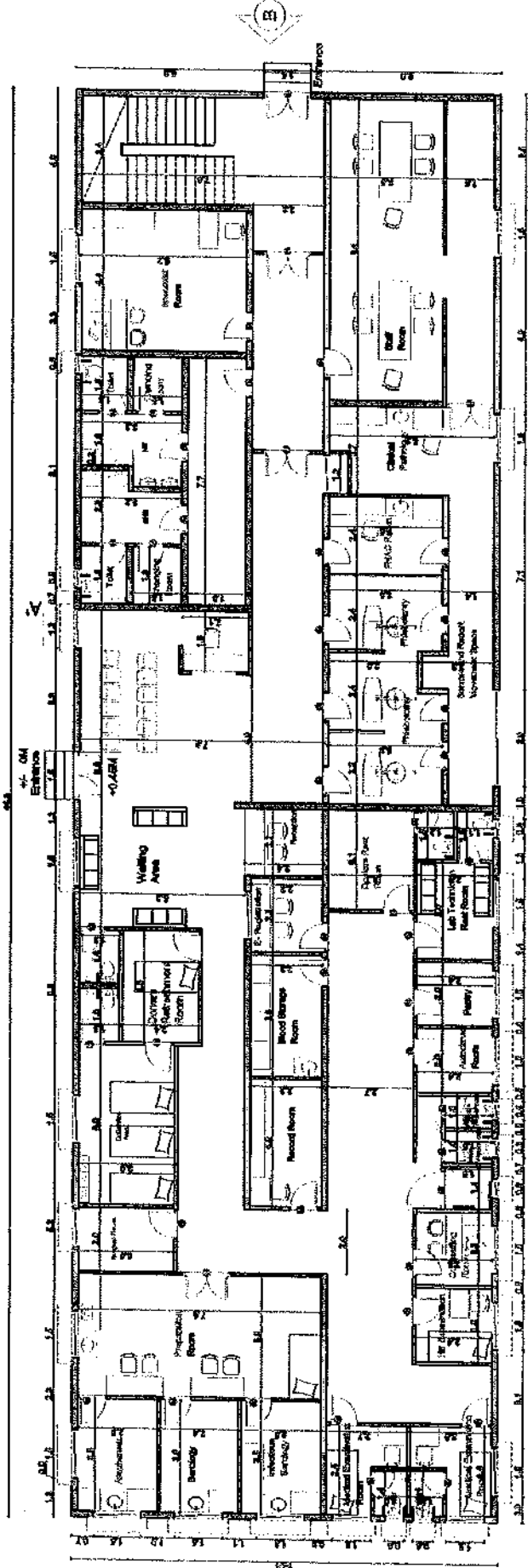
EXECUTIVE ENGINEER, HEI

APPROVED BY

MISSING DISSEMINATION
 Meghalaya Shillong

NAME

RAMKUMAR S DAS



Window Schedule

S/No	Schedule	Description	Dimension	S/No	Schedule	Description	Dimension
1	W1	Window in Lab	1500 x 1200	1	W1	Window in Lab	1500 x 1200
2	W2	Window in Reception	1200 x 1000	2	W2	Window in Reception	1200 x 1000
3	W3	Window in Office	1000 x 800	3	W3	Window in Office	1000 x 800
4	W4	Window in Corridor	800 x 600	4	W4	Window in Corridor	800 x 600

Door Schedule

S/No	Schedule	Description	Dimension	S/No	Schedule	Description	Dimension
1	D1	Door in Lab	1000 x 1000	1	D1	Door in Lab	1000 x 1000
2	D2	Door in Reception	1000 x 1000	2	D2	Door in Reception	1000 x 1000
3	D3	Door in Office	1000 x 1000	3	D3	Door in Office	1000 x 1000
4	D4	Door in Corridor	1000 x 1000	4	D4	Door in Corridor	1000 x 1000

Note: All internal doors are steel and external doors UPVC

GROUND FLOOR PLAN

NOTES

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2. The contents of this drawing (in parts) should not be copied, duplicated or in manual or electronic or any other method. It will be treated as breach of copyright and conditions.
3. This drawing should be read and not a copy of the drawing should be made for the purpose of the project at the earliest.
4. All dimensions are in METERS and MILLIMETERS.
5. The drawing should be read in conjunction with other relevant structural, electrical, plumbing and sanitary drawings.
6. This drawing supersedes all other drawings in this regard. If in doubt, consult the architect.
7. This drawing holds good for construction unless otherwise stated. The contractor shall be responsible for obtaining the required permission in respect to obtaining the required permission.

PROJECT TITLE
INTEGRATED PUBLIC HEALTH LABORATORY

KEY PLAN

SITE DETAILS
 LOCATION: BALJEK
 STATE: MEGHALAYA
 PLYNTH AREA (in Sq. M): GROUND FLOOR-4
 FIRST FLOOR-462

DRAWING DETAILS

LAYOUT SITE PLAN
 DRAWN BY: NEW, GOM
 CHECKED BY: NEW, GOM
 DATE OF ISSUE: 24.02.2022
 SIGNATURE: (with stamp and date)

PREPARED BY

Health Engineering Mania
 Meghalaya Health Systems Strengthening
 Meghalaya, Shillong

DESIGNATION

HEM, MESSP

PREPARED BY

NAME: ARTHIND TARIANG
 DESIGNATION: HEM, MESSP

NAME: K. P. MANISH K. DUTTA
 DESIGNATION: HEALTH ENGINEERING CONSULTANT

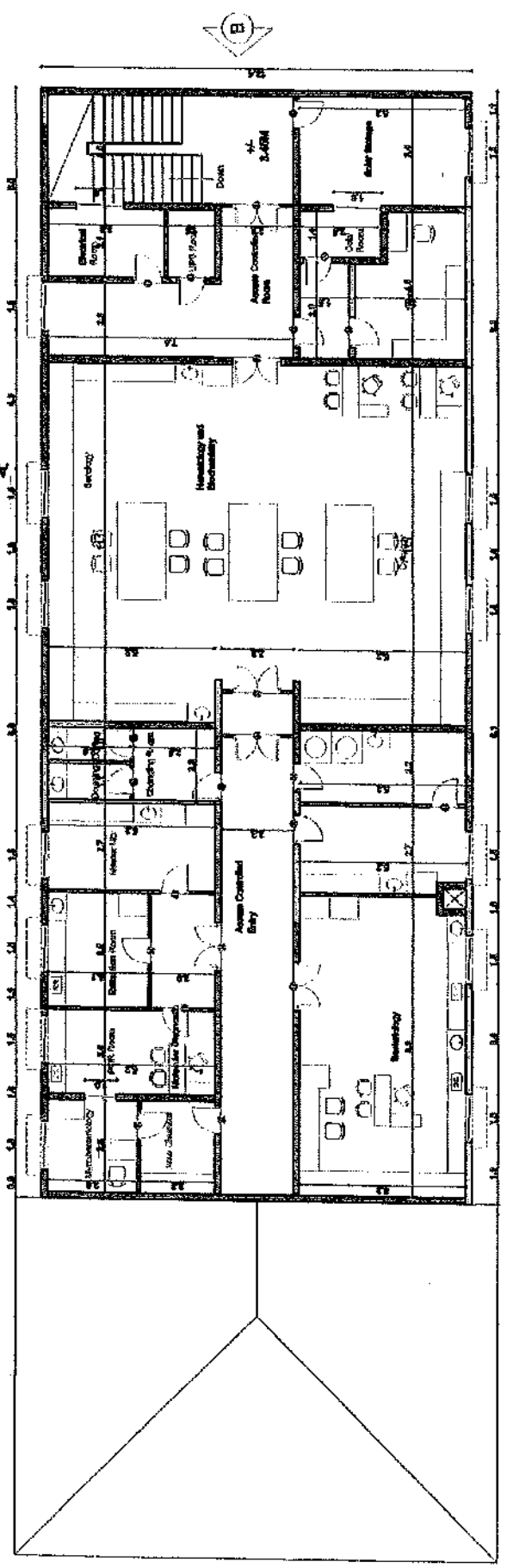
COUNTERSIGNED BY

Executive Engineer,
 Health Engineering Wing
 Directorate of Health Services
 Meghalaya, Shillong

NAME: M. C. BANERJEE
 DESIGNATION: EXECUTIVE ENGINEER

APPROVED BY

(Signature)
 NAME: MEGHAJIT DEB
 DESIGNATION: MESSP



Door Schedule			Window Schedule					
Sl. No.	Schedule	Description	Dimension	Sl. No.	Schedule	Description	Sl. Height	Dimension
1	D1	Door with single shutter	900 x 2100 x 100	17	W1	900 x 1500 x 100	900	1500 x 100
2	D2	Door with double shutter	1200 x 2100 x 100	6	W2	1200 x 1200 x 100	900	1200 x 100
3	D3	Swing Door with double shutter	2000 x 2100 x 100	3	W3	1000 x 1500 x 100	900	1000 x 100
4	D4	Swing Door with double shutter	1900 x 2100 x 100	1	W4	600 x 500 x 100	2100	600 x 100
5	D5	Door with single shutter	900 x 2100 x 100					

Note: All internal doors are steel and external doors UPVC

NOTES

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2. The contents of this drawing (in its original or copied form) should not be copied, duplicated or reproduced in any form without the prior written consent of the author.
3. The drawing should be read and no discrepancy in the drawing should be noticed of the architect at the earliest.
4. All dimensions are in feet and inches.
5. This drawing should be read in conjunction with the structural, electrical, plumbing and sanitary drawings.
6. This drawing supersedes all other drawings prepared for this project.
7. This drawing is the property of the architect and shall remain his property. It is to be used only for the project for which it was prepared.
8. This drawing is the property of the architect and shall remain his property. It is to be used only for the project for which it was prepared.

PROJECT TITLE

INTEGRATED PUBLIC HEALTH LABORATORY
KEY PLAN

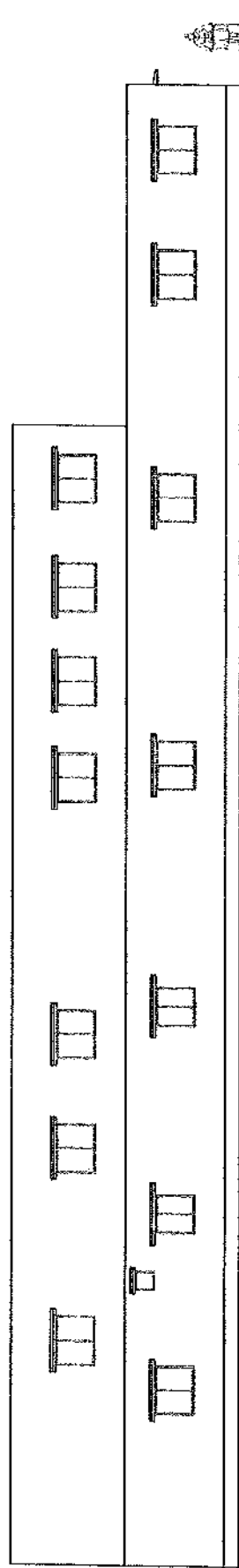
SITE DETAILS
LOCATION: BALJEK
STATE: MEGHALAYA
PLOT AREA: GROUND FLOOR
FIRST FLOOR

DRAWING DETAILS
DRAWING NUMBER: LAYOUT SITE PL
DRAWN BY: NEW, GOM
CHECKED BY: NEW, GOM
DATE OF ISSUE: 24.12.2022
SIGNATURE: (with stamp and date)

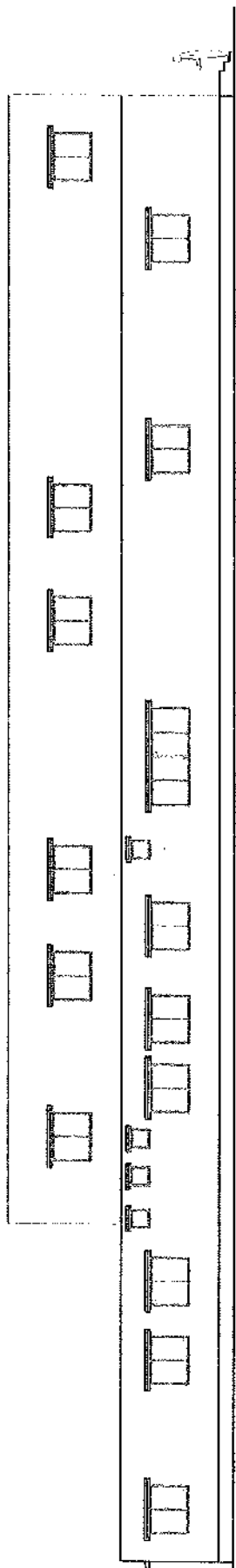
PREPARED BY
NAME: ARJUNKI TARLANG
DESIGNATION: MEM, MPSSP
PREPARED BY

APPROVED BY
NAME: Mission Director
DESIGNATION: Mission Director
NAME: R. WANNIANG
DESIGNATION: EXECUTIVE ENGINEER

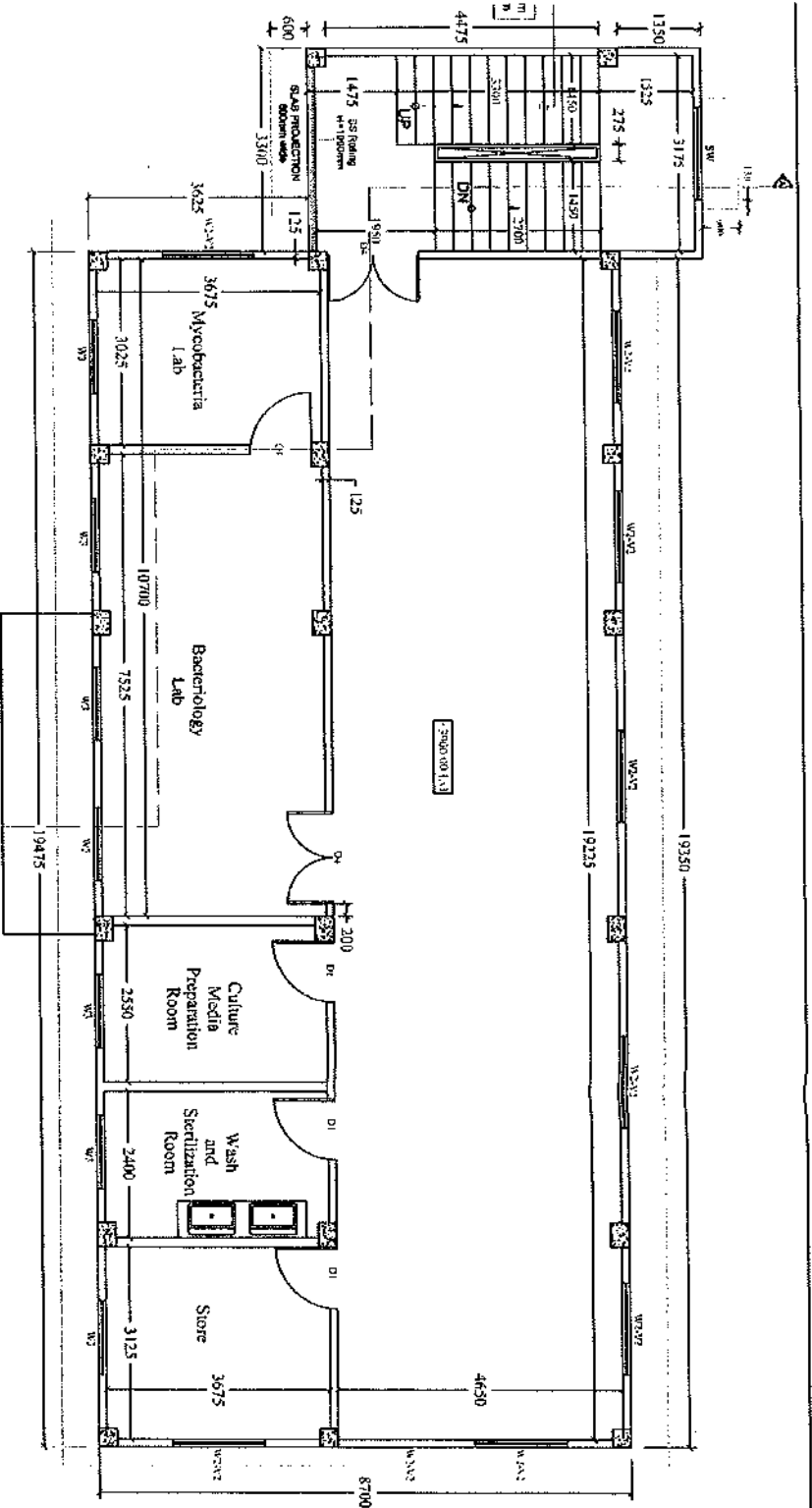
APPROVED BY
NAME: Mission Director
DESIGNATION: Mission Director
NAME: RAVIKUMAR S DAS
DESIGNATION: Mission Director



ELEVATION D



ELEVATION C



FIRST FLOOR PLAN

Area: 190.97 SQM

NOTE:

- ALL DIMENSIONS ARE IN MILLIMETERS.
- ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- ALL DIMENSIONS SHALL BE CHECKED AT SITE.
- IF ANY DISCREPANCY IN THE DRAWING, SHALL BE TO THE NOTICE OF THE ENGINEER-IN-CHARGE BEFORE EXECUTION OF WORK.

AREA STATEMENT:

GROUND FLOOR	= 190.
FIRST FLOOR	= 190.
TOTAL BUILT-UP AREA	= 381.

SCHEDULE OF DOORS & WINDOWS

S.N	TYPE	WIDTH	HT	CLL HT	IN. HT.	DESCRIPTION
01	ED	2100 x 2800	-	2800	-	UPVC FRSH DOUBLE SWING WITH GLASS PANEL
02	01	1000 x 2100	-	2100	-	UPVC FRAME FLUSH DOOR
03	02	800 x 2100	-	2100	-	SHUTTER SINGLE SWING
04	03	750 x 2000	-	2100	-	SHUTTER SINGLE SWING
05	04	1500 x 2100	-	2100	-	UPVC FRU FLUSH DOOR
06	05	750 x 900	1900	2100	-	SHUTTER DOUBLE SWING
07	06	1500 x 1800	800	2300	-	UPVC FR SH. OPENABLE / SLIDING
08	07	1200 x 1800	500	2800	-	UPVC FR SH. OPENABLE / FIXED
09	08	800 x 800	1800	2400	-	UPVC FR SH. OPENABLE / SLIDING
10	09	1500 x 1800	800	2800	-	UPVC FR SH. OPENABLE / FIXED
11	10	1500 x 2100	-	2100	-	UPVC FR SH. DOUBLE OPENABLE / FIXED
12						

DEPARTMENT OF HEALTH & FAMILY WELFARE

IPHL LAB AT PASTEUR SHILLONG

FIRST FLOOR PLAN

DRG. No.

Prepared by: *[Signature]* Health Engineering Manager, Meghalaya Health Systems Strengthening Project, Meghalaya, Shillong, MHSSP

Countersigned by: *[Signature]* Senior Specialist, Directorate of Health Services (Research and) Meghalaya, Pasteur Hills, Shillong

Countersigned by: *[Signature]* Mission Director, National Health Mission, Meghalaya, Shillong

Countersigned by: *[Signature]* Mission Director, National Health Mission, Meghalaya, Shillong

HEALTH ENGINEERING MANAGER, MHSSP

HEALTH ENGINEERING COORDINATOR, NHM

DOCTOR IN CHARGE, FACILITY

EXECUTIVE ENGINEER, HEALTH ENGINEERING WING

MISSION DIRECTOR

Senior Engineer, MHSSP, Meghalaya Region

HEALTH ENGINEERING MANAGER, MHSSP

HEALTH ENGINEERING COORDINATOR, NHM

DOCTOR IN CHARGE, FACILITY

EXECUTIVE ENGINEER, HEALTH ENGINEERING WING

MISSION DIRECTOR

Senior Engineer, MHSSP, Meghalaya Region

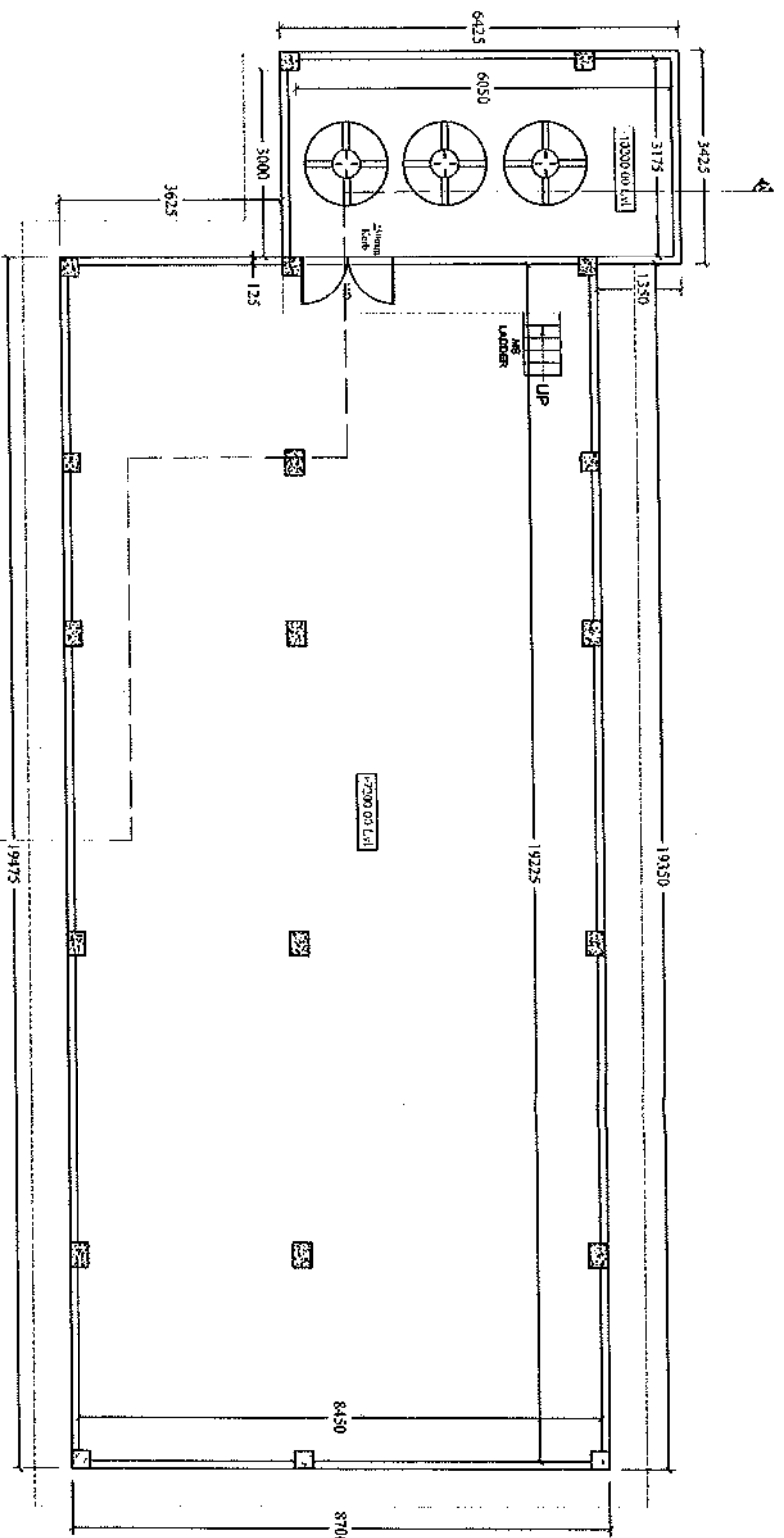
HEALTH ENGINEERING MANAGER, MHSSP

HEALTH ENGINEERING COORDINATOR, NHM

DOCTOR IN CHARGE, FACILITY

EXECUTIVE ENGINEER, HEALTH ENGINEERING WING

MISSION DIRECTOR



ROOF PLAN

- NOTE:**
- ALL DIMENSIONS ARE IN MILLIMETERS.
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 - ALL DIMENSIONS SHALL BE CHECKED AT SITE.
 - IF ANY DISCREPANCY IN THE DRAWING, SHALL BE TO THE NOTICE OF THE ENGINEER-IN-CHARGE BEFORE EXECUTION OF WORK.

AREA STATEMENT:

GROUND FLOOR = 190
 FIRST FLOOR = 190

TOTAL BUILT-UP AREA = 381

SCHEDULE OF DOORS & WINDOWS

S.NO	TYPE	WIDTH	HT	PILL HT	ILLUM. HT.	DESCRIPTION
01	ED	2100	2800	-	2800	UPVC FR./SH. DOUBLE SWING WITH GLASS PANEL
02	D1	1800	2130	-	2100	UPVC FRAME/FURUSH DOOR SHUTTER SINGLE SWING
03	D2	900	2100	-	2100	UPVC FRAME/FURUSH DOOR SHUTTER SINGLE SWING
04	D3	750	2000	-	2100	FRP FRAME FRP SHUTTER
05	D4	1800	2100	-	2100	UPVC FR./SH. GLASS DOOR SHUTTER DOUBLE SWING
06	V1	750	900	1500	2100	UPVC FR./SH. OPENABLE / FIXED
07	W2	1500	1500	000	2200	UPVC FR./SH. OPENABLE SLIDING
08	W3	1200	1800	600	2600	UPVC FR./SH. OPENABLE SLIDING
09	V1	900	600	1800	2400	UPVC FR./SH. OPENABLE SLIDING
10	SW	1500	1000	900	2600	UPVC FR./SH. OPENABLE FIXED
11	WD	1500	2100	-	2100	MS FR./MS SH. DOUBLE OPENABLE
12						

DEPARTMENT OF HEALTH & FAMILY W

DATE : NOV 22
 SCALE : NTS
 IPHL LAB AT PASTEUR SHILLONG

ROOF PLAN

DRG. No.

Approved by:-

Prepared by:-

Countersigned by:-

Countersigned by:-

Countersigned by:-

By:-
 Junior Engineer
 MHSSP
 Assam Region
 Junior Engineer
 MHSSP

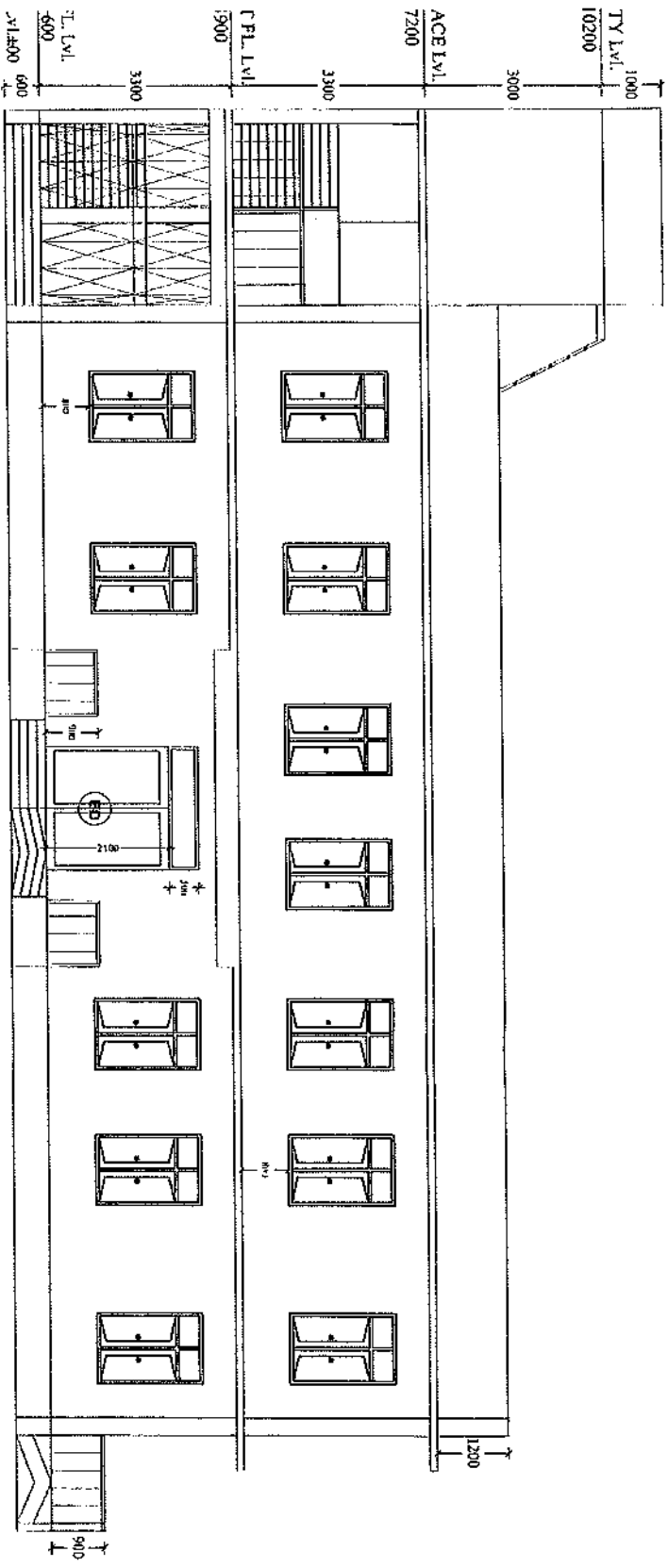
Health Engineering Manager
 Meghalaya Health Systems Strengthening Project
 Health Engineering Manager
 MHSSP

HEALTH ENGINEERING COORDINATOR
 NHM

Senior Specialist,
 Directorate of Health Services
 (Research & Meghalaya
 Pasteur Shillong)
 DOCTOR IN CHARGE, FACILITY

EXECUTIVE ENGINEER
 HEALTH ENGINEERING WING

Mission Director
 National Health Mission
 Meghalaya Shillong
 MISSION DIRECTOR,



FRONT ELEVATION






NOTE:

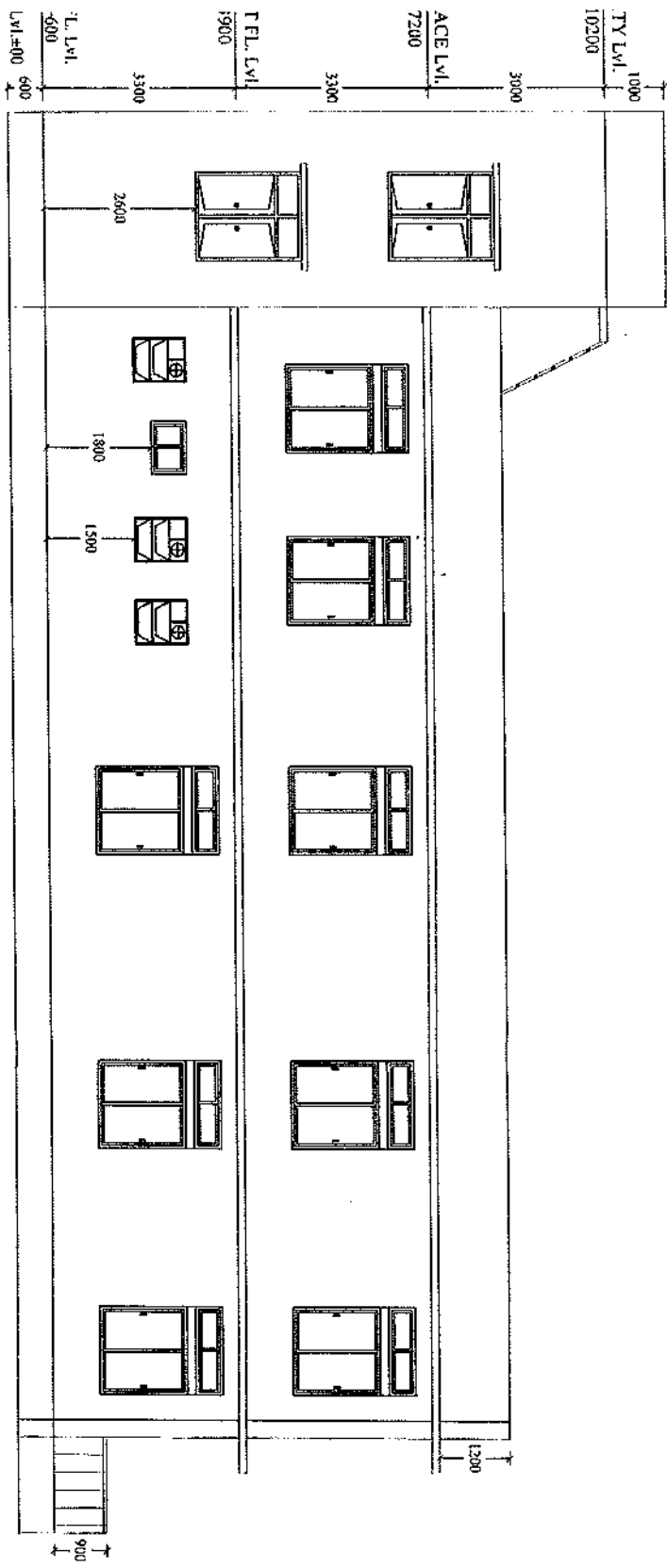
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AREA STATEMENT:

GROUND FLOOR	= 190.
FIRST FLOOR	= 190.
TOTAL BUILT-UP AREA	= 381.

DEPARTMENT OF HEALTH & FAMILY W	
DATE : NOV' 22	IPHL LAB AT PASTEUR SHILLONG
SCALE : NTS	ELEVATIONS
DRG. No.	

by:-  Engineer MHSSP Assam/ Jaintia Region SENIOR ENGINEER MHSSP	Prepared by:-  Health Engineering Manager Meghalaya Health Systems Strengthening Project HEALTH ENGINEERING MANAGER MHSSP	Countersigned by:-  HEALTH ENGINEERING COORDINATOR NHM	Countersigned by:- Senior Specialist Directorate of Health Services (Research etc.) Meghalaya Pasteur Hills Shillong DOCTOR IN CHARGE, FACILITY	Countersigned by:-  EXECUTIVE ENGINEER HEALTH ENGINEERING WING	Approved by:-  Mission Director National Health Mission Meghalaya Shillong MISSION DIRECTOR,
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REAR ELEVATION




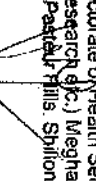

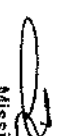
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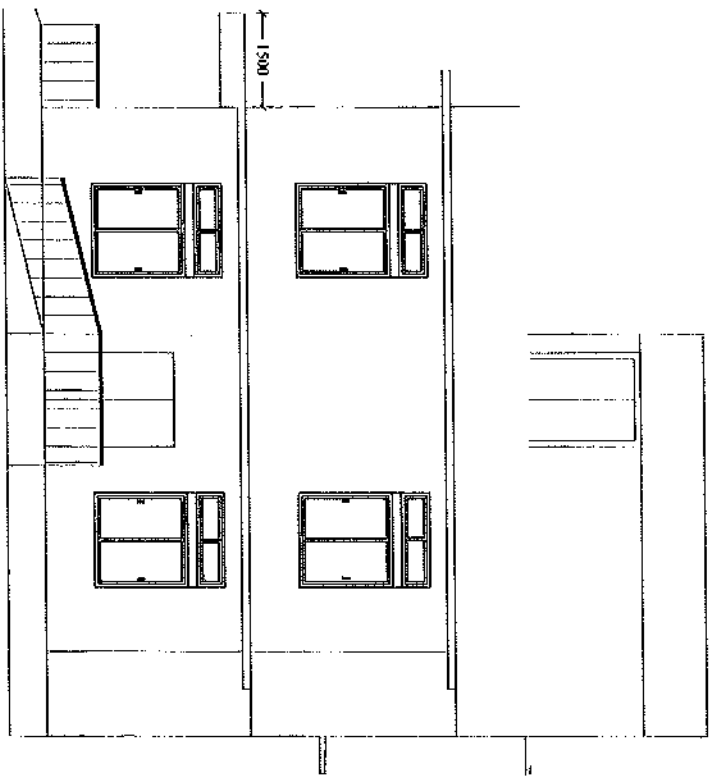
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AREA STATEMENT:

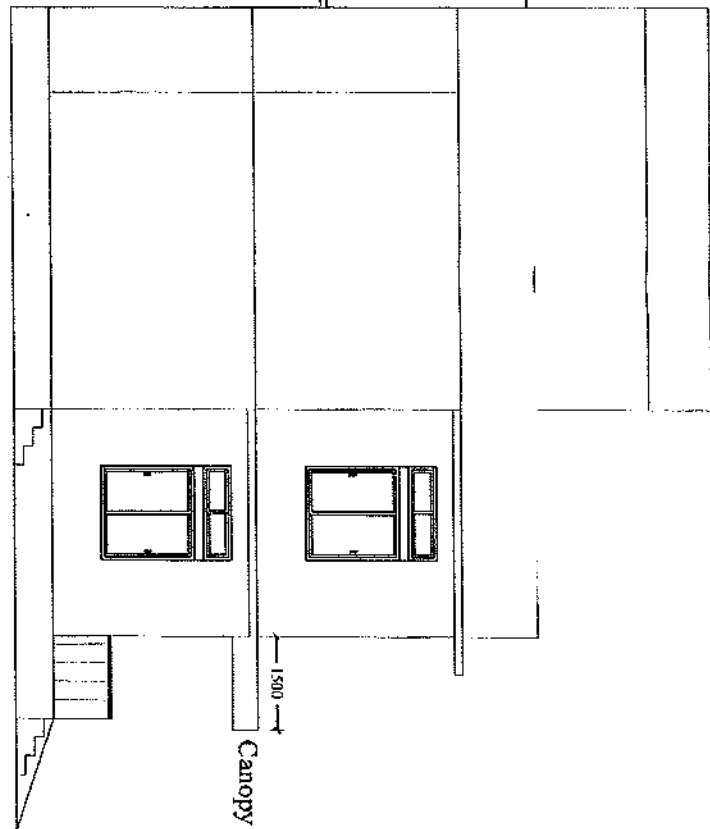
GROUND FLOOR	= 190
FIRST FLOOR	= 190
TOTAL BUILT-UP AREA	= 381

DEPARTMENT OF HEALTH & FAMILY W	
DATE : NOV'22	IPHL LAB AT PASTEUR SHILLONG
SCALE : NTS	ELEVATIONS
DRG. No.	

By:-  Junior Engineer MHSSP Assis/Janitia Region NIOR ENGINEER MHSSP	Prepared by:-  Health Engineering Manager Meghalaya Health Systems Strengthening Project HEALTH ENGINEERING MANAGER MHSSP	Countersigned by:-  HEALTH ENGINEERING COORDINATOR NHM	Countersigned by:-  Senior Specialist Directorate of Health Services (Research etc.) Meghalaya Patkail Hillis Shillong DOCTOR IN CHARGE, FACILITY	Countersigned by:-  EXECUTIVE ENGINEER HEALTH ENGINEERING WING	Approved by:-  Mission Director National Health Mission Meghalaya Shillong MISSION DIRECTOR
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RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION

NOTE:

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AREA STATEMENT:

GROUND FLOOR	=	190
FIRST FLOOR	=	190
TOTAL BUILT-UP AREA	=	381

DEPARTMENT OF HEALTH & FAMILY W

DATE : NOV'22
SCALE: NTS

ELEVATIONS

DRG. No.

Approved by:-

Prepared by:-

Countersigned by:-

Countersigned by:-

Countersigned by:-

by:-
[Signature]
Senior Engineer
MHSSP
Ass/Jaintia Region
NOR ENGINEER
MHSSP

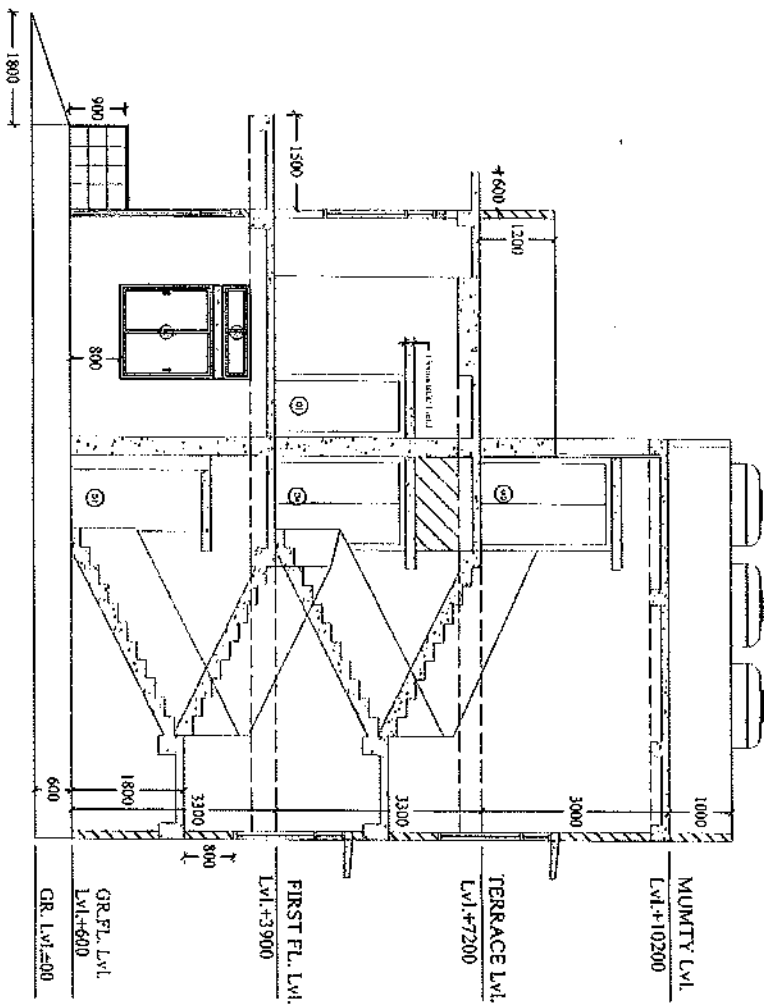
[Signature]
Health Engineering Manager
Meghalaya Health Systems Strengthening Project
HEALTH ENGINEERING MANAGER
MHSSP

[Signature]
HEALTH ENGINEERING COORDINATOR
NHM

[Signature]
Senior Specialist
Directorate of Health Services
(Research etc.) Meghalaya
Pastor Hills, Shillong
DOCTOR IN CHARGE, FACILITY

[Signature]
EXECUTIVE ENGINEER
HEALTH ENGINEERING WING

[Signature]
Mission Director
National Health Miss
Meghalaya Shillong
MISSION DIRECTOR,



SECTIONAL ELEVATION A-A

by:-
[Signature]
 Project Engineer
 MHSSP
 Jais/Jaintia Region
 PROJECT ENGINEER
 MHSSP

Prepared by:-
[Signature]
 Health Engineering Manager
 Meghalaya Health Systems Strengthening Project
 HEALTH ENGINEERING MANAGER
 MHSSP

Countersigned by:-
[Signature]
 HEALTH ENGINEERING COORDINATOR
 NHM

Countersigned by:-
 Senior Specialist
 Directorate of Health Services
 (Research etc.) Meghalaya
 Pasteur/Hills, Shillong
 DOCTOR IN CHARGE, FACILITY

Countersigned by:-
[Signature]
 EXECUTIVE ENGINEER
 HEALTH ENGINEERING WING

Approved by:-
[Signature]
 Mission Director
 National Health Mission
 Meghalaya Shillong
 MISSION DIRECTOR

NOTE:

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AREA STATEMENT:

GROUND FLOOR	= 190
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TOTAL BUILT-UP AREA	= 381

DEPARTMENT OF HEALTH & FAMILY W

DATE : NOV 22
 SCALE : NTS
 IPHL LAB AT PASTEUR
 SHILLONG
 ELEVATIONS

DRG. No.	
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