TENDER NO : P.11011/2/2023-NESIDS/PD/HFW(PP) dated 1st Feb, 2023

Directorate of Hospital & Medical Education

Mizoram New Capital Complex, Khatla
Aizawl - 796001

Tender Document for Supply, Installation and Commissioning of

"Complete Cath Lab and its Peripherals and Accessories"

at Department of Cardiology, Civil Hospital, Aizawl

Tender fees Rs. 2500/-

Date of Pre-Bid Conference: 15.02.2023 at 1:00 PM

Date of submission of Bid: 6.02.2023 till 28.02.2023 (12:00 Noon)

No.P.11011/2/2023-NESIDS/PD/HFW(PP)
GOVERNMENT OF MIZORAM
HEALTH & FAMILY WELFARE DEPARTMENT
OFFICE OF THE PRINCIPAL DIRECTOR
MINECO, KHATLA, AIZAWL - 796001
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Dated Aizawl 1st Feb., 2023

TENDER NOTICE

1. Sealed tenders are invited in Two Part Bids System, Technical bid and Financial bid system on behalf of the Director, Hospital & Medical Education (DHME), Aizawl from interested agencies and eligible manufacturer or their authorized distributors, for Supply Installation and Commissioning of complete Cath Lab and its peripherals and accessories for the Department of Cardiology, Civil Hospital, Aizawl.

2. The technical bid and financial bid should be submitted separately, in Sealed Cover-I containing "Technical Bid" and Sealed Cover-II containing "Financial Bid" and placed in one sealed cover envelop super scribed **"Tender for Supply Installation and Commissioning of complete Cath Lab and its peripherals and accessories."** The bid should reach at the office of Directorate of Hospital & Medical Education, MINECO, Khatla, Aizawl - 796001, on or before dated **28.02.2023 at 12:00 Noon.** The bid received after due date and time will not be entertained. The technical bids shall be opened on the same day at **1:00 PM** in the Meeting Room of DHME, in presence of persons representing the prospective bidders. The date for opening of financial bid among technically qualified agencies will be intimated later.

3. The tender document can be purchased from the office of Directorate of Hospital & Medical Education from **06.02.2023** to **28.02.2023** between 10.00 AM and 02.00 PM on non-refundable payment of Rs. 2500/- (Rupees Two Thousand Five Hundred only) or can be downloaded from website www.health.mizoram.gov.in. and State Public Procurement portal. Those who download the tender document from website should enclose DD/Pay Order for Rs. 2500/- (Rupees Two Thousand Five Hundred only) (non- refundable) in favour of "Director of Hospital & Medical Education", payable at Aizawl, not later than dated **28.02.2023** alongwith their technical bid in the Cover-I "Technical Bid".

4. The Earnest Money Deposit (EMD) for "Supply Installation and Commissioning of Cath Lab and its peripherals" for the Department of Cardiology as given in table-1 below tender documents should be paid in the form of demand draft/FD/TD/CD from any Nationalised/Schedule bank duly pledged in favour of "Director, Hospital & Medical Education" payable at Aizawl and will be placed in Cover-1 with technical bid. The Tender Documents are not transferable.

5. Covering letter with a summary of applied document with proper numbering should be enclosed. Bid should also attached a compliance sheet as per specification mentioning that they are complyoing to all specifications or have any variations.

6. The bidders are required to regularly check the Department website for any corrigendum(s) as only these bids, taking care of such corrigendum(s) shall be considered for finalization of the tender.

Sd/- ESTHER LAL RUATKIMI
Principal Secretary to the Govt. of Mizoram
Health & Family Welfare Department

Memo No. P.11011/2/2023-NESIDS/PD/HFW(PP) **Dated 1st Feb., 2023**

Copy to :

1. P.S to Minister, H & F W Deptt., for favour of information.
2. The Principal Secretary, H & FW Deptt.
3. The Director, Hospital & Medical Education, Mizoram, Aizawl.
4. Guard file.

(DR. T. LALHMANGAIHI)
Principal Director
Health & Family Welfare Department
Govt. of Mizoram

Chapter-I

TENDER DOCUMENT

(Instructions to bidder & conditions of contract)

(A) General Information and Conditions relating to Submission of Bids

1. The tender document containing eligibility criteria, scope of work, terms & conditions and tentative draft agreement can be purchased from Directorate of Hospital & Medical Education on any working day from **06.02.2023** to **28.02.2023** between 10:00 AM to 02:00 PM on payment of non-refundable charges of Rs. 2500/- (Rupees Two Thousand Five Hundred only)or can be downloaded from website www.health.mizoram.gov.in and State Public Procurement portal. Those who downloadthe tender document from Website should enclose a Demand Draft/Pay Order for Rs. 2500/- (Rupees Two Thousand Five Hundred only) in favour of "Director, Hospital & Medical Education", payable at Aizawl, not later than dated **28.02.2023** along with their bid in the Cover-I containing "Technical Bid".

2. The interested firms/suppliers are required to submit the Technical and Financial Bids separately in the format enclosed and they have to observe highest standard of ethics while bidding for this tender. The bids in sealed Cover-I containing "Technical Bid" and sealed Cover-II containing "Financial Bid" should be placed in a third sealed cover super scribed "Supply, Installation and Commissioning of complete Cath Lab and its peripherals and accessories" for the Department of Cardiology, Civil Hospital, Aizawl should reach Directorate of Hospital & Medical Education, Aizawl by or before **28.02.2023** on **12:00 Noon.** The Technical bids shall be opened on same day at **1:00 PM** at Office of the Directorate of Hospital & Medical Education in presence of the bidders or their authorized representatives (Authorization letter required to be submitted) who choose to remain present. The Tender documents received after due date & time will not be considered and no claim shall be entertained whatsoever may be the reason.

3. The pre bid conference would be held on **15.02.2023** at **1:00PM** in the Meeting Room of Director, Directorate of Hospital & Medical Education. All firm's representatives who are attending the pre bid meeting, shall produce an authorization letter from their firm on the firm's letter head. They are required to put their query in writing before the committee and submit the same in writing on its letter head. The firms representatives are also informed to be prepared to answer any query made by DHME.

4. Tender must be submitted on the prescribed Tender Form. Otherwise tender will be cancelled straightaway.

5. The tender form is not transferable.

6. Canvassing in any form is strictly prohibited and the tenderers who are found canvassing are liable to have their tenders rejected out rightly.

7. All the duly filled/completed pages of the tender should be given serial/page number on each page and signed, dated and stamped by the owner of the firm or his Authorized signatory. In case the tenders are signed by the Authorized signatory, a copy of the power of attorney/authorization may be enclosed along with tender. A copy of the terms & conditions shall be signed on each page and submitted with the technical bid as token of acceptance of terms & conditions. Tender with unsigned pages/incomplete/partial/part of tender if submitted will be rejected out rightly.

8. All entries in the tender form should be typed. Handwritten documents will not be accepted. If the space for furnishing information is insufficient, a separate sheet duly signed by the authorized signatory may be attached. No overwriting, whitener or cutting is permitted in the Technical Bid as well as Financial Bid unless authenticated by full signature of bidder and stamped. Any omission in filling the columns of Financial Bid form (Schedule of Rates) shall debar a tender from being considered. Rates should be filled up carefully by the tenderer. All corrections in this schedule must be duly attested by full signature of the tenderers. The corrections made by using correcting fluid and overwriting will not be accepted and tender would be rejected.

9. (i) Bid Security: -The bidder shall pay 5% of the estimated value of the total bid as Security (EMD) as mentioned in table-I along with the Technical Bid by way of demand draft/FD/TD/CD in favour of "Director, Hospital & Medical Education" drawn on any Nationalized Bank/ Scheduled Bank and payable at Aizawl and must be valid for (6) six months. Bids received without tender fees and Earnest Money Deposit (EMD) shall stand rejected and thus shall not be considered for evaluation etc. at any stage. The original EMD should be put in cover-I containing the Technical bid.

a) Bid security will not be required to be taken from Undertakings, Corporations, Autonomous bodies, Registered Societies, Cooperative Societies which are controlled/managed by Government, Government Undertakings and Companies of Union Government and Government of Mizoram. However, a Bid Securing Declaration will be taken from them

(ii) Forfeiture of Bid security: The Bid security taken from a bidder shall be forfeited in the following cases, namely:-

a) when the bidder withdraws or modifies his bid after opening of bids;

b) when the successful bidder fails to deposit the Performance Security after fifteen days of the issue of offer of contract;

c) when the successful bidder fails to sign the Contract in accordance with Bidding Document;

d) to adjust any dues against the bidder from any other contract with the Procuring Authority;

e) if the bidder breaches any provision of code of integrity prescribed for bidders in Rule 64 of MPPR 2020.

10. The bid security (EMD) without interest shall be returned to the unsuccessful bidders after finalization of contract with successful bidder.

11. Bidders are not allowed to submit more than one bid anytime during the tendering process for the same/similar tendered work else all its bids shall be cancelled thereby making him disqualified in addition to the may forfeiture of the EMD.

12. Full description and specifications, make/brand and name of the manufacturing firm must be clearly mentioned in the tender, failing which, the tender will not be considered. The tenderer must also mention whether the goods are imported / indigenous. Descriptive original literature /catalogues must be attached with the tender, failing which, the tender may be disqualified.

13. Deviation in work/equipments: - Where the specifications are as per tenderer's range of products the tenderer's offer should mention that the item meets all specifications as per the tender enquiry and if there are improvements/deviations the same should be brought out on separate Letter Head of the firm. It would be at the discretion of the competent authority to accept or reject such deviations which are not in accordance with our required specifications as given below the financial bid.

14. To assist in the analysis, evaluation and computation of the bids, the Competent Authority, may ask bidders individually for clarification of their bids. The request for Clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.

15. It must be mentioned clearly whether bidder is a manufacturer/sole distributor / sole agent for the items for which he is quoting.

    a. Manufacturer must add a certificate that item(s) is manufactured by them as per range of products.

    b. Sole Manufacturers must add a certificate that they are the sole manufacturer of the item for which they are quoting in this tender enquiry and item is /are their proprietary item in India. The rate certificate is also required from the sole manufactures that the rates quoted are the same as they quote to other State/Centre Govt./reputed Private Organisation and DGS&D rate for the similar item(s) and these are not higher than those quoted by them.

    c. Authorized agents must add authority letter from their Manufacturer/Principals on the letter head of the manufacturer/principals signed by a competent person and comes in proforma given in attach must duly supported by a notarized affidavit on Indian Non Judicial Stamp Paper of Rs.10/- (Rupees ten only) that they are quoting rates on behalf of them. The authorization letter must give/mention the purpose for which it is allowed. The validity period of the authorization letter must be mentioned in the authority letter otherwise tender will be liable to rejection.

16. The competent authority of Directorate of Hospital & Medical Education reserves all rights to accept or reject any/ all tender(s) without assigning any reason. It can also impose/relax any administrative term and condition/specifications of the tender enquiry after due discussion in pre-bid conference. This will be communicated and shown over the website of the H&FW Deptt., Govt. of Mizoram. No representation will be considered after pre-bid meeting and bidders may ensure its queries only in pre-bid meeting. Director of Hospital & Medical Education also reserves the right to reject any bid which in his opinion is non-responsive or violating any of the conditions/specifications without any liability to any loss whatsoever it may cause to the bidder in the process.

17. After evaluation, the work shall be awarded normally to the Agency fulfilling all the conditions of the contract and who has quoted the lowest rate as per financial bid after complying with all the Acts / provisions stated / referred to for adherence in the tender.

18. The name of such successful bidder will be displayed on the website of the H&FW Deptt., Govt. of Mizoram www.health.mizoram.gov.in within 7 (seven) days from the date of execution of this tender contract by him.

19. The successful bidders have to execute a contract on Indian non judicial stamp paper of Rs.100/- (Rupees one hundred only) within twenty-one (21) days from the date of "Letter of award" of this tender in his favour and also required to furnish the Security Deposit @ 5% of contract value in the form of FD/BG/TD/CD for three months extra of the contract period from any Nationalised/Schedule bank duly pledged in favour of Director of Hospital & Medical Education & payable at Aizawl only. The EMD deposited by successful bidder may be adjusted towards Security Deposit as demanded above after its validation for the required period. If the successful bidder fails to furnish the full security deposit or difference amount between Security Deposit and EMD within 21 (twenty-one) days after the issue of Letter of Award of Work, his bid security (EMD) shall beforfeited and award of tender in suppliers favour automatically stands terminated at his cost & liability, unless time extension has been granted by Director of Hospital & Medical Education.

20. The EMD/PBG together shall be forfeited if successful bidder fails to Supply, Installation and Commissioning of complete Cath Lab within stipulated time of six (6) months or fails to comply with any of the terms & conditions of the contractor fail to sign the contract.

21. The bid shall be valid and open for acceptance by the competent authority of Directorate of Hospital & Medical Education, Aizawl for a period of 1 (one) year from the published date of opening of the tenders and no request for any variation in quoted rates and /withdrawal of tender on any ground by bidders shall be entertained. The unilateral withdraw at any stage will cause forfeiture of EMD in addition to any remedy that the purchaser may have under the law.

22. In case the vendor fails to complete the work of installing the complete Cath Lab and supply of its spare parts or fails to provide the agreed maintenance during the prescribed period, as per the terms of contract, the purchaser is automatically entitled to procure the required parts and hire services from the market at the risk and cost of the vendor, such inability of bidder will entail forfeiture of the security deposit. The purchaser also reserves the right to terminate the contract on immediate notice, if the vendor fails to comply with this clause for more than one instance.

23. In case the bidder on whom the supply order has been placed, fails to establish complete Cath Lab within the time schedule and the H&FW Deptt. has to resort risk of completion, the Government of Mizoram may recover from the tender and the difference between the cost calculated on the basis of risk purchase price and that calculated on the basis of rates quoted by tenderer. In case of repeated failure in supplying/establishing complete Cath Lab of the required goods/work, the work order may be cancelled and bid security deposit will be forfeited.

24. It is required by all concerned, namely the Bidders/Suppliers, as the case may be to observe highest standard of ethics during the establishment of Cath Lab, procurement of its equipments and execution of work.

25. Installation at consignee's site i.e. Cardiology Deptt., Civil Hospital, Aizawl should be free of cost immediately on arrival of equipment.

26. The bidders should have furnished a copy of GST/S.T. /C.S.T./VAT registration number, the State/U.T. of registration and the date of such registration. Tenders not complying with this condition will be rejected.

27. Turnover provisions: -

a. The tenderers should submit along with the tender, a photo- stat copy of the last three years Annual Accounts with Audit certificate by Chartered Accountant, Income Tax returns and a copy of current valid income tax clearance certificate (IT CC), otherwise bidder will not be considered for administrative evaluation (in evaluation of Technical bid) and will be declared disqualified in technical evaluation.

b. In case of supplier is an Indian Agent, the firm can submit copies of purchase orders issued in favour of firm (As the payment is made through LC directly to foreign manufacturer and equipment payment does not exist in the book of account of the supplier) in support to its turnover whatever amount is getting short.

c. There will be relaxation on turnover on case to case basis for Start-up firms registered by Government of India under Start-up schemes as per orders of Ministry of Commerce, Government of India.

28. In case the quality of goods supplied are not in conformity with the standard given in the tender terms and conditions and the supplies are found defective at any stage, these goods shall immediately be taken back by the supplier and will be replaced with the tender quality goods, without any delay. The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required descriptions/specifications and liquidates damages shall be charged in addition to the cost of re- tender. The bidder is required to provide the demonstration of equipment at Civil Hospital, Aizawl premises to the Cardiology Deptt. representatives for its evaluation as per the specifications and desired functionality standard. However, a submission of videography displaying functionality as per tender specification may also be considered by the Civil Hospital, Aizawl, representatives.

29. The tenderer hereby guarantees that the equipments supplied to the Institute (purchaser) under the contract shall be of the best quality/latest version and workmanship and new in all respects and shall be strictly in accordance with the specifications and particulars contained/ mentioned in the Tender Document. The tenderer will have further guarantees that the said equipment would continue to conform to the description and quality aforesaid for a period of five (5) years of guarantee period (As per MoH&FW guidelines), from the date of installation of the said equipment to the purchaser and not withstanding the fact that the purchaser (Inspector) may have inspected and /or approved the said equipment, if during the aforesaid period of five years the said equipment be discovered not to conform to the description and quality as required as per specification or not giving satisfactory performance or have deteriorated, the decision of the Purchaser in that behalf shall be final and binding on the tenderer and the purchaser shall be entitled to call upon the tenderer to rectify the equipment or such portion thereof as is found to be defective by the purchaser within a reasonable period or such specified period as may be allowed by the purchaser in his discretion on/an application made thereof by the tenderer and in such an event, the above mentioned warranty period shall apply to the equipment replaced from the date of replacement thereof. In case of failure of the tenderer to rectify or replace the equipment, withinspecified time, the purchaser shall be entitled to recover the cost with all expenses from the tenderer for such defective equipment.

30. Force Majeure: Any failure or omission to carry out of the provisions of this supply by the supplier shall not give right for any claim by supplier and purchaser to one against the other, if such failure or omission arise from an act of God which shall include all acts of natural calamities from civil strikes, compliance with any statistics and or requisitions of the Government lockout and strikes, riots, embargoes or from any political or other reasons beyond the suppliers control including war (whether declared or not) civil war or state of incarceration provided that notice of the occurrence of any event by either party to the other shall be within two weeks from the date of occurrence of such an event which could be attributed to force majeure. Any delay due to Force Majeure will not be attributable to either of the parties.

31. The equipment installed should be up for 95% of the total warranty time. If the equipment is down for more than 5% suitable action shall be taken against the supplier including imposition of penalty as deemed fit.

32. If there is a close system the tenderer shall ensure and will have to submit an affidavit on Indian Non Judicial stamp paper of Rs.10/- along with technical bid that spare parts and consumables for these equipment's/instruments/items will be available at reasonable fixed rates for next 10 (ten) years (Guarantee and CMC period), such rates should not be more than the rates supplied to institutes of national importance or repute hospitals.

33. The successful bidder shall at all times agree to indemnify and keep indemnified the purchaser against all losses, damages which may arise in respect of action/inactions of such bidder or breach of any term of this tender by such bidder. All claims regarding indemnity shall survive the termination of the contract with such Bidder.

34. Legal Jurisdiction: - The Courts at Aizawl, Mizoram alone and no other court will have the jurisdiction to try the matter, dispute or reference between the parties arising out of this tender/supply order/contract.

Applicable Law:

1. The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.

2. Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Aizawl, Mizoram, India only.

3. Except as otherwise provided under this Contract for immediate termination of the Contract, in the event of any dispute(s) which may be arise out of the execution of the tender contract, the matter will be referred to the Director, Hospital & Medical Education. Appeal against the decision of the Director, Hospital & Medical Education, will lie to the hands of the Appellate Authority as per Rule 117 of The Mizoram Public Procurement Rules, 2020, and the decision shall be final and binding upon both the parties.

I / We hereby accept the terms and conditions given in the tender

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(Signature & Stamp of the bidder)

Note- Please put signatures in each page of document including terms & conditions & tender

(B) Financial terms and conditions

1. Rates are strictly required to be offered/quoted on the prescribed "Financial Bid format". Financial bid not submitted in the prescribed format will not be considered and will be deemed improper, subject to the condition that there is/are other requirement(s) which are not mention in the said format.

2. Rates quoted should be inclusive of all applicable taxes, packing, forwarding, postage and transportation charges for Civil Hospital, Aizawl (Site of installation/use). To sum up, the rates should be quoted for establishment of complete Cath Lab. Rates should be mentioned both in figures and in words. The offer should be typed. Handwritten offer will be rejected. Telegraphic/ Telex/ Fax offers will not be considered and cancelled straightaway.

3. The supplier has to submit a notarized affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that the bidder has not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. Therefore, if at any stage it has been found that the supplier has quoted lower rates than those quoted in this tender; the Institute (the purchaser) would be given the benefit of lower rates by the supplier and any excess payment if any, will become immediately payable to the Directorate of Hospital & Medical Education. If such affidavit is not submitted, tender will be out rightly rejected. (Part of technical bid)

4. If the price of the contracted articles is/ are controlled by the Government, in no circumstances the payment will be higher than the controlled rate.

5. Tender will be regarded as constituting an offer open to acceptance in whole or in part at the discretion of the competent authority of the institute for a period of 180 days (6 months) valid from the date of opening of the tender by the committee.

6. The corrections made using correcting fluid and overwriting will not be accepted and tender would be rejected.

7. Tenderer shall have to provide complete warranty for all equipments mentioned in Chapter – III (B) for 5 (five) years along with CMC for 5 (five) years for Chapter – III (A). Financial bid should be quoted accordingly. In this regard, the tenderer shall submit a notarized affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that bidder will provide complete warranty and CMC as stated.

8. Tender Currencies:

    a. The bidder shall quote only in Indian Rupees. Further, imported goods to be supplied by the bidder are required to be quoted in Indian Rupees. For imported goods, the exchange rate of currencies at the time of submitting the financial bid will be used for payment and whenever applicable.
    b. Tenders, where prices are quoted in any other way shall be treated as non - responsive and rejected.

9. Tender Prices: While filling up the columns of the Financial Bid, the following aspects should be noted for compliance: -

a. The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, GST/CST/ VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc.

b. Any sales tax or other taxes and any duties including excise duty, which will be payable on thegoods in India if the contract is awarded;

c. Charges towards Packing & Forwarding, Inland Transportation, Insurance, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Financial Bid.

d. The price of Incidental Services, as mentioned in List of Requirements and Financial Bid.

e. The price of CMC after warranty period, as mentioned in List of Requirements, Technical Specification and Financial Bid.

10. Additional information and instruction on Duties and Taxes: If the Bidder desires to ask for excise duty,sales tax/GST/CST / VAT/ CENVAT, Custom Duty, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation, the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

11. Excise Duty:

a. If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so. Also, indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation, it will be presumed that the prices quoted are full and final and no claim on account of excise duty will be entertained after the opening of tenders.

b. If a Bidder chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation. If there is an excise duty at the time of supply, the bidder must clearly state it, as well as the rate and quantum duty included in the price. Failure to indicate all such details in clear terms may result in rejection of that tender.

c. Subject to sub clauses (i) & (ii) above, any change in excise duty upward/downward as a resultof any statutory variation in excise duty taking place within contract terms shall be allowed to the extentof actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the Directorate of Hospital & Medical Education by the supplier.All such adjustment shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

12. Sales Tax: - If a bidder asks for sales tax/GST/CST / VAT/CENVAT, Service Tax and Work ContractTax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The GST/CST / VAT/CENVAT, Service Tax and Works Contract Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to sales tax/ GST/CST / VAT/CENVAT, Service Tax and Works Contract Tax and is payable as per the terms of the contract.

13. Octroi Duty and Local Duties & Taxes: - Normally, goods to be supplied to Government departments against Government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned Government department. Keeping this in view, the supplier shall ensure that the goods to be supplied by the supplier against the contract placed by the Director of Hospital & Medical Education are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the Director of Hospital & Medical Education. However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the Director of Hospital & Medical Education to enable the Director of Hospital & Medical Education reimburse the supplier and take other necessary action in the matter.

14. Customs Duty: In respect of imported goods offered from abroad, the bidder shall specify the rate as well as the total amount of customs duty payable with Custom Duty Exemption Certificate, if applicable, on the quoted goods in the Financial Bid. The bidder shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods.

    a. For transportation of imported goods offered from abroad, relevant instructions as incorporated shall be followed.

    b. For insurance of goods to be supplied, relevant instructions as provided shall be followed.

    c. Unless otherwise specifically indicated in this NIT document, the terms FCA, FOB, FAS, CIF,CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris.

    d. The need for indication of all such price components by the bidders, as required in this clause is for the purpose of comparison of the tenders by the purchaser and will no way restrict the Director of Hospital & Medical Education right to award the contract on the selected bidder on any of the terms offered.

15. Indian Agent: - If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission and shall also furnish the following information (if any):

    a. The complete name and address of the Indian Agent and its Permanent Account Number as allotted by the Indian Income Tax authority.

    b. The details of the services to be rendered by the agent for the subject requirement.

c. Details of Service outlets in India, nearest to Civil Hospital, Aizawl to render services during warranty and CMC period.

Firm Price:-

a. Unless otherwise specified in the NIT, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.

b. However, as regards taxes and duties, if any, chargeable on the goods and payable, theconditions stipulated will apply.

16. Payment terms: -

I. Cath Lab Machine [Chapter III (A)]

a) On shipment: 40 % payment of the cost shall be paid after delivery of goods at site and upon the submission of the following documents: -

i. Four copies of Supplier's invoice showing contract number, goods description, quantity, unit price and total amount.
ii. Original and four copies of the clean, on-board Bill of Lading/ Airway bill, marked freight prepaid and four copies of non-negotiable Bill of Lading/Airway bill.
iii. Insurance Certificate;
iv. Certificate of origin by the chamber of commerce of the concerned country;
v. Certificate of country of origin;
vi. Manufacture's / Supplier's warranty certificate;
vii. Manufacturer's own factory inspection report.

b) On Acceptance: 60 % payment would be made after satisfactory installation, commissioning, demonstration and training, if required on issuance of Inspection certificate by the Directorate of Hospital & Medical Education.

II. Other Equipments [Chapter – III (B)]

100% payment after successful supply, installation and commissioning and upon certification by Head of Deptt., Cardiology and Medical Superintendent, Civil Hospital, Aizawl.

17. Guarantee / Warrantee Period: The bidder must quote for 5 years' comprehensive warranty (Including all Spares, Accessories software application and upgradation, if any and Labour) from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. Also the bidders are requested to submit their quote (Rates) for subsequent 5 years Comprehensive Maintenance Contract (CMC) (Including All Spares, Accessories software application and upgradation, if any and Labour) for Chapter-III (A). Failure to comply this condition will entail the rejection of the bids. The price comparison shall be taken into account on the basis of total price and cost CMC.

18. Custom Clearance: For the goods to be imported and supplied, the Institute will provide Custom Duty Exemption Certificate (CDEC) to successful bidder for availing concessional rate of duty as per prevailing Custom Tariff. In case, the bidder requires CDEC certificate, then the same should be specifically mentioned in the bid. The supplier is solely responsible for getting the material clearance from customs. Institute will provide all

custom documents for custom clearance on the demand of supplier. The supplier undertakes to fully co-operate to avoid any fine, demurrage or other charges and shall indemnify Civil Hospital, Aizawl in case of any such failure. Transportation of goods up to Civil Hospital, Aizawl and its successful installation and commissioning demonstration (and training, if required) is also the responsibility of the supplier. All charges/ expenses incurred in this process will be borne by the supplier and after submission of deposit slips of custom clearance and transportation charges will be reimbursed to the supplier if said provisions are to be shown separately in the financial bid.

NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYBALE BY THE INSTITUTE UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLEARANCE/ FREIGHT/INSURANCE ETC

Note: In case of any dispute regarding award of tender, decision of Directorate of Hospital & Medical Education would be final.

I / We hereby accept the terms and Conditions given in the tender

Note- Please sign each page of document including terms & conditions & tender

Equipment for the Department of "Cardiology"

TECHNICAL BID
(In separate sealed Cover-I super scribed as "Technical Bid")

1. Name & Address of the manufacturer and their authorized dealers/ distributors/Agency with phone number, email, name and telephone/mobile	
2. Specify your firm/company is a manufacturer/ authorized dealer/ distributor/ Agency	
3. Whether the signature on each page has been made by the bidder or not.	
4. Name, Address & designation of the authorized person (Sole proprietor/partner /Director)	
5. Have you previously executed Cath Lab works to any government/ reputed private organization? If yes, attach the relevant proof thereof.	
6. Please provide a notarized affidavit on Indian Non Judicial stamp paper of Rs. 10/- that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in last one year. If you don't fulfil this criteria, your tender will be out rightly rejected.	
7. Please attach copy of last three years' of Income Tax Return.	
8. Turnover a. Please attach balance sheet (duly certified by Chartered Accountant) for last three (3) years (Attach copy of annual minimum turnover which should not be less than Rs. 25 crores duly certified by the Chartered Accountant) b. Indian Agent can submit its copy of POs of LC cases, in support of its amount getting short in required turnover. c. Start-ups may submit its Start-up Registration for consideration (Relaxation in turnover can be considered as the case may be, subject to fulfilment of other conditions. However, it will not mandatory)	
9. PAN No. (Please attach copy)	
10. GST/VAT/Service Tax Registration Number. (Please attach copy)	
11. Acceptance of terms & conditions attached (Yes/No). Please sign each page of terms and conditions as token of acceptance and submit as part of tender document with technical bid. Otherwise your tender will be rejected.	
12. Power of Attorney/authorization for signing the bid documents (Not required in case of sole-proprietorship.)	
13. Please submit a notarized affidavit on Indian Non judicial stamp paper of Rs. 10/- that no case is pending with the police against the Proprietor/firm/partner or the Company (Agency). Indicate any convictions in the past against the Company/firm/partner.	
14. Please declare that proprietor/firm/company has never been black listed/debarred by any organization. An oath certificate to this effect may be enclosed on Rs.10 notarized stamp paper.	
15. Please submit a notarized affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that they will provide complete warranty for all	

equipment's/items for 5 (five) years followed by CMC for further 5 (five) years of these equipment's/items.	
16. Please furnished a notarized affidavit on Indian Non judicial stamp paper of Rs.10/- that they will supply spare parts for next 10 years at reasonable price by submission of suitable benchmarks.	
17. Please submit two performance certificate from your two different customers to whom you have supplied such type of equipment in previous 3 years	
15. Details of the FD/DD/TD/CD of bid security (EMD) FD/DD/TD/CD No: Date: Payable at-	Detail of cost of Tender for Rs. 2500/- (if downloaded from website) DD No. Date: Payable at-

Undertaking

1. We have examined and have no reservations to the Bidding Document, including Addenda.

2. We offer to execute the Works described above and remedy any defects therein in conformity with the Conditions of Contract including Special Conditions, Specifications, Drawings, Bill of Quantities.

3. We undertake, if our Bid is accepted, to commence the work as stipulated in this Contract, and to complete the whole work comprised in the Contract within the time stated in the Contract Document.

4. We agree to abide by this Bid for the period of _____ days from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

5. We undertake that unless and until a formal Agreement is prepared and executed, this Bid, together with your written notification of Letter of Acceptance shall constitute a binding contract between us.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

7. I/We do hereby submit our Technical Bid, complete with all the required information as stipulated in your Bidding Documents.

8. I/We also confirm that in the event of my/our tender being accepted, I/we hereby undertake to furnish within 21 days, Bank Guarantee/ Performance Security after the issue of Purchase Order, as applicable,in the format to be provided by Civil Hospital, Aizawl in addition to execution of a Contract as pre-conditionfor obtaining the supply orders.

9. I/We further undertake that none of the Proprietor/Partners/Directors of the firm was or is Proprietor or Partner or Director of any firm with whom the Government have banned /suspended business dealings.I/We further undertake to report to Director, Hospital and Medical Education immediately after we are informed but in anycase not later 15 days, if any firm in which Proprietor/Partners/Directors are Proprietor or Partner or Director of such a firm which is banned/suspended in future during the currency of the Contract with you.

10. I/We undertake that the information given in this tender are true and correct in all respect and I/We holdthe responsibility for the same.

(Signature of the Bidder)

Name:

Designation with Seal of the Firm:

Chapter-II

"Equipment for the Department of "Cardiology" Civil Hospital. Aizawl
(Schedule of requirements & EMD)

Table-I

Details of item & their tentative quantity and EMD

The following work of Establishment of complete Cath Lab manufactured by Indian/International firms/agencies of repute are required.

Item	Quantity	EMD
Establishment of complete Cath Lab	01	

Chapter III (A) :

Specification & Allied Technical details for complete Cardiac Catheterization Laboratory

Latest state of the art, single plane floor / ceiling mounted C-arm/G-arm Cardiovascular Angiography system with flat detector technology digital imaging system for diagnostic procedures and interventional cardiovascular procedures, valvuloplasty and vascular Angiography, and online DSA.

The offer shall be for single-plane flat panel digital cardiovascular angiography system and ancillary equipment capable of meeting the essential requirements of a cath lab usable for Cardiology. The platform should be able to accommodate all the up-gradations required later (as and when required) to add on more and more special features.

Firm should offer latest model only.

All components must be compatible with the main system and with each other. The main Angiography system should be FDA approved & comply with BARC & AERB guidelines. Copies of certificates should be attached.

Basic points:

1) Tender Document for a New State of the Art, Top of the line, Digital Flat Panel Single – Plane Cardiovascular Catheterization Laboratory system for advanced Cardiovascular Diagnostic and Interventional Procedures including coronary, valvular, congenital, peripheral procedures along with accessories like automated pressure injector, Hemodynamic recorder and back-up UPS with site preparation on turnkey basis.
2) Competitive bids are invited for installation of state of the art, top of the line fully digital single plane cardiac angiography system for Cardiac Interventional procedures. The specification should be integral part of quotation and none of the essential requirements should be quoted as optional. If the supplier has any additional advance application or technique, the same should be quoted separately.
3) The original data sheet must support all the specification quoted by the company. Broad specification of the proposed system is given below. The detailed specification that follows shall be understood to be minimum requirement. Specifications quoted are essential requirement of this equipment while terms and conditions are mentioned separately. A system with better configuration and additional relevant technical features suitable for our requirement will be given due weight age. The Cost of the item/feature wherever asked should be quoted in the price bid only. System must be DICOM3 standard compatible.
4) System must be configured for higher performance to optimally deal with cardiac interventional procedures. Essential system configuration and capabilities are given below. The bidder should produce original technical data sheet when required; additional information should be provided as separate document referring to the specific section in the document. When the standard vendor data sheet disagrees with the bid response, clarification should accompany in the form of letter/certificates from appropriate authority in the absence which vendor data sheet will prevail for the purpose of evaluation and decision of the technical evaluation committee shall be final and binding on the supplier. Offer should comprise delivery, installation, official release and safety acceptance until hand over of the system including the accessories necessary for operation. The bidder must be original manufacturer of the equipment or authorized dealer with good track record who has sold, installed and maintained a number of such

equipments during last ten years in India. All standards software and tools needed for routine and regular use must be part of system.

5) The technology is changing very fast and new features are added to the system. We accept that by the time of tender form sale and negotiation for equipment, there may be new features added to the system. So the bidders should quote the most recently lunched system meeting the tender requirement. At the time of negotiation the latest will be given priority within the constraints of budget allocation. The technical committee will take appropriate decision regarding selection of the system.
6) All individual items must be separately priced in the price bid.
7) If your system matches fully in most of the important specifications but matches only partly in a few specifications you may quote your system high-lighting these facts and also if your system has alternate features which can compensate for the specification asked.
8) If the specification document refers to technical terms/features which may reflect the product line of a particular manufacturer, the equivalent proven technology/feature can be quoted. If this document does not elaborate on a particular specification, state of art industry standard will be applicable. For all clarifications, refer to state of art industry standard.

Technical Specifications:

1. **C-Arm /G Arm Multi-directional floor/ceiling mounted:**
   1) The system must have Ceiling /floor mounted Gantry.
   2) Gantry rotation/angulations must be LAO/RAO at least +100 deg/-100 deg and Cranial/Caudal ± 45 degrees; Speed of Rotation should be fast at rate of Cranial/Caudal and LAO/RAO: 15 deg /sec or higher.
   3) Motorized movement of the detector on the vertical axis at specified speed must be available.
   4) The C arm should have auto collision protection with patient, monitors and the table, to prevent patient collision & reaching steeper angulation with faster movement.
   5) System should be capable of doing head to toe coverage without repositioning the patient.
   6) The gantry should be able to have symmetrical left & right side gantry access.
   7) Manual/ motorized parking of C-Arm for resuscitation if required.

2. **Table:**
   1) The table should have longitudinal, horizontal and vertical travel.
   2) Floating/Floor mounted with carbon fiber table top with easy patient transport & pivot capability, long length and broad enough to support hands and capability to perform CPR even in extended position.
   3) The table should have capacity of 200kg of patient load.
   4) Extendable arm rest for both sides and elbow guard must be available.
   5) It should have rotating facility.

3. **X-RAY Generator:**
   1) It should be of latest technology with high frequency type with at least 100 KW generator.
   2) It should be high frequency generator compatible with high resolution imaging along with facility to automatically adjust the dose according to the size of the patient.
   3) It should have automatic exposure control device for radiographic fluoroscopy and angio mode.
   4) It should also have an overloading protection.

4. **X-Ray Tube:**
   1) Anode heat storage capacity should be 3.5 MHU or higher to run continuously for 6-8hrs without shutting off with appropriate anode heat dissipation rate.
   2) The system must have cooling system (Oiled or water-cooled) to ensure continuous operation. (kindly mention the anode dissipation rate)
   3) Latest generation tube with Primary & mandatory tube end Secondary Grid switch for dose reduction.
   4) X ray tube with noiseless operation with high anode heat storage capacity to support long-term interventional procedures & for better visibility in obese and deep angulations.
   5) The Pulse Fluoroscopy should be offered with pulse rate of 10 -30 frames /sec.
   6) Automatic/programmable spectral filtration mechanism for eliminating soft radiation without any need for manual filter insertion in both fluoro and cine mode.

5. **Radiation protection:**
   1) The System must have radiation safety package like care & clarity, Auto Right or equivalent for radiation safety of operator & patient.
   2) The system should have integrated computer controlled (preferably automatic) X-Ray Beam filtering with copper filters of various sizes from 0.2 mm to 0.9 mm. Please list the specific filters available.
   3) The system should have positioning of collimator blades without radiation.
   4) It should have dose measuring capacity.
   5) The system should have monitoring and display of X-ray dose during the patient examination. It should be possible to create a DICOM based dose report of the patient. The system should have a facility to remove the anti-scatter grid on the detector for ensuring lower dose in pediatric imaging.
   6) The System should meet all National & International safety standards & comply with BARC & AERB guidelines.
   7) Periodic quality assurance test as per AERB norms and registration of the machine will be the responsibility of the vendor for the warranty period and CMC period.

6. **Collimator :**
   1) At least one collimator per plane must be provided, preferably with IRIS/square type arrangement.
   2) It should have facility for dose measurement chamber in order to display the skin radiation dose on the monitors in the lab.
   3) The Collimator should have facility for copper pre filtration for reducing the x-ray dose.

7. **Digital imaging System:**
   1) Digital cardiac imaging for acquisition storage and retrieval in high matrix of at least 1024 x 1024 or more acquisition/display and storage of image application to give excellent resolution with latest image processing software.
   2) Flat Panel detector system with excellent spatial and contrast resolution with at least 4-zoom fields with DQE of at least 80% or better.
   3) Acquisition: speed of at least 30 frames per sec. Acquisition speed for DSA should be 0.5 frames/sec to 6 frames/sec or higher
   4) Image storage capacity of at least 1,25,000 images in 1024 x 1024 matrix at a minimum of 8bits/pixel on the main system disk.
   5) System should have capability of ECG display on the live image monitor and archive the ECG display along with angio images on CD, during the acquisition.
   6) Real time image processing algorithm applicable for both fluoroscopy and acquisition. Cine loop replay facility with forward and back ward and fast forward

7) The system should have facility for storage of fluoro loop scene of at least last 10- 20 seconds or previous 450 frames once the fluoro switch is off (backward storage); unlimited and continuous forward fluoro storage facility with excellent quality of stored fluoro images. Facility for storage at high, medium or low fluoro
8) DSA Road mapping and landscaping facility should be available. Facility for side-by-side still image; road map facility should be provided so as to support all anatomical areas and all interventional procedures with facility to overlay selected reference image with fluoroscopy
9) Dedicated touch pad for review/zoom, play/pause previous /next image, store /recall reference images at the table side
10) Post processing software facilities with real time edge enhancement, positive /negative image display windowing, electronic shuttering, roaming, image reversal, zooming and magnifying with text and annotation junctions.
11) There should be facility to enter the patient demographics from the examination room or the console room. The full system should have touch screen control at table side
12) The system should have full table side control operation with complete acquisition and post processing capabilities.
13) System should have on-line & off-line validated coronary analysis and ventricle analysis program.
14) The software should have Auto calibration facility for stenosis measurement with edge enhancement and geometrical and densitometry calculations. The analysis should be possible from table side in the examination room and from the control room.
15) The system should have on-line DSA capabilities in 1024 x 1024 matrix with acquisition frame rate of 0.5 -to 6 frames/sec. The system should have on-line DSA of excellent quality with bolus –chase facility with motorized table movement which can be manually controlled.
16) The system should be quoted with 3D modeling/analysis of coronary arteries.
17) The latest complete software and hardware for visualizing stent with extra high resolution from table side control. Should have **stent enhancement tool** with fade in/fade out facility with all software, hardware, image processing tools for enhancing visualization of the stent and vessel and should be the latest and most technologically advanced version and capable of placing on a separate screen in examination room.
18) The system should able to perform Dual axis rotational angiography to gather more information with less radiation exposure.
19) The System should have latest enhanced stent visualization system (**ESV**) with fade-in & fade-out facility.
20) It should be possible to overlay live fluoroimage on reference image on live monitor with fade in fade out.
21) Angle and distance measurement facility should be available
22) It should have parallel line display cum medical grade monitor in doctors' rooms
23) System must be offered with latest release image processing algorithm/software – XRES/OPTIQ/AUTORIGHT to reduce noise quantum in image.
24) Dose reduction software and hardware to be provided – Dosewise/Care & Optiq /Blueprint.
25) Intercom facility must be provided control room and examination room.

8. **Monitors / Display:**

1) The monitor display system in examination room should be ceiling suspended and it should be possible to position it on the left or right side of patient table.

2) Display in exam room should be single screen of at least 56 inch 8 megapixel or equivalent monitor to display live and reference images, patient hemodynamic monitoring, stent enhancement monitor / EP tracing, 3D image display and IVUS/ FFR imaging.
3) Two high resolution TFT (Preferably LED) monitors, 19 inch or more for post-processing and reporting in the control room. One high resolution medical grade TFT/LCD monitor for post-processing and reporting in the work station. Another monitor in the console room for live scenes. There should be 2 more monitor in console room for live hemodynamic monitoring & Console Monitor for patient Registration.

9. **Work station and Digital Archiving**

A state of the art workstation should be provided.

1) Facility for acquired images to be transferred to the workstation seamlessly without interrupting the procedure; there should be 2 way digital image communication between the workstation and the procedure room.
2) Should be able to work with the workstation for review of the previously transferred scenes of same patients or other patients while procedure is going on without interruption.
3) Work station should be able to archive at least 1000 patients' data with easy irretrievability search by name, date of procedure or cath number
4) The system should be able to perform QCA facility from the console as well as workstation and facility to transfer the scenes from archive to the procedure room. Full quantitative analysis package should be provided. QCA facility should be also available for recorded CD/DVD.
5) There should be facility to edit and delete selected scenes archived in the work station
6) On CD/DVD with embedded software for reading, with facility for zoom in and out.
7) US FDA approved system for recording images on DVD_R/ CD_R with DICOM Viewer in DICOM 3 format having capability of receive and transfer of images from cath lab to remote review station.
8) Dynamic viewing of CD images at frame rate of 0-30 frames/sec, single frame step by step, fast forward & fast rewind ,zoom In or zoom out
9) Image transfer from digital system in background mode without affecting the system operation.
10) USB Interface to copy images to memory disk / external hard disk.
11) There should be facility to connect the workstation to hospital PACS system of any proprietary item for remote viewing and manipulation
12) Should have capability to convert Dicom images into JPEG, .avi and .mp4 formats with frame editing
13) Juke box/RAID (5TB) & 1000 rewritable DVD's and 2000 rewritable CD's with separate CD/DVD cover for each CD/DVD of latest configuration & reputed company should be provided.
14) There should be additional review workstation with CD/DVD recorder, laser printer and latest generation computer with 24 inch LED monitor with storage capacity of at least 1 tetrabit memory and 8 GB RAM and with latest most advanced licensed version operating system in Doctor's conference room beside cath lab and it should be similar to workstation in console room having Facility for acquired images to be transferred to the workstation seamlessly without interrupting the procedure; there should be 2 way digital image communication between the workstation and the procedure room.
15) The system should be capable of giving still images minimum 300dpi in tiff, PNG and JPG format

10. **Cath lab should have In-built (Integrated) latest, high end, FFR measuring capability.**

11. **Cath Lab Recording System/ Hemodynamic Recorder:**
Cardiac catheterization & hemodynamic recorder with 4 invasive pressure recording with facility for complete hemodynamic calculation and cardiac output monitoring by thermo-dilution technique and waveform storage on hard disk. Simultaneously 12 Lead ECG display with full remote operation. System should be capable of full hemodynamic analysis and laser printer with full data recording and Analyzing System

The Model offered should be the latest model under current production. Refurbished Units will not be accepted.

12. **Review / Archiving & Networking**
OEM DICOM based CD recording for dynamic recording on CD. CDs to have DICOM software embedded for instant review in any PC; at minimum 8-bit pixel. ; Image storage capacity of at least 100,000 images at 1024x1024 matrix . Ability to generate single DVD incorporating multiple patient studies capable of review in any PC.\

13. **SYSTEM ACCESSORIES, SPARES AND CONSUMBLES:**
1) Digital Storage and Archiving system with DICOM CD RECORDER
2) Hemo-oximeter – 01
3) Protective gonad shield at least 0.35 mm lead equivalent – 6
4) Thyroid collars – 6
5) Defibrillator with monitor and recorder – 01
6) Online UPS of 120 KVA with min 1 hour backup for the Whole system
7) Footswitch for fluoroscopy and acquisition to be provided
8) Lead aprons: of standard state of the art make, light weight, with a lead equivalent of 0.5mm. Should be double sided, 12 such aprons to be provided 6 of which should be two piece and 6 shouldbe single piece. Design should be wrap around.
9) Head gear radiation protection and lead goggles - 4 each
10) Wall mounted stand (No. 5) with Hangers (No. 10) for Aprons
11) Ceiling-suspended operation lamp, cool LED type- 1 no. Focused ceiling mounted light with ahandle for positioning the light. This handle should be removable.
12) State of the art High Pressure Injector compatible with the machine – One
13) Ceiling suspended radiation protection - 1 no. (as per international radiation protection system)
14) Table mounted radiation protection - 1 no. (as per international radiation protection system)
15) One Laser Network Printer of high resolution (at least 1200 dots per inch) with minimum 128MB memory and 1200 dpi should also be offered for high quality image printing
16) Surgical Diathermy – 01
17) Scrub Sink (Stainless Steel)
18) Fire extinguisher
19) Dehumidifier
20) Desktop Computer set – 01
21) Catheter storage rack (Standard size – 2 with door and 3 without door) – 5
22) Instrument cabinet (standard size) – 5
23) Electric Geyser (10 ltrs.)

14. **The model offered should be compatible IVUS/OCT and FFR/ iFR/angio FFR systems.**

15. **The model offered should have US FDA and CE approved.**

16. **The backup power Generator should be as per required specifications.**

17. **Training:** In house Training for 1+1 weeks after the Commissioning of the System within 1 year.

18. **Warranty**
    1) Comprehensive warranty for 5 years for the complete system and third party item including x-ray tube, Electrophysiology system, Defibrillator and other supplied accessories like High Pressure Injector, hemoximeter, etc.
    2) All steps to be taken to maintain 95% uptake time of the Equipment falling which penalty clause would be imposed

19. **Standards, Safety and Training**
    1) Main Cath lab should be USFDA approved product. All other accessories should be USFDA approved wherever applicable.
    2) Electrical safety conforms to standards for electrical safety IEC-60601-General Requirements
    3) Manufacturer should have ISO certification for quality standards.
    4) Shall comply with AERB and BARC guidelines.

20. **Documentation**
    1) User manual in English
    2) Service manual in English
    3) List of important spare parts and accessories with their part number and costing
    4) Certificate of Calibration and inspection from the factory
    5) Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
    6) List of Equipments available for providing calibration and routine maintenance support as permanufacturer documentation in service / technical manual.

21. **Other requirements**
    1) Model should be latest generation
    2) Should have local service facility. Response time in case of breakdown must be < 24 hrs.
    3) Comprehensive warranty of the main cath lab system and third party items for 5 yrs and CMC of the main cath lab system and third party items for the next 5 years to be provided by the cath lab unit supplier
    4) Availability of the spares to be ensured for minimum 10 years
    5) The company should provide LAN facility that will provide online as well as offline analysis of cath lab procedure from other cath lab and from office rooms of two consultants
    6) Demonstration is must before approval and also working demonstration after installation
    7) Bidder should give undertaking to shift entire cath lab system with accessories to other site in the institute, if required at a mutually agreed terms between institute and successful bidder

22. Oxygen & Vacuum supply
    1) O2 & Vacuum supply pipelines in Cath Lab exam room with 02 outlets for each.

2) Humidifier jars for all outlet points.
3) O2 & Vacuum pipelines with panels & power sockets in patient recovery & preparation area for 5 beds.

23. Electrical work

1) The supplier shall be required to specify the total load requirements for the Cath lab centre including the load of air conditioning, room lighting and for the accessories if any. A distribution panel of standard make and appropriate capacity is to be provided. The load shall be provided by the hospital. However, from the substation of the hospital to the distribution panel, cable of appropriate size will have to be provided and fixed be the vendor. Few lights in each room shall be connected to the UPS to provide emergency lighting.
2) Advance maintenance free earthing 68mm (3m length) 3.6mm wall thickness copper bonded thick wall with one bags back filling compound electrode.
3) A distribution panel of standard make and appropriate capacity is to be provided. The load shall be provided by the hospital. However, from the substation of the hospital to the distribution panel, cable of appropriate size will have to be provided and fixed be the vendor.
4) The switch gears (MCBs / ACBs/ MCCBs) should be of Siemens / Hager (L&T) make.
5) L.T. distribution board for MCBs etc. should be of Siemens/ Hager (L&T) make.
6) Electrical wires should be of copper of different capacity as per the load and should be of Polycab make.
7) Modular range Switches / Sockets of Vinay/Roma/V. Guard should be provided and fixed as per requirement.
8) General lights (LED) should be of mirror optic reflector type of Phillips/Wipro/GE/Crompton make. Light dimmers (down lighters) should also be fixed in the equipment room. 1X28 W or 2X28 W/LED fittings 2X36, 3X36 W with electronic ballasts.
9) Steel conduit of BEC/AKG makes and conduit accessories of RAMA/Fitwell make.

24. AIR CONDITIONING:

a. Ductable package 1.5 ton air conditioners and split AC units to be provided by the vendor in whole complex as per requirements to maintain appropriate temperature in the main Cath lab room and Console room as per regulations of AERB may be used according to room requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface. The Air conditioning should be designed with standby provision to function 24 hours a day.
b. The outdoor units of AC should have grill coverings to prevent theft and damage.
c. Standby additional split air condition(s) of appropriate strength/capacity (tonnage) to be fixed in the main equipment room.
d. Hygrometer Nos.3 to be provided.
e. In-built or External De Humidifier in Equipment, Console and Examination rooms to be provided as per room layout.

Environment specifications:

1) Humidity range: Relative humidity 40% and 60% in all areas except equipment room which shall be as per requirement of the equipment.
2) Temperature ranges: 22 + 2° C in all areas except equipment room which shall be as perrequirement of the equipment.
3) Air conditioning load: The heat load calculations and maintaining the desired temperature andhumidity shall be the responsibility of the bidder.

25. Defect liability:

1) The works shall be guaranteed for a minimum period of 5 years from the date of commissioning against any defective material/workmanship.
2) The warranty and CMC of the Air conditioners will form part of the main equipment.
3) Certification to the effect that the work has been executed as per the specifications incorporated in the above document will be by Civil Hospital, Aizawl/Appropriate Authority.

26. OTHERS

1) The offer should be accompanied by original product data sheet/brochure of the product and AERB type approval certificate or valid No Objection Certificate (NOC) for the model offered should be submitted along with the technical bid. In case of NOC valid type approval certificate has to be submitted prior to submission of invoice for payments.
2) There shall be no separate licensing fee for the use of software (software by the bidder or third party) supplied by the bidder.
3) All equipment provided shall be of current production, new and of first rate quality.
4) Remote diagnostic capabilities must include the ability to remotely connect the system on a regular basis to retrieve information about the system and to correct any software problems.
5) It is the responsibility of the bidder to provide all items required but erroneously mentioned or omittedabove for the full commissioning of the equipment.
6) Should have FDA/CE approved & AERB NOC
7) Breakdown time 48 hours
8) Suitable servo voltage & frequency stabilizer for whole system

CHAPTER III (B) : TECHNICAL SPECIFICATION WITH FORM OF TECHNICAL COMPLIANCE SHEET

1. 12-lead ECG Machine

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	ECG Functionality:		
a.	Simultaneous lead acquisition and display of up to 12 leads.		
b.	Up to 12 Configurable Rhythm Leads		
c.	Full disclosure of each leads with complete ECG report of any 10 seconds with continuous patient heart rate display		
2	Algorithm:		
a.	Standard measurements of intervals, duration and axis.		
b.	Selectable interpretation		
c.	Five ECG reports, ST Segment Analysis with graphical ST Vector, frontal and transverse.		
d.	Gender specific criteria to detect unique cardiac disease symptoms in Women.		
e.	Right heart statements from right chest leads.		
f.	Pediatric specific criteria		
3	Signal Quality, Data acquisition & Processing:		
a.	Leads off advisory for disconnected leads.		
b.	Four Colour to indicate levels of waveform quality		
c.	Detection of Lead reversals		
d.	8000 samples of second per lead wire		
e.	Wide filter selection: 0.05 Hz to 150 Hz selectable as per applications		
f.	Should have microprocessor controlled digital processing facility		
4	Display & data input:		
a.	High resolution colour 6.4”TFT display, with touch screen for quick use		
b.	Continuous display of Patient Heart Rate		
c.	Full Screen Preview of complete 12 lead report prior to printing		
d.	Integrated graphical help screen for primary functions		

e.	Full alphanumeric keyboard for quick patient data entry		
f.	Storage, Recording & printout		
g.	Built in high resolution thermal array printer (200 x 500 dpi).		
h.	A4 size recording with rhythm for 12L ECG on single sheet		
i.	200 ECGs internal storage, and additional storage of 200 ECGs with optional USBdevice.		
5	Power Supply:		
a.	Li-Ion battery for printing at least 25 ECG on full charge battery		
b.	Option for second Li-Ion battery for additional extended back-up		
c.	Line power 100-240 V, 50/60 Hz with consumption less than 70W		

2. Cardiac Monitor

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	Should have facility to display ECG, RR, HR, Spo2, NIBP, single Temperature as standard parameters and with in built rechargeable battery back up of at least 3 hrs. Operation.		
2	Display: Color TFT display of size 12" or more		
a	Should display at least 10 waveforms of selected parameters simultaneously.		
b	Should display 10 waveforms at a time when selected for ECG view option.		
	Should display 12 Lead ECG.		
3	MASIMO SpO2 technology should sense the SPO2 in hypotensive, shivering & motion condition. Should display Pleth Variability index and perfusion index		
a	Should be able to analyze arrhythmia (15 types) & ST segments for all 12 leads.		
b	Should have facility for displaying 6 different screen configurations.		
4	SpO2 measured should have pitch variation with increment or decrement of SpO2 values.		
5	Should be able to display at least 160 hrs. of graphical trends of all parameters.		
6	Should store data in event of power – off or patient disconnection.		
	To cater emergency atleast 2 or more waveforms can be stored and can be able to review.		
7	Should have Drug Dose Calculation, OXYCRG Software		
8	Should have ST analysis, ST Mapping, QT Analysis, QTC measurement, HRV analysis & NIBP Analysis Software package		
a	Should be suitable for monitoring adult, pediatric & neonatal patients.		
9	Should be able to give visual & audible alarms with three levels of volume adjustment on violation of any monitored parameter.		

10	Should have connectivity to Central station.		
a	The monitor should be able to save trends on USB pen drive which can be printed easily from computer without help of any specialized software		
b	Should be able to connect to HIS / HL7.		
11	In case of emergency monitor should work on ambulance / car battery. It should have direct 12 V DC connectivity.		
a	Should have inbuilt rechargeable Li ion battery with backup of 3 hours or more. And should have a slot for 2nd battery so that if required battery backup can be increased.		
b	Should be upgradeable to IBP (Dual channel), ETCO2 (Microstream), Multigas (Co2 + O2 + 5 Anaesthetic Agents) or Thermal Recorder at any point time		
c	Facility of bed to bed remote monitoring when connected via Ethernet to central monitoring.		
12	The monitor should be ISO 13485, European CE approved.		
a	The scope of supply should be: o SpO2 reusable probe -1 o NIBP cuff for adult, children and neonates – 1 each o ECG Cable – 10 Lead – 1 o Temperature probe – 1 o Operating manual –english - 1		

3. Infusion Pump

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	Digital self-regulating volume controlled portable pump		
2	Unit should have drop sensor or equivalent mechanism for feedback and detection		
3	It can be mounted on standard bed/wall rail or mobile pole/stand (supplied with fixation)		
4	It should be capable of infusing through intravenous route		
5	It should have an open system, suitable for different brands of IV sets available in local India market. Also if any IV set is required to be calibrated then user should easily calibrate.		
6	It should be programmeable, infusion volume and time/flow rate can be entered		
7	The flow rate should be adjustable: 1-999 ml/h, steps of 0.1 ml/h.		
8	The accuracy ±1% of the total volume delivered.		
9	It should have facility for occlusion detection and alarm.		
10	The system should have LED/LDC display		
11	It should have an audio-visual alarm with a silencing feature for audio alarms		
12	Should have internal rechargeable battery. The battery backup should be of minimum 4-6 hrs.		
13	US FDA/European CE (Notified body) approved model should offered		
14	Power supply 220VAC +/- 10%, 50Hz fitted with Indian Plug		
15	UPS of suitable rating with voltage regulation, spike protection and maintenance free batteries for 60 minutes back up.		

4. Tread Mill Test Machine

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	System should be Dedicated microprocessor console based cardiac workstation simultaneously 12 lead acquisition combines resting & exercise ECG in one unit.		
2	Should have digital Acquisition module to acquire diagnostic quality ECG data.		
3	Each wire of patient cable set should be detachable, so that each cable can be changeable in case of one cable faulty.		
4	The ECG acquisition sampling rate should be 1,000 Samples/seconds channel or more.		
5	System should have 22" display for easy access. Monitor should adjusts to any angle for better visualization.		
6	Should have facility to Review, edit an add ECG from full discloser storage post-exam.		
7	Should have facility to hide Zoom ECG, context ECG view and Trends at any time.		
8	System should have 50mm sweep speed selection for ECG display.		
9	Should have full disclosure of all 12 leads for beat to beat analysis.		
10	The final report should include information on blood pressure, heart rat MET,s treadmill speed/Grade, ST trends relating to stage wise & recovery phase and duke treadmill score etc.		
11	Report should be user-definable and can be selectable at final step of reporting.		
12	Automatic calculation & display of METs.		
13	System should support Time and METs ramped protocol.		
14	System should show recovery elapsed time in %.		
15	System should support left to right work flow.		
16	System should provide online printing of ECG prints on High Quality Thermal printer manually		

	and automatically during stress testing.		
17	Treadmill soft stop option for stopping the treadmill after 20 second in recovery mode.		
18	Facility to get system generated auto statement report.		
19	System should support editing of final report in review phase.		
20	System should support user defined ST measurement points.		
21	System should have special filters to reduce noise artefacts, motion artefacts, baseline artefacts during stress test.		
22	System should be capable to store full disclosure ECG data for later review using page review mode.		
23	System should support multi login password protected access.		
24	System should be supplied with US-FDA approved stress automatic BP measurement device with interface cable to measure automatically the patient NIBP during stress test per the programming done at stress system.		
25	The stress testing system should be US-FDA / European CE (Notified body) approved model should be offered.		

5. Echocardiography

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	The system should incorporate facility for High Resolution B mode, M Mode, PW, CW, Colour Doppler, 3D imaging.		
2	The system monitor should be minimum 24" HD max monitor with Flexible Arm and Display matrix minimum resolution of with tilt, swivel and height adjustment facility. A separate 12'' touchscreen should also be available.		
3	The system should have broadband technology.		
4	Powerful Imaging combines a massive parallel processing architecture and precision beamforming for real-time coherent beam reconstruction. Capable of processing multiple data streams for structural, functional.		
5	Dynamic range should be 300 dB or more.		
6	There should be at least 40,00,000 digital processing channels. The system should have 256 grey shades or more.		
7	The system should have a Frame Rate 2700 Frames per second or more.		
8	The system should have imaging depth of 40 cms or more.		
9	The system should have real-time compound imaging facility. The system should have a fast boot up time of less than 120 seconds, when switched on from 'OFF' position.		
10	The system should have Tissue Harmonic Imaging (THI) facility. The system should have THI capability on phased linear, 3D and curved array transducers. THI should be available in color flow imaging, M-Mode and 3D rendering modes with light source.		
11	The system should be able to work in combined mode of Harmonic Image and Real-time Compound Imaging. The system should have Tissue Harmonic Imaging in Power Doppler mode.		
12	The System should be upgradable for Volume Navigation Tool which allows Fusing Real Time Ultrasound Images with Images acquired from other Modalities such as CT & MRI. The Following feature's upgradable for Real Time Fusion Imaging. i. The Transmitter should be fixed with System with movable arm for Easy Navigation.		

	ii. The Receiving Sensor should be attach with Convex/Linear Probes while performing Fusion Imaging mode.		
13	The system should have facility for extended field of viewing, reconstruction / panoramic imaging.		
14	All the transducers are broadband with multi frequency capability. Minimum frequency should be 1MHz and Maximum Frequency should be 18 MHz can be selected depends on Probe		
15	The system should have 4 active Transducer ports		
16	Auto IMT measurement		
17	The system should have pulse Inversion Tissue Harmonic Imaging for Better Contrast and Less Side Lobe Artifact.		
18	The system should have auto optimization features for ease of use and automatic quantification of Doppler parameters in real time and freeze modes.		
19	The system should have real time panoramic view imaging that operates by sweeping a transducer over the anatomy of interest.		
20	System should have Shear wave elastography on convex and linear probe and Strain Elastography on Linear probe and on TVS Probe.		
21	System should have color codded Shear wave elastography with convex and linear probes.		
22	One-touch image optimization should be available in 2D mode with one button automatic adjustment of TGC.		
23	Zoom facility with high resolution results and pan capability in both real time and frozen images.		
24	The system should have Cine loop review facility in individual and mixed modes with memory up to minimum of 400 images and 5 min of 2D cine loop.		
25	Equipment should be offered with following Probes. a. Neonatal Probe and/or Paediatric Probe		
	b. Adult Probe		
	c. TEE Probe (Transesophageal)		
	d. Vascular Probe		
26	The system should have facility of direct storage and retrieval of B/W and color images (both frozen and cine loops) in the in-built hard disk drive. Inbuilt hard disk		

	storage for images should be 1TB or more.		
27	The system should have USB archival (DICOM and PC format) facility.		
28	The system should be DICOM 3.0 ready (like send, receive, print, record on CD/ DVD, acknowledge etc.)		
29	On line UPS for 60 minutes back up to support all functions of the unit.		

7. Portable Echo Machine

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	System must be a state–of–the–art model with all digital beam former with super computed signal processing and clinically proven imaging technologies. System quoted must be your highest end.		
2	System must be offered with the following applications. : Adult, Paediatric and Neonatal Cardiology, 4D adult TEE and with ICE imaging.		
3	The system should be very light with maximum of 7.5 Kg		
4	System must be offered with a minimum of 700000 digital processed channels per image frame. Original technical data sheet should be enclosed in the technical bid to support the number of channels on the systems. If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the Channels of the offered system.		
5	System must be offered with a MINIMUM 15 inch High Resolution Integrated Flat Panel Display monitor with High resolution. System offered with smaller screen are liable for rejection.		
6	System must be offered with frequency compounding facility. Other equivalent Technology can also be offered. Processing technology in technical bid should be highlighted.		
7	System must be offered with 2D, M – mode, Colour M- mode, Anatomical M-mode (on line and off line), Colour Flow, Pulse Wave Doppler, continuous Wave Doppler and Directional Colour Power Doppler, TDI and TVI.		
8	System must be offered with Speckle Reduction Imaging: Image processing technique to remove speckles and clutter artefacts.		
9	System must be offered with a very high dynamic range of at least 170		

	Db to pick up subtle echoes. Original technical data sheet should be enclosed in the technical bid to support the Dynamic range in Db. If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the dynamic range of the offered system.		
10	Frequency processing facility for the transducers should be 1.5 - 15 MHz this must be available without the need for frequency switching.		
11	System must be offered with digital control adjustment of TGC curve.		
12	Independently selectable gain Control in Lateral plane. (Better technology can also be offered).		
13	Triplex Imaging should be standard on the system.		
14	System must be offered with a 2D frame rate of at least 700 frames/second. Acquisition frame rate should be clearly mentioned in the technical quote If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the dynamic range of the offered system, failing which the bid is liable for rejection.		
15	Must be offered with a single button control for automatic optimization and adjustment of TGC and Receiver Gain to achieve optimal uniformity of image quality and faster scans. This should be demonstrated to the users in Cardiology and vascular exams during technical discussions		
16	System must be offered with Enhanced Tissue Harmonic Imaging should be standard on the system. This should be based on a real – time digital signal storage and phase cancellation technique to enhance axial and Contrast resolution.		
17	The should have minimum hard drive of 250GB		
18	System should have extensive image management capability including thumb nail review, Cine loop editing etc		
19	Mitral Valve Tomographic		

	representation should be offered optionally.		
20	Should have option to auto cut and crop basic views like 4Chamber, Mitral Valve		
21	System Should able to provide 3D/4D Adult TEE application		
22	Triplane imaging should be standard		
23	System should have offline Anatomical m mode, for realigning and calculation of EF.		
24	System should have 4 probe connectivity cart.		
25	System should be US FDA and CE approved.		
26	System should be supplied with imported cart dedicated for the system withprobe holders		
27	System should have 60 min of inbuilt battery backup.		
	SPECIFICATION FOR HIGH END PORTABLE COLOUR DOPPLER SYSTEM:		
28	Print – Should have direct connectivity to Inkjet printer for printing images & report.		
	SYSTEM MUST BE QUOTED WITH THE FOLLOWING BROADBAND TRANSDUCERS:		
29	1.5–4.5 MHz single crystal/Pure wave matrix Phased array Adult Cardiac Transducer		
30	2-7 MHz Paediatric Echo Transducer for Paediatric and small adult Cardiology imaging. Must have Tissue Harmonic Imaging, Must have broadband technology for excellent Image quality on Difficult to image patients .Must have smaller foot print than the adult echo transducer. Must attach original technical data sheet of transducer.		
31	4-13 MHz Linear Probe for Vascular application.		
32	3-8 MHz Active Matrix 4D Adult TEE probe with customizable TEE probe button.		

8. Holter Machine 7 days

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
A.	**SOFTWARE:**		
	System should have following software and capabilities as standard		
1	The system should work on Licensed Windows software.		
2	More than 72 hours Ambulatory ECG Recording & Analysis Software.		
3	ST Measurement software with a ST trend and measurement values.		
4	**Heart Rate Variability Software with HRV differential histogram, HRV histogram, HRV scatterplot.**		
5	**Colour coded HRV Power Spectrogram in terms of low power, middle range power and high power values**.		
6	HRV tabular summery should be available.		
7	**The values of HRV histogram and HRV differential histogram should be exported to a CSV file.**		
8	**HRV Analysis in time & frequency domain**.		
9	Pacemaker Analysis should be there with PM-PM histogram, PM-R histogram and the values of these histogram should be exported to a CSV file.		
10	Pacemaker analysis tabular summery should be there with Undefined paced, Fusion, Atrial paced, Ventricular paced Dual-chamber paced, PM Failed To Capture, PM Failed To Sense, PM Failed To Pace and Total paced data.		
11	ECG Template matching software		
12	**Should detect P wave accurately for atrial fibrillation screening**		
13	**Should have specialized Graphical software for detection of onset of Atrial Fibrillation**		
14	Should have Artifact Detection Software and automatic exclusion of artifact.		
15	Should have atrial analysis		
16	Should have QT analysis		
17	**Should have RR Interval**		

	measurement Beat by Beat		
18	**Should have calipers for measurements of time in msec and heart rate and preferably amplitude measurement.**		
19	Should have apnoea analysis		
20	Should have specialized Graphical representation software to provide information on sleep quality and level of stress		
21	Should have an easy view of ECG of all leads		
22	***Should have coloured Graphical Representation of QT intervals, PR Intervals, Tachogram (R-R interval) & ST Alteration***		
23	Should be able to save the complete test report as PDF format		
24	Should be able to send the data via e-mail.		
25	System should allow user to reclassify the complex as well as ECG templates.		
26	Should allow the user to make different work flow patterns.		
27	Should give the Tabular Summary showing all recorded ECG details.		
28	Should have strip marking and strip directory.		
B.	**HARDWARE:**		
1	Recorder should be compact and lightweight.		
2	Weight should not be more than 130 gms without battery.		
3	**Should have sampling frequency of atleast 30000 Hz**		
4	**Should record 3 Channels with 5/7 lead patient cable**		
5	Same recorder should have capability of measuring derived 12 Lead from 3 channels		
6	Should have 16 GB removable Compact flash card & capable of storing 24/48/72 hours and more of ECG.		
7	Data should be transferred /analyzed via SD card reader.		
8	Should have display to check pre hook-up ECG quality.		
9	Should have an option of selecting the resolution of recording. The maximum resolution of the recording		

	should be 1024 Hz with storage rate of 1000 Hz: 12 bit.		
10	Should detect Apnea, QRS, P Wave.		
11	Should have Event Marker / Patient Marker button on the recorder.		
12	Should record for more than 7 days of Holter recording.		
13	Should use single AAA battery to record 48/24 hrs of ECG.		
14	Should also have internal rechargeable battery so that if in case the AAA battery depletes internal battery takes over the recording without any break		
15	System should print all the Holter Test Report on Laser Printer on ordinary paper & not on Thermal Chart Paper.		
C.	**<u>Storage System:</u>**		
1	***System with data storage facility with following configuration*** Windows Licensed Software I5 Processor 500 GB HDD RAM : 4 GB DVD Writer 24 inch LCD Touch screen monitor Color Laser Printer Suitable Table for placing data storage system		
D.	**No. OF Recorders :**		
1	**No. Of Analyser : 1 nos.**		
E.	**Standards:**		
1	**Conformity : CE to 93/42/EEC**		
2	**Safety Standards : IEC/EN60601-1-2, tables 201, 202 and 204.**		
3	**Protection Class : should not be less than IP22.**		

9. Holter Machine 24 hours

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
A.	**SOFTWARE:**		
	System should have following software and capabilities as standard		
	The system should work on Licensed Windows software.		
1	More than 72 hours Ambulatory ECG Recording & Analysis Software.		
2	ST Measurement software with a ST trend and measurement values.		
3	**Heart Rate Variability Software with HRV differential histogram, HRV histogram, HRV scatterplot.**		
4	**Colour coded HRV Power Spectrogram in terms of low power, middle range power and high power values**.		
5	HRV tabular summery should be available.		
6	**The values of HRV histogram and HRV differential histogram should be exported to a CSV file.**		
7	**HRV Analysis in time & frequency domain**.		
8	Pacemaker Analysis should be there with PM-PM histogram, PM-R histogram and the values of these histogram should be exported to a CSV file.		
9	Pacemaker analysis tabular summery should be there with Undefined paced, Fusion, Atrial paced, Ventricular paced Dual-chamber paced, PM Failed To Capture, PM Failed To Sense, PM Failed To Pace and Total paced data.		
10	ECG Template matching software		
11	**Should detect P wave accurately for atrial fibrillation screening**		
12	**Should have specialized Graphical software for detection of onset of Atrial Fibrillation**		
13	Should have Artifact Detection Software and automatic exclusion of artifact.		
14	Should have atrial analysis		
15	Should have QT analysis		
16	**Should have RR Interval**		

	measurement Beat by Beat		
17	**Should have calipers for measurements of time in msec and heart rate and preferably amplitude measurement.**		
18	Should have apnoea analysis		
19	Should have specialized Graphical representation software to provide information on sleep quality and level of stress		
20	Should have an easy view of ECG of all leads		
21	***Should have coloured Graphical Representation of QT intervals, PR Intervals, Tachogram (R-R interval) & ST Alteration***		
22	Should be able to save the complete test report as PDF format		
23	Should be able to send the data via e-mail.		
24	System should allow user to reclassify the complex as well as ECG templates.		
25	Should allow the user to make different work flow patterns.		
26	Should give the Tabular Summary showing all recorded ECG details.		
27	Should have strip marking and strip directory.		
B.	**HARDWARE:**		
1	Recorder should be compact and lightweight.		
2	Weight should not be more than 130 gms without battery.		
3	**Should have sampling frequency of atleast 30000 Hz**		
4	**Should record 3 Channels with 5/7 lead patient cable**		
5	Same recorder should have capability of measuring derived 12 Lead from 3 channels		
6	Should have 16 GB removable Compact flash card & capable of storing 24/48/72 hours and more of ECG.		
7	Data should be transferred /analyzed via SD card reader.		
8	Should have display to check pre hook-up ECG quality.		
9	Should have an option of selecting the resolution of recording. The maximum resolution of the recording		

	should be 1024 Hz with storage rate of 1000 Hz: 12 bit.		
10	Should detect Apnea, QRS, P Wave.		
11	Should have Event Marker / Patient Marker button on the recorder.		
12	Should record for more than 7 days of Holter recording.		
13	Should use single AAA battery to record 48/24 hrs of ECG.		
14	Should also have internal rechargeable battery so that if in case the AAA battery depletes internal battery takes over the recording without any break		
15	System should print all the Holter Test Report on Laser Printer on ordinary paper & not on Thermal Chart Paper.		
C.	**<u>Storage System:</u>**		
1	***System with data storage facility with following configuration*** Windows Licensed Software I5 Processor 500 GB HDD RAM : 4 GB DVD Writer 24 inch LCD Touch screen monitor Color Laser Printer Suitable Table for placing data storage system		
D.	**No. OF Recorders :**		
1	**No. Of Analyser : 1 nos.**		
E	**Standards:**		
1	**Conformity : CE to 93/42/EEC**		
2	**Safety Standards : IEC/EN60601-1-2, tables 201, 202 and 204.**		
3	**Protection Class : should not be less than IP22.**		

10. Cardio Bed

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	A cost effective manually operated bed for hospitals nursing homes and clinics. The Bed combines all features of good hospital ICU Bed with adjustable of height, back upper leg, lower leg sections and trendelenburg and reverse trendelenburg on four separate crank mechanisms.		
2	Laminated Headboard & Footboard		
3	4 Section perforated top		
4	4 swivel castors 125mm dia – Tente (Germany)		
5	Collapsible SS Side Rails		
6	SS. Telecopic IV rod with K616 telescopes		
7	A manually operated ICU bed with adjustable height, back rest, knee rest and patient safety side railing.		
8	ISO certified Bidder / Manufacturer IS9001:2015		
9	Supplied with PU Foam Mattress in 4 Section		
10	Overall Approx. dimension 2180mm (L) X 1010 mm (W).		
11	Bed frame dimension 2095mm (L) X 920mm (W).		
12	Minimum height 490mm,Maximum height 710mm		
13	Backrest, Upper leg section, Height and Trendelenburg / Reverse Trendelenburg manually operated by screw mechanism.		
14	Lower section can be adjusted by Ratchet Mechanism Corners buffers		
15	125 mm dia modular castor wheels two with brakes and two w/o brakes.		
16	Four I.V pole provision.		
17	Easily removable Modular Head & Foot Boards		
18	Complete MS part is pre-treated & powder coated finish.		

11. Ambulatory BP Machine

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	Ambulatory blood pressure monitor, should be designed according to oscillography theory. The device should monitor human body blood pressure up to 24 hours continuously and dynamically, providing accurate basis for the diagnosis.		
2.	**Product features:**		
2.1	Compact and portable, user-friend interface, easy to use		
2.2	Patient range: adult, pediatric, neonate		
2.3	24 hours ambulatory NIBP monitoring function, up to 350 groups of ambulatory NIBP data can be recorded for once.		
2.4	Perfect combination of automatic and manual measurement method, up to 300 groups of data can be recorded for once by manual measure.		
2.5	High-definition color TFT display, strong visibility		
2.6	By data review interface such as "data list","trend graph","big font", NIBP data is clear at a glance		
2.7	Display of low power prompt, alarm, error message and time		
2.8	Supply two kinds of unit: mmHg / kPa		
2.9	Display interface can be switched between Chinese and English		
2.10	Parameter alarm dispose function is optional		
2.11	Communicate with PC, PC software can achieve data review, measured results analysis, view of trend graph, reports printing and other functions		
3.	**Software features:**		
3.1	Connect to the device by USB interface.		
3.2	Download NIBP measure result from the terminal device.		
3.3	Display of scoop-shape trend graph, filling-type trend graph, histogram, pie chart, correlation line graph.		
3.4	Edit every piece of NIBP data, and add annotation to it.		
3.5	Edit basic information, doctor's advice, NIBP status instruction, current medicine-taken information, etc.		

3.6	Support report printing and print preview.		
4	**Performance**		
4.1	NIBP:		
4.2	Measure Method: Oscillometry		
4.3	Measure Mode: The upper arm measure		
4.4	Automatic Measure Interval: 15, 20, 30, 40, 60, 90, 120, 180, 240 minutes		
4.5	Measure range: Pressure:0kPa (0mmHg)~38.67kPa (290mmHg)		
4.6	Resolution: 1mmHg		
4.7	Accuracy: ±3mmHg		
4.8	Prompt parameter: SYS, DIA		
4.9	Inflation: automatic inflation by force pump		
4.10	Deflation: automatic multistep deflation		
4.11	PR:		
4.12	Measure range: 40bpm～240bpm		
4.13	Resolution:1bpm		
5	**Safety:**		
5.1	Power supply: DC 3V (2×1.5V AA alkaline dry battery)		
5.2	Safety type: internally powered device, type BF applied part with defibrillation protection		
5	**Accessories** Cuff for adult 1pc download software User manual 1pc USB data line 1pc Pack 1pc		
6	**Software function**		
a	PC software should be connected to the device by USB interface		
b	Can download NIBP measure result of the terminal device.		
c	Can display scoop-shape trend graph,filling-type trend graph, histogram, pie chart, correlation line graph		
d	Can edit every piece of NIBP data, and add annotation to it.		
e	Can edit basic information, doctor's advice information, NIBP status instruction, current medicine-taken information, etc. Support print preview, print the report. Complete System should be supplied		
7	ISO 9001:2015 Compliant. Supporting Certificate to be submitted		

12. ABG Machine

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	Compact system for measuring pH, pCO2, pO2, -HCO3 & four Electrolytes like Na, K, Ca+ and Cl - in blood.		
2	All should be measured in a single injection / aspiration of Sample.		
3	May have provision of modular platform for future up gradation to include glucose, lactate & hemoglobin the same machine with the inspiration of single sample.		
4	Should be able to analyze all parameters using low blood volume directly from syringe or capillaries.		
5	Fast and accurate result of test made available in about 60 seconds.		
6	Automatic Calibration by liquid calibrators with flexible time mode. Instrument should have Stand-by mode facility and Economy mode.		
7	It should not be cartridge based system.		
8	Startup Kit, Calibrators, Consumables, Accessories and spares required performing initial 500 tests.		
9	All the consumables and spares should be quoted separately unit wise.		
10	Compatible online UPS with battery back up of at least one hour		
11	US FDA / European CE (Notified body) Approved model should be offered.		

13. ACT Machine

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	It should have a multiple testing capability & should be capable to perform the following test.		
1.1	Activated clotting time (ACT)		
1.2	Prothrombin time (PT)		
1.3	Activated partial thromboplastin time (APTT)		
1.4	Heparinase (HRHTC)		
2	It should be compact & portable for bed- side testing		
3	It should have heat block temperature		
4	Range 37.0+2 Degree C.		
5	It should require less than 2ml of blood for each test.		
6	It should be capable to display two reports at one time and should display average reading for these tests.		
7	Hundred cartridges for ACT test to be supplied with machine.		
8	Cost of disposable like ACT tube to be quoted separately and rate of the quoted disposables will be fixed for future uses up to minimum two years.		
9	It should have two years warranty from the date of installation then five years CMC after finishing the warranty period.		

14. Defibrillator

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1.	**Description of Function**		
1.1	Defibrillator is required for reviving the heart functions by providing selected quantum of electrical shocks with facility for monitoring vital parameters.		
2.	**Operational Requirements**		
2.1	Defibrillator should be a low energy Bi-Phasic, **Portable** and latest model. Should not weigh more than 6 Kg (+/- 10% is acceptable)		
2.2	Should monitor vital parameters like **ECG, Heart Rate and upgradable to SPO2, NIBP.**		
2.3	Should print the ECG on thermal recorders.		
2.4	Should work on Manual and Automated external defibrillation (AED) in Bi-phasic mode. The maximum energy delivered by the device should be upto 200J in manual mode and 150 J in AED mode (Biphasic)		
2.5	Should be capable of doing synchronized & asynchronized cardioversion		
2.6	Can be operated from mains as well as battery		
2.7	Should have defibrillator self test facility.		
2.8	Demonstration of the equipment quoted is a must		
3	**Technical Specifications**		
3.1	Low energy biphasic defibrillator monitor with recorder, having capability to arrest all arrhythmia.		
3.2	Monitor ECG through external paddles and monitoring electrodes and defibrillate through external paddles. Should have automatic/ manual switching to see patient ECG through paddles or leads.		
3.3	Factory integrated compensation for chest impedance for a range of 25 to 150 ohms		
3.4	Built in printer/thermal recorder		
3.5	Charging time of less than **6** seconds for maximum energy. Charging		

	indicator should be there		
3.6	Bright TFT colour display 7" or more for viewing messages and ECG waveform of 4 seconds		
3.7	External paddles with paddle contact indicators. Single adult and paediatric paddles should be available.		
3.8	Event summary facility for recording and printing at least **50** events and 50 waveforms		
3.9	Battery capable of 100 shocks delivery.		
3.10	Capable of printing reports on event summary, configuration, self test, battery capacity etc.		
3.11	Facility for self test/check before usage and set up function		
3.12	Upgradable to have SPO2, NIBP and non-invasive pacing		
3.13	Capable of delivering energy in increments of 1-2 joules up to 10J and increments of 5-20 joules upto 50J.		
3.14	User friendly 1,2,3 colour-coded operations		
3.15	Capable to connect internal paddles (price for internal paddle should be quoted separately)		
3.16	Automated self-test when switched on and should have a 'ready to use. indicator.		
3.17	Patient contact indicators on paddles for immediate feedback on patient-paddle contact for ensuring maximum shock efficacy		
3.18	Continuous 8 hours waveforms storage facility. It should have capacity to store at least 50 events of 30 minutes in length.		
4	**System Configuration Accessories, spares and consumables**		
4.1	Defibrillator -01		
4.2	Paddles Adult/Paediatric (pair) -01		
4.3	Complete set of ECG Leads along with mother cable-01		
4.4	ECG Rolls- 50		
4.5	AED pads 10 nos. .		
5	**Environmental factors**		
5.1	The unit shall be capable of operating continuously in ambient temperature of 10-40˚C and relative humidity of 15-90%		

5.2	The unit shall be capable of being stored continuously in ambient temperature of 0-50˚C and relative humidity of 15-90%		
6	**Power Supply**		
6.1	Power input to be 220-240VAC, 50Hz		
7	**Standards, Safety and Training**		
7.1	Should be US-FDA / European CE approved product. Should be an IPX44 rated product.		

15. Ventilator

Sl. No.	Technical Specifications	Compliance YES/NO	Remarks
1	Wall gas independent Upgradeable Ventilator platform. Based on servo heritage of close loop ventilation, fastest and most accurate in sensing and flow delivery.		
1.1	**For Paediatric- Adult use (20ml - 2000 ml)** 12" TFT - touch-screen display with intuitive menu		
1.2	**Ventilation modes:** Volume Control (VC) Pressure Control (PC) PRVC SIMV (VC)+ PS SIMV (PC)+ PS SIMV (PRVC)+ PS PS/CPAP **including Apnea back up ventilation**		
1.3	**With unique features:** + Extensive Lung Mechanics Package including loops & respiratory parameters + Reusable Ultrasonic Flow Sensor - for unmatched sensitivity, accuracy, reliability & speed + Low bias flow for lowest in class O2 Consumption &highest sensitivity at low volumes + Automatic tube compensation		
1.4	**Includes (per unit):** - User interface - Patient unit - Battery (1 hr back-up) - Mains power inlet cable - User's manual - Routine cleaning- wall chart		
2	**FiO2 Monitoring** O2 Cell (Factory Installed)		
3	**Non Invasive Ventilation** Non Invasive Ventilation Software		
4	**Aeroneb Nebulizer system**		
5	**Patient Connection- COMMON** Adult Reusable Patient Circuit		
6	**Gas Supply** HOSE ASSEMBLE 10' ISO OXY O2		

	Hose		
7	Air Filter		
8	**Mounting System** Cart Servo Air Support Arm		
9	**Certifications**		
9.1	USFDA & European CE		
10	The Ventilator should be supplied with Reusable Adult Circuits, Hose hangers etc.		

FORM OF FINANCIAL BID

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document including Addenda.

2. We offer to execute the Works described above and remedy any defects therein in conformity with the Conditions of Contract including Additional Conditions and Special Conditions, Specifications, Drawings, Bill of Quantities accompanying this Bid for a sum of ` _____ (Rupees_____) only.

3. We undertake to abide by the Final Sum coming out of the correction of arithmetical errors as indicated in the General Conditions of Contract.

4. We also undertake, if our Bid is accepted, to commence the work within the period as indicated in the Contract Document and to complete the whole work comprised in the Contract within the time stated in the Contract Document.

5. We agree to abide by this Bid for the period of _____ days from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

6. We undertake that unless and until a formal Agreement is prepared and executed, this Bid, together with your written notification of Letter of Acceptance shall constitute a binding contract between us.

7. We understand that you are not bound to accept the lowest or any tender you may receive.

8. I/We do hereby submit our Financial Bid, complete with all the required information as stipulated in your Bidding Documents.

Signature of authorized signatory.....
Name.....
Title.....
Date.....

Chapter-IV

Price Schedule to be utilized by the bidders (Financial Bid)"Equipment for the Department of Cardiology, Civil Hospital, Aizawl"

A) FINANCIAL BID FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA OR GOODS TO BE IMPORTED AND SUPPLIED AGAINST PAYMENT IN INDIAN RUPEES

1	2	3	4	5								6
Schedule	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)								Total Price (at Civil Hospital, Aizawl) basis (Rs.) = {4 x 5(h)}
				Ex - factory/ Ex–warehouse /Ex-showroom /Off–theshelf (a)	Excise Duty (if any) [%age && value] (b)	Sales Tax/ GST/VAT (if any) [%age & value] (c)	Packing and Forwardingcharges (d)	Inland Transportation, Insurance, loading/ unloading and Incidental coststill Civil Hospital, Aizawl (e)	Incidental Services (including Installation& Commissioning, Supervision, Demonstration and Training) at Civil Hospital, Aizawl (f)	Unit Price (In Rs.) CMC for 5years (In Rs.) if applicable (g)	Unit Price (at Civil Hospital, Aizawl)basis (h)= (a+b+c+d+e+f +g)	

Note: -

0. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail. In case of calculation error, lower cost will be accepted between actual cost & errorcost.
1. The unit cost including five (5) years guarantee/warrantee should be mentioned as per table-1. The above quote should include all applicable taxes and F.O.R Civil Hospital, Aizawl. L1 will be decided on the basis of unit cost in addition to CMC value of 5 years where applicable including all applicable taxes at time of financial bid evaluation of individual equipment.
2. The Bidder must quote price for "GOODS TO BE IMPORTED AND SUPPLIED AGAINST PAYMENT IN INDIAN RUPEES" after having taken in to account, the provision of Custom Duty Exemption Certificate (CDEC) by the Purchaser, as per Customs Tariff Act.

Declaration by the Bidder: -

(i) This is to certify that I/We before signing this tender have read and fully understood the Tender document viz. terms & condition of the contract, rules regarding purchase of equipment for Department of .....I/We agree to abide them.

(ii) No other charges would be payable by purchaser and there would be no increase in rates during the contract period.

Place:
Date:
Signature of Bidder:

Name:
Business Address:
Seal of the Bidder:

MANUFACTURER's / PRINCIPAL's AUTHORIZATION FORM

(Clause 24 (c) of other terms and conditions of the tender)

To

The Director,
Hospital & Medical Education
Govt. of Mizoram

Dear Sir,

TENDER:_____.

We,_____, who are established and reputable manufacturers of _____, having factories at_____and_____, hereby authorize Messrs._____(name and address of agents) to bid, negotiate and conclude the contract withyou against Tender No._____for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the conditions of tender contract for the goods offered for supply against this tender by the above firm.

The authorization is valid up to _____

Yours faithfully,

(Name)
For and on behalf of Messrs. _____
(Name of manufacturers)/Principal.

Chapter –V

Tentative Format of Agreement/contract

(TENDER ENQUIRY NO.……)

DEPARTMENT OF ……

This agreement is made at Aizawl on the _____ day of _____two thousand and twenty two between the Department of Health & Family Welfare, Govt. of Mizoram represented by the Director, Hospital & Medical Education, Govt. of Mizoram (hereinafter called 'Client' which expression shall, unless repugnant to the context or meaning thereof be deemed to mean and include its successors, legal representatives and assigns) of the First Part.

Second Part

M/s… , having its registered office, (Hereinafter called the 'Agency' which expression unless repugnant to the context shall mean and include its successors-in-interest assigns etc.) of the Second Part.

WHEREAS the Client invited bids for certain goods and ancillary services viz. EQUIPMENTS (Brief description of goods"and services) and has accepted a bid by the supplier for the supply of those goods and services to Cardiology Deptt. at Civil Hospital, Aizawl on the terms and conditions stated below:

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS

1. In this agreement words and expression shall have the same meaning as are respectively assigned to them in the conditions of contract referred to:

2. The following documents shall constitute the contract between the contracting authority and the supplier, and each shall be read and construed as an integral part of the contract:-
   a. This contract agreement:
   b. Instructions of contract:
   c. General conditions of contract:
   d. Financial conditions of contract:
   e. Technical specifications:
   f. The supplier's bid and original price schedules
   g. The Contracting Authority's notification of contract.

3. This contract shall prevail all other contract documents. In the event of any discrepancy or inconsistency with the contract documents and then documents shall prevail in the order listed above.

4. In consideration of the payments to be made by the purchaser to the supplier as hereinafter mentioned, the supplierhereby covenants with the Purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the contract.

5. The Purchaser hereby covenants to pay the supplier in consideration of the provision of the goods and services and the remedying of defects therein, the contract price or such as may Become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

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

S/No	Item Sr. No	Name	Quantity to be supplied	Unit Rate for (Including all tax & Expenditure) including 5 Years Warranty.	CMC for 05 Years	Total Amount (Including All Tax & Expenditure)
Total Amount						

6. The above rates are inclusive of excise duty, transportation, insurance, inspection & testing charges, any incidental charges and CST/VAT.

7. The prices shall be valid for one year from the date of agreement, unless revoked and thereafter for a further periodas agreed upon mutually.

8. The suppliers shall agree to deposit 10% performance security of the total cost of the item, along with as mentionedof terms & condition of tender documents in advance in the form of FD/BG/TD/CD, against the value of particular supply orderfor a period of 63 months plus six months more validity (as per guidelines of Reserve Bank of India) from the date of placement of letter of award.

9. The supplier shall supply the goods with delivery challan directly to the indenters/purchase at the address (installationsite) given in the supply order.

10. The supplier shall raise bills in duplicate directly in the name of indenting officer/purchaser against the supplies madedirectly by them to the indenter's satisfaction in compliance with the conditions contained in the supply order.

11. The supplier has carefully read all the conditions of tender for supply of equipment (as tabulated above) floated by the ……. Health & Family Welfare Department, Govt. of Mizoram and agreed to accept all terms and conditions laid in the tender document. The terms and conditions mentioned in the tender document are part of this agreement and acceptable and abide by it to the agency before signing thiscontract.

12. In case of any dispute between the 'Agency' and 'Client', 'Client' shall have the right to decide. However, all mattersof jurisdiction shall be at the local courts located at Aizawl, Mizoram.

13. The firm will provide complete warranty for.....five years followed by CMC for next five years after the completion of the warranty period.

14. The firm will have to deposit the performance security of 2.5% of Total amount of Equipment's as security for CMC after completion of Warranty Period before releasing

Warranty Performance Security Deposited under clause 10 above.

THIS AGREEMENT will take effect from_____day of_____Two thousand and twenty two and shall be valid for ten year.

IN WITNESS WHEREOF both the parties here to have caused their respective common seals to be here unto affixed / (or have here unto set their respective hands and seals) the day and year mentioned above in Aizawl in the presence of the witness:

For and on behalf of the 'Agency' Signature of the authorized Official Name of the Official Stamp / Seal of the 'Agency' SIGNED, SEALED AND DELIVERED By the said_____ _____(Name) Signature of Authority_____on behalf of the 'Agency' in presence of Witness_____ Name_____ Address _____ Signature		For and on behalf of the ……. Signature of the authorized Official Name of the Official By the said _____(Name) Signature of Authority _____ on behalf of the ……. in presence of Witness_____ Name_____ Address_____ Signature

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

To

The Director,
Hospital & Medical Education
Govt. of Mizoram

WHEREAS____(Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no___dated_to supply (description of goods and services) (herein after called "the contract"). AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract; AND WHEREAS we have agreed to give the supplier such a irrevocable bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you unconditionally, on behalf of the supplier, up to a total of. _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of you to first demanding the said amount of guarantee from the supplier before raising the demand with us. You may directly raise the demand with us, without asking the supplier for the same.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee will not be changed due to change in the constitution of the bank or the supplier.

This guarantee shall be valid up to 63months (it may also be ensured by the bank that as per RBI guidelines its validity should be up to six months of its expiry) from the date of satisfactory installation of the equipment i.e. up to _____ (indicate date).

……..
(Signature with date of the authorized officer of the Bank)
……..
Name and designation of the officer
……..
……..
Seal, name & address of the Bank and address of the Branch