DR.RAJENDRA PRASAD GOVT MEDICAL COLLEGE, KANGRA AT TANDA (H.P).

E-mail :- principal@rpgmc.ac.in Telephone No. = 01892-267115

Website: https://www.hptenders.gov.in

E-TENDER DOCUMENT FOR PROCUREMENT OF MACHINERY & EQUIPMENT FOR THE SKILL CENTER, Dr.RPGMC, TANDA

Ref. No.	**:**	**E-tender/Skill**
Publishing Date	**:**	**05/06/2023**
Bid Submission Start Date	**:**	**14/06/2023 at 04:00 PM**
Last Date of Bid Submission	**:**	**26/06/2023 till 1:00 P.M**
Bid Opening Date	**:**	**26/06/2023 at 03:00 PM**

Tender documents may be downloaded from https://www.hptenders.gov.in

Tender Document Fee = Rs. 500/-(Five hundred only)

E-tenders are invited for the supply of following machinery & equipment for the Deptt. of Skill Center, Dr.RPGMC, Kangra at Tanda on the terms & conditions mentioned hereinafter:-

Sr. No.	Name of the department	Name of the equipment	Earnest money	Due date of submitting of online bid and delivery of physical copy of techno-commercial Bid
1.	Skill Center	Infant ALS Training	10000/-	26/06/2023 till 1:00 P.M
		Infant CPR Training Mannequin	--do--	--do--
		Head and Neck Trauma Training Mannequins	--do--	--do--
		Phlebotomy trainer arm for IV Canulation and IV Drug Administration	--do--	--do--
		Pericardiocentesis and Chest Tube Drainage Mannequin	--do--	--do--
		Tension Pneumothorax Decompression and Chest Tube Insertion	--do--	--do--
		ULTRAOUND COLOR DOPPLER SYSTEM	--do--	--do--
		Bi-Phasic Defibrillator	--do--	--do--
		Head Trauma Manikin	--do--	--do--
		Syringe Infusion Pump	--do--	--do--
		Phlebotomy Trainer Arm / Peripheral IV line trainer	--do--	--do--
		Paediatric Phlebotomy Trainer Arm/ Peripheral IV linetrainer	--do--	--do--
		Adult Intraosseous Trainer	--do--	--do--
		Infant Intraosseous Trainer	--do--	--do--
		Central IV Manikin with Internal Jugular, Subclavian and Femoral access	--do--	--do--
		Flexible Spine Model	--do--	--do--
		Cervical Spine Anatomic Model	--do--	--do--
		AED Trainer with simulator	--do--	--do--
		Monitor Defibrillator capable of defibrillation/synchronized cardioversion	--do--	--do--
		Airway Foreign body Trainer	--do--	--do--
		ADULT CPR TRAINING (HALF TORSO) MANNEQUIN WITH CARDIACFEEDBACK	--do--	--do--
		ECG Simulator with rhythm generator (DART)	--do--	--do--

1. General Instructions

a. E-tenders in Two Bids (Technical/Techno Commercial & Financial/Price bid) basis are invited by the Principal, DrRPGMC, Kangra at Tanda from interested and eligible manufacturers or their authorized distributors/dealers, for providing machinery & equipment.

b. Both techno-commercial and financial bid must be submitted online at Tenders Himachal Pradesh site **https://**www.hptenders.gov.in. on or before 26/06/2023upto 1.00 P.M. In addition, physical copy of the techno-commercial bid duly signed & stamped alongwith EMD/tender fee /MSME, NSCI registration etc. must be submitted

in physical form in the office of the undersigned on or before 26/06/2023 upto 1.00P.M. The same must be submitted in properly sealed manner & superscribed as " Tender for machinery and equipment for the Deptt of _____(Name of concerned deptt.) of Dr.RPGMC, Tanda". It must be addressed to the Principal, Dr.RPGMC, Tanda and must contain the particular of the bidder in bottom left hand of the cover. Tenders without EMD/tender fee/MSME, NSCI registration and techno-commercial bid in physical form shall be rejected straightway.

NB:- Financial bid is to be submitted only in online mode. No physical copy of the same is to be submitted.

c. The complete bidding process is online. Bidders should have possession of valid digital Signature Certificate (DSC) for online submission of bids. Prior to bidding DSC needs to be registered on the website mentioned above.

d. Tenderer/Contractor/Bidders are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer/Bidders for the e-submission of the bids online through the Tenders Himachal Pradesh Portal at **https://www.hptenders.gov.in**.

e. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

f. The tender shall be submitted online in two part, viz., technical bid and financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

g. Any future clarification and/or corrigendum(s) shall be communicated through the Public Procurement Portal for e Procurement at **https://www.hptenders.gov.in.** The bidders are required to regularly check the website to know about any/all such corrigendum(s) as only those bids, taking care of such corrigendum(s) shall be considered for finalization of the tender.

h. Bidder should necessarily enclose a covering letter mentioning index of documents submitted with proper numbering.

i. All the duly filled/completed pages of the tender should be given serial /page number on each page and signed 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.

j. The competent authority of Dr.RPGMC, Kanga at Tanda reserves all rights to accept or reject any/ all tender(s) without assigning any reason. Dr.RPGMC, Kangra at Tanda 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.

k. The bidder shall pay the respective amount of Bid Security (EMD) of the respective Machinery and equipment for which the bid is submitted by way of FDR in favour of "Principal, Dr.RPGMC, Kangra at Tanda" drawn on any Nationalized Bank/ Scheduled Bank and payable at Tanda. 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.

2. ELIGIBILITY CRITERIA

a. Bidder shall either be a manufacturer or a distributor/dealer having experience of supplying Hospital Equipments.

b. Total Annual turnover of the bidder (who is not a manufacturer) in the last three financial years i.e., 2019-20, 2020-21, 2021-22 shall not be less than Rs 50 Lac.

c. Manufacturer participating as bidder should have an Total Annual Turnover of Rs 5 (Five) Crores in the last 3 years i.e., 2019-20, 2020-21, 2021-22.

d. Manufacturers from whom Hospital Equipments will be procured should posses valid ISO 9001:2008 Certification valid for last three years issued by the competent authority. Equipments having European Union CE/USFDA/BIS/CDSCO certification shall only be considered. In case BIS standards certificate is tendered the bidder must ensure that it is for the concerned equipment only.

e. The Bidder must have valid GST/Services Tax Registration and PAN number allotted by the respective authorities.

f. Bidder who has been blacklisted either by the Tender Inviting Authority or by any State Government or Central Government Organization shall not be allowed to participate in the tender during the period of blacklisting.

g. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority in terms of Ministry of Finance, Department of Expenditure, Public Procurement Division Order(Public Procurement No.1) and Order(Public Procurement No.2) vide F.No.6/18/2019-PPD dated 23/07/2020.

3. TECHNO-COMMERCIAL BID -

The Bidder should furnish the following documents as part of the technical bid.

A. Earnest Money Deposit:-

The bidder shall pay the respective amount of Bid Security (EMD) of the respective Machinery and equipment for which the bid is submitted by way of FDR in favour of "Principal, Dr.RPGMC, Kangra at Tanda" drawn on any Nationalized Bank/ Scheduled Bank and payable at Tanda. 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 Earnest Money Deposit of the successful Bidder may, at the discretion of Tender Inviting Authority be adjusted towards the Security Deposit payable by the Bidder.

B. Constitution of Company of Bidder:

Documentary evidence regarding constitution of the company /concern such as Memorandum of Articles of Association, Partnership Deed etc. with details like Name, Address, Telephone Number, Fax Number, E-mail Address of the firm with names of the Managing Director / Partners / Proprietor.

C. Power of Attorney of Bidder:

Attested photocopy of instruments such as Power of Attorney, Resolution of Board etc., authorizing an officer of the bidding firm to submit their bids. Such authorized officer should sign the bid documents.

D. Undertaking of Bidder:

Undertaking in the form at Annexure-I

E. Manufacturer's Authorization

Authorization letters from all the manufacturers concerned in the format at Annexure -II. Bids without authorization letters will be disqualified.

F. **European Union CE/USFDA/BIS/CDSCO Certificate**

Attested photocopy of European Union CE/USFDA/BIS/CDSCO Certificate for the equipment on the date of tender. Latest standardization certificate be attached in r/0 of the machinery/equipment. In case such certification is not relevant for a particular item the same may be indicated.

g. Annual Turnover:Annual turnover statement of bidder/manufacturers for 3 years i.e., 2019-20, 2020-21, 2021-2022 in the format given in Annexure-III certified by the Auditor/Chartered Accountant.

H. GST Certificate & PAN Card of Bidder:

GST Certificate and PAN card of the bidder must be attached. An undertaking duly attested must be given by the tenderer stating that no tax liability is pending against the tenderer or the firm to the Income tax deptt or any other deptt of State Govt. or the Govt. of India.

I. Undertaking for providing of logo of Bidder:

Undertaking (as per Annexure-IV) for embossment of Dr.RPGMC logo on all items.

J. Technical Compliance Statement

The bidder shall furnished technical compliance statement as per Annexure V.

K. Undertaking on Fraud & Corruption of Bidder:

Undertaking on fraud and corruption in the format at Annexure-VI by bidder/manufacturer.

L. Non Blacklisted Entity:-

Bidder who has been blacklisted either by the Tender Inviting Authority or by any State Government or Central Government Organization shall not be allowed to participate in the tender during the period of blacklisting. An Undertaking to this effect must be given by the manufacturer and bidder(incase bidder is not manufacturer) in the shape of a sworn affidavit.

M. Agreed Terms & Conditions of Bidder:

Agreed Terms & Conditions as per Annexure VII.

N. Warranty / Guarantee: An undertaking that the Warranty/guarantee terms mentioned in para –8 of the bid document are acceptable to the tenderer. Such an undertaking is required from both the bidder and manufacturer (In case the bidder is not the manufacturer)

O. Comprehensive Maintenance Contract (CMC):- An undertaking that the CMC terms mentioned in para – 8 of the bid document are acceptable to the tenderer. Such an undertaking is required from both the bidder and manufacturer (In case the bidder is not the manufacturer). Such undertaking need not be furnished for items which CMC cost is not required to be enter in the BOQ format as part of financial bid.

P. Certificate regarding compliance with Ministry of Finance, Department of Expenditure,

Public Procurement Division Order(Public Procurement No.1) and Order(Public Procurement No.2) vide F.No.6/18/2019-PPD dated 23/07/2020:-

The Bidder shall furnish a certificate as per Annexure VIII and if such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with Law

Q. Signature & Seal on each page

The tender document signed by the Bidder in all pages with office seal.

R. Checklist of documents

A Checklist (Annexure-IX) for the list of documents enclosed with their page number. The documents should be serially arranged as per this Annexure-VIII and should be securely tied or bound.

4. PRICE BID

- Price bid of the tender should be submitted only in online mode in the prescribed format of BOQ.
- The bid should contain both the initial cost of the equipment as well as years wise CMC cost for 5 years after the warranty period.
- The rates should be quoted in Indian Rupees only.
- The rate quoted shall be inclusive of excise duty, all taxes, packaging charge, freight, Insurance etc. The component of GSTshould also be shown separately.
- Optional items shall not be taken into account for the finalization of the total cost and evaluation of the price bid.

5. OPENING OF TECHNICAL AND PRICE BID

A. All bidders are entitled to be present at the date and time of opening of Technical Bid.

B. Only those bidders whose Technical Bids are found to be acceptable after technical and commercial evaluation will be invited to be present at the date and time of opening of Price Bid of the tender. The price bids of tenderers not found technically qualified shall not be opened.

6. VALIDITY OF BID:

Bids shall remain valid for acceptance for a period of 180 days after opening of Technical Bid. Bids with shorter validity shall be rejected. Purchaser may solicit bidders consent to an extension of validity period. A bidder may refuse extension request without forfeiting the EMD.

7. VALIDITY OF OFFER OF SUCCESSFUL BIDDER:

The validity of offer of the successful bidder shall be at least one year from the date of finalization of the order and the successful bidder will be bound to supply the items at agreed rates and terms during this period. This validity period maybe further extended with mutual consent.

8. Warranty and CMC Conditions:-

a. All quoted items should have warranty for a period of 5 years from the date of installation followed by Comprehensive Maintenance Contract for a period of 5 years after warranty/guarantee period. All expenses related to the maintenance of the equipment during warranty as well as CMC period including all spares, durable/non-durable consumables, labour charges, import charges etc. except patient related consumables will be the sole responsibility of the supplier.

b. The firm will have to guarantee an uptime of 95 % during warranty period and also during comprehensive maintenance contract period. The unit should remain functional for 95 % of working days in a calendar year of 365 days i.e the machine should be functional for 345 days out of 365 days. The penalty for down time shall be imposed @Rs.2000/- per day or part thereof beyond this permissible down time limit.

c. In situation of malfunctioning of equipment or it being non-functional, the equipment should be repaired/made properly functioning to the satisfaction of the end user within 96 hrs of making a complain to the company, failing which a penalty @Rs.100/- per hour shall be imposed. If it is not possible to repair the equipment then a properly functioning equipment of the same or the higher model should be made available for the period for which equipment is non-functional

9. Other Conditions:-

a. Items details & Quantity:-

The detailed specifications and the Quantity of the items are shown at Annexure-X

b. Firm Rates

Firm Rates (inclusive of Excise Duty, transportation, insurance, Packaging, Installation & Training at Site Charges and any incidental charges) should be quoted for the Equipments on door delivery basis. Tender for supply of equipments with conditional/variable rates shall not be accepted. Handling, clearing, transport charges etc., will not be paid separately. The delivery should be made as stipulated in the purchase order placed with the successful bidders. The rates quoted and accepted will be binding on the Bidder for the stipulated period and any increase in the price will not be entertained till completion of the tender period.

c. Controlled Price/MRP

The price quoted by the bidders shall not, in any case exceed the controlled price, if any, fixed by the Government and the Maximum Retail Price (MRP). During the period of contract with the successful bidder, if the price of any item is reduced due to any reason including any Law or Act of the Central/State Government, the bidder shall be statutorily bound to intimate the reduced rates immediately to the Tender Inviting Authority and shall charge the reduced rates. The Tender Inviting Authority is empowered to unilaterally effect such reduction as is necessary in rates, in case the bidder fails to notify or fail to agree to such reduction in rates.

D. No Revision/Correction of Rates

No Bidder shall be allowed at any time on any ground whatsoever to claim revision or modification in the rates quoted by him. Representation to make correction in the tender documents on the ground of Clerical error, typographical error, etc., committed by the bidders in the Bids shall not be entertained after submission of the bids.

e. Firm Delivery Schedule

Firm delivery schedule shall be mentioned in the bid. Cross conditions such as "SUBJECT TO AVAILABILITY" "SUPPLIES WILL BE MADE AS AND WHEN SUPPLIES ARE RECEIVED" etc., will not be considered under any circumstances and the tenders of those who have given such conditions shall be treated as incomplete and will be summarily rejected.

f. Execution of Order

Unless otherwise specified, supplies should be made directly by the successful bidder and not through any other agency.

g. Inspection

Tender Inviting Authority or his authorized representatives have the right to inspect the equipments offered by the bidding entity which shall be arranged by the bidder at their own cost.

10. ACCEPTANCE OF TENDER

a. Tender Evaluation

The price bids shall be evaluated by combining the initial cost with the total cost of annual CMC. The CMC charges quoted shall be discounted @8% to arrive at the present value of the offer which shall be added to the initial cost to arrive at the consolidated offer of thetenders as explained in the following illustration:-

If the initial cost of equipment is quoted as Rs 10000/- and the CMC from 6th year onward is quoted as Rs 1000 per year upto the 10^{th} year, the present value of the future payments will be calculated as follows:-

Year of Operation of Equipment	*Quoted CMC amount*	*Present value of the quoted CMC amount*	*Formula Used for calculating Present Value= Future Cost/$(1+8\%)^n$ where n=completed years of operation*
6^{th}	*1000*	*680.58*	*$1000/(1.08)^5$*
7^{th}	*1000*	*630.17*	*$1000/(1.08)^6$*
8^{th}	*1000*	*583.49*	*$1000/(1.08)^7$*
9^{th}	*1000*	*540.27*	*$1000/(1.08)^8$*
10^{th}	*1000*	*500.25*	*$1000/(1.08)^9$*
	Total Present Value of Quoted CMC amount	*2934.76*	

Therefore the total value of the offer will be calculated as:-
10000(Initial cost of Equipment)

+

2934.76(Total Present Value of Quoted CMC amount)

= Rs. 12934.76/-

Conditional discounts shall not be taken into account for price comparison.

b. Right to Reject Tender

Tender Inviting Authority reserves the right to accept the tender or to reject the whole tender for the supply of the Equipment tendered at any point of time without assigning any reason.

c. Tender Acceptance

The acceptance of the tenders will be communicated to the successful bidders in writing.

11. NON ASSIGNMENT

The Bidder shall not, at any time, assign, sub-let or make over the contract or the benefit thereof or any part thereof to any person or persons, whatsoever.

12. COMMUNICATION

All notices or communications relating to or arising out of an agreement or any of the terms thereof shall be considered duly served on or given to the Bidder if delivered to him or left at his premises, places of business or abode or sent to his e- mail address.

13. SECURITY DEPOSIT

The successful bidder, within 10 days of signing of the agreement, shall be required to submit Security Deposit of 10 % of the order value(Initial cost only) in the form of bank guarantee from any Indian nationalized bank in favour of the Tender Inviting Authority valid for a period of 5 years from the date of order. However, if the supplier fails to execute the order or fails to perform the services as per agreement, in addition to other penal actions, the bank guarantee shall be encashed and the amount will be forfeited. The Bank Guarantee shall be released in five equal instalments. The first four equal installments will be released on yearly basis at the end of first four year of satisfactory performance of the equipment. The last installment will be retained as security for CMC which will be release on satisfactory completion of CMC period.

14. SUPPLY CONDITIONS

a. Purchase Order

Purchase order will be placed on the successful Bidder at the discretion of the Tender Inviting Authority.

b. Specifications & Quality

The items supplied by the successful Bidder shall be of the best quality and shall comply with the specifications, stipulations and conditions specified in the tender document.

c. Delivery Period

The supply should be received, installed and commissioned within 90 (Ninety) days from the date of purchase order as mentioned in the P.O, unless otherwise specified in the order.

d. Delivery Point/Destination

The items shall be delivered at the HOD Concerned/Medical Superintendent/Storekeeper, Dr.RPGMC, Kangra at Tanda Himachal Pradesh.

e. Penalty for Delayed Delivery

i. In case there is delay in delivery beyond the stipulated period as mentioned in the purchase order, there shall be reduction in price @ 1% of the value of delayed goods per week of delay or part thereof subject to a maximum of 10% of the total order value.

ii. Once the maximum price reduction is reached, termination of the contract may be considered. Non-performance of the contract provisions shall make the successful bidder liable to be disqualified to participate in any tender for the next 5 years, in addition to forfeiture of Security Deposit and other penal actions.

f. Alternative Purchase

If the successful Bidder fails to execute the order within the stipulated time, the Tender Inviting Authority will be at liberty to make alternative arrangements for purchase of the items of Equipment for which the purchase orders have been placed, from any other source or from the open market, at the risk and cost of the supplier. This would be in addition to any other penalties including forfeiture of security deposit.

g. Shortage and Damage

It shall be the responsibility of the successful Bidder for any shortages/damages at the time of receipt in Institution. Tender Inviting Authority is not responsible for the items received, for which no order is placed.

15. FORCE MAJUERE

The above conditions of delivery period, price reduction & termination etc. are subject to force majeure conditions which are beyond the control of the supplier, do not involve fault or negligence of the supplier and are not anticipated. Such events may include but are not limited to riots, mutinies, war, fire, storm, tempest, flood, earthquakes, epidemics, or other exceptional causes like quarantine restrictions, freight embargoes. On specific request made by the bidder the time period of supply may be extended by the purchaser at his discretion for such period as may be considered reasonable. However, the condition shall not include scarcity of raw materials, power cut, labour dispute, failure of sub-vendor and increase in cost of raw material.

16. FRAUD & CORRUPTION:

The bidders, suppliers & contractors shall observe the highest standard of ethics during bidding and during performance of the contract. For the

purposes of this provision, the following acts shall be considered as corrupt and / or fraudulent practices -

1. "Corrupt Practice" means offering, giving, receiving, or soliciting directly or indirectly, of anything of value to influence the action of an official in the procurement process or in contract execution.
2. "Fraudulent Practice" means misrepresentation or omission of facts in execution of contract.
3. "Collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, non-competitive level.
4. "Coercive Practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process or in execution of acontract.

During the process of evaluation of a bid or proposal for award of a contract,

if it is detected that a bidder directly or through agent has engaged in corrupt, fraudulent, collusive or coercive practice in competing for the contract in question, then a) the bid shall be rejected and b) declare the firm ineligible for a specific period or indefinitely to participate in a bidding process. However, if any such practice is detected at any subsequent stage or during execution of the contract, the Tender Inviting Authority will exercise the right to cancel the contract and make suitable alternative arrangement at the risk and cost of such offendingbidder.

17. LOCAL CONDITIONS:

It will be imperative on each bidder to fully acquaint himself of all local conditions and factors that would have any effect on performance of the Contract. The Tender Inviting Authority shall not entertain any request for clarifications from the bidder regarding such local conditions nor shall accept any offer conditional to the local factors. No request for any change of price or extension of time schedule of delivery of goods shall be entertainedafter acceptance of bids.

18. LOGOGRAMS

Logogram means, wherever the context occurs, the design as specified in Annexure-IV.

a. Tenders for the supply for equipment, shall be considered only if the Bidder gives undertaking in his tender that the items will be supplied with the logogram either printed or embossed or affixed as per the design at Annexure-IV.
b. All items have to be supplied in standard packing with printed logogram. Affixing of stickers and rubber stamps shall not be accepted.
c. Failure to supply equipment, with the logogram will be treated as breach of the terms of agreement.

19. PAYMENT PROVISIONS

A. Payments towards the supply of equipments will be made strictly as per rules of the Tender Inviting Authority. All payments shall be made by way of RTGS in favour of the supplier.

B. On completion of supplies of ordered quantities bills/ Invoices along with installation reports should be raised in triplicate in the name of the Tender Inviting Authority with address.

C. If at any time during the period of contract, the price of tendered items is reduced or brought down by any law or Act of the Central or State Government or by the Bidder himself, the Bidder shall be bound to inform Tender Inviting Authority

immediately about such reduction in the contracted prices. Tender Inviting Authority is empowered to unilaterally effect such reduction as is necessary in rates in case the Bidder fails to notify or fails to agree to such reduction in rates.

D. Tender Inviting Authority has every right to receive supply even after expiry of contractual delivery date and in such case; price reduction as specified under Clause No. 15 e will be applicable.

20. ANNULMENT OF AWARD, FORFEITURE OF SECURITY DEPOSIT & FRESH AWARD

Failure of the successful bidder to comply with the requirements of signing of contract and / or submission of performance security within the time schedule as stipulated above shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security/EMD. Under such a situation, the proposal may be reviewed for award of the contract on the next lowest evaluated technically qualified bidder or go for a fresh bid depending on the circumstance. In case it is decided to go for the next lowest bidder, negotiation may be considered to bring down their price nearer to the originally evaluated lowest bidder.

21. ARBITRATION

Any dispute whatsoever in any way arising out of or relating to the contract shall be referred to the arbitration of the Director, Medical Education and Research, Shimla or to the sole arbitration of some person nominated by him. There shall be no objection if the arbitrator so appointed happens to be an employee of Deptt. Of Health & Family Welfare, H.P. The award of the arbitrator shall be final, conclusive and binding on all parties.

22. SAVING CLAUSE

No suit, prosecution or any legal proceedings shall lie against Tender Inviting Authority or any person for anything that is done in good faith or intended to be done in pursuance of tender.

23. LAWS GOVERNING THE CONTRACT & JURISDICTION

The contract shall be governed by the laws in force in India. In the event of any dispute arising out of the tender such dispute would be subject to the jurisdiction of the Court within the State of Himachal Pradesh only

s/d

Principal

Dr.RPGMC.Tanda

ANNEXURE I

UNDERTAKING

To

Tender No._____

For supply of _____

Sir,

1. I, Shri _____, on behalf of M/s _____having registered office at _____, do hereby declare that I have gone through the terms and conditions mentioned for the above and undertake to comply with all tender terms and conditions. The rates quoted by me/us are valid and binding on me/us for acceptance for a period of one year from the date of award of contract to us.

2. I/We undersigned hereby bind myself/ourselves to the Office of Principal, Dr.RPGMC, Tanda to supply the machinery & equipment. The rates quoted by me/us for the said tendered items are specified in the price bid. It is certified that rates quoted are lowest quoted for any institution in India and not higher than the MRP/ prevailing market rate.

3. The articles shall be strictly as per specification and of the best quality as per requirement of the institution. The decision of the Office of the Principal, Dr.RPGMC, Tanda (Hereinafter called the said Purchaser) as regards to the quality and specification of article shall be final and binding on me/us.

   a) Authorization from Manufacturer: We shall furnish authorization from the manufacturer/legally enforceable undertaking to the Purchaser in appropriate format listing obligations valid for a period of 5 years from the date of supply of the

supplied equipment.

4. We agree to the conditions of the tender under which the EARNEST MONEY DEPOSIT and SECURITY DEPOSIT & PERFORMANCE GUARANTEE shall be forfeited by us.
5. We hereby undertake to pay the penalty as per the terms and conditions of the contract for delayed supply of the ordered items or delayed maintenance thereof during the warranty and CMC period as per the terms of tender contract.
6. We agree to accept the amount of the bill to be paid by the purchaser after completion of all formalities and should any amount of the bill found by the purchaser/auditors to have been over-paid; the amount so found shall be refunded by me/us.
7. We hereby undertake to supply the items during the validity of the tender as per direction given in supply order within the stipulated period.
8. The tender inviting authority has the right to accept or reject any or all the tenders without assigning any reason.
9. We understand all the terms and conditions of the contract and bind myself/ourselves to abide by them.
10. We hereby declare that there is no vigilance/CBI or court case pending/contemplated against us at the moment.

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OFTHE FIRM :

Annexure –II

MANUFACTURER'S AUTHORIZATION FORM

N0. DATED

To,

The Principal,
Dr.RPGMC,
Tanda Kangra
H.P

Tender

No.

Dear Sir,

We _____who are established and reputable manufacturers of _____having factories at _____ registered office at_____Possessing manufacturing license (SSI) No._____dated _____ Valid up to _____hereby authorize _____ (name and address of representative and firm), to submit a bid and subsequently negotiate and sign the contract with you against the above mentioned tender for the following items quoted.

1.
2.
3.

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE MANUFACTURER:

Annexure-III

ANNUAL TURNOVER STATEMENT OF THE BIDDER/MANUFACTURER

The Annual Turnover of M/s_____ for the past three years and concurrent commitment for the current financial year are given below and certified that the statement are true and correct.

Sl No.	Year	Turnover in Rs Lakhs
1.	2019-20	
2.	2020-21	
3.	2021-22	

Total - Rs_____Lakhs

Date :

Seal :

Signature of Auditor / Chartered Accountant
(Name in Capital Letters)

Annexure-IV

Tender No:

UNDERTAKING FOR EMBOSSMENT OF LOGO

We M/s …….. Do hereby declare that, if favored with an order, we will supply the ordered ITEMS embossed with Dr.RPGMC Logo as per instructions given in this regard.

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OFTHE FIRM :

Annexure V

Tender No._____

Technical Compliance Statement for Machinery & equipment as per Annexure-X

Sl.No	Technical specification as per tender document.(As per annexure X)	Technical specification quoted	Diviation if any

****Items with quantity should be quoted as per tender technical specifications. SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OFTHE FIRM :

Annexure-VI

UNDERTAKING ON FRAUD & CORRUPTION

We..... do hereby undertake that, in competing for (and, if the award is made to us, in executing) the subject contract for supply of ordered items under tender reference no …… …… we shall strictly observe the terms and conditions against fraud and corruption in force in the country.

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE FIRM :

Annexure-VII

AGREED TERMS & CONDITIONS

Tender No. & Date_____

A. Details of Bidder

Bidder Name:

Offer Ref: Contact Person:

Telephone No: Signature:

Fax No: E-mail:

B. Definitions

1. "Purchaser" means the Principal, Dr.RPGMC, Tanda or his authorized representative.
2. "Bidder" means a person or firm or company who has made an offer for supply of goods and /or service as per tender.
3. "Vendor" or "Supplier" means a person or firm or company, to whom the order is addressed for supply of goods and /or services.
4. "Site" means the premises of the purchaser or any other place as decided by the Purchaser.

NOTE: The questionnaire below must be duly filled in and should be enclosed with un-priced Technical Bid. Clauses confirmed here under should not be repeated. All commercial terms and conditions should be indicated in this format. If necessary, details including deviations to the terms and conditions of the bid document, if any, should be enclosed as annexure to this questionnaire.

Sl. No.	Description	Vendor's Confirmation (Confirmed/Noted/Deviation furnished separately)
	C. Technical	
1.	Confirm that you meet the eligibility criteria as per bid document and have furnished relevant documents.	
2.	Confirm acceptance of Technical Specification and scope of supply as per Tender Document. Confirm that the quality will be as per technical requirements.	
3.	In case of deviations, confirm that the same have been highlighted separately.	
4.	Confirm that literature and technical data, wherever applicable, have been enclosed.	
5.	Confirm that all certificates/ documents furnished.	

6.	Confirm that Earnest Money Deposit (EMD) as per bid document has been furnished.	
	D. Commercial	
1.	It is noted that any deviations to the commercial terms and conditions shall lead to loading of prices or	
	rejection of offer.	
2.	Confirm that the quoted landed price per kit is inclusive of cost of containers, packing & forwarding charges, freight, insurance and all duties and taxes viz. Excise Duty, GST.	
3.	Confirm furnishing of price break-up of each item showing basic price of item and GST as %age of basic price to arrive at landed price in D2 above.	
4.	If there is any variation or fresh imposition of Excise Duty at the time of supply due to various reasons, including turn-over, confirm that the same shall be borne by supplier.	
7.	Confirm that in case any new or additional duties and taxes are imposed after the contractual delivery date due to delays attributable to the supplier the same shall be borne by the supplier. This will be in addition to Price Reduction for Delay in Delivery.	
8.	Confirm acceptance of Price Reduction Schedule for delay in delivery @ 0.5% of delayed value of goods per week of delay or part thereof subject to maximum of 10% of the total order value beyond the mandatory delivery period i.e three months from the date of purchase order.	
9.	Confirm acceptance of Delivery Period as indicated under clause 15 c of the bid document.	
10.	Confirm acceptance of relevant payment terms specified in the bid document.	
11.	It is noted that delivery period, price reduction, termination etc. are subject to Force Majeure Condition as stipulated in the bid document.	
12.	Confirm that the quoted prices shall remain firm & fixed till complete execution of the order.	
13.	a) In case you are a manufacturer confirm that the prices quoted are not higher in any respect than MRP b) In case you are a dealer/ distributor / authorized agent, confirm that the prices quoted are as per manufacturer's price list with appropriate discount	
14.	Packing / forwarding, transportation, loading/ unloading and insurance are supplier's responsibility. However, to protect the items from physical damages and/or deterioration due to weather during transit, supplier to ensure proper packing & handling arrangement. Please confirm compliance.	
15.	Confirm that security deposit of 10 % of the total order value in the form of a Bank Guarantee from a nationalized Bank shall be furnished, which will be valid for a period of five years from the date of order.	

16.	Confirm acceptance of the warranty and CMC terms & conditions as mentioned in bid document	
17.	Confirm acceptance of Repeat order within 24 months from the date of initial order at same price and terms & conditions.	
18.	Confirm that Road Permits for dispatch of materials will be arranged by Supplier.	
19.	It is noted that the purchaser would disown any responsibility / liability towards irregularity, contravention or infringement of any statutory regulations including those of patent, on manufacture or supply of goods covered by the order.	
20.	Terms & Conditions indicated in this format shall not be repeated in the bid. Terms & Conditions indicated elsewhere and contradicting those in this format shall be ignored. Confirm compliance.	
21.	Confirm that you shall observe the highest standard of ethics during bidding and in case favoured with an order, the execution of the order will be completed, without resorting to any fraud, corruption and/or coercion.	
22.	Confirm that the offer shall be valid for a period of 12 months from the date of bid opening.	

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE FIRM

Annexure-VIII

Certificate regarding compliance with Ministry of Finance, Department of Expenditure, Public Procurement Division Order(Public Procurement No.1) and Order(Public Procurement No.2) vide F.No.6/18/2019-PPD dated 23/07/2020:-

I have read the clause regarding restrictions on procurement from a bidder of country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirement in this regard and is eligible to be considered.[Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE FIRM

Tender No. & Date_____

Annexure-IX

CHECK LIST

Sl No.	Cover A	Yes	NO	Page No.
1.	EMD/tender fee in the form of FDR/DD submitted			
2.	Documentary evidence for the constitution of the company/concern			
3.	Attested/notarized copy of valid European Union CE/USFDA/BIS/CDSCO Certificate.			
4.	Attested/notarized copy of valid ISO 9001:2008 Certificate.			
5.	Power of Attorney, Resolution of Board etc., authorizing an officer of the bidding firm to sign the tender documents.			
6.	Detailed specifications & dimensions of each item along with catalogue, drawings etc.			
7.	Undertaking in the form at Annexure-I			
8.	Authorization from Manufacturer to the bidder as per Annexure -II			
9.	Annual Turnover Statement for 3 years as per Annexure – III			
10.	Copy of GST and PAN card			
11.	Duly attested undertaking by the tenderer stating that no tax liability is pending against the tenderer or the firm to the Income tax deptt or any other deptt of State Govt. or the Govt. of India.			
12.	Technical Compliance Statement as per Annexure V			
13.	Undertaking for Embossment of Logo as per Annexure –IV			
14.	Undertaking on fraud and corruption as per Annexure –VI			
15.	Agreed Terms and conditions as per Annexure – VII			
16.	Certificate regarding compliance with Ministry of Finance, Department of Expenditure, Public Procurement Division Order(Public Procurement No.1) and Order(Public Procurement No.2)			
17.	Undertaking regarding acceptance of warranty terms			
18.	Undertaking regarding acceptance of CMC terms			
19.	Signature and seal on each page of Tender Document			
20.	Affidavit to the effect that the manufacturer/Bidder has not been blacklisted either by the Tender Inviting Authority or by any State Government or Central Government Organization.			

Technical specifications:- **Annexure-X**

1 Technical Specification Infant ALS Training no required (1)

It should be a three-month-old infant with exceptional realism for individual training and realistic airway anatomy with tongue, oropharynx, epiglottis, larynx, vocal cords and trachea

It should be a portable skill trainer for realistic infant resuscitation training.

It should allow practicing of advanced resuscitation skills, including airway management, professional rescuer CPR, vascular access, and 4-lead ECG monitoring.

It should allow practicing of bag-valve-mask ventilation, oral and nasal intubation, use of LMA (Laryngeal Mask Airway) and CPR.

- -Ventilation via bag-valve-mask
- - Endotracheal and nasotracheal intubation
- - Auscultation of breath sounds
- - Bilateral chest movement and stomach distention
- - Oral/Nasal Airways
- - Insertion of LMA (Laryngeal Mask Airway)

It should be supplied with a battery-powered ECG rhythm simulator designed to provide and train on following rhythms.

- 30 ECG Rhythms
- 17 Modified Rhythms including Torsade de Pointes
- 7 Pediatric Rhythms
- Special Features including paroxysmal, ignore shock and variable pulse strengths

It should have a feature of intraosseous needle insertion with aspiration of bone marrow and Sellick Maneuver teaching.

- It should allow practicing CPR with Bag Valve Mask

- Visible chest rise
- Chest compressions
- It should have CE/FDA quality Certificate

Should be supplied with 5 leg replacement pads, cleaning kit, airway lubricant, directions for use and a hard-plastic carry case and ECH rhythm generator (Heartsim 200).

2 Infant CPR Training Mannequin no required (5)

- The manikin should be realistic in appearance with modeled hair child half body torso.
- The manikin should have a soft nose which can be occluded using the nose pinch technique.
- The manikin should be able to facilitate a head tilt/chin lift technique to open the airway and have an articulating jaw to facilitate a modified jaw thrust maneuver.
- The manikin should have visible chest raise and wireless feedback during ventilation.
- The manikin should have a disposable lower airway with an integral one-way valve.
- The manikin should have a compression clicker which provides audible feedback.

Feedback

The BLS Torso should be able to connect with wireless tablets, smart phones and/or LCD wired feedback providing both student and instructor feedback.

Wireless Instructor Feedback –

- Software shall be available for free downloads as many time as required providing real-time wireless feedback on compressions and ventilations
- It shall be able to monitor and connect to get the live feedback from more than 5 individual BLS Torso mannequins simultaneously for group training.
- It shall help provide improvement tips based on CPR performance
- Compression depth, rate release, time and chest compression fraction
- Indication of too little, OK or excessive ventilation volumes

Wireless Student Feedback –

- Wireless Student Feedback Software shall also be available for free downloads as many time as required providing real-time wireless feedback on compressions and ventilations, students can view and monitor their own performance for the following points
    - Compression Depth and Rate
    - Incomplete Release
    - Ventilation volume

      It also provides with a summative feedback on the:

    - Overall CPR score
    - Improvement suggestions
    - CPR duration

- The tethered plug and play feedback device shall also be able to provide detailed live feedback on compression and ventilation along with assessment and Summative Feedback Mode.
- Manikin should be supplied with Training Mat, 2 Manikin Faces, 2 Airways, 6 manikin wipes, 01 Suitable BVM, LCD compressions and ventilations Feedback device and User Guide.

3) Technical Specification Head and Neck Trauma Training Mannequins No required (1)

1. It should be a durable, rugged training manikin with an intubation head for advanced airway management training.
2. It should have a realistic articulation allowing the humanlike manikin to assume various settings for extrication or rescue.
3. It should be educationally effective for training in airway management and adult extrication extremely durable, rugged and lifelike, made to withstand years of use.
4. It should be portable and mobile for use in field extrication, triage and transport/evacuation training.
5. It should have a flexible manikin platform with optional modules to accommodate a wide range of training including trauma, NBC, bleeding control and first aid
6. Should be able to show different clinical conditions of pupils (normal, constricted, blown)
7. Head can be tilted forward, backward or rotated 90 degrees to either side

8. Realistic life-size intubation trainer with a flexible tongue, arytenoid cartilage, epiglottis, vallecula, vocal cords, trachea, esophagus, and simulated lungs
9. Head has neck opening and replaceable skin for practicing cricothyrotomy techniques
10. Head has manually inflatable tongue to simulate an obstructed airway
11. Ability to perform following airway skill

- o Endotracheal intubation
- o Nasotracheal intubation
- o Digital intubation
- o Oropharyngeal airway insertion
- o Nasopharyngeal airway insertion
- o Bag Valve Mask Ventilation
- o Retrograde intubation
- o Light wand intubation
- o Laryngeal Mask Airway insertion
- o Combi tube insertion
- o Trans-Tracheal Jet Ventilation
- o Surgical cricothyrotomy
- o Needle cricothyrotomy
- o Suctioning techniques
- o Stomach auscultation to verify proper airway positioning

4) Phlebotomy trainer arm for IV Canulation and IV Drug Administration No required (3)

Articulating IV Arm with replaceable skin and infusible vein system to allow peripheral intravenous therapy and site care

o Venipuncture possible in the antecubital fossa and dorsum of the hand

o Accessible veins include median, basilic and cephalic

o Bilateral deltoid, bilateral thigh, ventrogluteal and gluteal subcutaneous and intramuscular injection sites

5) Pericardiocentesis and Chest Tube Drainage Mannequin No required (1)

- Simulator should be designed specifically to teach the skills needed to perform this difficult procedure correctly, as well as ongoing chest tube maintenance and the management of pre-hospital chest trauma. The simulator should have a pressurized tension pneumothorax site and a site for the surgical placement of a functional chest tube. Should allow control of Fluid color, volume, and viscosity by the instructor. The manikin may be used with any commercially available closed water seal drainage unit. Pericardiocentesis may be performed in the left subxiphoid space and in the left fifth intercoastal space. Accurate placement of the needle should allow for the withdrawal of fluid from the simulated pericardium. The manikin should be supplied with –
- List of Components
- A. Torso
- B. Fluid Reservoir Bag (3)
- C. Foot Pump (1)
- D. Surgical Skin Pads (5)
- E. Subcutaneous Surgical Pads (5)
- F. Nurse Training Pad (1)
- G. Pneumothorax Pads (5)
- H. Blood Powder (1 pack)
- I. Methyl Cellulose Thickener (1 pack)
- J. Simulated Pericardium Bulb (3)
- K. IV Bag (1)

6) *Tension Pneumothorax Decompression and Chest Tube Insertion* No required (1)

o Bilateral mid-clavicular sites for needle decompression

o Right side mid-axillary site for needle decompression

o Chest tube insertion left mid-axillary

Cardiac Related Skills

o Various Cardiac rhythm variations

o Manual chest compressions

o Programmable waiting rhythms

o Programmable scenario base algorithms for instructor control

o 3- or 4- lead ECG using standard clinical monitor/ defibrillator.

o Pacing with programmable capture

o Defibrillation (25 – 360j)

Sounds

o Heart sounds synchronized with programmable ECG

o Auscultated lung sounds synchronized with breathing rate

o Individual lung or bilateral sound selection

o Vocal sounds – computer-generated sounds, mixed with voice input via microphone

- **Heart Sounds**

o Synchronized with programmable ECG

o Friction Rub

o Diastolic Murmur

o Systolic Murmur

o Normal Heart Sounds – Apex

o Opening Snap Msec

o Pulmonary Stenosis

o Stills Murmur

o Normal Heart Sounds

- **Lung Sounds**

o Synchronized with breathing rate, 0 – 60 bpm

o Individual lung or bilateral sound selection

o Coarse Crackles

o Fine Crackles

o Normal Breath Sounds

o Pneumonia

o Stridor

o Wheeze

o Pleural Rub

o Rhonchi

7) <u>TECHNICAL SPECIFICATION FOR ULTRAOUND COLOR DOPPLER SYSTEM</u>No required (1)

S No	Specification
1.	The units should be latest state of the art digital color Doppler with broadband beam forming for Cardiac, Abdominal, Vascular and OB/GYN application. The models with following (or higher) specifications need to be quoted.
2.	The machines should be USA FDA and European CE certified and should be latest in Technology and

S No	Specification
	launched in 2016 or later. The manufacturing company should be ISO certified.
3.	They should have at least 750000 digital processing channels for high –resolution imaging.
4.	Imaging Modes : 2D, M- Mode, Color Flow Imaging, Pulse Doppler, Power Doppler, Continuous Wave Doppler and Directional Color Flow Mapping
6.	The Machines should have facility for simultaneous dual/ duplex/ triplex mode display
7.	Tissue harmonic imaging should be available on all the transducers.
9.	Machines should be capable of advanced real time compound imaging.
10.	Should have frame rate 1500 fps or more
11.	High dynamic range of 250 dB or more.
12.	The machines should have 256 Grey shades (8 bit) or more.
13.	One touch image optimization should be available in 2D mode with one button automatic adjustment of TGC and receiver gain and compression curve based on the range of detectable tissue signals.
14.	There should be one button automatic adjustment of Doppler PRF, baseline, dynamic range and gain in Doppler mode.
15.	Pulsed wave Doppler should be available on all imaging transducers with adjustable sample volume size, simultaneous or duplex mode of operation, simultaneous, 2D, Colour Doppler, pulsed Doppler, high PRF capability in all modes including duplex and triplex and automatic adjustment of scale and baseline. The system should have option to adjust the color flow mode for high or low flows in one touch.
16.	Machines should support broad band/ wide band high density probes spanning with frequency range from 1-20 MHz (+/- 1 MHZ). The system should support latest technology single crystal probe or Matrix Array Probes for better resolution and penetration.
17.	Automatic Doppler analysis should be available with automatic real time calculation of at least six of following user selectable parameters peak systolic velocity end diastolic velocity, mean diastolic velocity, volume flow, time average mean velocity, time average peak velocity, resistive index, pulsatility index, systolic/ diastolic ratio, acceleration/ deceleration times.
18.	The machine should have up to 500000 images storing facility and cine loop review facility with memory up to minimum of 25,000 frames
19.	The machines should have facility of direct storage and retrieval of B/W and color images (both frozen and cine loop) in the inbuilt hard disk drive. In built hard disk storage should be equal to or more than 1TB and Solid State Device in addition with capacity 120GB.

S No	Specification
20.	The machines should support four or more transducers with universal ports allowing any transducer to be connected to any port.

8) Technical Specifications for Bi-Phasic Defibrillator **No required (4)**

- The machine should have facility for ECG monitoring, Bi-Phasic Defibrillation, Automated External Defibrillator mode with facility to print ECG through in-built thermal printer, monitor SPO2 and measure NIBP.
- Should be extremely light-weight (less than 10 Kgs)
- Should have monitoring facility through color TFT display with screen size at least 7" or better.
- Should have both Synchronous and Asynchronous mode.
- The defibrillator should be biphasic technology based having energy selection of 2-300 Joules
- It must be capable of monitoring ECG through ECG cables, Multi-function electrodes and external paddles.
- The machine should be able to defibrillate Adult, Pediatric patients.
- The machine should have ECG wave form display on bright screen along with other vital numeric information.
- Should be able to monitor ECG
- Should have facility for auto testing when switched ON and during operations.
- The machine should be compact, portable with built in rechargeable battery.
- Should have AED facility
- Should be able to deliver a maximum of 300J in AED mode
- Should be able to provide metronome signal for CPR
- Should have a minimum 2 hours battery capacity for monitoring and 1 hour battery capacity for giving minimum of 100 shocks.
- Energy Selection on Front panel button and external paddle buttons
- Charge Control on Front panel button and external paddle buttons
- Charge Indicator Charging tone, end of charge tone, LED in charge
- Shock Control Buttons on the external paddles
- Should have external defibrillator adult and paediatric paddles.
- Charging time - Less than 8 seconds at 300 J with a new and fully charged battery
- The machine should have user selectable alarm settings
- The machine should store at least 24 events for viewing or recording.

ECG:

- Should be able to monitor ECG through 5-Lead Patient Cable
- Should be able to display Lead I,II,III, aVR, aVL, aVF and one of the chest leads
- Should be able to monitor Heart Rate from 15-300 bpm

Pacemaker

- External pacemaker with Fixed or Demand modes
- Should have pacing rate 30 to 180ppm
- Should have refractory period 0f 340ms between 30 and 80ppm

SPO2

- The SPO2 should be Masimo technology only with following features:
  SPO2 range:1-100%
  Accuracy: ±3%
  Pulse Rate: 30-240bpm with resolution of 1 bpm
  Perfusion Index indication

- Should display the numeric value and plethysmograph as well

NIBP

- Should be SunTech NIBP
- Should follow the automatic oscillometric method for measurement of Nibp
- Should have cuffs for adult and pediatric patients
- Should have a measuring range of 0-300 mmHg
- Should have auto, manual and stat modes of operation

General Specifications

- The machine should work on mains as well as rechargeable battery.
- The device should be manufactured from an ISO certified organization
- Machine should be supplied with standard accessories
- System should be easy to operate with facility to give print command, charge and energy selection on both external paddles and on the main unit.

Standard Accessories:

1. 5-lead ECG Cable -01 no.
2. Re-usable Adult & Pediatric External Paddles -01 set each
3. Masimo Adult SPO2 with Extension cable-01 set
4. Adult and Peadiatric NIBP Cuff - 01 each
5. Disposable AED Pads-05 nos.

9) Technical Specification of Head Trauma Manikin **No required (1)**

1. Mounted to a base but can be easily transferred to adult manikins for use in full-body trauma scenarios.

2. Recognition and assessment of the following:

    1) Palpable fractures

    2) Open depressed skull fracture

    3) Le Fort I & III

    4) Nasal fracture

    5) Mandibular fracture (left)

    6) Fracture of C-6 vertebra

    7) Unequal pupils

    8) Haemotympanum

3. Demonstration is must.

4. Should be USFDA/ European CE approved

5. Warranty of Two years followed by CMC of 5 years.

6. Rate of accessories to be quoted separately.

7. The unit shall be capable of operating continuously in ambient temperature of 10 degree

Celsius to 50 degree Celsius and relative humidity of 15% to 90%.

8. After sales service should be available locally

10) Technical Specifications of Syringe Infusion Pump

1. Description of Function

1.1 The Syringe Infusion Pump provides uniform flow of fluid by Precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of I.V. medication in critical medical care.

2. Operational Requirements

2.1 The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system.

2.2 Demonstration of the equipment is a must.

3. Technical Specifications

3.1 Flow rate programmable from 0.1to at least 999 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option.

3.2 Bolus rate should be programmable from 0.1.to at least 999 ml/hr or more with infused volume display. Reminder audio after every 0.5 ml delivered bolus.

3.3 Display of Drug Name with a provision of memorizing 10~15 names by the operator with drug calculations

3.4 Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.

3.5 Occlusion pressure trigger three levels

3.6 Should be European CE/USFDA APPROVED/CERTIFIED

3.7 Should work with standard disposable syringes of10, 20, 50/60 ml sizes of different makes.

3.8 Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.

3.9 Anti bolus system to reduce pressure on sudden release of occlusion

3.10 Should have comprehensive alarm package including: Occlusion limit exceed alarm, Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre alarm and alarm, AC power failure, Drive disengaged.

3.10 Power input to be 220-240 VAC, 50 Hz. Rechargeable Battery having at least 4~6 hour backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.

4. System should include:

4.1 Syringe Infusion Pump – 01

5. Environmental factors

5.1 Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

5.2 The unit shall be capable of operating continuously in ambient Temperature of 10 -40deg C and relative humidity of 15-90%

5.3 The unit shall be capable of being stored continuously in ambient temperature of 0 degree Celsius to 50 degree Celsius and relative humidity of 15-90%

5.5 Demonstration is a must.

5.6 ESSENTIAL TO SEPARATELY MENTION THE PRICE OF EACH CONSUMABLE

5.7 Demonstration is a must.

5.8 Should be USFDA/ European CE approved

5.9 Warranty of Two years followed by CMC of 5 years.

5.10 Electrical safety norms: should be compatible with Indian electricity supply.

5.11 Rate of accessories to be quoted separately.

5.12 Shall meet IEC – 60601 – 1 -2: 2001 (or equivalent BIS) general requirements of safety for electromagnetic compatibility.

5.13 The unit shall be capable of operating continuously in ambient temperature of 10 degree Celsius to 50 degree Celsius and relative humidity of 15% to 90%.

11) <u>Technical Specifications of Phlebotomy Trainer Arm / Peripheral IV line trainer</u> No required (3)

1. Adultarmwithreplaceableskinandveinsdesignedforperipheralintravenoustherapy.
2. Venipunctureshouldbepossibleintheantecubitalfossa,dorsumofthehandandforearm
3. Palpableveinsshouldenablesiteselectionandpreparation
4. InfusibleveinsallowperipheraltherapywithIVbolusorpushinjectionmethod
5. Replaceableskinandveinsshouldensurelongevityofmodel
6. *Accessories:*ReplacementSkin&VeinSet,SimulatedBlood,BloodBagwithTubingandConnector,Clamp andHook,CarryCaseandDirectionsforUse.

7. ESSENTIAL TO SEPARATELY MENTION THE PRICE OF EACHCONSUMABLE
8. Demonstrationisamust.
9. ShouldbeUSFDA/EuropeanCEapproved
10. WarrantyofTwoyearsfollowedbyCMCof5years.
11. Rateofaccessoriestobequotedseparately.
12. Theunitshallbecapableofoperatingcontinuouslyinambienttemperatureof 10degreeCelsiusto50 degree Celsiusandrelativehumidityof15%to90%.

12) **Technical specifications of Paediatric Phlebotomy Trainer Arm/ Peripheral IV linetrainer** **No required (2)**

1 The Pediatric Multi-Venous IV Training Arm Kit should be a complete IV therapy training kitwhich includes a full-size right arm with replaceable skin and veins designed for peripheralintravenous therapy.

2 The arm should be/have

1) Anatomically accurate full pediatric arm model

2) Multiple injection sites for IV insertion

3) Dorsal veins of hand (at least 3) including Median vein, Basilic vein, Cephalic vein

4) Realism of the human pediatric arm in appearance, feel and resistance at puncture sites

5) Venipuncture possible in the antecubital fossa and dorsum of the hand

6) Palpable veins which enable site selection and preparation

7) Infusible veins allowing peripheral therapy with IV bolus or push by injection method

8) Replaceable skin and venous system which should ensure longevity of model The modelshould include following accessories:

9) Pediatric Multi-Venous IV Arm with one extra Replacement Skin, and

Multi-VeinSystem each

10) Blood concentrate three packets

11) Blood Bag with Tubing and Connector Clamp & Hook

12) 10 Syringes Carry Case

13) Mannequin Lubricant

13. Adult Intraosseous Trainer **No required (1)**

1. Designed for training in adult intraosseous infusion techniques.

2. Provision for adult size Intraosseous needle insertion.

3 Should have intraosseus training set comprising of Power driver (1), Needles withaccessories (adult size) (5) and Adult limb with at least 5 bones (1)

4. Provision for Simulated tibia and anatomical landmarks at the tibial tuberosity andmedial malleolus.

5. Provision for Fluid may be infused for realistic flashback.

6. Provision for Drain in heel connecting to reservoir bag.

7. essential to separately mention the price of eachconsumable

8 Demonstration is a must.

9. Should be USFDA/ European CE approved

10. Warranty of 5 years followed by CMC of 5 years.

11. Rate of accessories to be quoted separately.

12. The unit shall be capable of operating continuously in ambient temperature of 10degree Celsius to 50 degree Celsius and relative humidity of 15% to 90%.

13. After sales service should be available locally.

14) Technical Specifications of Infant Intraosseous Trainer **No required (1)**

1. Designed for training in infant intraosseous infusion techniques.
2. Provision for Intraosseous needle insertion.
3. Provision for Simulated tibia and anatomical landmarks at the tibial tuberosity and medial malleolus.
4. Provision for Fluid may be infused for realistic flashback.
5. Provision for Drain in heel connecting to reservoir bag.
6. ESSENTIAL TO SEPARATELY MENTION THE PRICE OF EACH CONSUMABLE
7. Demonstration is a must.
8. Should be USFDA/ European CE approved
9. Warranty of Two years followed by CMC of 5 years.
10. Rate of accessories to be quoted separately.
11. The unit shall be capable of operating continuously in ambient temperature of 10 degree

    Celsius to 50 degree Celsius and relative humidity of 15% to 90%.
12. After sales service should be available locally.

15) Technical Specification of Central IV Manikin with Internal Jugular, Subclavian and Femoral access **No required (1)**

1. It should enable the practice of IV access to the:Internal jugular vein, Subclavian vein and Femoral vein.
2. There should be palpable arterial pulsation.
3. Long catheters may be placed into the training model.
4. Realistic tissue simulation should be provided.
5. Both Neck Pad and Femoral Pad are to be replaceable without use of any tools.
6. The simulated veins inside the pads are to provide a natural resistance during puncture and a natural flashback of blood.
7. Both veins and skin are to self seal so that the site of puncture is not visible to the next student.
8. A carry case for easy transportation and storage is to be included.
9. Four neck pads and four femoral pads to be provided with each manikin.
10. List of all consumables required for full functioning of the trainer along with their costs are to be provided.
11. Warranty of 2 years followed by CMC for 5 years.
12. The unit shall be capable of operating continuously in ambient temperature of 10 -50 deg C and relative humidity of 15-90%.
13. Shall meet IEC-60601-1-2:2001 (or equivalent BIS) general requirements of safety for electromagnetic compatibility.
14. Electrical safety norms: should be compatible with Indian electricity supply.
15. Demonstration of equipment is must.
16. After sales service should be available locally.

16 Technical Specifications of Flexible Spine Model No required (1)

1. Size: complete Spine model, standing Height 74.00cm approx
2. Fully flexible mounting throughout spine. Flexibly mounted for effective demonstration on a stand
3. Full pelvis and occipital plate
4. Spinal nerve exits
5. Cervical vertebral artery
6. Durable and of good quality
7. Demonstration is must

17 Technical Specifications of Cervical Spine Anatomic Model No required (1)

1. This Model features a detailed occipital cervical vertebral column, which is mounted on a sturdy white base.

2. Model weighs .55 lbs. Model measures 6" H X 3" W X 4" L (without stand).

3. Model measures 8" H X 4" W X 5" L (including stand).

18 Technical Specifications of AED Trainer with simulator No required (4)

1. Manikin should be with realistic anatomical landmarks and lightweight adult CPR/AED trainer with all the essential features for adult CPR/AED learning.

2. Realistic feel when performing chest compressions with Vertical movement in the manikin's chest.

3. It should give feedback on chest compressions

4. Should allow for ventilation with mouth to mouth with facility of nose pinching, mouth to mask and pocket mask.

5. Natural obstruction of the airway should allows students to learn the important technique of opening the airway.

6. Head tilt/chin lift and jaw thrust allow students to correctly practice all maneuvers necessary when resuscitating a real victim.

7. Realistic airway functions- that the airway remains obstructed without proper head tilt/chin lift or jaw thrust.

8. Chest rise should be seen with correct ventilations

9. It should give feedback on correct placement of electrodes

10. Anatomically correct landmarks and sternal notch should allow the student to practice identification of all anatomical landmarks relevant to adult CPR.

11. Consumables: 2 sets of pads each for adult and pediatric to be provided with the equipment.

12 There should be rhythm generator attached with it (All Rhythms)

13. Demonstration is a must

13. The list and price for the consumables to be quoted separately and price to remain fixed for 3 years.

14. Should be USFDA/ European CE approved

15. Warranty of Two years followed by CMC of 5 years.

16. Electrical safety norms: should be compatible with Indian electricity supply.

17. Rate of accessories to be quoted separately.

18. Shall meet IEC – 60601 – 1 -2: 2001 (or equivalent BIS) general requirements of safety for electromagnetic compatibility.

19. The unit shall be capable of operating continuously in ambient temperature of 10 degree Celsius to 50 degree Celsius and relative humidity of 15% to 90%.

20. After sales service should be available locally.

19) **Technical Specifications of Monitor Defibrillator capable of defibrillation/synchronized cardioversion** **No required** **(4)**

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- 1. Defibrillator should use low energy biphasic waveform for delivering shock energy &
- must have energy selection from 1-200J.
- 2. Can be applicable for use on mannequins also.
- 3. It should have AED as well as manual mode.
- 4. Should have facility to do ECG monitoring, defibrillation and synchronizedcardioversion.
- 5. Must be capable of monitoring ECG through ECG cables, multiple function
- electrodes/pads & external paddles.
- 6. Unit should have adult & in-built paediatric external paddles & should be able to
- defibrillate both adult & paediatric patients.
- 7. Should work on mains as well as rechargeable battery.
- 8. Machine should be compact & portable with in built rechargeable battery for at least 2
- hour of continuous ECG monitoring.
- 9. It should have battery charge indicator.
- 10. Should have facility for self test.
- 11. It should have disarm facility.
- 12. Defibrillator should have pulse - oximetry and NIBP as integral part of unit.
- 13. Should have user selectable alarm settings.
- 14. Should be supplied with following accessories.:
- 1) Battery: 1no.
- 2) 5 Lead ECG cable – 2 no.
- 3) External defibrillator paddles (ped & adult)- 1no.
- 4) Multi-function defibrillator & monitoring pads/gel sheets – 5 per unit(adult and
- paeds)
- 5) SPO2 probe- finger probe one for adult per unit
- 6) NIBP cuff for Adult - one per unit
- 15. Demonstration is a must.
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- 16. Should be USFDA/ European CE approved
- 17. Warranty of 5 years followed by CMC of 5 years.
- 18. Electrical safety norms: should be compatible with Indian electricity supply.
- 19. Rate of accessories to be quoted separately.

- 20. Shall meet IEC – 60601 – 1 -2: 2001 (or equivalent BIS) general requirements of
- safety for electromagnetic compatibility.
- 21. The unit shall be capable of operating continuously in ambient temperature of 10
- degree Celsius to 50 degree Celsius and relative humidity of 15% to 90%.
- 22. After sales service should be available locally.
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- **20) Airway Foreign body Trainer No required (4)**
- 1. Mannequin should be life like adult torso with realistic anatomy and response using
- simulated boluses to provide instructors with a tool for instructing and practicing this
- lifesaving technique.
- 2. The mannequin should be Cast from a human specimen and Heimlich Abdominal Thrust
- Maneuver training with simulated food boluses should be possible.
- 3. The mannequin should be supplied with the following items –
- a) 1 Adult Male Manikin Torso
- b) 4 Simulated Boluses
- c) 1 Bottle of Talcum Powder
- d) 1 Tank Top
- e) 1 Carry Case
- f) Directions for Use
- 4 Warranty of 5 years followed by CMC of 5 years.
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21) ADULT CPR TRAINING (HALF TORSO) MANNEQUIN WITH CARDIACFEEDBACK No required -4

1) It should have all anatomical landmarks relevant to adult CPR.
2) Should be able to perform mouth to mouth, mouth to mask and bag mask ventilation
3) Adult CPR mannequin should have realistic features to demonstrate opening of airway, head tilt / chin lift and jaw thrust techniques.
4) Should be able to mimic airway obstruction which can be relieved by HT-CL and jaw thrust.
5) Adult CPR mannequin should have removable, reusable faces.
6) Adult CPR mannequin should have a feedback device which tells correct compression depth, rate, incomplete release and adequate ventilation.

7) It should be capable of generating carotid pulse.
8) Chest rise should be seen with correct ventilations
9) It should provide visual inspection of lung expansion with chest rise.
10) Should be compatible with most of the AED trainers use.
11) It should have realistic chest compression resistance which allows to perform proper chest compressions in a real-life situation.
12) Additional Accessories: reusable mannequin faces , Carry case and clothing
13) The price and list of accessories to be quoted separately
14) Should be European CE approved/ USFDA approved
15) Electrical safety norms: should be compatible with Indian electricity supply
16) Warranty of 5 years followed by CMC for 5 years
17) The unit shall be capable of operating continuously in ambient temperature of 10 -50 deg C and relative humidity of 15-90% 20.
18) Shall meet IEC-60601-1-2:2001 (or equivalent BIS) general requirements of safety for electromagnetic compatibility
19) Demonstration of equipment is must
20) After sales service should be available locally.

22 TechnicalSpecificationsofECG Simulator with rhythm generator (DART) No required -4

1) A battery powered ECG rhythm simulator which provides simulation of basic, modified and paediatric rhythmswiththeapplicablepulserateandstrength.
2) Should have a total of 30 cardiac rhythms, 17 modified rhythms includingTorsade de Pointes and 7paediatricrhythms.
3) A hand held unit with the function key incorporated on the top panel. Every key (with the exception ofthe Paroxysmal and Change rhythm keys) should have and associated LED to indicate the status of itfunction.
4) Should be able to be used preferably with ALS adult and ALS Baby Trainer using linkcable.
5) Simulator must also be able to be used as a stand-alone unit to provide ECG signals for display on anystandard3-leadECGMonitor.
6) TheECGrhythmsshould beselectedfromdedicatedcontrolsonthekeyboard.
7) Shouldworkonmains power supplyaswellasrechargeablebattery.
8) MusthaveBattery LowIndication.
9) EnvironmentalData-Temperature10°Cto40°C,Humidity15to90%RH.

10) Power Supplies- Power supply 9V from internal batteries -Batteries AA size (R6)1.5V -Number ofbatteries6-Capacity2500mAh-BatterylifetimeApprox.12.5hours
11) PhysicalDimensions-Size233x132x63mmapproximately
12) Weightincl.batteries0.5kgapproximately
13) Accessory-carry case
14) WarrantyofS yearsfollowedbyCMCof5years.
15) Local service should be available.
16) Demonstration is a must

ECG Simulator with rhythm generator (DART)

- 1) A battery powered ECG rhythm simulator which provides simulation of basic, modified
- and paediatric rhythms with the applicable pulse rate and strength.
- 2) Should have a total of 30 cardiac rhythms, 17 modified rhythms including Torsade de
- Pointes and 7 paediatric rhythms.
- 3) A hand held unit with the function key incorporated on the top panel. Every key (with
- the exception of the Paroxysmal and Change rhythm keys) should have and associated
- LED to indicate the status of it function.
- 4) Should be able to be used preferably with ALS adult and ALS Baby Trainer using link
- cable.
- 5) Simulator must also be able to be used as a stand-alone unit to provide ECG signals for
- display on any standard 3-lead ECG Monitor.
- 6) The ECG rhythms should be selected from dedicated controls on the keyboard.
- 7) Should work on mains power supply as well as rechargeable battery.
- 8) Must have Battery Low Indication.
- 9) Environmental Data-Temperature 10° C to 40° C, Humidity 15 to 90% RH.
- 10) Power Supplies- Power supply 9V from internal batteries - Batteries AA size (R6) 1.5V

- - Number of batteries 6 - Capacity 2500 mAh- Battery life time Approx. 12.5 hours
- 11) Physical Dimensions - Size 233 x 132 x 63 mm approximately
- 12) Weight incl. batteries 0.5 kg approximately
- 13) Accessory - carry case
- 14) Warranty of 5 years followed by CMC of 5 years.
- 15) Local service should be available.
- 16) Demonstration is a must