GOVERNMENT OF ANDHRA PRADESH

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Web Site : https://tender.apeprocurement.gov.in

TENDER DOCUMENT

FOR

Procurement and supply of Medical Equipment to 5 New Medical Colleges/Hospitals in Andhra Pradesh with a period of Two Years Rate Contract (e- Procurement)

Tender Notice No.	**:**	**11.1C/APMSIDC/2022-23, Dt: 20.09.2022.**
Name of the Work	**:**	**Procurement and supply of Medical Equipment to 5 New Medical Colleges/ Hospitals in Andhra Pradesh with a period of Two Years Rate Contract**
Name of the Agency and Address	**:**	**……** **……** **……**

Implementing Agency :

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION

(Formerly APHMHIDC)

(AN ENTERPRISE OF GOVT. OF A.P.)

2nd Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503.

INDEX

INTRODUCTION

1.1. The Andhra Pradesh Medical Services & Infrastructure Development Corporation – APMSIDC (formerly APHMHIDC) (Tender Inviting Authority) is a fully owned Government of Andhra Pradesh for providing services to the various health care institutions under the Department of Family Welfare and Health. One of the key objectives of the APMSIDC is to act as the central procurement agency for all essential drugs and equipments for all health care institutions (hereinafter referred to as user institutions) under the department. The corporation has also been entrusted with the setting up and running of all kinds of modern Medical and Paramedical or medical based ancillary facilities such as hospitals, pathological labs, diagnostic centres, x-ray/scanning facilities.

1.2. Over the last decades, several equipments have been procured and installed in the various health care institutions under the government under different schemes. One of the major problems encountered is the maintenance of the equipments. Site preparation, timely replacement of consumables, calibration of sensitive equipments, up gradation of technology, training to the doctors and paramedical staff- all poses problems. The corporation has been formed by the government to fill in these grey areas and to act as total service providers to the all the government health care institutions. Of course, this mammoth task could be achieved only with the active involvement and support of the manufacturers/dealers of the equipments.

1.3. In this tender, the lowest price is the sole criteria for selecting the equipment/supplier. The two-bid system, which is followed, has been designed to eliminate those equipments which do not match the technical specifications, or not having the proven technology and to eliminate firms that do not have the financial or technical capability to supply, install and maintain the equipments. i.e., to provide after sales support for a period of minimum 5 years from the date of installation and to ensure 98 % uptime in performance/operation of the equipment.

1.4. The payment to the successful tenders will be settled after obtaining a 'three month performance certificate' from the head of the user institution - three month period is a period of trail run- during which the performance of the equipments will be keenly observed. At the same time, it may be noted that the Corporation is not the agency finalizing the requirements of equipments and their technical specifications. These parameters are finalized by the user institutions and funding agencies and forwarded to the corporation for procurement. On our side, we ensure that the technical

specifications are not biased towards a particular equipment/firm, through consultations during the pre-tender meetings with the prospective tenderers. Amendments in the terms and conditions of the tender documents may be resorted to on the basis of expert advice to see that more than one firm qualifies for the final round. Technology specific specifications/conditions and entertaining direct purchase will be undertaken, if and only if, the user agency certifies the equipment required is of proprietary nature. Since the equipments procured are dealing with precious human life in government hospitals, depended by the poor and downtrodden of the society, it is our endeavor to ensure that most modern, but proven and durable equipments are procured and supplied. The tender documents are prepared after assessing the market to meet such objectives.

1.5. Every paisa spend by the corporation is public money and hence accountable. Therefore, after sales service and up-time guarantee on the performance of the equipment purchased by the Corporation have to be given paramount importance. Corporation will be dealing with defaulters in these fronts with a firm hand, which may lead to black listing and recovery of damages. We request our valuable suppliers to avoid such unpleasant situations.

1.6. It is also essential while dealing with public money that utmost transparency has to be maintained in the procurements of the corporation. All decisions will be published from time to time on our website www.msidc.ap.nic.in. The corporation will not wait for the mandatory 30 days period to provide any information under Right to Information Act and will provide the information within the minimum possible time. The Corporation will uphold the fundamental "right to be heard' enshrined under the Constitution of India and will take harsh decisions only after providing opportunity for hearing/submission of facts. Tenderers could prefer appeal to the government against all decisions of the corporation.

SECTION - I: INVITATION FOR BIDS (IFB)

GOVERNMENT OF ANDHRA PRADESH

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

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Tender Notice No.11.1C/APMSIDC/2022-23 Dt: 20.09.2022.

1. Bids are invited on the e-procurement platform for certain medical equipment as described in the Section V- Schedule of Requirements from the eligible manufacturers/Authorized Distributors. The details of bidding conditions and other terms can be downloaded from the electronic procurement platform of Government of Andhra Pradesh i.e. https://tender.apeprocurement.gov.in.

2. Bidders would be required to register on the e-Procurement market place "www.eprocurement.gov.in" and submit their bids online. On registration with the e-Procurement market place they will be provided with a user id and password by the system through which they can submit their bids online.

3. The bidders need to scan and upload the required documents as per the Check list given in **Annexure XIV**. Such uploaded documents pertaining to technical bid need to be attached to the tender while submitting the bids on line. The attested copies of all these uploaded documents of technical bid, signed undertaking of tenderer should be submitted off line to Managing Director, APMSIDC, Mangalagiri, Guntur on or before the next day of the last date of submission of bids. The Corporation will consider only the bids submitted through on-line over the copies of the paper based bids.

4. a) The participating bidder/s will have to pay tender processing fee (non-refundable) for the amounts specified in the Schedule of Requirements (Section –V), in the form of Demand Draft drawn in favour of Managing Director, APMSIDC, Guntur.

   b) Further the bidder/s shall furnish, as part of it bid, the Bid security for the amounts specified in the Schedule of Requirements (Section –V) to be paid in the form of crossed Demand Draft drawn in favour of Managing Director, APMSIDC, Guntur along with bids. The bidders should note that the local MSME units are exempted from payment of E.M.D, subject to the production of necessary documentation to that extent by them.

   c) Further all the participating bidders have to electronically pay a non-refundable transaction fee to M/s. APTS, the service provider through "Payment Gateway Service on E-Procurement platform", as per the Government Orders placed on the e-procurement website.

   d) APMSIDC will not accept the tenders from blacklisted companies or undependable Suppliers whose past performance with APMSIDC was found poor due to delayed and/or erratic supplies and those with frequent product

failures, and also against whom there have been adverse reports of **Sub-Standard Quality / Poor Service of** Equipment supplies, as defined in the other parts of the Bidding document.

e) "Complaint/s: Any complaints/representation regarding tender will be entertained only after depositing of Rs. 25,000/- in form of Demand Draft in the name of Managing director, APMSIDC, Mangalagiri, Guntur. Subsequently necessary action will be taken by the Managing Director and decision of Managing Director will be binding upon the complainant. If the complaint turns out to the false or invalid the amount will be forfeited. The amount shall be refunded if after scrutiny the complaint is found to be true. No further complaint/representation from the same complainant for the same tender will be entertained. If the complaint or allegation made is found to be false or baseless and without any valid point, the tender inviting authority in its discretion, can prevent / blacklist / declare ineligible, such bidder from participating in its procurement process, either indefinitely or for a stated period of time."

5. **Period of Delivery: 60** Days from the date of receipt of the Notification of Award (Purchase Order) of Contract. The delivery terms include the total time given for supply, installation, testing and training of staff.

Time Limits prescribed

Sl. No	Activity	Time Limit
5.1.1.	Installation & Delivery period	60 days from date of issuance of Supply Order
5.1.2.	Comprehensive warranty period	as specified at section V schedule of requirements against each equipment.
5.1.3.	Frequency of visits to all User Institution concerned during Warranty	One visit every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs/break down calls.
5.1.4	Submission of Performance Security and entering into contract	15 days from the date of issuance of Supply Order
5.1.5	Payment Installments of Price of equipments and ratio	Three Installments and in the ratio 60:30:10
5.1.6	Time for making payments by Tender Inviting Authority	Within 60 days from the date of submission of proper documents
5.1.7.	Maximum time to attend any Repair call	*Within 48 hours*
5.1.8	Uptime in a year	*95%*

6. Bidders eligibility and qualifications: Defined at Clause 13 of Instructions to Bidders (Section II) and Qualification Criteria (Section-VI)

7. Details of Tender Process:

1.	Downloading of documents	from 15-10-2022 to 29-10-2022 up to 02.59 PM
2.	Queries up to	19-10-2022 @ 11.00 A.M
3.	Due date for Receipt of tenders	29-10-2022 up to 03.00 P.M
4.	Time and date of opening of technical Bids	29-10-2022 @ 03.01 PM
5.	Time and date of opening of financial bids	29-10-2022 @ 5.00 PM

Note: The dates stipulated above are firm and under no circumstances they will be relaxed unless otherwise extended by an official notification or happen to be Public Holidays. For the assistance in the online submission issues, the bidder may contact the help desk of M/s Vupadhi Techno Services Pvt. Ltd. (e-procurement) at their e-mail address: eprocsupport@vupadhi.com or on the mobile nos. **8645-246370 / 71 / 72 / 73 / 74**

8. Procedure for Bid Submission

a. The Tenderers/Bidders who are desirous of participating in e-procurement shall submit their Technical bids, price bids etc., in the Standard formats prescribed in the Tender documents, displayed at e-procurement market place.

b. The bidders shall sign on all the statements, documents, certificates, uploaded by them, owning responsibility for their correctness / authenticity.

c. The hard copies of all the uploaded Technical / Price bid, to be attested by a Gazetted Officer or properly notarized.

d. The Corporation shall not hold any risk on account of postal delay. Similarly, if any of the certificates, documents, etc., furnished by the tenderer are found to be false / fabricated / bogus, the bidder will be disqualified, blacklisted, action will be initiated as deemed fit and the EMD will be forfeited.

e. The Corporation will not hold any risk and responsibility for the loss in transit during uploading of the scanned document, for the invisibility of the scanned document online, and any other problem(s) encountered by the Tenderers while submitting his bids online.

9. Important Instructions to the Bidders:

9.1 Quality of Supplied Equipment throughout its life cycle period, timely supplies and prompt maintenance support during the warranty and CMC period without default are being given paramount importance by the Corporation. The Corporation will be dealing with the defaulters with firm hand, which may lead to blacklisting for a specified period in addition to levying penalties.

9.2 In case of complaints on the quality and poor maintenance support of the products supplied, bills will be withheld till receipt of Satisfactory reports. Further:

- If one item of any Supplier is found of 'Sub-Standard Quality' during the Contract period, then that particular item will be blacklisted for a period of (3) three years immediately succeeding the Contract year
- If two items of any Supplier are found of 'Sub-standard Quality' during the Contract period, then Supplier will be blacklisted for a period of (3) three years immediately succeeding the Contract year

9.3 The Corporation will blacklist the Supplier, who is declared as 'Undependable for two (2) items or in two (2) instances during the Contract period, for a period of one year immediately succeeding the Contract year apart from taking other penal actions under the Contract.

9.4 The decision of the Managing Director, APMSIDC, or any officer authorized by him in respect of the quality of the supplied Equipment and other goods etc., shall be final and binding.

9.5 No claims shall be allowed against the APMSIDC in respect of interest on Earnest Money Deposit or on Security Deposit or late payments.

9.6 Savings Clause: No suit, prosecution or any legal proceedings shall lie against APMSIDC or any person for anything, which is done in good faith or intended to be done in pursuance of bid.

SECTION - II : INSTRUCTIONS TO BIDDERS

TABLE OF CLAUSES

A. Introduction

1. Source of funds:

The funds are made available by the State Government of Andhra Pradesh, to the Managing Director, APMSIDC Scheme wise towards the procurement processed under this tender notification.

2**. Eligible Bidder**

2.1 This invitation for Bids is open to all Manufacturers or their authorized distributors, who fulfill the eligibility criteria mentioned in the Clause 13 and who meet qualification criteria mentioned in the Section VI.

3 Eligible Goods and services

3.1 All goods and ancillary services to be supplied under the contract shall have their origin in eligible source country. The goods shall meet the requirements as specified in the Technical Specifications. And meet the eligibility criteria as given at Clause 14 of ITB.

3.2. For purpose of this clause, "origin" means the place where the goods are mined, grown, or produced or from which the ancillary services are supplied. Goods are produced, through manufacturing processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

3.3 The origin of goods and services is distinct from the nationality of the Bidder.

4. Cost of bidding.

4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Managing Director, APMSIDC, Mangalagiri, Guntur here in after referred to as " the purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

5. Content of Bidding Documents

5.1 In addition to the Invitation for Bids, the bidding documents include:

(a) Instruction to Bidders;
(b) General conditions of contract;
(c) Special conditions of contract;
(d) Schedule of requirements;
(e) Technical specifications;
(f) Bid form and price schedules;
(g) Bid security form;
(h) Performance security form.
(i) Firm Registration/manufacturer license
(j) Performance statement form.
(k) Declaration Form
(l) Check List of the documents uploaded on e-platform as part of the bid

5.2 The bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidders risk and may result in rejection of its bid.

6. Clarification of bidding documents

6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the purchaser in writing at the purchasers mailing address indicated in the Invitation for bids. The purchaser will respond in writing to any request for clarification of the Bidding documents if the same is received in the first week of the tender notice prescribed by the purchaser. Written copies of the purchaser's response (including an explanation of the query but without identifying the source or inquiry) will be sent to all prospective bidders which have received the bidding documents.

7. Amendment of bidding documents

7.1 At any time prior to the deadline for submission of bids, the purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the bidding documents by amendment.

7.2 The amendment will be notified online.

7.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the purchaser may, at its discretion, extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid.

8.1. The Bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the bid, the English translation shall govern.

9. Documents comprising the bid

9.1 The bid prepared by the bidder shall comprise the following components:

1. Technical Bid:

(a) A Bid form completed in accordance with clause 10

(b) Documentary evidence established in accordance with clause 13 that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.

(c) Documentary evidence established in accordance with clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services confirm to the Bidding Documents; and

(d) Bid security furnished in accordance with clause 15.

2. The Price Bid completed in accordance with clauses 11 and 12.

10. Bid Form

10.1 The Bidder shall complete the bid form provided in the Bidding documents, indicating for the goods to be supplied, brief description of the goods, their country of origin and quantity and other declaration statements.

11. Bid prices.

11.1 The Bidder shall indicate on the appropriate price schedule, made available in the e-procurement platform and a model format is also attached to these documents, the unit prices and total bid prices of the goods it proposes to supply under the contract, for each item separately. The unit prices shall be rounded off to nearest Indian rupee. The bidder may quote one or more items for which copy of necessary documents, wherever necessary have to be produced along with the bid.

11.2. Prices indicated on the price schedule shall be entered separately in the following manner:

(i) The price of the goods, quoted ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, or delivered, as applicable, including all duties and sales

and other taxes including transportation, installation, commissioning at site and all incidental charges associated with the contract.

(ii) Cost of 4 years Comprehensive Maintenance Contract as defined in the Clause 18 of the Special Conditions of the Contract.

11.3 The Bidder's separation of the price components in accordance with para 11.2 above will be solely for the purpose of facilitating the comparison of bids by the purchaser and will not in any way limit the purchaser's right to contract on any of the terms offered.

11.4 Fixed Price. Price quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation except for any changes made by the Statute in respect of local taxes. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to clause 24.

12. Bid currencies.

12.1 Prices shall be quoted in Indian Rupees; Bids quoted other than Indian currency will be rejected.

13. Documents Establishing Bidder's Eligibility and Qualifications.

13.1 Pursuant to clause 9, the bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted

13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the purchaser's satisfaction that the bidder, at the time of submission of the bid, is an eligible bidder as defined under clause 2.

13.3 The documentary evidence of the Bidders qualifications to perform the contract if its bid is accepted, shall establish to the purchaser satisfaction;

(a) That, in the case of bidder offering to supply goods under the contract which the bidder is manufacture produce, Firm Registration/manufacturer license that the bidder is manufacturer & also Memorandum of Articles. or otherwise produce, the bidder has been duly authorized (as per authorization form in section XII a).

(b) that, in the case of bidder offering to supply goods under the contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorized (as per authorization form in section XII b) by the goods manufacturer or producer to supply the goods in India.

(i) the legal status, place of registration and principle place of business of the company or firm or partnership etc.

(ii) Details of experience and past performance of the bidder on specified item offered in the bid within the past three years and

details of current contracts in hand and other commitments (suggested proforma given in section XI);

(iii) Copy of the GST Certificate and Details of IT Returns- PAN & TIN copies

(iv) The details in compliance to the Qualification Criteria (Section VI).

13.4 The check list for the details of documents to be submitted is given at Annexure XIV

14. Documents Establishing Goods Eligibility and conformity to bidding documents.

14.1 Pursuant to clause 9 the bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding document of all goods and services which the bidder proposes to supply under the contract.

14.2 The documentary evidence of the goods and services eligibility shall consist and of statement in the price schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.

14.3 The documentary evidence of the goods and services conformity to the bidding documents may be in the form of literature, drawings and data, and shall furnish:

(a) A detailed description of the goods essential technical and performance characteristics of the goods.

(b) A clause by clause commentary on the purchaser technical specifications demonstrating the goods and services substantial responsiveness to those specifications or statement of deviations and exceptions of the Technical specifications.

14.4 For purpose of the commentary to be furnished pursuant to clause 14.3 above, the bidder shall note that standards for workmanship, material and goods, and references to brand names or catalogue numbers designated by the purchaser in its technical specifications are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, brand name and / or catalogue numbers in its bid, provided that it demonstrates to the purchasers satisfaction that the substitutes are substantially equivalent or superior to those designated in the Technical specifications.

15. Bid security

15.1 Pursuant to Clause 9, the Bidder shall furnish, as part of it bid, the Bid security for the amounts specified in the Invitation for Bids (Section -1)

15.2 The bid security is required to protect the purchaser against risk of bidders conduct which would warrant the security forfeiture, pursuant to clause 15.7

15.3 The bid security shall be in Indian Rupees and shall be in online only.

15.4 Any bid not secured in accordance with para 15.1 and 15.3 above will be rejected by the purchaser as non-responsive pursuant to clause 24.

15.5 Unsuccessful Bidder's bid security will be discharged/ returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the purchaser pursuant to clause 16.

15.6 The successful Bidder's bid security will be discharged upon the Bidders executing the contract, pursuant to clause 34 and furnishing the performance security pursuant to clause 35.

15.7 The bid security may be forfeited;

(a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid form; or

(b) In case of successful Bidder, if the Bidder fails;

(i) to sign the contract in accordance with clause 34; or

(ii) to furnish performance security in accordance with clause 35.

(c) If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited.

16. Period of validity of Bids.

16.1 Bids shall remain valid for 90 days after the date of bid opening prescribed by the purchaser pursuant to Clause 19.1. A bid valid for shorter period may be rejected by the purchaser as non-responsive.

16.2 In exceptional circumstances, the Purchaser may solicit the Bidders consent to an extension of the period of validity the request and the responses thereto shall be made in writing (or by mail). The bid security provided under clause 15 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security.

17. Format and signing of Bid.

17.1 The bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the bidder to the

contract. The latter authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unammended printed literature, shall be initialed by the person or persons signing the bid.

17.2 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors and made by the bidder in which case such corrections shall be initialed by the person or persons signing the bid.

D. Submission of Bids

18. Sealing and Marking of bids.

18.1 The bids shall be uploaded (submitted) electronically, as described in the Invitation for Bids (Section –I). The hard copies of the bids in sealed covers must be received by the Purchaser at the address specified above on or before the due date of submission of bids (Section –I).

18.2 The Bids shall be addressed to the purchaser at the following address:

The Managing Director, APMSIDC, 2nd Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503**.**

18.3 The Bids shall bear the name of the invitation for bids (IFB) and Number and also the words "Do not open before 03.00 P.M Hrs **on 29-10-2022**. The envelopes shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it declared “late".

18.4 If the envelope is not sealed and marked as required by Para 18.2 and 18.3 above, the purchaser will assume no responsibility for the bids misplacement or premature opening.

19. Deadline, for submission of bids.

19.1 The Bids (both electronic and Hard copies) must be received by the purchaser, no later than the time and date specified in the Invitation for Bids (Section I). In the event of the specified date for the submission of Bids being declared a holiday for the purchaser, the Bids will be received up to the appointed time on the next working day.

19.2 The purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with clause 7, in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids.

20.1 Any bid received by the purchaser after the deadline for submission of bids prescribed by the purchaser, pursuant to clause 19, will be rejected and/ or returned unopened to the Bidder.

21. Modification and Withdrawal of Bids.

21.1 No bid may be modified subsequent to the deadline for submission of bids.

21.2 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid form. Withdrawal of bid during this interval may result in the Bidders forfeiture of its bid security , pursuant to Clause 15.7

E. Bid Opening and Evaluation

22. Opening of Bids by Purchaser

22.1 The Purchaser/or his authorized representative will download the technical bids on **29-10-2022** at 03.01 PM.

22.2 The Financial Bids of the Technically responsive bidder would be downloaded subsequently from the e-platform, once the technical evaluation is completed.

23. Clarification of Bids.

23.1 To assist in the examination, evaluation and comparison of bids the purchaser may at his discretion, ask the Bidder for clarification of his bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

24. Technical Evaluation (Preliminary Examination and Pre-Qualification)

24.1 The purchaser will examine the bids to determine whether they are complete, whether required securities have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

24.2 Prior to the financial evaluation, pursuant to clause 26, the purchaser will determine the responsiveness of each bid to the bidding documents. For purposes of these clauses, a responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. The purchaser's determination of bids responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

24.3 Further the purchaser will determine to his satisfaction whether the Bidder is qualified to satisfactorily perform the contract. The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder pursuant to clause 13 as well as such other information as the purchaser deems necessary and appropriate.

24.4 An affirmative determination will be prerequisite for the opening of the financial bids. A negative determination will result in rejection of the Bidder's bid.

24.5 A bid determined as not substantially responsive will be rejected by the purchaser.

24.6 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any bidder.

24.7 The Preliminary Evaluations of the bidders are kept available at APMSIDC website http://msidc.ap.nic.in

25. Deleted.

26. Evaluation and comparison of Bids.

26.1 The Purchaser will evaluate and compare bids previously determined to be substantially responsive, pursuant to clause 24 for each schedule separately.

26.2 The purchasers evaluation of a bid will take into account; in addition to the bid price (ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, on the finished goods and cost of incidental services required. The following costs to the extent specified:

a. cost of inland transportation, insurance and other costs within India incidental to the delivery of goods to their final destination;
b. The comprehensive annual maintenance charges (inclusive of four Preventive Maintenance visits and all distress calls in a year and costs of all spares required during the repairs) for a period mentioned against equipment at section V- (Schedule of requirements) subsequent to free guarantee maintenance period mentioned against equipment at section V- (Schedule of requirements).
c. the availability in India (Preferably in Andhra Pradesh) of spare parts and after-sales services for the equipment offered in the bid. To this extent the bidders shall give:

- An undertaking for the uninterrupted supply of adequate spares for at least a period of 7 years shall be furnished.
- An Undertaking Availability/ establishment of after sales service facility at least in (1) region of Andhra Pradesh to ensure uninterrupted after sales service during warranty period shall be confirmed. The details of service facility available / proposed to be set up shall be furnished with their bid.

27. Deleted

28. Contacting the purchaser.

28.1 Subject to clause 23, no Bidder shall contact the purchaser on any matter relating to the bid, from the time of the bid opening to the time, the contract is awarded.

28.2 Any effort by a Bidder to influence the Purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidders bid.

F. Award of Contract

29. Post - Qualification

Not Applicable

30. Award Criteria

30.1 Subject to clause 32, the purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

31. Purchaser's right to vary quantities at Time of Award

31.1 The purchaser reserves the right, at the time of award of contract to increase or decrease to any extent of the quantity of goods and services specified in the schedule of requirements without any change in price or other terms and conditions.

32. Purchaser's right to accept any Bid and to reject any or all Bids.

32.1 The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without there by incurring any liabilities to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

33. Notification of Award.

33.1 Prior to the expiry of the period of the bid validity, the purchaser will notify the successful Bidder in writing by registered letter or cable or telex, duly confirming that the bid has been accepted.

33.2 The notification of award will constitute the formation of the contract.

33.3 Upon the successful Bidder's furnishing of performance security, pursuant to clause 34, the purchaser will promptly notify each unsuccessful Bidder and will discharge their bid security, pursuant to clause 15.

34. Signing of contract

34.1. Within 15 days of receipt of the notification of award the successful Bidder shall sign the contract.

35. Performance security

35.1 Within 15 days of the receipt of notification of award from the purchaser, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, in the performance security form provided in the Bidding documents or another form acceptable to the purchaser and signs the agreement.

35.2 Failure of the successful Bidder to comply with the requirement of clause 34 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the purchaser may make the award to the next lowest evaluated bidder or call for new bids.

36 Fraud and corruption

36.1 It is the **purchaser'**s policy that requires that the bidders, suppliers and contractors and their subcontractor observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the **purchaser;**

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) **"corrupt practice"** is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
(ii) **"fraudulent practice"** is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
(iii) **"collusive practice"** is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
(iv) **"coercive practice"** is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
(v) **"obstructive practice"** is

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
(bb) acts intended to materially impede the exercise of the purchaser's inspection and audit rights provided for under sub-clause 36.2 (d) below.

36.2 The purchaser may, without prejudice to other terms of the bidding:

(a) will reject a proposal for award if it determines that the bidder considered for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

(b) will cancel the contract if the purchaser determines at any time that the bidder, supplier and contractors and their sub contractors engaged in corrupt, fraudulent, collusive, or coercive practices.

(c) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a contract; and

(d) will have the right to inspect the accounts and records of the bidders,
supplier, and contractors and their subcontractors and to have them audited by auditors appointed by the Purchaser.

SECTION - III: GENERAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

Section III: General Conditions Of Contract

1. Definitions

1.1 In this contract, the following terms shall be interpreted as indicated;

(a) "The contract" means the agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by references therein.

(b) "The Contract Price" means the price payable to the supplier under the contract for the full and proper performance of its contractual obligations.

(c) "The Goods" means all the equipment and / or other materials which the supplier is required to supply to the purchaser under the contract.

(d) "Services" means services ancillary to the supply of the goods, such as transportation, insurance and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the supplier covered under the contract.

(e) "An undependable Supplier/s' under contract means any Supplier who do not accept the purchase order or who delays the supply of required quantities beyond the permitted delays with liquidated damages

(f) "The Purchaser or Corporation" means the APMSIDC, the purchasing agency

(g) "The Supplier" means the individual or firm supplying the goods under this contract.

(h) "The Government" means the Government of Andhra Pradesh or its authorized representatives

(i) "The Project Site", where applicable means the place or places named in Schedule of Requirements

(j) "The End-User" means the authorized user of the equipment/the Medical Superintendent/Head of the Department of the concerned specialty.

(k) "Day" means calendar day

(l) "Delivery period" means the period applicable up to completion of supply,
Installation and testing of the equipment and the training of the staff on the equipment, by the supplier at the Project site and accepted by the Purchaser or its representative

2. Application

2.1. These General conditions shall apply to the extent that they are not superseded by provisions in other parts of the contract.

3. Country of Origin: Deleted.

4. Standards

4.1 The Goods supplied under this contract shall conform to the standards mentioned in the Technical specifications and when no applicable standard is mentioned the authoritative standard appropriate to the goods country of origin shall be followed and such standard shall be the latest issued by the concerned institution.

5. Use of contract documents and Information

5.1 The supplier shall not without the purchaser's prior written consent, disclose the contract or any provision thereof or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the purchaser in connection therewith to any person other than a person employed by the supplier in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

5.2 The supplier shall not, without the purchasers prior written consent make use of any document or information enumerated in para 5.1 except for purposes of performing the contract.

5.3 Any document other than the contract itself enumerated in para 5.1 shall remain the property of the purchaser and shall be returned (in all copies) to the purchaser on completion of the suppliers performance under the contract if so required by the purchaser.

6. Patent Rights

6.1 The supplier shall indemnify the purchaser against all third party claims of infringement of patent, trademark for industrial design rights arising from use of the goods or any part thereof in India.

7. Performance Security

7.1 Within 15 days after the supplier's receipt of notification of award of the contract, the supplier shall furnish performance security to the purchaser for the amount specified in the special conditions of contract.

7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract

7.3 The performance security shall be denominated in Indian Rupees and shall be in one of the following forms:

(a) A bank guarantee [in favour of Managing Director, APMSIDC, Guntur] issued by any scheduled commercial bank located in India acceptable to the purchaser and in the form provided in the Bidding documents or in any other form acceptable to the purchaser: or.

(b) A Banker's cheque or Demand Draft in favour of Managing Director, APMSIDC, Guntur.

7.4 Fifty percent (50%) of the performance security will be discharged by the Purchaser and returned to the supplier not later than 60 days following the date of completion of the supplier's performance obligations, including any warranty obligations. The balance 50% of the performance security will be retained towards performance security for the maintenance services to be provided for 4 years after the 3 years warranty period and this 50% will be discharged after completion of performance obligations under maintenance services after 7 years.

7.5 The supplier shall accordingly; either furnishes a fresh bank guarantee for the 50% value or an extension of bank guarantee for 50% of the value covering the 4 years maintenance period after 3 years warranty period. Only after receipt of the above, the 50% of the performance security will be discharged after the warranty period.

8. Inspections and Tests.

8.1 The purchaser or his representatives shall have the right to inspect and / or to test the Goods to confirm their conformity to the contract. The special conditions of contract and / or the Technical specifications shall specify what inspections and tests the purchaser requires and where they are to be conducted. The purchaser shall notify the supplier in writing of the identity of any representatives retained for these purposes.

8.2 The inspections and tests may be conducted in the premises of the supplier or its subcontractor(s) at point of delivery and/or at the goods final destination. Where conducted on the premises of the supplier or its subcontractor(s) all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the purchaser.

8.3 Should any inspected or tested goods fail to conform to the specifications the purchaser may reject them and the supplier shall either replace the rejected goods or make alternatives necessary to meet specifications, requirements free of cost to the purchaser.

8.4 The purchasers right to inspect test and where necessary reject the goods after the goods arrival at site and shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by the purchaser or its representative prior to the goods shipment from the country of origin.

8.5 Nothing in clause 8 shall in any way release the supplier from any warranty or other obligations under this contract.

9. Packing

9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration where appropriated the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements, as shall be provided for in the contract and subject to clause 18 and any subsequent instructions ordered by the purchaser.

10. Delivery and Documents

10.1 Delivery of the Goods shall be made by the supplier in accordance with the terms specified by the purchaser in the Notification of Award.

11. Insurance

The goods supplied under the contract shall be fully insured in Indian Rupees against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the special conditions of contract.

12. Transportation

12.1 The supplier is required to deliver the goods to the destinations specified in the contract and the cost thereof shall be included in the contract price.

12.2 The transportation of the Goods after the delivery at the final destination shall be the responsibility of the Purchaser.

13. Incidental services.

13.1 The supplier is required to provide the following services, including additional services, if any, specified in SCC:

(a) Performance of the on-site assembly and start-up of the supplied Goods;

(b) Furnishing of tools required for assembly and maintenance of the supplied Goods;

(c) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;

(d) Performance of maintenance and repair of the supplied Goods, for a period of 7 years, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

(e) Training of the users and maintenance personnel, in operation, maintenance and repair of the supplied Goods.

13.2 Prices charged by the Supplier for incidental services, if not included in the contract price of the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

14. Spare Parts:

14.1 As specified in the special conditions of contract, the supplier may be required to provide the following materials and notifications pertaining to spare parts manufacturer:

(a) Such of spare parts as the purchaser may select to purchase from the supplier providing that this selection shall not relieve the supplier of any warranty obligations under the contract and

(b) In the event of termination of production of the spare parts;

(i) advance notification to the purchaser of the pending terminating in sufficient time to permit the purchaser to procure needed requirements: and

(ii) Following such termination, furnishing at no cost to the purchaser, the blueprints, drawing and specifications of the spare parts, if and when requested.

15. Warranty

15.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The supplier further warrants that the goods supplied under this contract shall have no defect arising from design materials or workmanship (except insofar as the design or material is required by the purchasers

specifications) or from any act or omission the supplied goods in conditions obtaining in the country of final destination.

15.2 This warranty shall remain valid for as specified at section V schedule of requirements against each equipment or any portion thereof as the case may be have been delivered at the final destination indicated in the contract, unless specified otherwise in the special conditions of the contract. The warranty period starts from date of commissioning after installation by the firm.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the defective goods or parts thereof without cost to the purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced goods or parts from the port of entry to the final destination.

15.5 If the supplier, having been notified, fails to remedy the defect (s) within a reasonable period, the purchaser may proceed to take such remedial action as may be necessary, at the suppliers risk and expenses and without prejudices to any other right which the purchaser may have against the supplier under the contract.

15.6 Site Visits: The successful tenderer shall visit each User Institution as part of preventive maintenance as per the frequency mentioned under clause 5.1.3 (section-I of IFB) during the warranty period. The tenderer shall attend any number of break down/repair calls as and when informed by the Tender Inviting Authority/User Institution.

15.7 During every visit, a copy of the service report/break down call report, duly signed by the custodian of the equipment/head of the health care institution and stamped shall be forwarded by email/fax/post to the APMSIDC office within 10 days from the due date.

15.8 A warranty certificate (as per format in Annexure III) duly signed and with proper stamp of the institution concerned and also signed by the authorized signatory with the stamp of the successful tenderer shall be submitted to the Tender Inviting Authority for keeping it under safe custody along with the Installation Certificate. A copy of the original warranty papers has to be given to the institution head concerned.

15.9 The tenderer shall submit the activities to be carried out during the preventive maintenance visit as per the format in Annexure IV.

16. Payment

16.1 The method and conditions of payment to be made to supplier under the contract shall be specified in the special conditions

16.2 The Suppliers request (s) for payment shall be made to the purchaser in writing accompanied by an invoice describing as appropriate the goods delivered and the services performed and by shipping document, submitted pursuant to clause 10, and upon fulfillment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the purchaser within sixty (60) days of submission of the invoices / claims by the supplier duly furnishing the certificate specified in the bid document from the competent authority.

16.4 Payment shall be made in Indian Rupees.

17. Prices

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not with the exception of any price adjustments authorized by the special conditions of contract, vary from the prices quoted by the supplier in its bid.

18. Change Orders

18.1 The Purchaser may at any time by written orders given to the supplier pursuant to clause 31 , make changes within the general scope of the contract in any one or more of the following;

(a) drawings, designs or specifications, where goods to be furnishing under the contract are to be specifically manufactured for the purchaser;
(b) the method of shipping or packing;
(c) the place of delivery; or
(d) the services to be provided by the supplier;

18.2 If any such changes causes an increase or decrease in the cost of or the time required for the suppliers performance of any part of the work under the contract, whether changed or not changed by the order, an equitable adjustment shall be made in the contract price or delivery schedule or both and the contract shall accordingly be amended. Any claims by the supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the suppliers receipt of the purchasers change order.

19. Contract Amendments

19.1 Subject to clause 18, no variation in an modification of the terms of the contract shall be made except by written amendment signed by the parties.

20. Assignment

19.2 The supplier shall not assign in whole or in part, its obligations to perform under the contract, except with the purchasers prior written consent.

21. Sub-contracts

21.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under the contract if not already specified in his bid. Such notification, in his original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

22. Delays in the suppliers performance

22.1 Delivery of the goods and performance of the services shall be made by the supplier in accordance with the time schedule specified by the purchaser in its schedule of requirements.

22.2 Any unexcused delay by the supplier in the performance of its delivery obligations shall render the supplier liable for any or all of the following; i.e. forfeiture of its performance security, imposition of liquidation damages and or termination of the contract for default.

22.3 If at any time during the performance of the contract, the supplier or its subcontractor (s) should encounter performance of the services the supplier shall promptly notify the purchaser in writing of the fact of the delay its likely duration and its causes. As soon as practicable after receipt of the suppliers notice, the purchaser shall evaluate the situation and may at its discretion extend the suppliers time for performance, in which case the extension shall be ratified by the parties by amendment of the contract.

23. Liquidated Damages

23.1 Subject to clause 25, if the supplier fails to deliver any or all of the goods within the time period specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damages, an amount as specified in the SCC for the period of delay, until actual delivery or performance, up to a maximum deduction of **10 percent of the total contract value**. Once the maximum is reached, the purchaser may consider termination of the contract.

24. Termination for Default

24.1 The purchaser may, without prejudice to any other remedy for breach of contract by written notice of default sent to the supplier, terminate the contract in whole or part:

(a) if the supplier fails to deliver any or all of the goods within the time periods specified in the contract or any extension thereof granted by the purchaser pursuant to clause 22; or
(b) if the supplier fails to perform any other obligations under the contract.

24.2 In the event the purchaser terminates the contract in whole or in part, 24.1 the purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar Goods. However, the supplier shall continue the performance of the contract to the extent not terminated.

25. Force Majeure

25.1 Notwithstanding the provisions of clauses 22,23,24, the supplier shall not be liable for forfeiture of its performance security liquidated damages or termination or default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

25.2 For purposes of this clause "Force Majeure" means an event beyond the control of the supplier and not involving the suppliers fault or negligence and not foreseeable. Such events may include but are not limited to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, floods, epidemics, quarantine restrictions and freight embargoes.

25.3 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the purchaser in writing the supplier shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for Insolvency.

26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier, if the supplier becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Termination for convenience.

27.1 The purchaser may by written notice sent to the supplier terminate the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the purchasers convenience the extent to which performance of work under the contract is terminated and the date upon which such termination becomes effective.

27.2 The goods that are complete and ready for shipment within 30 days after the suppliers receipt for notice of termination shall be purchased by the purchaser and the contract terms and prices. For the remaining goods the purchaser may elect.

(a) to have completed and delivered at the contract terms and prices; and / or

(b) to cancel the remainder and pay to the supplier and agreed amount for partially completed goods and for materials and parts previously procured by the supplier.

28. Resolution of Disputes

28.1 The purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.

28.2 If after thirty (30) days from the commencement of such informal negotiations the purchaser and the supplier have been unable to resolve amicably contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the special conditions of contract. These mechanisms may include but are not limited to conciliation, mediation by third party justification in an agreed national or international forum and / or international arbitration. The mechanism shall be specified in the special conditions of contract.

29. Governing Language

29.1 The contract shall be written in English language, as specified by the purchaser in the instructions to bidders. Subject to clause 30, English language version of the contract shall govern

30. **Applicable law**

30.1 The contract shall be interpreted in accordance with the laws of the union of India and the legal jurisdiction is Hyderabad

31. Notices

31.1 Any notices given by one party to the other pursuant to the contract shall be sent in writing and confirmed in writing to the address specified for that purpose in the special conditions of the contract. A notice shall be

effective when delivered or on the notices effective date, whichever is later.

32. Taxes and duties

32.1 The rates quoted by the bidder shall be deemed to be inclusive of the sales and other taxes that the bidder will have to pay for the performance of this contract, at the prevailing rates notified by the Government. The purchaser will perform such duties in regard to the deduction of such taxes at source as per applicable law.

SECTION - IV: SPECIAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

(The corresponding clause number of the General condition is in parenthesis)

Section IV: Special Conditions of the Contract

1. The following special conditions of contract shall supplement the general Conditions of contract. Whenever there is conflict, the provisions herein shall prevail over those of the general conditions of contract the corresponding clause number of the general conditions in parentheses.

2. Definitions (Clause I)

(a) The Purchaser is : The Managing Director, APMSIDC, Mangalagiri,
Guntur.
(b) The Supplier is : ----------

3. Country of origin (Clause 3): All goods and related services to be supplied under the contract / agreement shall have their origin in India or any other country with which India has not banned trade relations.

4. Performance security (Clause 7)

4.1 Performance security is 5% of the contract value and shall be valid up to 60 days after the date of completion of performance obligations including warrant obligations, as applicable.

4.2 Add clause 7.5 to the GCC as the following:

In the event of any contract amendment, the supplier shall within 7 days of receipt of such amendment furnish the amendment to the performance security rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter

5. Inspection and Tests (clause 8)

The following inspection procedures and tests are required by the Purchaser:

5.1 The Supplier shall get each equipment inspected by a competent authority in manufacturer's works and also provide a guarantee/warranty certificate that the instrument conforms to all specifications contained in the contract.

5.2 The *Purchaser* or its representative may inspect and/or test any or all the equipment to confirm their conformity to the Contract specifications, prior to dispatch from the manufacturer’s premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the equipment on receipt at destination.

5.3 However, on arrival of the equipments at destinations, the purchaser or its representative shall have the right to inspect and/or test any or all the equipments to confirm their conformity to the contract.

5.4 If the equipment or its performance is not as per specified conditions, deficiency or replace the equipment (s) to the satisfaction of the purchaser's representative.

6. Packing (Clause 9)

The Supplier will be required to mark separate packages for each consignee on three sides with proper paint/indelible ink, the following: i. Name of the contract, ii. Contract No., iii. Country of origin of Goods, iv. Supplier's Name and v. Packing of list reference number

7. Delivery and Documents (Clause 10)

(i) Three copies of the Supplier invoice showing Goods description, quantity, unit price, total amount;
(ii) Railway receipt/acknowledgement of receipt of goods from the Consignee
(iii) Manufacture's/Supplier's Warranty and Factory Test certificate;
(iv) Acceptance Certificate issued by the End-User
(v) Inspection Certificate issued by the nominated inspection agency, as applicable

8. Insurance (Clause 11)

i) **For delivery of goods at site, the insurance shall be obtained by the Supplier at his cost for an amount equal to 110% of the value of the goods from "warehouse to warehouse" on "All Risks" basis including war Risks and Strike clauses period in the name of consignee authorized by the purchaser i.e. M.D. APMSIDC. The supplier shall also provide insurance coverage against fire and theft in the name of consignee upto end of the warranty period.**

ii) To submit a copy of insurance document duly attested by the consignee to APMSIDC along with bills for making payment. Otherwise the bills may not be processed.

9. Incidental Services (Clause 13)

No additional services are required to be provided over the services already covered under clause 13 of GCC.

10. Spare parts: (Clause 14)

Add as clause 14.2 to the GCC the following:

Supplier shall carry sufficient inventories to assure ex stock supply of consumables spares such as gaskets, plugs, washers, belts etc., other spare parts and components shall be promptly as possible but, in any case, within (3) days of placement of order.

11. Warranty (Clause 15)

11.1 In partial modification of the provisions, the warranty period shall be as specified at section V schedule of requirements against each equipment, or any portion thereof, as the case may be, have been delivered at site, installed, commissioned, successfully tested and accepted by the Purchaser or its authorized representative

11.2 Substitute Clause 15.4 of the GCC with the following:

Upon receipt of such notice, the Supplier shall within 3 days, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement.

11.3 If the supplier has not done repair/replacement within the time specified above the purchaser will assess the cost of having the repairs/replacements done and the supplier will pay this amount.

11.4 Overall an uptime guarantees of 95% shall be maintained out of total usage period of the equipment by the end users during the warranty period

11.5 All software updates, if any required, should be provided free of cost during Warranty period.

12 Payment (Clause 16)

12.1 Payment for goods and services shall be made in Indian Rupees as follows:

a) 60% of the contract value of the supply part after necessary deduction will be paid to the supplier on submission of copy of invoice with original Delivery Challan as proof of supply to destinations duly certified by the Head of the Institution and RTGS details
b) 30% of payment will be paid on submission of original invoice with stock entries, delivery challan and Installation Certificates (Annexure 1), warranty certificate (Annexure III), copy of insurance document duly attested by the consignee to APMSIDC, calibration, quality assurance certificate test certificate if required as per technical specification after completion of all the performance obligations.
c) The balance 10% will be paid after three months from the date of installation on submission of performance satisfactory report (Annexure-ll), obtained from the Head of the institute or concerned authorities.

d) In case any difficulty is experienced by the successful tenderer in obtaining three-month performance certificate from any of the User Institution after the installation of the equipment, the same shall be

brought to the notice of the Tender Inviting Authority immediately in writing. In such event(s), if the Tender Inviting Authority is convinced, the reasons are beyond the control of the successful tenderer, the Tender Inviting Authority, in case of supply orders placed by it, shall release payments at its discretion. In such case the letter sent to the Tender Inviting Authority shall be submitted along with the invoices while claiming payment.

12.2 If there is a delay in installation of the equipment due to reasons not attributable to the supplier such as non readiness of site, 60% of the supply part of the contract value will be released against supply and a confirmation letter from the consignee / end user, on submission of original delivery challan & Invoice copy.

12.3 Cost of Comprehensive Maintenance Contract for each year will be paid, at the end of each year by the Purchaser's representatives/hospital authorities, upon submission of the service reports to the extent of the service delivered as per the contract terms.

13. Prices (Clause 17)

Prices payable to the Supplier as stated in the Contract shall not be subject to adjustment during performance of the Contract.

14 Sub-contracts (Clause 21)

Add at the end of sub-clause 21.1 of the GCC the following. "Sub-contract shall be only for bought-out items and sub-assemblies".

15 Liquidated Damages (Clause 23)

15.1 <u>For delays</u>

Substitute Clause 23.1 of the GCC by the following:

Subject to clause 25 of GCC, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.5 percent of the delivered price of the delayed Goods or unperformed Services for each week of delay or part thereof until actual delivery or performance, up to a maximum deduction of **10% of the total Contract value**. Once the maximum deduction is reached, the Purchaser may consider termination of the Contract.

15.2 For Short fall in Equipment Maintenance services

Any major repair intimated by the *Purchaser or the end-user* shall be rectified by the Supplier from the date of intimation within a period of 3 calendar days and repair the equipment to the satisfaction of the Purchaser or the End User. Failing which the Purchaser has a right to

levy a penalty on the Supplier a sum of Rs.10,000/- per day of delay, until the equipment is repaired and brought to the normal working condition to the satisfaction of the Purchaser.

16 **Resolution of Disputes (Clause 28)**

Add as Clauses 28.3 and 28.4 of the GCC the following:

28.3 The dispute resolution mechanism to be applied pursuant to clause 28 of the General Conditions shall be as follows:

(a) In the case of dispute or difference arising between the Purchaser and a Domestic Supplier relating to any matter arising out of or connected with this agreement, such dispute or difference shall be referred to the award of two Arbitrators, one Arbitrator to be nominated by the Purchaser and the other to be nominated by the Supplier or in the case of the said Arbitrators not agreeing, then at the award of an Umpire to be appointed by the Arbitrators in writing before proceeding with the reference, and in case the Arbitrators cannot agree to the Umpire, he may be nominated by the Arbitration committee of the Indian Council of Arbitration, India. The award of the Arbitrators, and in the event of their not agreeing, of the Umpire appointed by them or by the Arbitration Council of India, India, shall be final and binding on the parties.

(b) The Indian Arbitration Act 1996, the rules thereunder and any statutory modification or re-enactments thereof, shall apply to the arbitration proceedings.

28.4 The venue of arbitration shall be the place from where the Contract is issued.

17 Notices (Clause 31)

For the purpose of all notices, the following shall be the address of the purchaser and supplier.

Purchaser: The Managing Director, APMSIDC, 2nd Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503

Supplier: (To be filled in at the time of Contract Signature)

18 Comprehensive Maintenance Contract (CMC)

a) The Comprehensive Maintenance Contract includes 4 visits in a year preventive maintenance visits and all the distress calls during the year and also include the probable cost of spares required towards the repairs carried out to bring a not working equipment to its normal working condition, during the year.

b) The supplier shall under take at least one half-yearly preventive maintenance visit and attend to all the break down calls during the year. The payment for the maintenance services will be made at the end of each half-year, upon submission of necessary service reports signed by the end-users.

19 Actions Against the Misconduct of the Supplier

19.1 A Supplier found being supplied similar items with similar tender conditions to any other agency in the country during the validity of the contract with the APMSIDC, at a rate lower than the rate at which they supplied under this tender, the difference amount is liable to be recovered apart from blacklisting the firm for a minimum period of 3 years. The Supplier should furnish undertaking (Annexure-XIII) that they will remit the differential cost, if they quote lower rate than the rate quoted to the APMSIDC to any other agency or department or state, during the period of contract.

19.2 Any substandard supplies without meeting the quality specifications made under the contract shall also entail blacklisting of the firm for a minimum period of three years for that particular product.

19.3 If the bidder fails to demonstrate on asked to do so, of the products quoted with their bid, without any valid or convincing reason to the satisfaction of the Purchaser, the bids for other items offered against the bid notice will not be considered and he may be debarred for a certain period as decided by the Purchaser.

20 Progress of Supply

Supplier shall intimate progress of supply, in writing, to the Purchaser as under:

- Qty offered for inspection and date;
- Qty. accepted/rejected by inspecting agency and date;
- Qty. dispatched/delivered to consignees and date;
- Qty. where incidental services have been satisfactorily completed with date;
- Quantity where rectification/repair/replacement effected/completed, on receipt of any communication from consignee/Purchaser with date;
- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract.

SECTION V

SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

Sl. No	Item Name	Qty	Warranty (in Years)	CMC (in Years)	EMD (in Rs.)	Average Annual turnover of the Authorized Bidder in the last three years i.e. 2018-19, 2019-20 and 2020-21
1.	Tread Mill Test	5	3	4	75,000	62,50,000
2.	EMG machine	5	3	4	60,000	50,00,000
3.	Oxygen regulator with humidifier	50	1	-	3,750	3,12,500
4.	Flowmeter	150	1	-	4,500	3,75,000
5.	Oxygen head-box (of each size)	24	1	-	4,400	3,60,000
6.	Infant meter	12	1	-	1000	69,000
7.	Stadiometer	19	1	-	500	21,375
8.	Shakir's tape	40	1	-	500	35,000
9.	Bronchoscope – Flexible Video	5	3	4	1,50,000	1,25,00,000
10.	Patient Examination table	43	1	-	12,900	10,75,000
11.	Light Microscope	14	3	4	42,000	35,00,000
12.	Transcutaneous Bilirubinometer	5	1	-	52,500	43,75,000
13.	Peak flow meters	24	-	-	700	51,000
14.	Rigid Bronchoscope	5	3	4	3,000	2,50,000
15.	Pulmonary function Test machine with facility for spirometry, lung volume and diffusion capacity	5	3	4	45,000	37,50,000
16.	Resuscitation equipment (CPR)- Ambu bag with face mask	10	1	-	3,000	2,50,000
17.	Adult Manikin	13	1	-	39,000	32,50,000
18.	Pediatric Manikin	15	1	-	45,000	37,50,000
19.	Airway crash cart	5	1	-	3,000	2,50,000
20.	Patients controlled analgesia system (portable)	5	1	-	7,500	6,25,000
21.	Nerve locator	5	3	4	45,000	37,50,000
22.	Nerve stimulator	10	3	4	3,000	2,50,000
23.	Monitor – 5 Para	10	3	4	30,000	25,00,000
24.	Monitor – 3 Para	30	3	4	54,000	45,00,000

25.	Central Cardiac Monitor Console	4	3	4	48,000	40,00,000
26.	Equipment for Cardiac pacing	5	-	-	45,000	37,50,000
27.	Electro Convulsive Therapy Machine preferably with ECG & EEG monitor	5	3	4	75,000	62,50,000
28.	Electro Convulsive Therapy Machine without monitor	10	3	4	1,05,000	87,50,000
29.	Lithium Analyzer	5	1	-	15,000	12,50,000
30.	Bio Feed back Instruments (sets)	5	-	-	1,500	1,25,000
31.	Thin layer Chromatography	5	3	4	7,500	6,25,000
32.	Alcohol Breath Analyzer	5	1	-	15,000	12,50,000
33.	Psychological Test Equipments – Projective Tests	15	1	-	90,000	75,00,000
34.	Psychological Test Equipments – Intelligence Tests	15	1	-	90,000	75,00,000
35.	Psychological Test Equipments – Personality Test	15	1	-	90,000	75,00,000
36.	Psychological Test Equipments – Neuro Psychological Tests	15	1	-	90,000	75,00,000
37.	Resuscitation Kit	100	1	-	30,000	25,00,000
38.	Tuning fork time marker 1--/sec	10	1	-	300	25,000
39.	Electrodes	10	-	-	600	50,000
40.	Spirit lamps	10	1	-	1,500	1,25,000
41.	Polygraphs	5	3	4	15,000	12,50,000
42.	Gas analyser automatic for CO2, O2, N2	5	3	4	45,000	37,50,000
43.	Low voltage unit for tapping 2 and 4 volts for stimulation	10	1	-	6,000	5,00,000
44.	Perimeter with charts (Lister's)	10	-	-	600	50,000
45.	Tuning fork to test hearing 32-1---- cps (sets-1--, 256, 512 Hz)	150	1	-	13,500	11,25,000
46.	Student physiograph, (single channel) with accessories	30	3	4	18,000	15,00,000

47.	Centrifuge, high speed with technometer	5	3	4	7,500	6,25,000
48.	Hand saw, preferably metal	25	1	-	3,750	3,12,500
49.	Band saw for sectioning body and limbs	25	1	-	7,500	6,25,000
50.	Brain knife	25	1	-	3,750	3,12,500
51.	Plastic tanks for storing soft and dissected parts	50	-	-	15,000	12,50,000
52.	Dissecting instruments set for cadaveric dissection	25	1	-	15,000	12,50,000
53.	Microtomes, rotary	10	3	4	15,000	12,50,000

Processing fee: The participating bidders will have to pay tender processing fee (non-refundable) of **Rs. 11,800/-** in the form of Demand Draft drawn in favour of Managing Director, APMSIDC, Guntur.

1. **To allow the authorized distributors duly obtaining an agreement/ MOU from the Manufacturer for binding on Post Supply Services i.e. Warranty, CMC, AMC etc., and on agreement executed by the authorized distributor with the Corporation. Further an undertaking from Manufacturer to take responsibility in case of authorized distributor's failure in performing the Contractual Obligations also may be obtained. Proforma will be provided.**
2. EMD shall be furnished in the form of Demand Draft/BG/Online drawn in favour of Managing Director, APMSIDC, Guntur.

Note: For bidders quoting for more than one equipment, the bidder must have an average annual turnover equal to the sum of the average annual turnovers mentioned against each equipment. However, a bidder having an average turnover of 10 Crores in the last three financial years and EMD 10 lakhs shall be eligible to bid for any number of equipment.

Technical Specifications

General Information

1. Bidders are requested to offer the equipment as per the specifications attached.

2. For each item of equipment the bidder should include all the cost associated with fixing, cables, connectors, accessories and ancillary items necessary for the satisfactory operation of that item of equipment. Bidders should make the provisions of starter packs for consumables for demonstration and three months of operation period for the supplied equipment.

3. Spare parts list, listing spare likely to be required for (7) years operations shall be attached with the Bid

4. (i) Bidders are requested to provide, referenced by given equipment code and item name, with their tender offer, the following information for all the items of equipment offered.
   - Name of the Manufacturer
   - Brand Name & Model Number
   - Country of Origin

   (ii) Catalogue, Pamphlet, descriptive literature, spare parts list and technical specifications for each unit of item must be forwarded with the offer.

5. Operating Environment:

   Electrical Supply: The Equipment supplied shall be suitable in all respect for use on the local electricity supply of 200- 270 Volts, 50 Cycles. A suitable stabilizer/CVT to be offered as an optional accessory in case of specific Voltage requirement for the supplied Equipment. Resettable over current breaker shall be fitted for protection wherever applicable.

   Humidity: The unit shall be capable of operating continuously in ambient temperature of 30^0C and relative humidity of around 80%.

7. After Sales Service:

   Bidders are requested to confirm in writing in their bid offer the after sales service they would provide, after the expiry of three-year warranty period, for four more years including an estimated cost an annual servicing contract. The maintenance capability of the bidders currently existing in Hyderabad and Andhra Pradesh should also be clearly stated.

8. All items should be of high quality, durable, and suitable for use in a Hospital. The technical specification and standards of each item delivered shall be that currently in use at the time of delivery.
   a) Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450.

b) Radiation safety: Safety aspects of Radiation dosage leakage should be spelt out and all the X-ray related products should comply with AERB Guidelines for radiation leakage.

10 a) The Manufacturer, must have necessary quality certifications for both processes and products such as ISO 9001 (Quality Management System for Organization) and ISO 13485 (Quality Management System for Medical Devices).

b) Full Quality Assurance System Approval certificate Management System Certification for Medical Devices and their equivalent International Standards certificates as BIS/ CE/USFDA etc.

11. If the bidder fails to demonstrate any of the products quoted, the bid for that product would be considered as withdrawn and suitable action will be taken as per the Clause 15 of ITB. i.e., forfeiture of the Bid security and also the bidder may be debarred for a certain period as decided by the Managing Director.

Note:

1. **The bidder should submit the details of spares which are covered or not covered under warranty.**
2. **The above items supply to 5 New Medical Colleges (Eluru, Nandyal, Machilipatnam, Rajahmundry and Vizianagaram) in Andhra Pradesh**

Technical specifications

1.Tread mill test machine

General Specifications

1. System should be PC based
2. The system should be supplied with a compatible NIBP system
3. Should be capable of Integration with Gas Exchange equipment
4. Company should make spares available for the entire life of the system.
5. Quality certifications like ISO-9001:2008, ISO-13485:2012 or equivalent
6. All-inclusive warranty of 3 years.

Specification for Acquisition / Stress Test Software

1. Automatic Arrythmia detection, print & capture : VBP and SVPB
2. Real time and retrospective J Point and isoelectric identification
3. User initiated and automatic capture of events
4. User defined Exercise Protocols
5. Real time Super imposition QRST Complex
6. Should acquire data from 12 Lead simultaneously
7. Should have notch filter around 50 Hz
8. Retrospective ECG & Arrythmia analysis even during Test
9. Scroll back during the Test
10. Should be capable of displaying real-time or stored ECG tracings.
11. Should display and regularly update ECG 12 leads, 12 medians, 1 expanded median, HR, BP, METS, Stage time, test time, protocol name, stage name, speed and grade of treadmill.
12. Should have automatic stage print out facility at the end of each exercise
13. Should have capability to display real-time ST running trend.
14. Should have ability to display trend graph for HR, BP, ST level, ST slope and J amplitude
15. Should have automatic detection, display, storage and review of rhythm events
16. Should be able to display ECG in various formats like 3 Lead + 12 Median; 6 Lead + 12 Median; 12 Lead + 12 Median
17. Should have base line correction (BLC) for stable baseline during test
18. Should run various test protocols like Bruce, Modified Bruce, Balke, Ellested, Naughton and user defined protocols.
19. Acquisition and analysis softwares should be upgradable to latest version free of cost
20. Should have capability to import patient data from HIS and also manually edit/add data of patient
21. Raw data from software should be made available in standard formats for further analysis with softwares like MATLAB.
22. Should be able to print report in PDF format.
23. Should able to print reports with standard Laser printers on A4 Plain sheets.

Specifications for treadmill

Treadmill should have:

1. Fully interfaced - controllable from software and Non interfaced – Independent mode with Programmable Controller
2. Controllable speed of 0.16-24 Km/H
3. Variable inclination (grade) from 0 – 25%
4. Adequate walking area ~ 1600 mm X 560 mm
5. Controlled by optically isolated RS 232 or USB
6. Heavy duty AC motor 4 HP(6 HP peak) drive
7. Emergency stop feature
8. Power requirement 230 V,50 Hz, 15 A

Specification for computer

System should be supplied with Trolly mounted branded all in one PC which should have:

1. i5 processor, 4 GB RAM, 1TB Hard Disk, DVD Drive, ~ 19" LED display or higher configuration.
2. Windows 8/10 (64 bit) Operating System.
3. Color Laser Printer for printing on A4 Sheets.
4. 1 KVA UPS for Computer.

Should be supplied with required standard accessories including 500 pieces of disposable ECG Electrodes

2. EMG and nerve conduction velocity machines

1. Should have Nerve Conduction Studies MCS, NCS, F wave, H reflex, Collision, Blink reflex, RNST, Inching studies & CCV with temperature probe.
2. Main Unit should be connected to the Computer through the latest and powerful USB Interface.
3. Must have 16 bit A/D conversion for high fidelity waveforms
4. Must have Compact operation panel for easy management of waveforms and latency marking.
5. 2/4 channel system with head montage junction box with user configurable channels.
6. Single channel monophasic/biphasic constant current electrical stimulator, upgradable to 4 electric stimulator with artifact compensation and temperature measurement for CCV
7. Input impedance: above 100 M ohms.
8. Sensitivity 1 micro volt per division to 10 milli volt per division
9. Noise < 0.5 micro volt RMS
10. Common mode rejection ratio: above 100 dB isolation mode
11. Low filter settings: 0.02,2,20,30,100,200,500Hz and high filter settings: 100,200,500Hz;1,2,3,5,10khz
12. Amplitude calibration 1 micro volt to 10 milli volt
13. Averaging 9,999
14. Electrical Stimulator: 2 channels monophasic / biphasic, constant current with artefact compensation
15. Should have option of connecting stimulation pods with multiple output ports.
16. Should have compact stimulating electrode with convenient dials for stimulation intensity adjustment and delivery of electric stimulation with two user configurable switches.
17. System should have at least 1 triggers input / output, upgradable to 6 Triggers

18. Must have Single Fiber EMG, spontaneous activity
19. User should be able to open at least 8 test protocols simultaneously.
20. 2 minutes up to 99 sites. The system should have QEMG, Single fiber EMG, Stimulated SFEMG and Macro EMG
21. EMG play back with waveform and sound for 2 minutes should be possible in any PC.
22. Should have Brain stem auditory evoked potentials with click, burst & tone pip stimulation (ABR, MLR, SVR&EcochG).
23. Should have Somatosensory Evoked potentials with signal triggering and back averaging
24. Must have user friendly Data base management software and study schedule program for easy data management.
25. On-screen examination guide / Neuro navigator.
26. Should be able to perform Skin electrode impedance check at both junction box.
27. Should have option of directly interfacing high voltage stimulator in future without additional hardware
28. Should have option of P-300
29. Should have facility of exporting data to csv or any other suitable format for analysis with MATLAB or any other third party software
30. Should Support for PDF or any other file format
31. Accessories:

a) Shielded EP electrodes – 2 sets
b) Conductive paste (3 Jars of 300 gms) - 2 sets
c) Skin preparation gel (Set of 2 tubes) - 2 sets
d) EMG disposables needles (Box of 25) - 1 boxes (Pead size)
e) EMG disposables needles (Box of 25) - 2 boxes (adult size)
f) Single fibre EMG needle - 2 Nos.
g) Temperature probe - 1 No.
h) Acoustically shielded Head Phones - 1 No.
i) Insert Ear Phones - 1 No.
j) 17” VEP Monitor - 1 No

32. System should have following Safety Standard

a) Manufacturer should have IS0 certification for quality standards.
b) Should be CE approved product.
c) Should be IEC 60601 -1 approved for electrical safety of Medical Equipment
d) Shall meet IEC 60601-2-040 Safety requirements

3. Oxygen Regulator with humidifier bottle for cylinder
Regulator should construct of brass and finished in chrome.
Regulator should be with flow meter.

Regulator should have Cylinder pressure indicator.
Flow rate should be 1-15 L/Min.
Metal filter between gas source and seat.
Should provide with spanner for opening of cylinder.
Manufacture should have ISO 9001/13485 certificate.
2 years warranty for any Manufacturing defects.
Should be CE/BIS/US FDA approved.

4. Flow meter

Usage	**Hospital Pipeline**
Flow Rate	**0-10L/min**
Display	**Analog**
Tube Cover material	**Poly Carbonate**
Body Material	**Brass**
Accuracy (Flow rate)	**+- 3%**
Add ons	**Humidifier Bottle with 200ml or more capacity**
Must be suitable to ports available in the hospital	

5. Oxygen Headbox

- Round shape or have no joins or corners, and easy to clean
- 3 x size small, approx: height 22 cm, diam 25 cm
- 3 x size medium, approx: height 18 cm, diam 20 cm
- Made of autoclavable polycarbonate
- Trauma free silicone neck
- Fitted with oxygen connector
- An adjustable porthole on top for feeding and suctioning

6. Infantometer

- Portable infant length-height measuring system
- Measures laying length of neonates and babies
- No need for calibration as all parts have prefixed position
- Reads in centimetres
- Minimum graduation: 1 mm
- Long-lasting hard-wearing ruler/graduation is fully integrated with device

• Measuring slide/wedge glides smoothly and close via ruler, avoiding reading parallax

• Measuring slide/wedge wobbles max 2 mm, over full length

• No sharp edges or corners

• Low stable board, width: 30 cm

• Length, measurement range, approx: 100 cm

• Head/footplate, board and slide/wedge made of quality laminated wood or plastic

• Wood parts should be treated and finished/protected with varnish to prevent chipping of edges and allow easy cleaning

• All connections should screwed/nailed plus glued

7.Stadiometer

specifications:

(1) A vertical board with an attached metric rule.

(2) An easily moveable horizontal headpiece that can be brought into contact with the superior part of the head.

(3) A wide and stable platform or firm uncarpeted floor as the base.

(4) Easily read, stable tape or digital readout in 0.1 cm (1 mm) increments.

(5) The stadiometer should have a height range of at least 70 cm to 205 cm so that it can be used with the majority of children and adolescents.

(6) The stadiometer should be foldable, portable and should have vertical columns with detachable pieces.

(7) The stadiometer should have stable platform and material of it should be hard, unbreakable, and light weighted.

(8) The downtime of the equipment must not be more than 10 days annually and system must be made functional within 48 hours of breakdown and in case of such incident the period of breakdown will not be counted while calculating warranty or CMC period. If the downtime during any year is more than 10 days a penalty at the rate of 0.1% of the cost of the equipment will be levied for each extra day of downtime.

(9) Operation manual with user demonstration video CD

8.Shakir's tape

Technical Specifications:

- MUAC measuring tape is suitable for measuring child's Middle Upper Arm Circumference (MUAC)with range up to 26.5 cm.
- Graduated with 1 mm precision with thicker line at 21.0 cm.
- Accuracy: ± 1 mm of the maximum measurement (26.5 cm)

Front side:

- Colour-coded as follows:
- Red (Pantone code 1795 C): from 0 to 11.5 cm,
- Yellow (Pantone code 107 C) from 11.5 to 12.5 cm,
- Green (Pantone code 369 C) from 12.5 to 26.5 cm.

9.Flexible Video Bronchoscope

Specifications:

Flexible Video Bronchoscope:

Should have following specifications:

1. Lighter and possess high-definition image quality with camera on the tip.
2. Fully immersible in disinfectant solution.
3. Scope should have image enhancement function.
4. Two or more no. of remote-control switches on control body.
5. Compatible with leakage testing device Manual/Automatic.

Field of view	:	120 degree or more
Direction of view	:	0-degree, forward viewing
Depth of field	:	3 to 50 mm or better
Distal end outer diameter	:	5.9 mm or less

Insertion tube outer diameter	:	5.9 mm or less
Tip Bending rage	:	Up 180 deg & more, Down 130 deg & more
Working length	:	600 mm or more
Channel inner diameter	:	2.8 mm or more

Fiberoptic Bronchoscope Full HD Video Processor Module:

1. Equipped with high resolution HDTV Imaging capacity.
2. Should be compatible with Analog and Digital output with 1920X1080P output.
3. Minimum 2 HDTV image output (HD-SDI/DVI/HDTV) for HD image transfer.
4. Integrated/Separate, light weight and ergonomically designed.
5. Suitable for BLI/FICE/ NBI/ISCAN-OE, Optical enhancement technology to provide high Contrast Images while observing microvascular and micro surface patterns of the mucosal layer.
6. Should have advanced LCI (Linked Color imaging) /RDI & TXI – Advance Image Enhancement Endoscopy facility or equivalent.
7. Should have Special light function for detection of surface patterns and vessels and slight color difference should be visualized with natural tone using Red Component.
8. System should support Close focus up to 1.5 mm to get enhanced image for diagnosis.
9. System should have Edge & Structure enhancement.
10. No white balance compulsion would be added advantage.
11. Recording of both still & moving images
12. Portable Memory & USB Slot for image recording with 4 GB internal memory and external USB (8GB) Automatic IRIS control & automatic white balance.
13. Automatic IRIS control & automatic white balance
14. Should be compatible with Pead bronchoscope (4mm OD or less), Latest EBUS scopes, for future upgradation.
15. Electronic Zoom up to 2X or more.
16. Equipped with memory back up for settings & Lithium battery.

Fiberoptic Bronchoscope Light Source:

1. Long life Multi LED light source (3 or more LED bulb) with minimum lamp life of 6000 hours, & light intensity equivalent to Xenon 300 watt/300-watt xenon with extra 5 xenon bulbs.
2. Backlit front panel indicators.
3. Equipped with automatic light adjustment forced air cooling, regulated air feeding pump and fan with low noise.

4. Compatible for waterproof one touch connector
5. Compact & light weight design weight up to 15 Kg.
6. Integrated/Separate, light weight and ergonomically designed.

Fiberoptic Bronchoscope Medical Grade Monitor

26" or more medical grade monitor compatible with the above quoted system.

Fiberoptic Bronchoscope system should be supplied with below mentioned items -

- Compatible trolley to mount the system
- HD Reporting and Reporting Software
- Computer system with i5 processor, 8GB RAM & 1 TB HDD or higher
- Laser color printer.
- Biopsy Forceps (2 No.)
- Mouth Guard (2No.)

Terms and conditions:

- The system must have standard comprehensive warranty of 3 years and should quote CMC for next 4 years.
- Should be European CE/US FDA certified/BIS/CDSCO/Indian Standards.
- CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- CMC offered for the quoted equipment must be on OEM letterhead for further years. CMC offered on distributors / vendor letterhead will not be considered
- Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility; all supporting documents must be provided.
- Equipment should have brand name / model number embossed/ etched on the equipment.

In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 72 Hour and repair within 10 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the INSTITUTE (Uptime guarantee of 95%).

10.Patient Examination table

1. Approx. Overall size 1820-1830mm L × 600- 610mm W × 750-760mmH.
2. All mild steel sheets used shall be of CRCA quality.
3. Table Top should be of 18G CRCA sheet in two sections.
4. The main top should be double bent four sides.
5. The top should have perineal recess made for 18G CRCA sheet and SS box at leg end with ‘C’ Channel sliding.
6. Complete with the pair of SS lithotomy rods made from 12mm dia SS304 grade round bars with rexine ankle straps insert gear arrangement.
7. The top should be of support of 31 × 35 × 2mm made from CRCA sheet one side having support of 31 × 3mm to receive the back section.
8. The back section shall be 18G CRCA sheet in double bend at three sides and one side closed beading having support of 35 × 3mm to receive main section a support must be provided with 25 × 5mm HR flat having welded to the support flat.
9. A ratchet flat shall be provided to with M.S. support rods 3/8".
10. The head flap adjustable on several indications both up and down and by easily accessible rack.
11. Foot endwelded tubular framework made of 31.7 O.D. × 18G tube for verticals & 25.5mm O.D. × 18G horizontal.
12. Gap between two legs must be 950-960mm lengthwise & 520mm-530mm widthwise.
13. Head end welded tubular framework made of 31.7mm O.D.× 18G tube for verticals & 25.5mm O.D.× 18G horizontal.
14. The leg must be fitted with rubber shoes with nylon inserts.
15. All components shall be thoroughly pre-treated chemically to remove rust & foreign matter like grease, oil etc by dip tank processes, including separate degreasing, derusting, phospating each followed by water rinsing & hot air drying to give phosphate coating conforming IS 3618-1966 class C.The treated metal surface should then be coated with epoxy polyester powder with paint film thickness of 50 microns & oven baked at 180 degree 200 degree centigrade. This finish should exclude stainless parts, some hardware, ebonite rubber, PVC, castor wheels, if any

11.Light Microscope

Specification:

1.Ocular eyepiece lens

2.Illuminator

3.Raue stop

4.Condenser lens 400X

5.Diaphragm or Iris

Objector lens

1.Total Magnification is 40X

2.To have good resolution at 1000X

12.Transcutaneous Bilirubinometer

1. Measuring method should measure the optical density difference at two wavelengths to determine the yellowness of the subcutaneous tissue.

2. The instrument should be suitable for non-invasive bilirubin measurement of neonates with gestational age 27 – 42 weeks and 1 month post-natal age; body weight 900 grams to 4000 grams.

3. Measurement range: 0.0mg/dL to 20mg/dL or 0 µmol/L to 340µmol/L

4. Error of estimate (SEE): ± 1.5mg/dL or ± 25.5µmol/L

5. It should measure readings at sternum and forehead.

6. Should have alarms when measurements are greater than 20mg/dl or 340µmol/L

7. Can be used in all skin colors, >35 weeks gestational age, prephototherapy.

8. Light source should be Pulse xenon arc lamp

9. Light source should have life of more than 10000 measurements.

10. Light source checker should be built in to the charger base.

11. Should have detectors with Silicon photodiodes.

12. Should have Ni-MH battery as power source.

13. Protection type and level Internally-powered instrument, BF type

14. It should measure at least 400 single measurements when fully charged.

15. It should have operating temperature range from 100 C to 400 C

16. It should be light weight; less than 250 g.

17. It should be supplied with: Charger unit with a checker, AC adapter, Carrying case and wrist strap, Power cable adapter set.

13.Peak flowmeters

- Unsuitable substance Products that attack ABS (Acrylonitrile butadiene styrene)
- Material ABS (Acrylonitrile butadiene styrene) Plastic Flow Meter with cardboard mouthpieces
- Temperature resistance (°C) -10 to +50°C
- Storage temperature (°C) 0 to +50°C
- Relative humidity (%) 10 – 95%
- Measurement range 50 – 800L/min
- Accuracy Above +/- 10 L/min or +/- 10% of the measurement
- Reproducibility Above +/- 5 L/min or +/- 5% of the measurement
- Leakage resistance 0.00384 kPa/L/min – 720L/min kPa/l/min
- Standard zone 50-800 L/min BTPS

- Frequency response Difference between A/B profiles below 15 l/min/15%
- Meter for mechanically measuring PEF (Peak Expiratory Flow) Can measure the intensity of an asthma attack and reveal a respiratory deficiency. Adjustable zone marker (green - yellow - red).

14.Rigid Bronchoscope

1. The tracheal and bronchoscope tubes should be made of high quality stainless steel. 2. The assembly should include a HD (High Definition) / High quality (3 chip CCD video) camera head fully compatible with the viewing telescope.

3. The video processor provided should be compatible with the camera head and provide a high resolution output to medical grade flat screen high definition/resolution 20 inch or greater sized video monitor.

4. There tracheoscope and bronchoscope tubes should be without a distal fiber optic light carrier.

5. The trachea bronchoscope tubes should be of use with proximally insertable telescopes.

6. The bronchoscopes should be durable and should be able to be cleaned with commonly used sterilizing solutions without affecting the surface of the scope.

7. All the accessories should be compatible with the sheath

8. The complete system should be covered under warranty as per the AIIMS Jodhpur rules .

9. A dedicated imported trolley for carrying the entire system and recording equipment should be provided

10. The equipment should be USFDA or European CE approved

11. A recording system to be provided which should have facility for recoding and storage of media in both image and video format and allow transfer on removable storage (either CD or USB flash drive)

12. All metallic instruments and accessories should be autoclavable

13. Operating voltage - Power 220 V 50 Hz AC .

14. The system should include all the other possible accessories, UPS, power cables, fiber optic cables connectors etc. to make the unit fully functional.

15. The system should be provided with a laptop PC (Windows 7 OS, 750 GB Hard disc drive, 8 GB RAM, Core i-7 processor)

16. Price of all the accessories as mentioned should be included within the quoted price 17. Rate list of all possible spares, accessories and consumables should be provided as part of the financial bid by the company.

Technical Specification of Equipment:

1. Zero degree straight forward viewing telescope with integrated fiberoptic light transmission, diameter 4.5 mm ,working length of 50 cm length- 1 No.

2. Zero degree straight forward viewing telescope with integrated fiberoptic light transmission, diameter 2.8 mm, working length of 44 cm - 1 No.

3. Tracheoscope tube size 6.5 mm, length at least 30 cm- 1 No.

4. Tracheoscope tube size 12 mm, length at least 30 cm -1 No.

5. Tracheoscope tube size 14 mm, length at least 30 cm for application of stents -1 No. 6. Bronchoscope tube size 6.5 mm, length at least 40 cm - 1 No.

7. Bronchoscope tube size 11 mm for application of stents, length at least 40 cm-1 No. 8. Bronchoscope tube size 12 mm, length at least 40 cm-1 No.

9. Bronchoscope tube size 14 mm, length at least 40 cm for application of stents – 1 No. 10. Optical forceps, alligator -1 No.

11. Optical forceps, cupped jaws for biopsy-2 Nos.

12. Optical forceps, universal-1 No.

13. Optical forceps for removal of coins and flat foreign body-1 No.

14. Manual forceps alligator, diameter 2.5 mm at least 50 cm length-2 Nos.

15. Manual forceps round cupped jaws for biopsy, diameter 2.5 mm at least 50 cm length-1 No.

16. Manual forceps universal, diameter 2.5 mm at least 50 cm length-1 No.

17. Manual forceps for peanuts and soft foreign bodies at least 50 cm length-1 No.

18. Foreign body basket with handle > 50 cm length- I No.

19. Sponge holder forceps-1 No.

20. Cotton applicator forceps -1 No.

21. Insulated coagulation tube with connector for unipolar coagulation 1 No.

22.TONN Stent applicator system for deployment of silicon stents of diameter 14-20 mm and 11- 13 mm consisting of Folding System, Clamping Rod, Loading Rod, Introducer Tube length 42 cm, with 2-ring handle and Pusher-1 Set (Red 1 and Green 1)

23. Dedicated forceps for opening and deployment of silicon stents- 1 No.

24. One set of boogies.

25. Silicone stent (3 each) : Tracheal stent with wall thickness 1.5 mm, Thin tracheal stent with wall thickness 1.0 mm, Bronchial stent with wall thickness 1.0 mm, Carina stent with wall thickness 1.0 mm, Total carina stent with wall thickness 1.0/1.3 mm

26. Controlled Radial Expansion Balloon dilator (Wire Guided) size of 6-8 mm, 8-10mm, 10-12mm, 12-14mm-2 each.

27. Each Balloon Inflation System for CRE Balloon-1 Set

28. Should be accompanied with all accessories essential for the functioning of the equipment including:

29. Prismatic Light Deflector - 5 pieces

30. Rubber telescope guide - 20 pieces

31. Glass window plug - 10 pieces

32. Movable adaptor with sealing cap - 5 pieces

33. Injection cannula for positive pressure ventilation - 5 pieces

34. Adaptor for respirator - 10 pieces

35. Instrument guide - 10 pieces

36. Rubber tipped suction catheter (4 mm) of at least 50 cm length with adaptor-10.

37. Adjustable head rest for positioning of patients head during the procedure -1

38. Flexible suction catheters - at least 100

39. Cleaning brushes - 5

40. Equipment carrying case (for the tubes and forceps) – 1

41. Anti fog solution -30 ml - 15 bottles

42. High resolution 3 chip video camera CCU and head - 1 No. [3x1/2" CCD image sensor chip, Resolution : 750 lines - 800 lines horizontal. Picture element = 752 (h) x 582(v) pixels per chip, Min. sensitivity : 3 lux (f=1.4), AGC: + 18 db, signal tonoise ration > 60 db., Camera should have integrated parfocal zoom lens, F=25-50mm, It should have DV output and image processing module and it should have image freeze function, Programmable control buttons on camera head for controlling, Gain , white balance shutter speed, video printer and recorder, Keyboard input . for data entry through built in character, Generator, Camera should be compatible with FBAS, S-VHS and RGB, Manual or automatic exposure control (1/50 sec. —1/10000), Should have automatic white balance with storage functions, For two white balance values, Unit should be certified to IEC 601-1, CE according to MDD.]

43. LED (175-300 W) light source with cable compatible with the unit -1 No. 44. High resolution medical grade flat screen 20-inch monitor for the system -1No.

15.Pulmonary function test machine

The unit should be light weight, exclusively designed to carry out examination of pulmonary system and to measure & display lung function parameters, operable on USB port power , not requiring large installation space (compact).

It should come with an incentive display for cooperation free, lung testing.

It should be designed for the following measurement protocols Spirometry with pre/post comparison, Flow/Vol and Vol/Time loops/curves and Trend Loops. Individual interpretation assistance.

MVV Patient Co-operation Display It should measure following options without using additional gas analyzer Capno-Volumetery measurement Emphysema diagnostic Determination of anatomical and functional dead spaces.

The system should incorporate a light weight, Ultrasonic sensor (non-heated) free from any kind of frictional inefficiencies which is absolutely insensitive to moisture.

It should not require any warm-up time and calibration with following measurement ranges :-

Flow Measurement Range : 0 to +/- 16 Ltrs/sec with accuracy better than +/- 3% or 100 ml/sec .

Volume measurement Range : 0 to 10 ltrs with resolution of 10 ml

Corrections Flow Volume : EGKS or ATS

Inspiratory Gas qty : BTPS (ambient module)

The machine should measure the following Parameters:

SVC , VC ex, V C max, IRV, ERV, VT, IC, Frequency, MVV, ti, te, ti/te, FVC, FEV1, FEV 0.5, FEV 1/ VC max, FEV 1/ FVC ex, MEF25, MEF 25-75, PEF, PIF, MVV and pre-post comparisons.

Should measure CO2 max %, Vm25-50, Vm50-75 etc.

The unit should be supplied with 50 no of disposable breathing tubes.

The unit should be supplied complete with hardware and software including a PC as per below given specifications from a respected brand like IBM, Compaq or HP.

a) CPU – Pentium IV Core 2 DUO Processor.

b) RAM – 1 GB, At least 160 GB HDD

c) At least 14” TFT Color Monitor

d) DVD R/W Drive, Keyboard, Mouse

e) Serial / Parallel interface PCI SLOT

f) Windows XP

g) Inkjet Printer.

h) Suitable UPS for the computer system The manufacturer should be an EN ISO accredited company and the product should be duly USFDA/CE/BIS etc marked to MDD 0124 for medical devices.

16.Resuscitation equipment (CPR)- Ambu bag with face mask

Ambu Bag

- Ambu bag should be self inflatable and should have pop up valve, attachment for oxygen tube & oxygen reservoir
- Bag should be made up of Silicon, latex free double layered rubber and should retain sensivity and should be resistant to rough use.
- Inlet end of the bag should have separate port for Oxygen supplement. Outer port should be such that re-breathing valve or non return valve can be attached.

1. Self-inflating bag

2. Silicone made

3. Provided with closed ended reservoir with two valves

4. Patient valves pliable, well-sealed, have minimum dead space and no forward or backward leaks

5. The bag should have an oxygen inlet which fits into the standard oxygen tubing both from a cylinder and central supply

6. Face masks should be transparent, fit the patient outlet easily and have minimum dead space.

7. The system should withstand washing scrubbing and autoclaving procedures

8. Face masks: 3 sizes i.e. 00, 01, 02,: 3 set with each bag.

9. Should be provided with one set of oxygen tubing and reservoir with each self inflating bag.

10. Should have a safety valve to control maximum PIP

11. Option to control PEEP (optional)

12. European CE and USFDA approved and certificate should be provided. A maximum of 15% variation is allowed in the volumes of self inflating bags of different volumes as mentioned below:

1. 250 ml- 22 Nos.

2. 500 ml- 14 Nos.

3. 1500 ml- 04 Nos.

17.Adult Manikin

1. The human patient simulator comprise of a life like mannequin. It should employ multiple models of human physiology including cardiovascular system, pulmonary system, neuromuscular system, and central nervous system. The models should allow the patient to exhibit clinical signs (e.g., spontaneous breathing, eyelid blinking) and monitored parameters (e.g., electrocardiogram, blood pressure) and should automatically respond totherapeutic intervention without any/ minimal input from the instructor.

2. The mannequin should be controlled completely wirelessly and should not be connected to any control system/instructor computer through wires/hoses.

3 The mannequin should have a realistic skeletal structure, providing true- to-life articulated motion.

4. ABP, CVP, Pulmonary artery pressure, Pulmonary artery occlusion (wedge) pressure, cardiac output

5. The patient simulator should have a pulmonary system that calculate etO2, inO2, etCo2, inN2O, etN2O, metabolic gas exchange. (for example, apnea or

hypoventilation and should automatically result in hypercarbia, hypoxemia, decreasing oxyhaemoglobin saturation and tachycardia

A. During spontaneous ventilation, the patient mannequin should breathe with a spontaneously controlled respiratory rate and tidal volume to maintain normocarbia and adequate oxygenation

B. Positive pressure ventilation or return of spontaneous ventilation should automatically reverse apnea with the response appropriate to the rate and tidal volume or ventilation.

C. The Patient Simulator should automatically responds to the fraction of inspired oxygen present, such as with smoke inhalation or supplemental oxygen.

6. The patient simulator should have a pharmacology system model with automatic drug recognition and calculation of pharmacodynamics for all commonly used intravenous and inhaled medications, yielding appropriate changes in patient clinical signs and monitored parameters. All patient responses to drug administration should be automatic, dose dependent, and follow an appropriate time course.

7. Patient outcome should be solely based on patient physiology and the treatment administered (e.g., ventilation, oxygen therapy, drug therapy) and should not be influenced by subjective assessment of the operator,Thus providing objective evaluation of clinical performance and reducing risk of negative training transfer.

8. The mannequin should have a realistic airway (mouth, oropharynx, larynx, esophagus, trachea, carina) resembling to that of an actual human patient.

A. Depending on head positioning, choice of clinical tools, and other maneuvers, it should be possible to achieve anywhere from a Cormack Class I (e.g., easy intubation) to a Cormack Class IV (e.g., difficult intubation) airway.

B. The mannequin airway should allow use of airway adjuncts (e.g., combitube, laryngeal mask airway) as they are used in real patients, without any special adjustments by the instructor (e.g., activation of posterior swelling to seat the LMA).

C. The success or failure of airway management should be automatically reflected in the resulting ventilation, oxyhemoglobin saturation, and overall cardiopulmonary stability.

9. The patient simulator should have trauma simulation capabilities, such as:

A. Surgical cricothyroidotomy

B Articulated mandible

C Neck articulation

D Simultaneous bleeding at different sites linked to physiology

E Secretions from eyes, ears, mouth.

F. Bi-lateral pneumothorax needle decompression at the clinically appropriate location

G. Bi-lateral chest tube insertion at the clinically correct location.

10. Each trauma capability should require minimal instructor input and physiological consequences (e.g., improvement in blood pressure, ventilation, and oxyhemoglobin saturation) should be automatic.

11. The patient simulator should have fully independent left and right lungs.

A. A one-sided pneumothorax should result in chest distention on one side, with the other side rising and falling with spontaneous breathing.

B. The simulator should have independent breath sounds linked to ventilation of each lung for both spontaneous and mechanical ventilation.

C. One-lung ventilation should automatically result in appropriate breath sounds, chest excursion, and pulmonary gas exchange.

D. Independent bilateral trauma feature (needle decompression / chest tube) No Change

12. The patient simulator should have independent blinking eyes and reactive pupils. Eye blinking should be automatic and dependent on the underlying

patient physiology (i.e., level-of- consciousness, level of neuromuscular blockade). It should be possible to easily set the pupils manually to different settings (i.e., pinpoint, reactive, non reactive, blown).

13. The patient simulator should be capable of physically shaking, giving a visible cue of convulsions, tremors, or other similar conditions.visible cue of convulsions, tremors, or other similar conditions.

14. The patient simulator should have touch activated, bi-lateral palpable pulses in the following locations: Carotid, Brachial, Radial, Femoral, Popliteal, Pedal (dorsalis and tibialis)

15. The patient simulator should have an advanced cardiac life support system in which:

A. Effective chest compressions automatically yield artificial circulation, cardiac output, central and peripheral blood pressures, palpable pulses, and exhaled CO2.

B. Ineffective chest compressions yield inadequate cardiac output and circulation and an absence of exhaled CO2.

C. Defibrillation energy is automatically identified, quantified, and logged physiological response.

D. Pacing current is automatically identified, quantified, and logged, with appropriate physiological response.

16. The patient simulator should include independent simulations of patients (e.g., young healthy male, pregnant female, elderly patient with coronary artery disease) and injury/disease scenarios (e.g., anaphylactic shock, ruptured spleen, subdural hematonia.)

A. It should be possible to combine any patient with any scenario, creating a wide variety of clinical care simulations.

B. It should be possible to run multiple software patients simultaneously to create multi- patient care simulations.

C. It should be possible to run multiple injury/disease scenarios simultaneously on a particular patient to create multi-trauma simulations.

17. The patient simulator should include educationally complete properly documemnted clinical simulations including information : Clinical background and scene, Pre-hospital and emergency department learning objectives, Student critical actions, Simulation algorithm, Equipment required for the simulation, and Instructor notes etc.

18. Patient simulator should be supplied complete with

a) Disaster/ Casualty kit which allows the patient to automatically physically bleed in various locations simultaneously and excrete body fluids from the eyes, ears, and mouth.

b) Wireless instructors workstation communicating over RF (radio frequency) allowing it to be located up to 150 feet away from the patient mannequin during simulation /training exercise

c) Should have the facility to run control software and monitor waveform display on same instructor's workstations thus allowing to use it for developing simulations at other locations independent of the patient mannequin.

20. USFDA/CE/BIS/etc

18.Pediatric Mannequin

1. The human patient simulator comprise of a life like mannequin. It should employ multiple models of human physiology including cardiovascular system, pulmonary system, neuromuscular system, and central nervous system. The models should allow the patient to exhibit clinical signs (e.g., spontaneous breathing, eyelid blinking) and monitored parameters (e.g., electrocardiogram, blood pressure) and should automatically respond to therapeutic intervention without any/ minimal input from the instructor. No Change
2. The mannequin should be controlled completely wirelessly and should not be connected to any control system/instructor computer through wires/hoses.
3. The mannequin should have a realistic skeletal structure, providing true-to-life articulated motion. No Change

4. The patient simulator should have a cardiovascular system that automatically calculates dependent variables (e.g., blood pressure, heart rate) in response to changing cardiovascular system status (e.g intravenous fluid administration), including the following:

A The manikin should have facility to control blood pressure, heart rate, pulse strength automatically to maintain circulation and perfusion

B. A myocardial oxygen supply (e.g., diastolic blood pressure, arterial oxygen partial pressure) and demand (e.g., cardiac contractility, heart rate) that yields appropriate cardiac response (e.g., cardiac rhythm, cardiac contractility) to myocardial ischemia. Untreated myocardial ischemia should automatically result in cardiovascular decompensation with accompanying cardiac rhythms (e.g., STsegment depression, ventricular tachycardia, ventricular fibrillation, asystole) and ultimately, cardiovascular collapse.

C. Arterial blood gases (e.g., PaO2, PaCO2, and pH) and mixed venous gases (e.g., PvO2, PvCO2) that realistically change.

D. Hematocrit can be automatically calculated to reflect oxyhemoglobin saturation and administration of a variety of intravenous fluids, such as whole blood, packed red cells, colloids, and crystalloids by using preset lab reports

E. A complete hemodynamic monitoring package that includes the capability to measure and monitor the following:

5. ABP, Left ventricular blood pressure, CVP, Right atrial pressure, Pulmonary artery pressure, Pulmonary artery occlusion (wedge) pressure, cardiac output.

6. The patient simulator should have a pulmonary system that automatically calculates alveolar and arterial gas partial pressures in response to ventilation, fraction of inspired oxygen, intrapulmonary shunt fraction, and metabolic gas exchange (For example, apnea or hypoventilation should automatically result in hypercarbia, hypoxemia, decreasing oxyhemoglobin saturation and tachycardia)

A. During spontaneous ventilation, the patient mannequin should breathe with a spontaneously controlled respiratory rate and tidal volume to maintain etCo2 and adequate oxygenation

B. Positive pressure ventilation or return of spontaneous ventilation should automatically reverse apnea with the response appropriate to the rate and tidal volume or ventilation.

C. The Patient Simulator should automatically responds to the simulated fraction of inspired oxygen present, such as with smoke inhalation or supplemental oxygen. (simulated cases)

7. The patient simulator should have a pharmacology system model with drug response calculation of pharmacodynamics for all commonly used intravenous and inhaled medications, yielding appropriate changes in patient clinical signs and monitored parameters. All patient responses to drug administration should be automatic, dose dependent, and follow an appropriate time course.

8. Patient outcome should be solely based on patient physiology and the treatment administered (e.g., ventilation, oxygen therapy, drug therapy) and should not be influenced by subjective assessment of the operator,Thus providing objective evaluation of clinical performance and reducing risk of negative training transfer.

9. The mannequin should have a realistic airway (mouth, oropharynx, larynx, esophagus, trachea, carina) resembling to that of an actual human patient.

A. Depending on head positioning, choice of clinical tools, and other maneuvers, it should be possible to achieve anywhere from a Cormack Class I (e.g., easy intubation) to a Cormack Class IV (e.g., difficult intubation) airway.

B. The mannequin airway should allow use of airway adjuncts (e.g., combitube, laryngeal mask airway) as they are used in real patients, without any special adjustments by the instructor (e.g., activation of posterior swelling to seat the LMA).

C. The success or failure of airway management should be automatically reflected in the resulting ventilation, oxyhemoglobin saturation, and overall cardiopulmonary stability.

10. The patient simulator should have trauma simulation capabilities, such as:

A. Airway opening acquired by head tilt, chin lift and jaw thrust , LMA, ET tube , Fiber optic , gastric tube,

B Articulated mandible

C Neck articulation

D Bleeding moulage modules (makeup kit) , enlarged liver, fontanelle bulge ,limp head

E. Limp, tone , motion , head seizure ,tounge edema, foreign body obstruction , laryngospasm.

F. Pneumothorax - Bilateral and unilateral chest rise and fall , Normal and abnormal breath sounds bi-lateral at clinically correct location ,

G. Simulated Chest tube insertion unilateral at clinically correct location

11. Each trauma capability should require minimal instructor input and physiological consequences (e.g., improvement in blood pressure, ventilation, and oxyhemoglobin saturation) should be automatic.

12. The patient simulator should have fully independent left and right lungs.

A. A one-sided pneumothorax should result in chest distention on one side, with the other side rising and falling with spontaneous breathing.

B. The simulator should have independent breath sounds linked to ventilation of each lung for both spontaneous and mechanical ventilation.

C. One-lung ventilation should automatically result in appropriate breath sounds, chest excursion, and pulmonary gas exchange..

D. Independent trauma feature (Unilateral needle thoracentesis mid-clavicular) No Change

13. The patient simulator should have independent blinking eyes and reactive pupils. Eye blinking should be automatic and dependent on the underlying patient physiology (i.e., level-of- consciousness, level of neuromuscular blockade). It should be possible to easily set the pupils manually to different settings (i.e., pinpoint, reactive, non reactive, blown).

14. The patient simulator should be capable of physically shaking, giving a visible cue of convulsions, tremors, or other similar conditions.

15. The patient simulator should have touch activated, palpable pulses Brachial, and Femoral

16. The patient simulator should have an advanced cardiac life support system in which:

A. Effective chest compressions automatically yield artificial circulation, cardiac output, central and peripheral blood pressures, palpable pulses, and exhaled CO2.

B. Ineffective chest compressions yield inadequate cardiac output and circulation and an absence of exhaled CO2.

C. Defibrillation energy is automatically identified, quantified, and logged physiological response

D. Pacing current is automatically identified, quantified, and logged, with appropriate physiological response.

17. The patient simulator should include independent simulations of patients (Eg Pediatric male, female with coronary disease) and injury / disease scenarios (Eg anaphylactic shock, trauma)

A. It should be possible to combine any patient with any scenario, creating a wide variety of clinical care simulations.

B. It should be possible to run multiple software patients simultaneously to create multi- patient care simulations.

C. It should be possible to run multiple injury/disease scenarios simultaneously on a particular patient to create multi-trauma simulations.

The patient simulator should include educationally complete properly documemnted clinical simulations including information : Clinical background and scene, Prehospital and emergency department learning objectives, Student critical actions, Simulation algorithm, Equipment required for the simulation, and Instructor notes etc.

Patient simulator should be supplied complete with

a) Disaster/Casualty make up kit which allows the patient to show trauma , simulated bleeding in various locations

b) Wireless instructors workstation communicating over RF (radio frequency) allowing it to be located up to 150 feet away from the patient mannequin during simulation /training exercise

c) Should have the facility to run control software and monitor waveform display on same instructor's workstations thus allowing to use it for developing simulations at other locations independent of the patient mannequin.

18. USFDA/CE/BIS etc

19.Air way Crash cart

• The trauma care crash cart should have 18g stainless steel (SS 304) tubular/Rectangular frame work. Two lockable plastic box units with 3 drawers should measure 305mm l x 380mm d x 320mm h.

• The trauma care crash cart should have following facilities: 6 nos. hand out bins to keep important supplies easily accessible of size approx. 110 mm W x 125 mm D x 75mm H. light weight plastic box with three drawers each to hold emergency medicines, Ambu. Bags, IV solutions, catheters.

• The trauma care crash cart should have facility to carry monitors, ECG, suction apparatus on open areas at top Centre and bottom shelves

• The trauma care crash cart should have stainless steel saline rod made of 12 mm dia. 304 grade s.s. approx. 750 mm long and bent at top to have an arm of 400 mm approx. at the end of which of 6 mm dia. s.s. hook shall be welded with tig.

• The trauma care crash cart should have 12.5 cms dia non-rusting swiveling castor wheels. Two having locking arrangement.

• The trauma care crash cart should have pull out cardiac massage board made of plywood. The trauma care crash cart should have oxygen cylinder stand epoxy powder coated, on one side.

Certificates: Should have notified body CE/BIS/USFDA certification.

20.Patients controlled analgesia system (portable)

1 TECHNICAL CHARACTERISTICS.

1.1 Clinical performances- Should be light weight, support the bolus supply of drug on press of single button, as per need and should be able to preset different range of Bolus supply. Preferably the unit should be of bottom / side loaded to

avoid accidental spilling of drugs and damage to the machine unit should have locking system with pump to prevent accidental disconnection of drugs.

2 Technical characteristics (specific to this type of device)

2.1 Flow must be adjustable between 0.1 ml to 50 ml/hr, with 0.1 ml increment

2.2 Dosage adjustments should be possible in mg and ml/hr for neonate and paediatric patient is very important.

2.3 It should have system to give bolus volumes of 5ml or more than 5ml during infusion.

2.4 Bolus rate adjustable from 0 to 9.9ml/hour.

2.5 Accuracy +/- 6%.

2.6 The dosing modes: it should have continuous rate, demand dose, clinician bolus or equivalent modes.

2.7 KVO adjustable.

2.8 Monitoring time frame -1-24hr.

2.9 Lockout time- minimum 5min; lockout time range- 5 min to 24 hours

2.10 Basal rate:

2.11 It should be provide security against tampering with ability to record and retrieve drug pump/Microprocessor malfunction.

2.12 Graphic LCD bright display to denote infusion & alarm status & keypad.

2.13 Set flow rate and volume infused should be digitally displayed.

2.14 Delivery rate should be preset on Delivery rate and on volume and time pre selection.

2.15 Volume infused should be displayed.

2.16 Should have audio and visual alarms for:

(a) Occlusion

(b) Very Low Battery

(c) End of Infusion

(d) Cover Unlocked

(e) Patient Handset Disconnected

(f) Limit Dose Reached

(g) Accumulated Dose

(h) No Mains

(j) Low Battery

2.17 Necessary drug holding chamber to be supplied

2.18 Machine should be password or code protected to prevent accident and safety.

2.19 Dose attempted option should be added to check patient effort in the time of lock out.

2.20 Different options of drug chamber should be there like 50ml, 100ml, 250 ml, to prevent frequent change of drug chamber.

2.21 Should have more option of drug delivery root like intravenous, Epidural, Intrathecal, for ease of treatment.

3 Accessories per pump:

(a) Headboard/footboard mounting clamp - 1 Set.

(b) Universal mounting clamp for mounting on IV stand pole available in hospital- 1nos.

(c) Patient handset – 2 Nos.

(d) Nurse call cable - 2 nos.

(e) AC power lead 2m (6 feet) long with plug that fits Indian sockets. - 1 no.

4 Settings-Single loadable with one syringe of minimum 5 ml.

5 User's Interface-Automatic

6 Software and/or standard of communication-Inbuilt

7 PHYSICAL CHARACTERISTICS- Should be compact, lightweight, and made of tamper-resistant material.

8 PRODUCT & MANUFACTURER QUALITY STANDARDS:

(a) Should be European CE (Notified as per medical device directive with 4 digit body number) or USFDA certified or BIS for the quoted model only.

(b) Electrical safety conforms to standards for electrical safety IEC-60601-1, class II Shall meet IEC 60601-1-2 EMC standard requirements

(c) Certified to IEC-60601-2-24: Particular requirements for the safety of infusion pumps and controllers.

21. Nerve locator

- Should be hand held type, light weight Should work on alkaline battery
- Low battery indicator
- LCD/LED display
- Should have features of both nerve locator during regional anesthesia and neuromuscular monitoring during anesthesia.
- Should be programmable
- For Nerve Stimulation :Current output: 10 to 150-160mA
- Stimulation pattern: TW,TOF,TET,PTC DBS Nerve locator
- For Nerve Location: Current output: beginning from 0.1/0.2 mA till 10mA Stimulation pattern: Twitch
- CE/FDA/BIS approved
- Accessories: electrodes

22.Nerve Stimulator

- 1. The nerve stimulator should have nerve mapping facility.
- 2. The nerve stimulator should have Remote control for sterile one
- handed operation.
- 3. The stimulator should work on 9V alkaline battery.
- 4. The Power consumption should be 8mA max
- 5. Stimulation current: 5 mA max
- 6. Stimulation Voltage: 95V
- 7. Stimulation frequency: 1Hz/2Hz
- 8. Allowable load impedance: 0 kohms -12kohms
- 9. Stimulus duration: 1.0ms to 0.05ms range
- 10. Current measuring accuracy: +/-0.02 mA
- 11. Impedance measuring range: 1 KOhms – 90KOhms for target
- stimulation current >0.5 mA
- 12. Weight: 250 g maximum

- **Accessories:**

- 1.Nerve stimulation needles 24G; 25mm
- 2.Nerve stimulation needles 22G; 50mm
- 3.Nerve stimulation needles, 21G; 100mm
- 4.Nerve stimulation needles 20G; 150mm
- 5.Nerve stimulation needles 18 G, 55mm
- length with 40cm length catheter set.
- 6.Nerve stimulation needles 18 G, 110mm
- length with 100cm length catheter set

23.Multipara monitor 5 channel

Specifications

1. Parameters monitored: ECG ,HR. Respiration rate, SPO2, NIBP,Temperature.
2. Display: Color TFT, approx. at least 12.1 inch, with wide viewing angle, facility for display of at least 5 waveforms
3. Soft touch keys, durable and easy to clean
4. ECG : 5 lead
5. HR: approx. 30to 250bpm; accuracy 3 bpm
6. NIBP: approx. 0 to 300 mmHg (systolic) 10 to 180 mmHg(Diastolic) accuracy ±3 mmHg,
7. NIBP hose should be at least 6 feet.
8. SpO2: approx. 10 to 100%, accuracy ±1%
9. RR (Tran thoracic Impedance) ECG div. respiration : approx. 0 to 155 bpm ,accuracy ±1 bpm
10. NIBP oscillometric step deflation , manual /automatic, initial inflation pressure user selectable
11. Sweep , adjustable : 12.5,25 or 50 mm/s
12. Sensitivity (amplitude) of all signals user adjustable
13. Standardizing voltage maker , 1 mV
14. User preset if high/low alarms on all monitored parameters
15. Audio visual alarm in case measurements are outside preset range
16. Silencing feature for audio alarms
17. Trend display (numerical and graphic) from 360 hrs. facility for zooming in up to 1 min. The trends data should not be lost on switching off the monitor.
18. RS 232 serial data output provision(peripheral printer or network), analogue output for ECG
19. Display reports system error, leads and sensor failure and built in battery status.
20. Power requirements : 220V / 50 Hz (with adapter) and internal rechargeable batteries (autonomy at least 3hrs. , automatic recharge)
21. Should be provided with appropriate accessories for wall mounting.
22. Should be CE/ US FDA/BIS approved product.
23. Central monitoring system should be provide free of cost for every 8 monitors

Supplies with each unit

1set of reusable NIBP cuffs each for all age groups (neonates, children, adolescents) (No.1 (3.1 - 5.7 cm) No.2 (4.3 - 8cm), No 3(5.8 - 10.9 cm), No 4 (7.1 - 12.1 cm) No. 5 (9.96 - 14.3 cm)

24. Reusable SpO2 sensors with cables for Adult (Finger type), Pediatric (Finger type) and neonate (wrap type) – 1 set of each

24.Monitor 3 para

Specifications

25. Parameters monitored: ECG ,SPO2, NIBP,.
26. Display: Color TFT, approx. at least 8 inch or more, with wide viewing angle, facility for display of at least 5 waveforms
27. Soft touch keys, durable and easy to clean
28. ECG : 3 lead
29. NIBP: approx. 0 to 300 mmHg (systolic) 10 to 180 mmHg(Diastolic) accuracy ±3 mmHg,
30. NIBP hose should be at least 6 feet.
31. SpO2: approx. 10 to 100%, accuracy ±1%
32. NIBP oscillometric step deflation , manual /automatic, initial inflation pressure user selectable
33. Sweep , adjustable : 12.5,25 or 50 mm/s
34. Sensitivity (amplitude) of all signals user adjustable
35. Standardizing voltage maker , 1 mV
36. User preset if high/low alarms on all monitored parameters
37. Audio visual alarm in case measurements are outside preset range
38. Silencing feature for audio alarms
39. Trend display (numerical and graphic) from 360 hrs. facility for zooming in up to 1 min. The trends data should not be lost on switching off the monitor.
40. RS 232 serial data output provision(peripheral printer or network), analogue output for ECG

41. Display reports system error, leads and sensor failure and built in battery status.
42. Power requirements : 220V / 50 Hz (with adapter) and internal rechargeable batteries (autonomy at least 3hrs. , automatic recharge)
43. Should be provided with appropriate accessories for wall mounting.
44. Should be CE/ US FDA/BIS approved product.
45. Central monitoring system should be provide free of cost for every 8 monitors

Supplies with each unit

1set of reusable NIBP cuffs each for all age groups (neonates, children, adolescents) (No.1 (3.1 - 5.7 cm) No.2 (4.3 - 8cm), No 3(5.8 - 10.9 cm), No 4 (7.1 - 12.1 cm) No. 5 (9.96 - 14.3 cm)

46. Reusable SpO2 sensors with cables for Adult (Finger type), Pediatric (Finger type) and neonate (wrap type) - 1 set each
47. USFDA/CE/BIS etc

25.Central Cardiac Monitor Console

Central Station should provide remote centralized monitoring and alarm management for 12 patients and should be scalable to monitor up to 48 patients.

Each high-resolution flat panel touchscreen display should present data from one to 16 patients for maximum parameter viewing.

Up to four high-resolution flat panel touchscreen displays could be connected to one Central Station to allow network control and views of real time surveillance, trends, and patient demographics.

- Should allow remote access for any monitor to view, control, review, and record across departments and across sites using the hospital network.
- Should have intuitive controls on the touchscreen interface to provide simplified patient management. Keyboard and mouse can also be used.
- Should easily adjust which patients are viewed on each screen as per the acuity of their data.
- Bedside view should allow display of all monitored parameters from a bedside monitor on a single display for optimum review. Data can be frozen for close inspection and printed as needed.

- Should have fully customizable display that allows user to:
    - Organize information based on patient's condition
    - Identify patients by caregiver
    - Expand patient information easily to full screen
    - Identify alarm severity through colour, flash, and tones
    - Use only one or two menu steps for any function
- Should have simple virtual sticky notes feature on the screen to eliminate paper notes everywhere
- Should have an Intelligent Alarm System. All alarms can be assigned on priority for display based on clinical significance. When multiple alarms of the same priority occur for a patient, the system displays the alarm that is the most important for the care of the patient.
- The last high priority alarm message should be saved and displayed in the patient zone after the alarm condition has been resolved.
- Display Patient centric data. The system should define a patient zone and all data from the bedside monitor should be displayed within the zone. Any parameter monitored at the bedside can be automatically displayed in this patient zone.
- Graphic and Tabular Trends— Data presentation should show in the same format as the bedside monitor.
- Should be able to print strips and reports from the Central Station. Receive and print strips from bedside monitors as well.
- Should have two 22'' touch screen displays with seamless all glass bezel design.
- Should come with Laser printer.Also, the system should be possible to use any network laser printer that is already available in the hospital.

The system should be able to provide:

- Full disclosure for 72hrs:
    - Retrospective analysis of the las 72 hours of ECG waveforms and provide a retrospective summary report, histogram, or thumbnail view to review events.
    - Electronic Callipers measurement.
    - Alarm review of all patient's measurements, filteredby priority or by type.
- Printer Management with ability to save printouts for later view and reprinting with annotationsin PDF format.
- Interactive access through PCS and laptops to real-time waveform views, data analysis, review, and reporting from insidethe hospital or outside if hospital IT structure allows.
- 12-lead interface to allow the measurements to be sent to the hospital's ECG Data Management System (optional).

Modular Patient Monitor

Bedside monitor should provide premium performance and ultra-configurability to support the clinical requirements of the highest acuity environments. It should have easy-to-use graphical window interface,information rich,tabular, and graphical trends, remote view, and alarm watch features. It should be capable of monitoring adult, paediatric and neonatal patients.

1. All monitors should have multi-parameter module to monitor the following parameters:Multi Lead ECG (3, 5&12Leads) with advanced arrhythmia analysis, Respiration, NIBP, Pulse Oximetry, 2 Channels of Temperature.
2. All monitors should have multi-parameter module to monitor the following parameters: Multi Lead ECG (3, 5 & 12 Leads) with advanced arrhythmia analysis, Respiration, NIBP, Pulse Oximetry, 2 Channels of Temperature, 2 Channels of Invasive Blood Pressure.
3. All monitors should have multi-parameter module to monitor the following parameters: Multi Lead ECG (3, 5 & 12 Leads) with advanced arrhythmia analysis, Respiration, NIBP, Pulse Oximetry, 2 Channels of Temperature, 4 Channels of Invasive Blood Pressure and Cardiac Output.

TECHNICAL REQUIREMENTS

Display

- Should be a 19 inch, fully touch screen LCD of medical grade.
- Should be capable of displaying 8 waveforms.
- Should have a minimum resolution of 1280X 1024.
- Should have additional alarm LED lights integrated into the display frame, in front and the back, for 360° visibility.
- The display should have ambient light sensor for auto-dimming feature which is responsive to ambient light conditions and automatically dims both display and alarm light.

Recording

- Monitor shall be capable of printing to an A4 printer.
- Monitor shall be able to be configured to include a strip printer

DATA INFORMATION AND COMMUNICATION

- Should be able to display at least 96 hours of graphic and tabular data, simultaneously displayed on a single page, for any bed on the network.
- Graphical trends data should be stored in one-minute resolution.
- Clinicians should be able to access different trend views based on observation needs, type of procedure, or clinical protocols in a single touch.

- For real-time updates of critical patient information, trends should be displayed continuously on the bedside monitor. Clinicians should be able to customize views according to their preferences like size and arrangement.
- All monitors should have interactive networking – providing interactive view, control, review, and recording abilities for parameters, trends and calculations displayed from any monitored patient on the network.
- The monitor should have alarm watch feature to receive alarms of any monitored patient on the network.
- Should have advanced alarm software that helps the Users to manage Alarm Fatigue including high/low and extreme high/low alarm settings with distinct tones as well as Alarm Bar to show alarms for the last 60min.
- Should have alarm limit review which provides a snapshot view of bedside alarm limits for all active parameters
- Should have full bed review which provides a multiparameter view of up to seven waveforms for any monitored patient on the network.
- Should provide five different display configurations for parameter waveform and the names of the configuration should be changeable.
- All monitors should have drug calculations enabling the user to determine infusion rates for drugs, based on drug concentration, desired dose, patient weight, and patient type (adult, paediatric or neonate)
- All monitors should have vital signs calculations for hemodynamic, oxygenation, ventilation and renal.
- All monitors should communicate with each other, with or without the presence of a Central Station.
- Monitor shall be equipped with a minimum of four USB ports two on the front panel and two on the rear panel.
- Monitor shall accept data integration from a variety of sources including Stand-Alone Monitors, Continuous Cardiac Output Monitors, Ventilators, and other devices.
- Monitor should be provided with wall mounting kit.

26.Equipment for Cardiac pacing

Specifications for Temporary External Pacemaker

1. It should have option of all basic modes like DDD, DOO, DDI, AAI, AOO, VVI, VOO (Demand and Asynchronous)

2. Voltage output: 0.1 TO 20 mA or wider for both atria and ventricle.

3. Pacing rate 30-200 or more ppm with rapid atrial pacing available.

4. Pulse width 1 millisecond or wider.

5. Display should demonstrate both sensing and pulsing.

6. Dimensions- should be compact and light in weight.

7. Control: All controls are to be located on the face and are to be protected by a transparent cover.

8. Should have safety lock for set pacing parameters.

9. Sensitivity: Should be continuously variable from 1 to 20 mV or more in ventricle and 0.4 -10 mV in atrium.

10. Refractory period –Atrial 200-500 millisecond, PVARP.

11. Inhibit sensitivity 1-20 mV.

12. Should have pacing pause mode.

13. AV interval-manual range 200-300, sensed A-V 100-200.

14. Power backup to be 9 volts, pacing should continue during battery change period.

15. Should be CE/FDA/BIS approved.

16. Should have low battery indicator.

17. Six Pacing cables should be provided with each unit.

18. 5 years' warranty should be available.

19. CMC after 5 years should be quoted separately. For final comparison, CMC price of five years will be taken into account.

20. Adequate service backup should be available.

27.Electroconvulsive Therapy (ECT)

1.Description of Function:

The main aim of Electroconvulsive Therapy is to cause a massive convulsion in the brain (a massive epileptic fit). This is achieved by giving the brain an electric shock using an ECT Machine. ECT machines are, basically, transformers which modify Mains Current so that it is transmitted to the patient's skull in timed pulses.

2. Operational Requirements

1. The unit should have Parameter Display on LCD/LED 2. Should have auto Stimulus Voltage 3. Should have Auto Impedance Check 4. Should provide Output Display in joules & milli coulombs and EEG-ECG, EMG OMS (Optical Motion Sensor) Monitoring with online calculation of hart rate Simultaneously monitoring of SPO2 Monitoring on Thermal paper 3.

3.Technical Specifications

Technical data stimulus: 1. Bidirectional Square Wave brief pulse and ultra brief pulse 2. Current: 0.8 Amp Constant 3. Frequency Range: 20-120 Hz (Fixed) 4. Pulse Width: 0.3-1.5m Sec. 5. Mode: Auto & Manual 6. Stimulus Duration in Auto mode: 0.1 to 5.9 sec. in step of 0.1 sec. 7. Cerebral Stimulation 0 to 40 volts. 8. Should be able to deliver 50-400 volts. 9. Should have protection against paddle to paddles short circuit or open circuit conditions.

4. Accessories

Integrated or standalone compatible printer should be supplied. All the accessories to make equipment functional as per specifications should be supplied.

5. Power Supply

1. Power input to be 220-240VAC, 50Hz fitted with Indian plug 2.UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up

6. Standards & Safety

1. Should be FDA/CE/UL or BIS approved product.
2. Manufacturer should have ISO certification for quality standards.

.EEG MACHINE

1. Should be a 32 Channel digital EEG Machine, where 24 Channels for acquisition and storage, 5 Polygraph Channels and 3 DC Channels.

2. Frequency response should be 0.05 Hz to 70Hz.

3. Should have facility to view all channels in different montages during acquisition and review.

4. Should have split screen facility to study and even carefully during acquisition, where data storage should be on going in hard disk.

5. Should have split screen facility in analysis to compare the data of same time or different times with individual selection of filters, sensitivity, montages etc.

6. Should have the facility for simultaneous acquisition and review of same record.

7. Should have the facility to mark pages / important events for printing in review.

8. Should have user definable photic stimulator protocol execution with display of photic marks on screen using LED or Xenon flash lights

9. Should have unlimited Montage Reformatting.

10. Should have HLF (15, 35, 70 Hz) and LLF (0.1, 0.3, 1.5, 3, 5 Hz) filters for each channel as well as for all channels for display.

11. Should have the facility for sweep speed selection.

12. Should have the facility to display traces with limit trace.

13. Should mark and annotate standards events such as Eyes open, Eyes closed, Hyperventilation on, Hyperventilation off, Artifact, and other user defined events of max. 50.

14. Should have separate sensitivity control for each channels as well as for all channels.

15. Should have the facility to enter patient details such as ID, Name, Referred By, Sex, Age, Patient History, Address, Doctor Name etc.

16. Should have the facility to review of selected patient form list, to sort data according to patient name, sex, age, test date etc, review another patient while acquisition and to edit the patient details.

17. Should have the facility to browse page by page, Scroll in forward and reverse direction and the speed of scrolling can be different speed levels such as same acquisition speed, 2 times, 3 times , 4 times the acquisition speed.

18. Should have user definable protocols for acquisition.

19. EEG pages should be displayed in BRAIN MAP montage and it should have the facility to view Amplitude brain map, Progressive amplitude brain map, frequency brain map, progressive frequency brain map, 4 bands frequency brain map with frequency spectrum, 5 bands frequency brain map with frequency

spectrum, 4 bands frequency brain map with EEG & 5 bands frequency brain map with EEG in review mode.

20. Should have the facility to edit current page events, browse all the marked events. Display the page having the selected event, to store any number of marked EEG pages on another HDD.

21. Should have the facility for spike detection with amplitude greater than or equal to the specified amplitude and within specified duration.

22. Should have the facility to print all marked EEG pages / Brain map pages in queue.

23. Should have the facility to edit and print summary report, EEG page and Brain map page.

24. Should have Acquisition Hot keys for Sensitivity for all traces, Eyes open, Eyes close, Hyperventilation ON, Hyperventilation OFF, Mark page, Artifact, Annotated event, Toggle pause / Release pause, Snap shot mode, photic stimulation etc.

25. Should have Review Hot Keys for page mode, scroll mode, flip mode, next page, increase speed, mark page for printing, forward direction, reverse direction, previous page, decrease speed etc.

26. Should have an efficient data base management including Hospital details, Reference doctors list, standard comments for summary report etc.

27. Photic frequency should be 1-30 Hz, stimulating time 1-16 sec and pause time 1- 16 sec.

28. CMRR should be greater than 100 db and input impedance should be greater than 10 M Ohms.

29. Should operate from 200 to 240Vac, 50 Hz input supply.

30. Should have a high-resolution low light video camera.

31. Should have infra-red camera for night VEEG recording facilities.

32. Should have facility to upgrade EEG to sleep system in future.

33. Should be supplied all necessary accessories including EEG Disc Electrodes reusable – 1 set, EEG Paste – 5 Jar / sufficient quantity for 100 EEG Cases, Head Cap for Adult, & Infant – 1 each.

34. Should be supplied with a PC of adequate configuration having HDD of storage not less than 360 GB HDD, DVD/CD writer and a Colour Printer.

35. Monitors provided along with PC should be LCD / TFT and Colour Printer should be Colour Laser Printer.

36. Should supply online UPS of sufficient capacity with 1 hour backup to connect all the equipment supplied.

37. Should be supplied with a suitable Table/Trolley for keeping the equipment, PC, Printer and all the accessories.

38. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid.

39. Warranty of at least 2 YEARS.

28.Electroconvulsive Therapy (ECT) without monitor

1.Description of Function:

The main aim of Electroconvulsive Therapy is to cause a massive convulsion in the brain (a massive epileptic fit). This is achieved by giving the brain an electric shock using an ECT Machine. ECT machines are, basically, transformers which modify Mains Current so that it is transmitted to the patient's skull in timed pulses.

2. Operational Requirements

1. The unit should have Parameter Display on LCD/LED 2. Should have auto Stimulus Voltage 3. Should have Auto Impedance Check 4. Should provide Output Display in joules & milli coulombs and EEG-ECG, EMG OMS (Optical Motion Sensor) Monitoring with online calculation of hart rate Simultaneously monitoring of SPO2 Monitoring on Thermal paper 3.

3.Technical Specifications

Technical data stimulus: 1. Bidirectional Square Wave brief pulse and ultra brief pulse 2. Current: 0.8 Amp Constant 3. Frequency Range: 20-120 Hz (Fixed) 4. Pulse Width: 0.3-1.5m Sec. 5. Mode: Auto & Manual 6. Stimulus Duration in Auto mode: 0.1 to 5.9 sec. in step of 0.1 sec. 7. Cerebral Stimulation 0 to 40 volts. 8.

Should be able to deliver 50-400 volts. 9. Should have protection against paddle to paddles short circuit or open circuit conditions.

4. Accessories

Integrated or standalone compatible printer should be supplied. All the accessories to make equipment functional as per specifications should be supplied.

5. Power Supply

1. Power input to be 220-240VAC, 50Hz fitted with Indian plug 2.UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up

6. Standards & Safety

1. Should be FDA/CE/UL or BIS approved product.
2. Manufacturer should have ISO certification for quality standards.

29.Lithium analyzer

- System should measure Na, K, Cl, Ca, Li
- Facility for auto sampler tray for constant loading. Sample can be fed by capillary syringe or sample tube directly
- Sample volume should be less than 100 micro-liters.
- Auto Calibration Facility and provision for economy mode.
- Quality control facility
- Facility of flagging of abnormal results and user programmable ranges.
- Stand by mode: user controlled and automatically controlled
- Memory for last 100 messages.
- Built in printer for printing the data.
- RS 232 (standard serial port) should be available
- ISE Analyser-01
- Na, K, Ca, Li, Cl Electrodes- 02 each (1 standard and 1 spare)

- Power input to be 220-240VAC, 50Hz
- Suitable UPS with maintenance free batteries for minimum one-hour back-up should besupplied with the system
- Should be FDA or CE approved product
- Safe and easy wastage disposable
- Accurate results from whole blood, plasma, serum and diluted urine samples

30.Bio feed-back instruments

Biofeedback machine

Computerized Biofeedback for GSR, Temperature, Pulse Rate, Respiration, EMG, EEG Parameters.

Specifications

• Online Acquisition, Display and Storage for EEG, EMG, Respiration, GSR, Pulse and Temperature.

• Automatic Calculation of Individual Channel Amplitudes and rates.

• 3D Games on High Resolution secondary monitor for feedback

• User selectable audio feedback control

• User selectable volume control in 10 steps

• —Bio trainer‖ Relaxation Therapy System

• Neuro feedback/ Brain Feedback System

• Individual Feedback control

• System Containing at least 12 Different 3D Animations.

• Comprehensive Reporting and Trend Data Analysis.

Computer Hardware

COMPUTER: Latest Computer processor with at least 3GB RAM CD/DVD R/W, 500 GB HDD,

Keyboard, and Mouse

MONITOR-1: LCD monitor 21‖ for test data.

MONITOR-2: LCD monitor 21‖ for animation pictures.

PRINTER: - Windows supporting inkjet colour Printer.

OPERATING SYSTEM: Windows XP/ Vista

Suitable UPS with 30 min back up.

31.Thin-Layer Chromatography

Instrumental Thin-Layer Chromatography (or Planar Chromatography) is a modern separation technique, established worldwide and distinguished by flexibility, reliability and cost efficiency

Complete with IP/BP/USP standards having movable applicator with in-built thickness arrangement between 0.25 mm to 0.35 mm having following components as per Technical Specifications

Technical Specifications Thin Layer Chromatography System:

1. Spreader (Applicator) made of anodized aluminum, with fixed thickness and width of 5 cm, 10 cm and 20 cm.

2. Perspex brass size 125 x 25 cm to support 5 glass plate of size 20 x 20cm and two plates of size 20x5 cm

3. Plate store rack aluminum for ten 20x20 plates

4. Spotting template Perspex

5. Developing tank with lid

6. TLC plate set 20x20 cm or 20x 10 cm

7. Micro-Pipette 5 microliter and 10 microliter

8. Scriber for making lines

9. Glass sprayer with rubber bellow

10. TLC plate store cabinet

11. Special drying cabinet with inspection window

12. Desiccator cabinet 13. U.V. Chromatography inspection cabinet with two U.V. tubes 254 and 365nm

All consumables required for installation and standardization of system to be given free of cost.

Power Supply: 230V +/- 10%, 50 Hz

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

32.Alcohol Breath Analyser

- Sensor: Advanced flat surfaced semiconductor alcohol sensor
- Warm-up time: Within 10 seconds
- Respond time: Within 5 seconds
- Operating temperature range: 5~40
- Detection range: 0.000-0.199% BAC / 0.00-1.99 BAC /
- 0.00-0.99 mg/L
- Digital display results (% BAC / BAC / mg/L)
- Power input: 3V (3 x ” ” alkaline battery.

33.Psychological Tests equipment - Projective tests Specification:

1. Rorschach ink bolt test – 2 No’s
2. Indian modification of thematic apperception test
3. Children apperception test - Indian

34.Psychological Tests equipment - Intelligence Tests Specification:

1. Seguin from board test

2. Wechsler adult performance intelligence test (WAPIS)
3. Binet kamat intelligence test 9BKT) (3-22yrs) – 2 No;s

35.Psychological Tests equipment - Personality Tests

Specification:

1. 16 personality factor questionnaire
2. Eysenck personality inventory.

36.Psychological Tests equipment - Neuro psychological tests

Specification:

1. Bender visual –motor gestalt test
2. Cambridge neuropsychological test automated
3. NIMHANS neuropsychological battery – 2 No's

37.Resusctation kit

1. Silicon Resuscitator Adult (1600 ml).
2. Laryngoscope set with 2, 3, 4 number Mac Blades.
3. Airways size: 2, 3, 4 number.
4. Silicon Mask size 3, 4 number.
5. Oxygen Reservoir Bag with Value.
6. Oxygen tube.
7. Carry bag.
8. Hand Suction.

9. Optional: Laryngeal Mask Airway & E.T Tube.

38Tuning fork time marker 100/sec

- Should be made up of stainless steel with frequency marked

39.Electrodes

- Copper wire placed in holder made of non conductive material (cork, Plastic ect)
- With screw
- Shielded electrode two wire parallel to each other in layer of non conductive material
- Polarizable or non Polarizable electrode

40.Spirit Lamp

- Brass sheet die pressed, with woven wick in metal holder, screw
- Capacity 100 ml

41.Polygraphs

1 Technical Specification

1.1 No of Channels: 16

1.2 Ethernet/High Speed USB Data Acquisition and analysis Software.

1.3 Apparatus for recording and calculating HRV and blood pressure Variability, temperature

1.4 Transducers and software's for recording and analyzing plethysmography, GSR, Skin temperature, Continuous real-time beatto-beat blood pressure, Non Invasive Cardiac Out Put, respiration, phonocardiogram and pulse tonometer for carotid pulse, baroreflex sensitivity and total peripheral resistance recording.

1.5 21 inch TFT monitor

1.6 160 GB storage facility and 1GB RAM for the computer

1.7 Colour laser printer

1.8 Wireless (transmitter / recorder) device with transmit range up to 100m, memory capacity 480 hours, 250 Hz sampling rate, radio band frequency

2 Accessories, Spares and Consumables

2.1 Necessary cables and batteries

2.2 Computer (latest configurations) with laser printer to be attached to the equipment

3 Standards, Safety and Training

3.1 Should be CE / BIS approved product

3.2 Calibration/Acceptance test certificate from the factory required.

3.3 Manufacturer/Supplier should have ISO certification for quality standards.

3.4 Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

4 Documentation

4.1 User/Service Manual in English

4.2 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/ para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.

5 Multi-channel universal bio-amplifier for ECG, EMG, EEG, EOG (at least 8 channels) along with cardio axis analysis.

6 Bidders are encouraged to arrange for demonstration of their equipment if not able to comply with all specification requirements.

42.Gas analyser automatic for CO2, O2, N2

- Minimum detection limit (MDL) for N2, O2/Argon, CO & total hydrocarbon containing oxygenated organic species (As Methane form) ≤ 50 ppb.
- Minimum detection limit (MDL) for CO2 ≤ 0.1 ppm.
- Analyzer 2 requires three analytical channels which can run simultaneously or separately. Carrier gas to be used in analytical channels 1 & 3 is He.
- Analytical channel 1, for the analysis of N2, O2/Ar•& CO, to feature an 8 port multifunction gas sampling valve with backflush to vent by mid-point pressure change, a PLOT capillary column system and a Discharge Ionization Detector (DID). The valve and all connections to the columns are contained in an unheated, purged box mounted on the side of the GC.
- Analytical channel 2, for detection of CO, CO2 & CH4, to feature a multiple function Gas Sampling Valve, Methanizer, Flame Ionization Detector & suitable packed column.
- To optimize performance at the trace levels, the analyzer is plumbed with “passivated tubing”. The gas valve is mounted in a purged housing. The purged housing is filled with a positive pressure of carrier gas. Once CO2 has fully eluted, column must backflush to vent.
- THC channel 3 to provide a guaranteed analysis of trace total hydrocarbons measured as methane. To maximize performance, treated tubing is used as needed throughout the analyzer.
- Analytical channel 3 to feature a Gas Sampling Valve and a Flame Ionization Detector (FID). FID to be used in common by Channel 2 & 3.
- Analyzer 2 requires Gas Sampling Valves, one Discharge Ionization Detector (DID), one Flame Ionization Detector (FID), Methanizer & Suitable columns.
- Analyzer 2 should consist of a 4 port valve configured with an auxiliary flow source to provide continuous flow while venting the majority of the matrix sample before the detector.
- The sample input for this analyzer should be VCR fitting; required in order to eliminate any air leakage into the sample when passed through the analyzer’s sample loop.

- Basic system with EPC/AFC/PPC control for carrier/detector zone gases.
- EPC/PPC/AFC should provide optimum performance with all types of columns and detectors.
- All parameters should be stored as a part of method for better analysis reproducibility.
- Power Supply: 220 VAC ±10%, 47 to 53 Hz.

Sub Components:

Gas Flow Control:

- Standard with programmable pneumatic control; Digital Pneumatic Control for setting column flow with pressure, flow and linear velocity.
- Carrier gas pneumatic program rates 0-100 psi/min or 0-100 ml/min or better.
- Three-ramps pressure program for carrier gas. –
- Carrier pressure increment should be 0.1 psi or better.

GC Oven Characteristics:

- Volume ≥ 10L; for easy fixing and removal of different column types/dimensions without compromising rate of heating or cooling of oven.
- All temperature and time functions should be micro-processor controlled and displayed on the screen.
- Column over-heat protection required.
- Temperature set point resolution ≤ 1°C.
- Oven Operating temperature: (Ambient+10)°C to 450°C.
- Temperature ramps ≥ 3; Maximum achievable temperature ramp rate ≥ 45°C/min.
- Cool down time (from 250°C to 50°C) ≤ 4.8 min.
- Time settings: 1 min increments for values 0 to 999 minutes or wider.

Flame Ionization Detector (FID):

- Operating Temperatures: 100°C to 350°C; in 1°C increments.
- Minimum detectable quantity:
- Sensitivity: >0.015 Coulombs / g C.
- Linearity: > 107.
- Makeup gas: Not required
- PPC pneumatics: Software flow control of hydrogen and air.

Software:

- Software performing data analyses at least as per DIN/ISO/US-EPA, calibration, blank correction, data import, export, handling and reporting, quality control protocols, computer- based training.

43.Low voltage unit for tapping 2 and 4 volts for stimulation

- Low voltage unit for tapping 2 and 4 volts for stimulation variable from 2 volts to 12 volts in steps of 2 volts and of 5 A capacity. Complete with plug and cord.

44.Perimeter with charts

- Should have a calibrated arc, revolving chart holder.
- Should be able to rotate in any direction and fix at any position with a tightening screw. The arc should be graduated from 0° to 90° with a movable test object.
- At the back of the arc arrangement should be provided for fixing of chart which has concentric circles corresponding to the degrees of arc.
- Adjustable chin rest.
- The above mentioned should be fitted over a sturdy base with receptacle for keeping charts.

Accessories:

- Different sized (2mm & 5mm), shaped (round & square) and coloured (five different) objects.
- Should be supplied with 20 packets of charts (100 charts/packet).
- Circular black disc to read the meridian in which the arc in shape of a semicircle with radius 330mm Adjustable chart rest and a detachable lever in a bar is fixed in front of metallic arc

45.Tuning fork to test hearing 32-10000 cps(sets-100, 256, 512 Hz)

- Turning fork to test hearing 32-10000 cps (sets :-100, 256, 512 Hz) each tuning fork with base
-

46.Student physiograph, (single channel) with accessories

- Student Physiograph single channel console with Time & event channel and inbuilt stimulator for Human experiments.
- Should have a digital display on an inbuilt TFT screen 15.5x9.5 cm.
- Channel width: 80mm, A/D Conversion: 16-bit A/D, CMRR:>80-85 db sensitivity: 50, 100, 200, 500, uv/cm and 1,2,5,10,20,50,100 mv/cm, Sweep speed: 0.5, 1,2,5,10,20,50,100 div/sec,
- Notch filter: 50-60 Hz, Data sampling>256 Hz, Input frequency, Input Impedance:>1 mega Ohm.
- Standalone unit having colored TFT Display for displaying online & offline recording data.

- Systems have six couplers fitted in a Single unit, easy to carry & light weight (Strain gage, Isotonic, Pulse Respiration. Temperature, EKG, Bio potential).
- System with Eight Transducers (Force, Pressure, Volume, Respiration, Temperature, Pulse, Respiration Belt and Isotonic)-Interface to the computerthrough USB.
- System provides with software to review and printing the recorded data from PC.
- Accessories include electrodes (ECG, EEG, ECG, Ground) Bio potential junction box , EEG & EMG paste, ECG jelly, Fuses-5, ear thing cord-1, operating manual-1, machine cover-1, software back up on CD-1 & USB cable-1.

47.Centrifuge, high speed with technometer

- Centrifuge with technometer -10,000 rpm, digital, dust cover and glass wares.
- Speed Range 500 to 4500 rpm on load with variable speed regulator
- It should be fitted with digital timer 0-59 minutes and digital speed indicator, LED/LCD display.
- The motor of machine should be fitted with anti-vibration pads.
- Capacity– Can accommodate 24 tubes at a time

48.Hand saw, preferably metal

1.which lead sto less friction. No Change

2. Blades should be chrome plated to prevent body fluid /chemical corrosion. No Change

3. For HRC, Blade materials should reach 52 degrees and teeth reaches 60 degrees(+/ - 3) No Change

4. Chrome treatment, antirust smoothening should be done to reduce the friction. No Change

5. It should have strong handles. No Change

6. It should be ergonomic and rust proof. No Change

7. Special teeth design which should be sharp at edges No Change

8. Should be supplied with essential accessories No Change

9. Power Supply 200VAC +/- 10 %, 50Hz fitted with Indian plug.

10. Should be ISO/BIS approved approved model should be offered

49.Band saw for sectioning body and limbs

• Size of cutting table: 600 x 800 mm. Extension table: 450 X 760 mm (approx); Height: 1700-1800 mm (app

• Size of wheel-50-50 mm

• Track 1065 X 685 mm

• Height-1700-1800 mm

• The table should be made of thick special heavy C.S. Supplied with 1 blade, cord and plug suitable to work on 220 V, single phase, 50 Hz, A.C supply. Specially designed for use in anatomy and meat cutting requirements for preparing big size specimen. Spare cutting blade must be provided

• The large working table and extension table operate should have ball bearing rollers

• Total table travel: 1200-1400 mm (approx)

• Motor (heavy duty): 2.00 H. P (single phase), 220V, A.C Mains

50.Brain knife

Knives are of premium quality of cutting instrument segment, high quality stainless steel with heat-treat our blades.

Features: Edge technology creates a blade that is sharper out of the box, holds its edge longer and is easier to re-sharpen; Handle materials used are selected from a variety of man-made and natural materials, providing the best appearance and performance or S.S.,.

51.Plastic tanks for storing soft and dissected parts

Plastic tanks for storing soft and dissected parts

52.Dissecting instruments set for cadaveric dissection

• Tooth Forcep (SS) – 6”
• Plain Forcep (SS) – 6”
• Pointed Scissor (SS) – 6”
• Blunt Scissor (SS) – 6”
• BP Handle (SS) – 6”
• Small pointed Scissor (SS)- 4”
• BP Handle Blade / Surgical Blade – 24 No.
• Artery Forcep (SS) – 8”
• Brain Cutting Knife (SS)– 12”

• Retractor (SS) – 8” or 12”
• Rib Cutter (SS) – 8”
• Surgical Suture Needle (Half Circle) with thread – 1no. & 6no. The above mentioned all materials should be SS 304

53.Microtomes, rotary

The rotary microtome should have

1. Precision micrometer feed mechanism with monp-block system: section thickness setting from 0.5 µm to 60 µm.
2. Section thickness setting both with left as well as right hand
3. Section counter
4. Manual coarse feed via hand-wheel
5. Provision of Specimen retraction during return travel, and turning off two mechanical trim stages 10 µm and 30 µm.
6. Vertical stroke 64 m and maximum horizontal feed range 28 mm.
7. Integrated hand-wheel that locks in any position
8. Direct fitting of all specimen holders. Maximum specimen size 55 mm X 50 mm.
9. Fine orientation of Specimen holder Universal X & Y axis 8 & rotatable Z axis 360.
10. Specimen Retraction in the return stroke max. 40 um that can be turned ofl when not needed
11. Lateral or Front coarse feed facility.
12. Large Integrated wrap around type section waste tray for debris Collection.
13. Safety warning for end position approach.
14. Direct easy fitting of all Blade carriers with precision guide way.
15. Common blade holder for High & low profile blades
16. Blade Carrier to be fitted on solid bar guide way to eliminate vibration when sectioning hard tissues
17. Storage Plate on top of the instrument for storing blades. tissue blocks, brush etc.
18. To be supplied with Specimen Clamp, Blade Holder, 1 pk each of 50 Low Profile and 50 High Profile Blades
19. Unit should be European EC and CE/US FDA certified.
20. Manufacturer must be ISO compliant

SECTION – VI

PRE - QUALIFICATION CRITERIA

(Referred to in clause 13.3 of ITB)

I. Terms of Qualification for Equipment:

The Authorized Distributor or manufacturer should have supplied equipment as specified in the schedule of requirements to any Indian Institutions, up to the following quantity in any one of the last three financial years and completed the supplies within the stipulated delivery period. The Supplied units should be in working condition without any adverse remarks for the last two years as on the date of bid notification.

(a). at least equal of the quantity offered or 25, whichever is lowest, if the tender quantity is ≤49 (or)
(b). at least 50% of the quantity offered or 70, whichever is lowest, if the tender quantity is between 50 and 199
(c). at least 35% of the quantity offered or 125, whichever is lowest, if the tender quantity is between 200 and 499
(d). at least 25% of the quantity offered, if the tender quantity is > 500

- The bidder should furnish the information on past supplies and satisfactory performance in the proforma given under Section XI- Format B1, duly attested by the Bid signatory

- Bidders shall invariably furnish documentary evidence (End-user Certificate) in support of the satisfactory operation of the equipment as specified or a CA/Statutory auditor Certificate to that extent as per the format provided in the Section XI- Format B2

- The Bidder shall have an Avg. annual turnover in the last three financial years of not less than the amount specified against each item in the Schedule of the Requirements and also to have a positive net worth as per the latest Annual Accounts.

- Towards the above, the bidder should furnish data as per the Format (B3) given in Section- XI, to support that he has the financial capacity to perform the contract. Further the bidder as to submit the corresponding Balance Sheets and Profit and Loss Accounts for verification

a) The Manufacturer, must have necessary quality certifications for both processes and products such as ISO 9001 (Quality Management System for Organization) and ISO 13485 (Quality Management System for Medical Devices).

b) Full Quality Assurance System Approval certificate Management System Certification for Medical Devices and their equivalent International Standards certificates as BIS/CE/USFDA etc.

II. Terms of Disqualification:

1. The Bidders who has withdrawn their bids in any of the previous tenders of APMSIDC

2. A bidder who is placed on the black-list by either APMSIDC or by any other State /Central government's department or organization for the product offered with his bid in the last 3 years

3. A bidder who is placed on the black-list by either APMSIDC or by any other State / Central government's department or organization in the last 3 years

4. A bidder who is currently blacklisted / debarred either by APMSIDC or by any State Government or Central Government Department or Organization

5. The bidder who has been declared as ‘undependable supplier’ for two (2) items or in two (2) instances in the last one year by the APMSIDC and

6. The bidders against whom there have been reports of substandard Equipment and/or service are liable for disqualification.

Note: In all the above cases, the disqualification cut-off date will be till the contract is signed

III. Not with standing anything stated above, the purchaser reserves the right to assess the Bidders capabilities and capacity to perform the contract should circumstances warrant such an assessment in the overall interest of the purchaser deciding on award.

SECTION – VII (A): BID FORM

(Name and Address of Purchaser)

Date_____

To

Contract No._____

The Managing Director,
APMSIDC, Mangalagiri, Guntur.

Gentlemen:

Having examined the Bidding Documents including Addenda No. _____ the receipt of which is hereby duly acknowledged, we, the under-signed, offer to supply and deliver _____ (Description of Goods and Services) in conformity with the said Bidding Documents for the sum as given in the Price Bid (electronically) or such other sums as may be ascertained in accordance with the schedule of prices furnished and made part of this bid.

We undertake, if our bid is accepted, to commence delivery within 60 (Number) days and to complete delivery of all the items and perform incidental services as specified in the contract within 60 (Number days calculated from the date of receipt of your Notification of Award/Letter of credit.

If our bid is accepted we will obtain the guarantee of a bank in a sum not exceeding 5% of the Contract price for the due performance of the Contract

We agree to abide by this bid for a period of 90 (Number) days from the date fixed for bid opening under Clause 22 of the Instruction to Bidders and shall remain binding upon us and may be accepted at any time before the expiration of that period.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in India like “The Prevention of Corruption Act 1988”

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding contract between us.

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

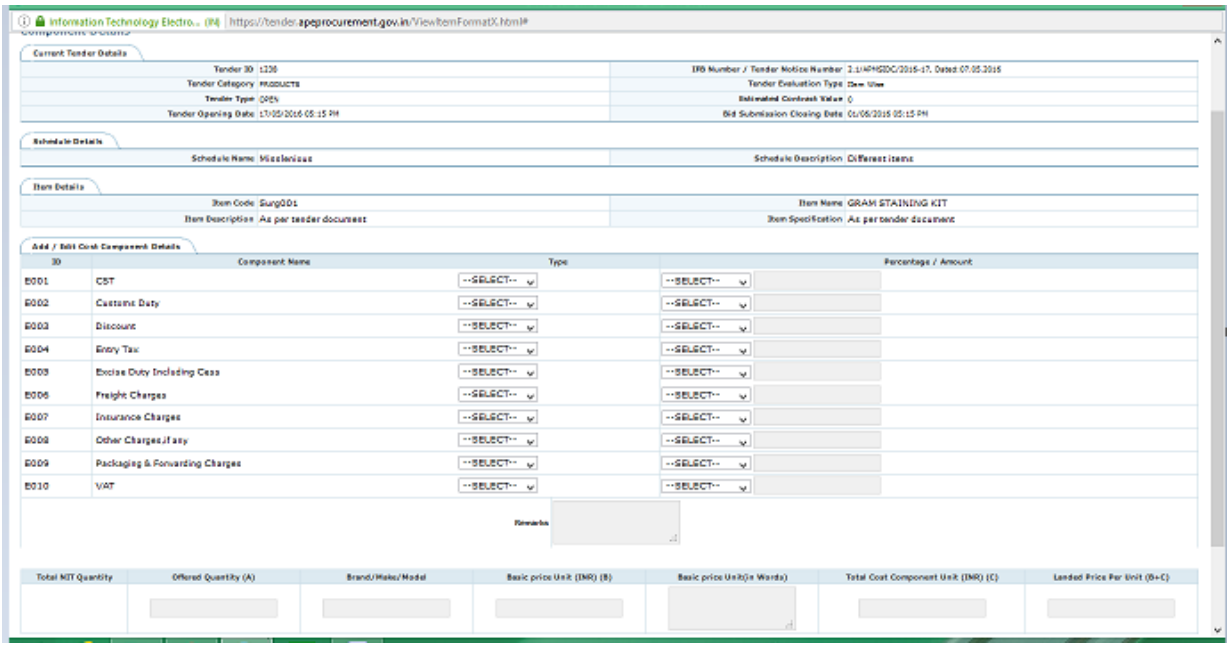
Dated this _____ day of _____

Signature: _____

(in the Capacity of) : _____

Duly Authorized to sign bid for and on behalf of

Section VII (B) - Model PRICE Schedules (available on e-procurement Platform)



SECTION – VIII
Bid Security Form

To

The Managing Director
APMSIDC, Mangalagiri, Guntur.

Whereas _____
(hereinafter called "the Bidder" has submitted its bid dated _____ for the supply of _____ (hereinafter called "the Bid")

KNOW ALL MEN by these presents that WE _____ of _____ having our registered office at _____ (hereinafter called the Bank") are bound unto

_____
____ (hereinafter called "the purchaser") in the sum of _____ for which payment will and truly to be made to the said purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the common Seal of the said Bank this _____ day of _____.

THE CONDITIONS of this obligation are:

If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid form; or

If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the
period of bid validity:

- Fails or refuses to execute the contract form if required
- Fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders
- Does not accept the correction of the bid price pursuant to Clause 15.7(c).

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

This guarantee will remain in force up to and including 45 days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date i.e., upto _____.

…….(Signature of the Bank)

SECTION – IX : CONTRACT FORM

THIS AGREEMENT made the _____ day of _____ between _____ (Name of Purchaser) of _____ (Country of Purchaser) (hereinafter "the Purchaser") of one part and _____(Name of the Supplier) of _____ (City and Country of Supplier) (hereinafter "the Supplier") of the other part.

WHEREAS the Purchaser is desirous that certain Goods and ancillary services should be provided by the supplier, viz, _____ (Brief description of Goods and Services) and has accepted a bid by the supply of Goods and services in the sum of _____ (Contract price in Words and Figures) (hereinafter "the Contract Price").

NOW THIC AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of Contract referred to;

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

   (a) The Technical and Price bid of the Supplier
   (b) The approved Technical Specifications,
   (c) The General Conditions of Contract,
   (d) The Special Conditions of Contract, and
   (e) The Purchaser's Notification of Award.

3. In consideration of the payments to be made by the purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provision of the Contract.

4. 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 other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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

SL NO.	BRIEF DESCRIPTION TO GOODS & SERVICES	QUANTITY TO BE SUPPLIED	UNIT PRICE	DELIVERY TERMS

TOTAL VALUE:

DELIVERY SCHEDULE:

IN WITNESS whereof the parties here to have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

Said _____ (For the Purchaser)

in the presence of _____

Signed, sealed and Delivered by the

Said _____ (For the supplier)

In the presence of _____

SECTION- X: PERFORMANCE SECURITY FORM

To

The Managing Director
APMSIDC,
Mangalagiri, Guntur.

WHEREAS _____ (Name of the Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Contract No. _____ dated _____ to supply _____ (Description of Goods and Services) hereinafter 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 recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of _____ (Amount of the Guarantee in Words and Figures) and we under take 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 limit 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.

This guarantee is valid until the _____ day of _____.

Signature and seal of Guarantors

_____

_____

Date _____
Address_____

_____

SECTION XI

FORMAT B1: PROFORMA FOR PERFORMANCE (for a period of last three years)

(Please see Section VI: Qualification Criteria)

Bid No. _____ Date of Opening _____ Time _____ Hours

Name of the Firm

_____

Order placed by _____ _ (Full address of Purchaser)	Order No	Date	Description of Item	Quantity of ordered Items.	Value of order	Date of completion of delivery		Remarks indicating reasons for late delivery, if any	Has the Supplier received full payment towards the supplies made
						Purchase terms	Actual		
1	2	3	4	5	6	7	8	9	10

Signature and seal of the Bid Signatory

_____

_____

_____

SECTION XI

FORMAT B2

CA (STATUTORY AUDITOR) CERTIFICATE

(Please see Section VI: Qualification Criteria)

Certificate from the Statutory Auditor

This is to certify that ..... (name of the Bidder) is a "Manufacturer/Authorized Distributor'' of the required items offered under the Bid. The Bidder had supplied the quantities shown in the past performance statement and also completed the respective supplies within the stipulated delivery period/s.

Further it is certified that the previously supplied equipment are reported to be in working condition without any adverse remarks from the respective users and some are working for more than two year as per the records as on the date of this Tender notification.

The bidder has previous experience in maintenance and repairs of equipment for _____ years and has qualified service staff working with him".

Name of Authorized Signatory(CA):
Designation:
Name of firm:

(Signature of the Authorized Signatory)
Seal of the Firm

SECTION XI

B3- FINANCIAL CAPACITY OF THE MANUFACTURER

A. Details of Annual Turnover for Preceding 3 Years.

	Year 1 (2018-19)	Year 2 (2019-20)	Year 3 (2020-21)	Average Annual Turnover
Turn Over (In Rs. Crores)				

B. Details of Net Worth

	Year1 (Last Financial Year i.e. as on 31st March 2021)
Paid up Capital (Rs. Cr)	
(Add) Free Reserves (Rs. Cr)	
Total Net Worth (Rs. Cr)	

_____

(Signature of Bid Signatory)
Seal of the Firm

Certificate from the Statutory Auditor

This is to certify that .....(name of the Bidder) has an average annual turnover (in the last three financial years) and Net Worth (in the last financial year) as shown above

Name of Authorized Signatory(CA):
Designation:
Name of firm:

(Signature of the Authorized Signatory)
Seal of the Firm

SECTION XI

B3-A FINANCIAL CAPACITY OF THE DISTRIBUTOR

A. Details of Annual Turnover for Preceding 3 Years.

	Year 1 (2018-19)	Year 2 (2019-20)	Year 3 (2020-21)	Average Annual Turnover
Turn Over (In Rs. Crores)				

B. Details of Net Worth

	Year1 (Last Financial Year i.e. as on 31st March 2021)
Paid up Capital (Rs. Cr)	
(Add) Free Reserves (Rs. Cr)	
Total Net Worth (Rs. Cr)	

_____

(Signature of Bid Signatory)
Seal of the Firm

Certificate from the Statutory Auditor

This is to certify that .....(name of the Bidder) has an average annual turnover (in the last three financial years) and Net Worth (in the last financial year) as shown above

Name of Authorized Signatory(CA):
Designation:
Name of firm:

(Signature of the Authorized Signatory)
Seal of the Firm

SECTION – XII -A

(Please see Clause 13.3(a) of Instructions to Bidders)

(to be submitted by manufacturers)

MANUFACTURER'S AUTHORIZATION FORM

No._____ dated _____

To
The Managing Director
APMSIDC, Mangalagiri, Guntur.

Dear Sir,

Tender Notice No._____

We _____ who are established and reputable manufacturers of _____ having factories at _____ and _____ do hereby authorize M/s. _____ (Name and address of Agents) to bid, negotiate and conclude the contract with you against Tender Notice No._____ for the above goods manufactured by us.

No company or firm or individual other than M/s. _____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific Tender Notice.

We hereby declare that we are willing to provide guarantee/warranty and after sales service during the period of comprehensive warranty/CMC/AMC as per the above tender.

We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and read with the Clause 10 of Special Conditions of Contract, for the Goods offered for supply against this invitation for bid by the above firm.

Yours faithfully,

(Name) for and on behalf of M/s.

_____

(Name of manufacturers)

Note: This letter of authority is on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.

SECTION – XII -B

(Please see Clause 13.3(a) of Instructions to Bidders)

(to be submitted by Authorized Distributors))

MANUFACTURER'S AUTHORIZATION FORM

No._____ dated _____

To
The Managing Director
APMSIDC, Mangalagiri, Guntur.
Dear Sir,

Tender Notice No._____

We _____ who are established and reputable manufacturers of _____ having factories at _____ and _____ do hereby authorize M/s. _____ (Name and address of Agents) to bid, negotiate and conclude the contract with you against Tender Notice No._____ for the above goods manufactured by us.

No company or firm or individual other than M/s. _____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific Tender Notice.

We also hereby undertake to provide full guarantee/warrantee/CMC/AMC as agreed by the tenderer in the event the tenderer is changed as the dealers or the tenderer fails to provide satisfactory after sales and service during such period of comprehensive warranty/CMC/AMC and to supply all the spares/ reagents during the said period.

We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and read with the Clause 10 of Special Conditions of Contract, for the Goods offered for supply against this invitation for bid by the above firm.

Yours faithfully,
(Name) for and on behalf of M/s.

_____
(Name of manufacturers)

Note: This letter of authority is on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.

SECTION - XIII

DECLARATION FORM

I / We …….. having Our …….. office at ……. read and understood the terms and conditions contained in the bidding documents under this notification for bid and offer our bids unconditional, to the extent not stated at any other part of our bid.

We will not quote or supply the equipment/furniture similar to the ones offered under this bid notification to any agency or organization in the country, at the rate lower than the rate quoted in this present tender.

If we found quoting lower rate than the rate quoted to the APMSIDC, to any other agency in the country during the validity of the present contract, we will remit the differential cost to the APMSIDC, unconditionally.

Signature :

Date :

Name of the
Firm and address :

SECTION XIV

Check List of Documents to be Uploaded as part of the Bid and Notes to Bidders

I. Documents with the Technical Bid

Sl. No	Document Description	Documents to be submitted
1	Process Fee 11,800/-	Offline
2	EMD	Online & Offline
3	Bid Form Section VII-A	Online & Offline
4	List of items offered with Make and Model details without prices	Online & Offline
5	Manufacturers Authorization	Online & Offline
6	Past Performance Details Format B1 along with supporting documents	Online & Offline
7	End-User Certificates or CA Certificate as per Format B2	Online & Offline
8	Financial Capability Details Format B3 for Manufacturer	Online & Offline
9	Financial Capability Details Format B3-A Distributor	Online & Offline
10	Details and proof of After-Sales Service facilities	Online & Offline
11	Letter of authorization to sign the bids	Online & Offline
12	Clause-by-clause commentary on technical specifications	Online & Offline
13	Technical and Commercial deviations statements	Online & Offline
14	Copy of the GST Certificate and Details of IT Returns- (Last 3 years), PAN and GST copies.	Online & Offline
15	The Manufacturer, must have necessary quality certifications for both processes and products such as ISO 9001 (Quality Management System for Organization) and ISO 13485 (Quality Management System for Medical Devices)	Online & Offline
16	Full Quality Assurance System Approval Certificate Management System Certification for Medical Devices and their equivalent International Standards certificates (BIS/ CE/USFDA/AERB etc)	Online & Offline
17	Memorandum of Articles	Online & Offline
18	All the uploaded Technical bid, to be attested by a Gazette Officer or properly notarized or self attested	Online & Offline
19	General Information about the tenderer	Online & Offline
20	Declaration form	Online & Offline

Sl. No	Document Description	Documents to be submitted
21	DPIIT Approval, if required	Online & Offline

II. Financial (Price) Bid in the format available with the e-procurement platform

- Please note that the Bidder runs the risk of his bid being rejected if the price schedule contains any conditions.

Notes to Bidders

1. Upload the documents in ZIP format with suitable description as defined above.
2. The scanned documents shall be legible failing which they will not be considered.
3. Sign on all statements, documents, certificates uploaded owning responsibility for their correctness / authenticity.
4. All the statements copies of the certificates, documents etc., enclosed to the Technical bid shall be given page numbers on the right corner of each certificate
5. The tenderer is subjected to be blacklisted and the EMD forfeited if he is found to have mislead or furnished false information in the forms / statements / certificates submitted in proof of qualification requirements or record of performance (Please see Corrupt and Fraudulent Practices Clause)
6. All the Bidders are requested to quote with single option only, for the each item offered and please note that bids with multiple options, for any one or all of the items offered, will be rejected by the purchaser as Non-responsive.

(On Firm letter Head) **Annexure - I**

ANDHRA PRADESH MEDICAL SERVICES CORPORATION LTD

INSTALLATION CERTIFICATE

(to be fiiled jointly by the Tenderer, head of user institution & Representative of the Tender Inviting Authority individually for every equipment)

HOSP CODE/ Hospital Name:			
Equipment Details			
EQPT CODE/ Name of the equipment:		Purchase Order No:	
Make / Manufacturer		Purchase Order Date:	
Model		Purchase Amount	
Serial no.		Project Name	
Location / Department			
Installation Start Date		Completed Date.	
Comprehensive Warranty Start Date		Comprehensive Warranty End Date:	

Preventive Maintenance Schedule (Specify Year & Month)				
YEAR	Visit 1	Visit 2	Visit 3	Visit 4

Contact Details			
SUP.CODE / Name of the Supplier			
Name of Service Engineer		Mobile No.	
Service Centre Manager's name		Mobile No.	
Service center address			

Accessories supplied				
Sl. No.	Item	Qty.	Serial No.	Remarks

To be filled by Institution	
Whether the sticker affixed on all the key components of the equipment or on a conspicuous place in the installed room/storage area?	YES / NO (*tick one)*
Whether a digital Photograph of the installed equipment taken after affixing the sticker in the presence of the hospital personnel?	YES / NO
Whether the Demonstration of the equipment with accessories on the technical specification/key features was conducted to the satisfaction at	YES / NO

the time of installation?			
Whether training was conducted to the satisfaction at the time of installation?			YES / NO
Short supply items, if any			
Remarks of hospital authorities			
Recommend to release payment YES □ NO □		The equipment is working satisfactorily YES □ NO □	
The equipment was installed and handed over on *(Installation date to be fiiled in by the Head of the institution or by the end user)*			
Name of Service Engr.		Sign.	
Name of End User & Department Mobile No.		Sign.	
Name of Bio Medical Engr. & Organization		Sign.	
Signature of the Superintendent. Mobile No.		Sign. & Seal	
Date: Seal of supplier:		Date: Hospital Seal:	

Note: The installation report shall be submitted in a single sheet printed back to back and shall be submitted individually for each equipment installed.

Annexure - II

On Consignee letter Head

Dt:_____

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

THREE MONTHS PERFORMANCE CERTIFICATE

(to be fiiled by the head of user institution individually for every equipment)

HOSP CODE / Hospital Name:			
SUP.CODE / Name of the Supplier			
Equipment Details			
EQPT CODE /Name of the equipment:		Purchase Order No:	
Make / Manufacturer		Purchase Order Date:	
Model		Purchase Amount	
Serial no.		Project Name	
Date of Installation		Location / Department	
Whether Equipment working satisfactorily without any problem for one month?		YES □ NO □	
If No, provide details of equipment failure in the first month *(attach additional details if any in a separate sheet)*			

BREAK DOWN DETAILS				
Break down Reported Date	Attended date	Rectified date	Attended by	Details of beak down / service

Present status of the equipment	Working satisfactorily □ Not working satisfactorily □
Recommended to settle the final payment	YES □ NO □
Recommend for trial run for one more month	YES □ NO □
Performance of accessories supplied	
Further Training	Required □ Not required □
Remarks of hospital authorities	
Three month performance certificate was issued on *(date to be filed in by the Head of the institution or by the end user)*	

Name of End User & Department		Sign.	
Signature of the Superintendent.		Sign. & Seal	
Date: Seal of supplier:		Date: Hospital Seal :	

Annexure - III

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

WARRANTY CERTIFICATE

(to be fiiled jointly by the Tenderer, head of user institution & Representative of the Tender Inviting Authority individually for every equipment)

Date:

APMSIDC Supply order No: .....dated.....

The equipment ..... *(Equipment Name)* Model No..... bearing serial no ..... was installed successfully at ..... (*Institution Name*) is offered with a comprehensive warranty for a period of ..... Years starting from ..... to ..... including all the following accessories;

Sl. No	Name of the accessory	Manufacturer's name	Equipment Serial No.	Qty

Name of the Supplier: Signature: Seal:	Name of the Supdt. / End User: Signature: Seal:

Annexure - IV

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

PREVENTIVE MAINTENANCE CHECK LIST

Equipment Name.

Sl. No.	Activities carried out during Preventive Maintenance visit	Visit 1	Visit 2	Visit 3	Visit 4
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

Annexure-V

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

CALIBRATION CHECK LIST

Equipment Name

Model.

Sl. No.	Parameters to be calibrated	Frequency of calibration required
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Annexure-VI

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

List of Spare Part

Equipment Name :

Make:

Model

Sl. No.	Spare name	Cost (inclusive of all charges)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Signature :

Date :

Name of the
Firm and address :

Annexure-VII

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

GENERAL INFORMATION ABOUT THE TENDERER

Name of the Tenderer

Registered address of the firm

State: District

Telephone. No. Fax. No. Email.

3	Address			
	State		District	
	Telephone No.		Fax	
	Email		Website	

Type of Firm (Please □ relevant box)

4	Private Ltd.		Public Ltd.		Proprietorship	
	Partnership		Society		Others, specify	
	Registration No. & Date of Registration.					
	Nature of Bussiness (			-lease □ relevant box)		
5	Original Equipment Manufacturer		Authorized Dealer /Representative			
	Direct Importer		Others, specify.			

Annexure-VIII

SERVICE CENTRE DETAILS

TOLL FREE NUMBER, IF ANY			
Sl. No	Name and address of the service center (s)	Contact Details	
1		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	
2		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	
3		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	