BIDDING DOCUMENT

FOR PURCHASE OF ELECTRO MEDICAL EQUIPMENTS

FOR PESSI HOSPITALS OF ZONE-IV
YEAR 2019–2020

Address: Khawaja Farid Social Security Hospital, Vehari Road Multan.

Ph. No. 061-4481005
Khawaja Farid Social Security Hospital, Vehari Road Multan.

TENDER NOTICE

The Khawaja Farid Social Security Hospital (KFSSH) Multan being Procuring Agency for hospitals falling in Zone-IV (KFSSH Multan, Kalsoom SSH Okara and SSH Sahiwal) invites sealed bids from manufacturers and sole agents of foreign principles for the purchase of Electro Medical Equipment for various PESSI Hospitals. The equipments shall be procured on CIF basis in case of imported equipments and on FOR / DDP basis in case of local equipments. In case of imported items rates should be quoted in foreign currency and for local items rates should be quoted in Pak rupees.

Interested bidders may get the bidding document along with detailed specifications from the office of the undersigned from the date of publication on submission of written request on original letter head along with payment of non-refundable fee of Rs. 1,000 (One Thousand Only). The bidding document can also be downloaded from PPRA Website www.ppra.punjab.gop.pk & PESSI Website www.pessi.gop.pk.

Single stage two envelopes bidding procedure shall be applied. The envelopes should be marked as FINANCIAL PROPOSAL and TECHNICAL PROPOSAL in bold and illegible letters.

Pre-Bid meeting shall be held on 24.03.2020 at 10:00AM in the conference room of Khawaja Farid Social Security Hospital (KFSSH) Multan. All interested bidders are requested to submit their reservation if any, in writing by 19.03.2020 till 03:00PM; which will be discussed in Pre-Bid meeting for appropriated decision. Finalized specifications of the equipment’s shall be uploaded on PPRA Website www.ppra.punjab.gop.pk & PESSI Website www.pessi.gop.pk on 25.03.2020 after pre-bid meeting.

The bids shall accompany 2% Bid Security of the estimated price in the form of CDR/Bank Draft. Interested firms may submit their bids by 11.04.2020 till 11.00 A.M in the office of the undersigned which shall be opened on the same day i.e. 11.04.2020 at 11:30 A.M in presence of the representatives of the participating firms; who care to present. Rule 36A- One person one bid should be followed strictly.

Procurement shall be governed by Punjab Procurement Rules 2014. The tender can be cancelled as per Rule 35 of PPRA Rules 2014.

DR. MUHAMMAD TARIQ SHEIKH
Medical Superintendent KFSSH Multan
Head of Zone-IV Procuring Agency
THE PUNJAB EMPLOYEES’ SOCIAL SECURITY HOSPITAL,
Khawaja Farid Social Security Hospital, Vehari Road Multan.

TENDER FEE: Rs. 1000/- (Non-refundable)

LAST DATE OF RECEIPT: 11.04.2020 (11:00 A.M.)

DATE OF OPENING: 11.04.2020(11:30 A.M.)

Delivery Period.

i) CIF Basis
   90-days from the date of opening of
   L/C on CIF Basis
   (Insurance shall be the responsibility
   of the firm)

ii) FOR / DDP Basis
   90 days on FOR / DDP Basis

Bid Security: 2% of estimated price in shape of CDR in favor
   of Medical Superintendent, Khawaja Farid
   social Security Hospital, Vehari Road Multan

SUBJECT: - TERMS & CONDITIONS REGARDING PURCHASE OF

ELECTROMEDICAL EQUIPMENTS FOR VARIOUS PESSI HOSPITALS

Technical specifications for the purchase of Electromedical equipments for various
PESSI Hospitals in Punjab.

Instructions to the bidders, General Conditions of contract, special conditions of Contract
& schedule of requirements are detailed in the bidding document available at PPRA Web Site,

NO.SSR/Tender-Equipment/__________ Dated Multan, the 2020.
M/s.

__________________________________________
__________________________________________

MEDICAL SUPERINTENDENT
Khawaja Farid Social Security Hospital
### CHECK LIST (MANDATORY TO FILL)

<table>
<thead>
<tr>
<th>S.#</th>
<th>DETAIL</th>
<th>YES/NO</th>
<th>PAGE #</th>
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<tbody>
<tr>
<td>1.</td>
<td>Original receipt for purchase of tender (F-6)</td>
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<td>2.</td>
<td>Minimum two years business history from date of authorization.</td>
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<td>3.</td>
<td>Mandatory warranty of the product as per terms and conditions of the contract. Proof that the company is authorized to give warranty on behalf of the Principal to be provided.</td>
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<td>4.</td>
<td>Acceptance of terms and condition, tender documents duly signed and stamped.</td>
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<td>5.</td>
<td>Company profile including engineering and managerial capability.</td>
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<td>6.</td>
<td>An affidavit on stamp paper of Rs. 100/- submitting following clauses: 1) that maintenance of equipment and replacement of defective parts under warranty shall be done, II) that the firm is never blacklisted on any grounds whatsoever.</td>
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<td>7.</td>
<td>Price should not be mentioned on technical bid.</td>
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<td>8.</td>
<td>Professional Tax Clearance Certificate, National Tax Number and General Sale Tax number certificate.</td>
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<td>9.</td>
<td>List of quoted products supplied to Govt. Hospital and private sector.</td>
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<td>10.</td>
<td>Literature &amp; brochure wherein detailed technical specifications of quoted product be mentioned</td>
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<td>11.</td>
<td>Valid Manufacturer authorization certificate duly signed and stamped by the respective Foreign Principal.</td>
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<td>12.</td>
<td>Certificate/documentary proof to the effect that the Principal is the original manufacturer of the required goods (major components, mainframe, etc).</td>
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<td>13.</td>
<td>Certificates regarding quality of production for conformity with International Standards (copy of certificate FDA, CE, JIS/MHLW)</td>
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<td>14.</td>
<td>Detail of technical staff to be provided.</td>
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<td>15.</td>
<td>Latest 2 years tax returns, audited balance sheet &amp; bank statement.</td>
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<td>16.</td>
<td>Copies of Supply orders of quoted items over last two years(minimum) Government/private sector.</td>
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**Note:**

1- Fill in the check list properly/completely

2- All bids should be submitted in tape or ring binding.

3- All documents should contain proper page marking, attached in sequence as indicated for evaluation in the bidding document and signatures of authorized person.
Instructions to Bidders (ITB)

General Instructions:

1. Content of Bidding Document

1.1 The goods required, bidding procedures, and Contract terms are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents include:

   (a) Instructions to Bidders (ITB);
   (b) General Conditions of Contract (GCC);
   (c) Special Conditions of Contract (SCC);
   (d) Schedule of Requirements;
   (e) Contract Form;
   (f) Manufacturer’s Authorization Form;
   (g) Bid Form; and
   (h) Price Schedule.
   (i) Technical Specifications;

1.2 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 to submit a bid not substantially responsive to the bidding documents in every respect shall be at the Bidder’s risk and may result in the rejection of its bid.

2. Source of Funds

2.1 The Punjab Employees Social Security Institution has allocated for purchase of medical equipment under the relevant head of Account during the financial year 2019-2020 (herein referred to as the “Procuring Agency”).

3. Eligible Bidders

3.1 This Invitation for Bids is open to all original Manufacturers/authorized Sole Agents of Foreign Principals in Pakistan for supply of goods.

3.2 The bidder must possess valid authorization from the Foreign Principal / Manufacturer and in case of Manufacturer; they should have a documentary proof to the effect that they are the original Manufacturer of the required goods.

3.3 Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government (Federal, Provincial), PESSI, a local body or a public sector organization.

3.4 Any offer not received as per terms and conditions of the Bidding documents is liable to be rejected. No offer shall be considered if:

   i. Received without earnest money from any firm.
   ii. It is received after the time and date fixed for its receipt.
   iii. The tender is unsigned
   iv. The offer is ambiguous.
   v. The offer is conditional.
   vi. The offer is from a firm, black listed, suspended.
   vii. The offer is received by telegram/fax.
   viii. Offer received with shorter validity than required in the tender enquiry.
ix. The offer is for store not conforming to specification indicated in the tender enquiry. No counter offer will be accepted.

3.5 The bidder must be an active payer. National Tax Number (NTN) and General Sales Tax Number with documentary proof shall have to be provided by bidder(s).

4. Eligible Goods and Services
4.1 All goods and related services to be supplied under the contract shall have their origin in eligible source Countries and all expenditures made under the contract shall be limited to such goods and services.

4.2 For the purpose of this clause, (a) the term “Goods” includes any Goods that are the subject of this Invitation for Bids and (b) the term “Services” includes related services such as transportation, insurance, after sale service, spare parts availability, etc. For purposes of this clause, “origin” means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied. Goods are produced when, through manufacturing or processing, or substantial and major assembly of components, a commercially recognized product is produced that is substantially different in basic characteristics or in purpose or utility from its components.

4.3 The quoted electric equipment must comply with the Standard Electrical Power System of the Country i.e., 220 V/50 Hz. Cost of Bidding

5.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

5. Clarification of Bidding Documents
6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the Procuring Agency in writing at the Procuring Agency’s address indicated in the Invitation for Bids. The Procuring Agency shall respond in writing to any request for clarification of the bidding documents, which it receives not later than ten (10) days prior to the deadline for the submission of bids prescribed in the Invitation for Bids. Written copies of the Procuring Agency’s response (including an explanation of the query but without identifying the source of inquiry) shall be sent to all prospective Bidders that have received the bidding documents.

6. Amendment of Bidding Documents
7.1 At any time prior to the deadline for submission of bids, the Procuring Agency, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the bidding documents by amendment.

7.2 All prospective Bidders that have received the bidding documents shall be notified of the amendment in writing or through procuring agency website, and shall be binding on them.

7.3 In order to allow prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Procuring Agency, at its discretion, may extend the deadline for the submission of bids. Amendment notice to that effect shall be communicated in the same manner as the original invitation to bid.

7. Qualification and Disqualification of Bidders
8.1 In the absence of prequalification, the Procuring Agency shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the Contract satisfactorily, in accordance with the evaluation criteria.

8.2 The determination shall take into account the Bidder’s financial, technical, and production capabilities. It shall be based upon an examination of the documentary evidence of the Bidder’s qualifications submitted by the Bidder, pursuant to evaluation criteria as well as such other information as the Procuring Agency deems necessary and appropriate.
8.3 An affirmative determination shall be a pre-requisite for Award of the Contract to the Bidder. A negative determination shall result in rejection of the Bidder’s bid, in which event the Procuring Agency shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder’s capabilities to perform satisfactorily.

8.4 The Procuring Agency, at any stage of the procurement proceedings, having credible reasons for or prima facie evidence of any defect in Supplier’s capacities, may require the Suppliers to provide information concerning their professional, technical, financial, legal or managerial competence.

8.5 The Procuring Agency shall disqualify a Bidder if it finds, at any time, that the information submitted by him concerning his qualification as Supplier was false and materially inaccurate or incomplete.

8.6 Bidders that are found to consistently fail to provide satisfactory performances or are found to be indulging in corrupt or fraudulent practices shall be black listed under the relevant provisions of PPRA Rules 2014

8. Corrupt or Fraudulent Practices
9.1 The Government of Punjab defines Corrupt and Fraudulent Practices as “the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official or the contractor in the procurement process or in contract execution to the detriment of the procuring agency; or misrepresentation of facts in order to influence a procurement process or the execution of a contract, collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the procuring agency of the benefits of free and open competition and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty; it may include any of the following practices:

i) coercive practice by impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;

ii) collusive practice by arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, non-competitive levels for any wrongful gain;

iii) corrupt practice by offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;

iv) fraudulent practice by 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;

v) obstructive practice by harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; 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 acts intended to materially impede the exercise of inspection and audit rights;

Preparation of Bids

10. Language of Bid
10.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring Agency shall be written in English. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, the translation shall govern.

11. Documents Comprising the Bid
11.1 The bid prepared by the Bidder shall comprise the following components:

(a) A Bid Form and Price Schedule completed in accordance with instructions to the bidder clause 12 and 13 (to be submitted along with financial proposal);
(b) Documentary evidence established in accordance with instruction to the bidder clause 15. 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 instruction to the bidder clause 16 that the goods to be supplied by the Bidder are eligible goods and conform to the bidding documents.

12. Bid Form and Price Schedule
12.1 The Bidder shall complete the Bid Form and an appropriate Price Schedule furnished in the bidding documents indicating the goods to be supplied, a brief description of the goods, specifications, make, model, country of origin, port of shipment (in case of CPT / CFR), freight and warranty, taxes, quantity, and prices

13. Bid Prices
13.1 The Bidder shall indicate on the Price Schedule the unit prices and total bid price of the goods, it proposes to supply under the Contract.

13.2 Form for Price Schedule is to be filled in very carefully, and should be typed. Any alteration/correction must be initialed. Every page is to be signed and stamped at the bottom. Serial number/bid number of the quoted item may be marked or highlighted with red/yellow marker.

13.3 The Bidder should quote the prices of goods according to the technical specifications. The specifications of goods, different from the demand of enquiry, shall straightway be rejected.

13.4 The Bidder is required to offer competitive price. All prices must include relevant taxes and duties, where applicable. If there is no mention of taxes, the offered/quoted price shall be considered as inclusive of all prevailing taxes/duties. The benefit of exemption from or reduction in the GST or other taxes shall be passed on to the Procuring Agency.

13.5 Prices offered should be for the entire quantity demanded; partial quantity offers shall straightaway be rejected. Conditional offer shall also be considered as non-responsive Bidder.

13.6 While tendering your quotation, the present trend/inflation in the rate of goods and services in the market should be kept in mind. No request for increase in price due to market fluctuation in the cost of goods and services shall be entertained after the bid has been submitted.

14. Bid Currencies
14.1 Prices shall be quoted in Pak Rupees in case of FOR/DDP.

14.2 Price shall be quoted in foreign currency in case of CIF/C&F basis. State Bank of Pakistan’s foreign currency selling rate will be considered from the date of opening of financial bid (Import Cases).

15. Documents Establishing Bidder’s Eligibility and Qualification
15.1 The Bidder shall furnish, as part of its technical bid, documents establishing the Bidder’s eligibility to bid and its qualifications to perform the Contract if its bid is accepted.

15.2 The documentary evidence of the Bidder’s eligibility to bid shall establish to the Procuring Agency’s satisfaction that the Bidder, at the time of submission of its bid, is an eligible as defined under instruction to the bidder.
15.3 The documentary evidence to be submitted in the Technical Proposal for the purposes of qualification and technical evaluation shall include:

(a) The Supplier/agent shall have to produce letter of authorization from Manufacturer and in case of Manufacturer, documentary proof to the effect that they are the original Manufacturer of the required goods shall be provided.

(b) National Tax Number (NTN) and General Sales Tax Number (if applicable) with documentary proof shall have to be provided by each Bidder in the tender.

(c) The Bidder/Manufacturer shall submit an affidavit on legal stamp paper of Rs. 100/- that their firm has not been blacklisted in the past on any ground by any Government (Federal, Provincial), PESSI a local body or a public sector organization. On account of submission of false statement the Bidder shall be disqualified forthwith and subsequently black listed.

(d) The Bidder should have minimum two years experience in the market, as specified for relevant equipment which will be counted from the date of Authorized Letter of Principal/Local Manufacturer. Similarly it is mandatory that the item to be quoted by the Bidder/Manufacturer should have already been used in different public/private Institution/hospitals. Documentary proof shall have to be provided in this regard.

(e) The Bidder is required to provide with the technical proposal the name of item(s), tender number and serial number in the exact manner as quoted in the financial proposals.

(f) The Bidder must indicate the country of origin of the goods, capacity of production of the firm (in case of manufacturer), its financial status, necessary assurance of quality production, Certificate(s) for conformity with International standards of Quality (original or attested certification) and list of qualified (attested degrees or certification) technical persons along with qualification and trainings (including details of CNIC), payroll details of staff, list of main service, testing and calibration tools and supervisory staff working in the production and quality control departments in the manufacturing plants.

(g) The Bidder (in case of manufacturer) shall provide a list of plant, major machinery and equipment installed in the factory. All necessary equipment must be calibrated and validation certificate to be included in the technical bid.

(h) In case of non-local manufacturers the list of Countries in which the specific product is available and is in use. Information to be duly certified by the appropriate Punjab Chapter of the Chamber of Commerce.

(i) The Bidder shall provide firms balance sheet, latest tax paid, audit inspection report (if undertaken) and at least one year bank statement.

(j) The Bidder shall provide total list of products it supplies in the market. The Bidder shall also supply attested copy of the first invoice for the specific product for which bidding is being undertaken. The Bidder shall also be responsible for providing up to date and authentic contact details of both private and public hospitals to which it has supplied over the last two years. Bidder shall also provide supply order details over last one (01) year with complete and up to date details of its distribution sub-offices or/and representatives.


16.1 Pursuant instruction to the Bidder shall furnish along with technical proposal, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods, which the Bidder proposes to supply under the Contract.

16.2 The documentary evidence of the eligibility of the goods shall consist of a statement in the Price Schedule of the country of origin of the goods offered, with a certificate of origin issued by the Manufacturer.

16.3 Submission of sample (where demanded): If so required by the technical committee, to be recorded in writing, the bidder shall provide a sample or demonstration as the case may be.

17. Bid Security

17.1 2% Bid Security of the estimated price in the form of CDR/Bank Draft will have to be deposited in the form of call deposit and in case the offer is withdrawn, amended or revised during the validity period of the offer, the bid security is liable to be forfeited.

18. Bid Validity

18.1 Bids shall remain valid for a period of ninety (120) days after opening of Technical Bid prescribed by the Procuring Agency. A bid valid for a shorter period shall be rejected by the Procuring Agency as non-responsive.
18.2 The Procuring Agency shall ordinarily be under an obligation to process and evaluate the bid within the stipulated bid validity period. However, under exceptional circumstances and for reasons to be recorded in writing, if an extension is considered necessary, all those who have submitted their bids shall be asked to extend their respective bid validity period. Such extension shall be for not more than the period equal to the period of the original bid validity.

18.3 Bidders who,
(a) agree to the Procuring Agency’s request for extension of bid validity period shall not be permitted to change the substance of their bids; and
(b) do not agree to an extension of the bid validity period shall be allowed to withdraw their bids, if any.

Submission of Bids

19. Format and Signing of Bid
19.1 The bid shall be typed and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. The person or persons signing the bid shall initial all pages of the bid.
19.2 Any interlineations, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.
19.3 All bidding documents to be duly attested (signed and stamped) by the authorized person of company.

20. Sealing and Marking of Bids
20.1 The envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion. The envelopes shall then be sealed in an outer envelope.
20.2 The inner and outer envelopes shall:
a) be addressed to the Procuring Agency at the address given in the Invitation for Bids; and
b) bear the Institution name and number indicated in the Invitation for Bids, and shall be inscribed by the following sentence: “DO NOT OPEN BEFORE,” to be completed with the time and the date specified in the invitation for Bid.
20.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared as non-responsive or late.
20.4 If the outer as well as inner envelope is not sealed and marked properly, the Procuring Agency shall assume no responsibility for the bid’s misplacement or premature opening.

21. Deadline for Submission of Bids
21.1 Bids must be submitted by the Bidder and received by the Procuring Agency at the address specified Instruction to the bidder not later than the time and date specified in the Invitation for Bids.
21.2 If a procuring agency considers that it is necessary in public interest to extend the last date for the submission of the bids, it may, after recording reasons, do so in the manner similar to the original advertisement.

22. Late Bid
22.1 Any bid received by the Procuring Agency after the deadline for submission of bids prescribed by the Procuring Agency pursuant to Instruction to the bidder shall be rejected and returned unopened to the Bidder.

23. Withdrawal of Bids
23.1 The Bidder may withdraw its bid prior to the deadline specified in the invitation to bid.
23.2 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 in Instruction to the bidder. Withdrawal of a bid during this interval will make the bidder eligible to be debarred for further procurements for a period as deemed necessary by the Procuring Agency.

**The Bidding Procedure (under Punjab Procurement Rules 2014)**

24. Single stage – two envelopes bidding procedure

24.1 Single stage – two envelopes bidding procedure shall be applied:

(i) the bid shall be a single package consisting of two separate envelopes, containing separately the financial and the technical proposals;

(ii) the envelopes shall be marked as “Financial Proposal” and “Technical Proposal”;

(iii) in the first instance, the “Technical Proposal” shall be opened and the envelope marked as “Financial Proposal” shall be retained unopened in the custody of the procuring agency;

(iv) the procuring agency shall evaluate the technical proposal in the manner prescribed in advance, without reference to the price and shall reject any proposal which does not conform to the specified requirements;

(v) during the technical evaluation no amendments in the technical proposal shall be permitted;

(vi) after the evaluation and approval of the technical proposals, the procuring agency shall open the financial proposals of the technically accepted bids, publically at a time, date and venue announced and communicated to the bidders in advance, within the bid validity period;

(vii) the financial bids found technically nonresponsive shall be returned un-opened to the respective bidders; and

(viii) the lowest evaluated bidder shall be awarded the contract;

**Opening and Evaluation of Bids**

25. Opening of Bids by the Procuring Agency

25.1 The Procuring Agency shall initially open only the envelopes marked “TECHNICAL PROPOSAL” in the presence of Bidders’ representatives who choose to attend, at the time, on the date, and at the place specified in the Invitation for Bids. The Bidders’ representatives who are present shall sign the Attendance Sheet as evidence of their attendance. However, the envelope marked as “FINANCIAL PROPOSAL” shall remain unopened and shall be retained in safe custody of the Procuring Agency till completion of the evaluation process.

25.2 The Bidders’ names, item(s) for which they quoted their rate and such other details as the Procuring Agency, at its discretion, may consider appropriate, shall be announced at the opening of technical proposal. No bid shall be rejected at technical proposal/ bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to instruction to bidder. However, at the opening financial proposals (the date, time and venue would be announced later on), the bid prices, and the presence or absence of requisite bid Security and such other details as the Procuring Agency, at its discretion, may consider appropriate, shall be announced.

25.3 The Procuring Agency shall prepare minutes of both the technical proposal as well as the financial proposal bid opening.

26. Clarification of Bids

26.1 No bidder shall be allowed to alter or modify his bid after the closing time for the submission of the bids.

26.2 The procuring agency may, if necessary after the opening of the bids, seek and accept such clarifications of the bid as do not change the substance of the bid.

26.3 Any request for clarification in the bid, made by the procuring agency and its response, shall invariably be in writing.
27. Preliminary Examination

27.1 The Procuring Agency shall examine the bids to determine whether they are complete, whether any computational errors have been made (at the time of opening the financial proposal), whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

27.2 In the financial bids (at the time of opening the financial proposal) the arithmetical errors shall be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Bidders/Suppliers do not accept the correction of the errors, its bid shall be rejected. If there is a discrepancy between words and figures, the amount in words shall prevail.

27.3 The Procuring Agency may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation (or changes the substance of the bid), provided such waiver does not prejudice or affect the relative ranking of any Bidder.

27.4 Prior to the detailed evaluation, pursuant instruction to the bidder the Procuring Agency shall determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one, which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions shall be deemed to be a material deviation for technical proposals. The Procuring Agency’s determination of a bid’s responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

27.5 If a bid is not substantially responsive, it shall be rejected by the Procuring Agency and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

28. Evaluation and Comparison of Bids

28.1 The Procuring Agency shall evaluate and compare the bids, which have been determined to be substantially responsive.

28.2 All bids shall be evaluated in accordance with the Evaluation Criteria / Least Cost Method and other terms and conditions set forth in these bidding documents.

28.3 A bid once opened in accordance with the prescribed procedure shall be subject to only those rules, regulations and policies that are in force at the time of issue of notice for invitation of bids.

28.4 The Procuring Agency’s evaluation of technical proposal/ bid shall be on the basis of previous performances, test reports, inspection of plant/ factory/ premises, previous experience, financial soundness and such other details as already highlighted. However, the evaluation of financial proposal shall be on the basis of price inclusive of prevailing taxes and duties in pursuant to instruction to the bidder.

28.4 In case of procurement on C&F/ CIF basis; for the purpose of comparison of bids quoted in different currencies, the price shall be converted into Pak Rupees in pursuant to instruction to the bidder. The rate of exchange shall be the selling rate, prevailing on the date of opening of bids specified in the bidding documents, as notified by the State Bank of Pakistan/ National Bank of Pakistan on that day.

28.5 A bid once opened in accordance with the prescribed procedure shall be subject to only those rules, regulations and policies that are in force at the time of issue of notice for invitation of bids.

29. Evaluation Criteria

29.1 For the purposes of determining the lowest evaluated bid, facts other than price such as previous performances, previous experience, engineering/ technical capabilities, financial soundness and such other details as the Procuring Agency at its discretion, may consider appropriate shall be taken into consideration. The following evaluation factors/ criteria will be employed on technical proposals. The number of points allocated to each factor shall be specified in the Evaluation Report. Only bids securing minimum of 70% marks would be declared technically qualified. However, for such items where inspection of sample and inspection of manufacturing unit is required in such cases technical qualification shall be subject to satisfactory inspections.
i) After technical evaluation is completed, the Procuring Agency shall notify the date, time and location for opening of the financial proposals. Bidders’ attendance at the opening of financial proposals is optional.

ii) Financial proposals shall be opened publicly in the presence of the bidders’ representatives who choose to attend. The name of the bidders and the technical score of the bidder shall be read aloud. The financial proposal of the bidders who met the minimum qualifying mark shall then be inspected to confirm that they have remained sealed and unopened (financial proposals of those Bidders failing to secure minimum marks in the technical evaluation shall be returned unopened). These financial proposals shall be then opened, and the total prices read aloud and recorded.

29.2 Evaluation Criteria

For the purposes of evaluation the word “Product” would mean the specific item included in the bidders bid, the specific make and model the bidder is including in the bid.

The Product to be purchased shall be evaluated under all/any of the following assessment parameters depending upon the nature of the product and as determined by the Technical Committee.

EVALUATION CRITERIA FOR equipments TO BE QUOTED ON C.I.F BASIS (COST INSURANCE AND FREIGHT)

PART-A: ASSESSMENT FOR ELIGIBILITY

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Yes/ No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The bidder must possess valid authorization/ sole agency agreement from the Foreign Principal duly attested by the concerned Embassy.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The Manufacturer should have documentary evidence to the effect that they are the original Manufacturer of the quoted product with indication of manufacturing site and its location.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The product should have minimum two-years market experience locally or internationally</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Compliant to the specifications (Responsive). Specifications shall be evaluated by the Technical Committee. The bid with minor deviations without any effect on the quality, efficiency, reliability and durability of products will be declared as substantially responsive, which shall be determined by the Technical Evaluation Committee.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The Bidder/ Manufacturer shall submit an affidavit on legal stamp paper of Rs. 100/- that their firm has not been blacklisted in the past on any ground by any Government (Federal, Provincial), a local body or a public sector organization.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Country of origin of quoted product must be of USA/EUROPE/JAPAN</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Quoted product must have one or two certification of FDA/CE/JIS/MHLW as per detail mentioned against each item.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Performance of the firm with PESSI regarding supply of equipments fully compliant with the ordered specifications (if supply order was awarded in past)</td>
<td></td>
</tr>
</tbody>
</table>

Note: 1. Only eligible firms will be scrutinized further for Part-B

PART-B: ASSESSMENT PARAMETERS (BIDDERS)

<table>
<thead>
<tr>
<th>A.</th>
<th>General</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firm’s Certificate ISO 9001: 2000 (04) (copy to be attached)</td>
<td>04</td>
</tr>
<tr>
<td>2.</td>
<td>References of quoted item supplied in Public / Private Organizations</td>
<td>20</td>
</tr>
</tbody>
</table>
i. **Public Organizations.**

<table>
<thead>
<tr>
<th>Range</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>04</td>
</tr>
<tr>
<td>5 to 10</td>
<td>08</td>
</tr>
<tr>
<td>More Than 10</td>
<td>12</td>
</tr>
</tbody>
</table>

ii. **Private Organizations.**

<table>
<thead>
<tr>
<th>Range</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>02</td>
</tr>
<tr>
<td>5 to 10</td>
<td>04</td>
</tr>
<tr>
<td>More Than 10</td>
<td>08</td>
</tr>
</tbody>
</table>

Supporting documents including name, Model of quoted item, Institutions where supplied with quantity must be attached.

3. **Financial Soundness**

<table>
<thead>
<tr>
<th>Document</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Returns (Last 2 Years) (copies to be attached)</td>
<td>02</td>
</tr>
<tr>
<td>Bank Certificate showing annual turn over 25-50 Million</td>
<td>03</td>
</tr>
<tr>
<td>Bank Certificate showing annual turn over more than 50 Million</td>
<td>05</td>
</tr>
<tr>
<td>Last two years audited balance sheet (copies to be attached)</td>
<td>03</td>
</tr>
</tbody>
</table>

B. **Technical Ability**

1. **Engineers (not less than 2-years experience).**

   a. 1 – 3 DAE | 04 |
   4 or above   | 07 |

   Additional Marks Max upto 08
   B.Sc Engineering in Biomedical / Electrical / Electronic / Mechatronic = 02 mark for each engineer
   M.Sc / PhD= 03 marks for each engineer

   b) Maximum total number of above parameters shall be 15
   Employment letters and diploma / degree of relevant engineering staff must be attached.

2. **Trainings on the quoted product** *(Maximum 6 marks)*

<table>
<thead>
<tr>
<th>Training Type</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 2 trained engineers (locally)</td>
<td>02</td>
</tr>
<tr>
<td>3 or more</td>
<td>04</td>
</tr>
<tr>
<td>1 to 2 rained engineer (abroad)</td>
<td>04</td>
</tr>
<tr>
<td>More than 03 trained engineers (abroad)</td>
<td>06</td>
</tr>
</tbody>
</table>

Supporting documents including degrees must be attached.

3. **Measuring / Analyzer / Calibrators & Repair Tools**

<table>
<thead>
<tr>
<th>Tools</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair tools</td>
<td>04</td>
</tr>
<tr>
<td>Calibration tools &amp; Analyzers (List be attached with reference to the quoted equipment)</td>
<td>06</td>
</tr>
</tbody>
</table>

4. **Inventory**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor parts</td>
<td>02</td>
</tr>
<tr>
<td>Major parts (supporting list / documents must be attached)</td>
<td>05</td>
</tr>
</tbody>
</table>

Total Score: 46
<table>
<thead>
<tr>
<th>Spare Equipment in stock backup support</th>
<th>03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Shop Certificate from Foreign Principal</td>
<td>05</td>
</tr>
</tbody>
</table>

C. **PRODUCT STRENGTH**  

<table>
<thead>
<tr>
<th>1.</th>
<th>Product Quality Certification</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>FDA / CE / JIS / MHLW (Anyone) (04)</td>
<td>04</td>
</tr>
</tbody>
</table>
| ii. | Any two or more standards (10)  
(Certificates and proof must be attached) | 10 |

<table>
<thead>
<tr>
<th>2.</th>
<th>International References of quoted products</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Sales Unit</td>
<td>05</td>
<td></td>
</tr>
<tr>
<td>25 to 50</td>
<td>05</td>
<td></td>
</tr>
<tr>
<td>51 to 100</td>
<td>08</td>
<td></td>
</tr>
<tr>
<td>More than 100</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

1) Acceptable Bids must score minimum of 70% marks.
2) For verification of above information, the nominated representative(s) of the institution may visit the premises of the firm at any time during evaluation process and will take necessary action in case of false presentation of documents.
3) Products with USA origin need to bear Food & Drug Administration (FDA) 510K certificate, Japan origin need to bear JIS (Japanese Industrial Standards) / MHLW (Ministry of Health Labour and Welfare) and Europe origin need to bear CE (MDD).
# EVALUATION CRITERIA FOR EQUIPMENTS TO BE QUOTED ON F.O.R BASIS (FREIGHT ON RECEIPT)

## PART-A: ASSESSMENT FOR ELIGIBILITY

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Yes/ No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Manufacturer should have documentary evidence to the effect that they are the original Manufacturer of the quoted product with indication of manufacturing site and its location.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The Manufacturer should have minimum three-years market experience of quoted product locally or internationally</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Compliant to the specifications (Responsive). Specifications shall be evaluated by the Technical Committee. The bid with minor deviations without any effect on the quality, efficiency, reliability and durability of products will be declared as substantially responsive, which shall be determined by the Technical Evaluation Committee.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>The Bidder/ Manufacturer shall submit an affidavit on legal stamp paper of Rs. 100/- that their firm has not been blacklisted in the past on any ground by any Government (Federal, Provincial), a local body or a public sector organization.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

1. Only eligible firms will be scrutinized further for Part-B
2. The firms who have failed to supply the equipments in past as per ordered specifications shall not be scrutinized further for Part-B

## PART-B: ASSESSMENT PARAMETERS (BIDDERS)

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firm’s Certificate ISO 9001: 2000 (copy to be attached)</td>
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<td>2.</td>
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<td></td>
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</tr>
<tr>
<td>ii.</td>
<td>Private Organizations.</td>
<td></td>
</tr>
<tr>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>More Than 10</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td>Supporting documents including name, Model of quoted item, Institutions where supplied with quantity must be attached.</td>
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<td>3.</td>
<td>Financial Soundness</td>
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<td></td>
<td>Bank Certificate showing annual turn over more than 20 Million</td>
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<tr>
<td></td>
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<td>05</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 4. | (i) Availability of Spare Parts and Accessories in stock (05)  
(ii) List of Machinery and Tool with reference to Product (05)  
Manufacturer shall clearly define which parts and accessories are replaceable and under warranty. | 10 |
| 5. | **Availability of technical staff of the company/firm with reference to the product.** | 20 |
| | A. Number of technical staff  
  i. Technical staff 5-10 = 10  
  ii. Technical Staff 11 – 15 = 15  
  iii. One additional number for every additional technical member shall be granted with maximum up to 20 | |
| 6. | Exporter of the quoted product  
Supporting document shall have to be provided. | 10 |
| 7. | **Overall reputation with reference to the product**  
  • Certificates provided regarding performance of the product from head of the concerned institute/hospital where the goods were supplied.  
  One number for each certificate shall be granted with maximum upto 15 marks | 15 |

**Note:**

1. Acceptable Bids must score minimum of 70% marks.
2. Technical qualification of the participating firms against Semi Automated Bed shall be subject to the condition that:-  
   i. The firm which shall obtain minimum qualifying marks during technical scrutiny of documents shall have to provide samples of beds within 03 days of the issuance of demand from the procuring agency.  
   ii. If the sample is found in accordance with the advertised specifications then the Technical Committee shall visit the manufacturing unit of the firm prior to announcement of the technical status.
29.3 Financial proposals would be evaluated as follows:
   i) Incomplete bid shall stand rejected.
   ii) Minor oversight, clerical mistakes, other minor inconsistencies that do not alter the substances of the financial bid may be corrected by the Procuring Agency.

30. Contacting the Procuring Agency.
30.1 No Bidder shall contact the Procuring Agency on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.

30.2 Any effort by a Bidder to influence the Procuring Agency in its decisions on bid evaluation, bid comparison, or Contract Award will result in the rejection of the Bidder’s bid and subsequent black listing. Canvassing by any Bidder at any stage of the Tender evaluation is strictly prohibited.

31. Rejection of Bids
31.1 The Procuring Agency may reject any or all bids at any time prior to the acceptance of a bid or proposal. The Procuring Agency shall upon request communicate to any Bidder who submitted a bid, the grounds for its rejection of all bids or proposals, but shall not be required to justify those grounds.

31.2 The Procuring Agency incurs no liability, solely by virtue of its invoking Clause 31.1 towards Bidders who have submitted bids.

31.3 Notice of the rejection of any or all bids shall be given promptly to the concerned Bidders that submitted bids.

32. Re-Bidding
32.1 If the Procuring Agency rejects all bids in pursuant to instruction to the bidder, it may call for a re-bidding or if deems necessary and appropriate the Procuring Agency may seek any alternative methods of procurement.

32.2 The Procuring Agency before invitation for re-bidding shall assess the reasons for rejection and may revise specifications, evaluation criteria or any other condition for Bidders, as it may deem necessary.

33. Announcement of Evaluation Report
33.1 The Procuring Agency shall announce the results of bid evaluation in the form of a report giving justification for acceptance or rejection of bids at least ten days prior to the award of procurement Contract.

Award of Contract

34. Acceptance of Bid and Award criteria
34.1 The Bidder with technically evaluated lowest financial bid, if not in conflict with any other law, rules, regulations or policy of the Government, shall be awarded the Contract, within the original or extended period of bid validity.

35. Procuring Agency’s right to vary quantities at time of Award
35.1 The Procuring Agency reserves the right at the time of Contract award to increase or decrease, the quantity of goods originally specified in the Price Schedule and Schedule of Requirements without any change in unit price or other terms and conditions.
36 Limitations on Negotiations

36.1 Save as otherwise provided there shall be no price negotiations with the bidder having submitted the lowest evaluated bid or with any other bidder: provided that the extent of the negotiation permissible shall be subject to the provision of rules / regulations issued by the PPRA, 2014.

37. Notification of Award

37.1 Prior to the expiration of the period of bid validity, the Procuring Agency shall notify the successful Bidder in writing by registered letter that its bid has been accepted.

37.2 The notification of Award shall constitute the formation of the Contract.

38. Signing of Contract

38.1 At the same time as the Procuring Agency notifies the successful Bidder that its bid has been accepted, the Procuring Agency shall send the Bidder the Contract Form provided in the bidding documents, incorporating all agreements between the Parties.

38.2 Within ONE week of receipt of the Contract Form, both the successful Bidder and the Procuring Agency shall sign and date the Contract on the legal stamp paper. The Procuring Agency shall issue Purchase Order on the same date of signing of Contract. If the successful Bidder, after completion of all codal formalities shows inability to sign the Contract then their bid Security/ earnest money to the extent of proportionate percentage shall be forfeited and the firm shall be blacklisted minimum for two years for future participation. In such situation the Procuring Agency may make the Award to the next lowest evaluated Bidder or call for re-bidding.


39.1 The Performance Guarantee will be 10% of the contract amount. The performance security shall be deposited in the shape of deposit at call (CDR). In case, the contractor fails to execute the contract strictly in accordance with the terms and conditions laid down in the contract, the security deposited by him shall be forfeited and the store purchased at his risk & expense.

39.2 Failure of the successful Bidder to comply with the requirement of instruction to the bidder shall constitute sufficient grounds for the annulment of the Award, in which event the Procuring Agency may make the Award to the next lowest evaluated Bidder or call for re-bidding.

40. Schedule of Requirement.

40.1 The supplies shall be delivered within 90 days w.e.f the next date after the date of issue of Purchase Order on F.O.R basis (without penalty), and with prescribed penalty, as per following schedule of requirement:

40.2 In case of late delivery of goods beyond the periods specified in the Schedule of Requirements, penalty @ 1% per week of the cost.

41. Redressal of grievances by the Procuring Agency.

41.1 The Procuring Agency shall constitute a committee comprising of odd number of persons, with proper powers and authorizations, to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.

41.2 Any bidder feeling aggrieved by any act of the Procuring Agency after the submission of his bid may lodge a written complaint concerning his grievances not later than fifteen days after the announcement of the bid evaluation report under rule35.

41.3 The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint.

41.4 Mere fact lodging of a complaint shall not warrant suspension of the procurement process.

41.5 Any bidder not satisfied with the decision of the committee of the Procuring Agency may lodge an appeal in the relevant court of jurisdiction.
General Conditions of Contract (GCC)

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated:

a. “The Contract” means the agreement to be entered into between the Procuring Agency and the Successful bidder, as recorded in the Contract Form signed by the Parties, including all attachments and appendices thereto and all documents incorporated by reference therein.


c. “The Goods” means electro medical equipment which the Supplier is required to supply to the Procuring Agency under the Contract.

d. “The Services” means those services ancillary to the supply of above goods, such as printing of special instructions on the label and packing, design and logo of the Institute/Hospital, transportation of goods up to the desired destinations and other such obligations of the supplier covered under the Contract.

e. “GCC” mean the General Conditions of Contract contained in this section.

f. “SCC” means the Special Conditions of Contract.

g. “The Procuring Agency” means Social Security Hospital _________ / (Zone-___).

h. “The Procuring Agency’s Country” is the country named in SCC.

i. “The Supplier” means the individual or firm supplying the goods under this Contract.

j. “Day” means calendar day.

2. Application

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

3. Country of Origin

3.1 Country of manufacturer should be of USA / Europe / Japan. However, country of origin of equipment could be from any geographical region of the world as per laws of Pakistan.

4. Standards

5. 4.1 The goods supplied under this Contract shall conform to the standards mentioned in the bidding documents/ Technical Specifications.

5. Use of Contract Documents and Information

5.1 The Supplier shall not, without the Procuring Agency’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 Procuring Agency in connection therewith, to any person other than a person employed by the Supplier in the 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 Procuring Agency’s prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.

5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Procuring Agency and shall be returned (all copies) to the Procuring Agency on completion of the Supplier’s performance under the Contract if so required by the Procuring Agency.

5.4 The Supplier shall permit the Procuring Agency to inspect the Supplier’s accounts and records relating to the performance of the Supplier.

6. Patent Rights
6.1 The Supplier shall indemnify the Procuring Agency against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the country.

7. **Ensuring Storage/Installation Arrangements**
7.1 To ensure storage and installation arrangements for the intended supplies, the Supplier shall inform end user for pre-requisites well in time for proper installation. In case the Supplier abides by the given time frame he shall not be penalized for delay.
7.2 In case of late delivery of goods beyond the periods specified in the Schedule of Requirements, penalty @ 1% per week of the cost.

8. **Inspections and Tests.**
8.1 The Procuring Agency or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Agency.
8.2 For the purpose of inspections and tests of equipment. The Supplier, all reasonable facilities and assistance, shall be furnished to the inspectors at no charge to the Procuring Agency. However, if the Supplier proves an undue delay in conduct of inspection on the part of Procuring Agency, the Supplier shall not be liable for penalty on account of that delay.
8.3 The Procuring Agency’s right to inspect, test and, where necessary, reject the goods after the goods have been installed at Procuring Agency’s destinations.

9. **Physical Examination/Inspection of Goods**
9.1 The goods shall be acceptable subject to physical inspection, tests and/or in accordance with the approved specifications as decided by the Procuring Agency.

10. **Delivery and Documents**
10.1 The Supplier in accordance with the terms specified in the Schedule of Requirements shall make delivery of the goods. The details of documents to be furnished by the Supplier are specified in SCC.

11. **Insurance**
11.1 The goods supplied under the Contract shall be delivered duty paid (DDP) under which risk is transferred to the buyer after having been delivered; hence insurance coverage is Seller’s responsibility.

12. **Transportation**
12.1 The Supplier shall arrange such transportation of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Schedule of Requirement.
12.2 Transportation including loading/unloading of goods shall be arranged and paid for by the Supplier, and related cost shall be inclusive in the Contract price. The addresses of destinations/offices shall be provided at the time signing of Contract.

13. **Incidental Services**
13.1 The Supplier shall be required to provide the incidental services as specified in SCC and the cost of which should include in the total bid price.

14. **Warranty**
14.1 Warranty as per detail mentioned against each item will be provided free of cost including parts however in case of high tech equipment if mentioned in the specification, the warranty shall be three to five years free service and parts at the installation site.

15. **Payment**
15.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC. The currency of payment is Pak. Rupees which will be paid after installation and satisfactory report by the Inspection Committee for Duty Delivered Paid (DDP)/free delivery at the consignee end.
15.2 In case of imported goods to be procured on CFR/CPT basis; the payment will be made 100% via establishing the LC in favor of manufacturer/beneficiary at sight and receiving shipping documents i.e Airway Bill / Bill of lading Issuance, Inspection certificate of the manufacturer, Country of origin, compliance of International standards of quality as per INCOTERMS of latest version. The payment will be made in the following manner through a letter of credit to be opened by the Procuring Agency.

(A) Payment shall be made after satisfactory pre-shipment inspection at the manufacturing site (where applicable) and the expenses to be incurred on pre-shipment inspection shall be born by the firm. Furthermore, if charges incurred on extension of L/C to next quarter it will be on part of contracting firm. Pre-shipment inspection shall be carried only of single item having value of Rs. 30 Million or above.

15.3 The Payment for extended comprehensive warranty period (SLA) will be made by the Procuring Agency after the end of each year which shall be counted from the date of successful completion of standard warranty period of one year. No payment shall be made for extended comprehensive warranty for item (s) against which the firm quoted extended comprehensive warranty free of cost.

16. Prices
16.1 Prices charged by the Supplier for goods delivered under the Contract shall not vary from the prices quoted by the Supplier in its bid and shall remain the same till expiry of the original bid validity period provided the Procuring Agency’s request for bid validity extension.

17. Contract Amendments
17.1 No variation in or modification of the terms of the Contract shall be made except by written amendment signed by the Parties.

17.2 No variation in finalized brands/ makes/models shall be allowed except in special conditions where the manufacturer has stopped producing or suspended that model or the latest model of similar series or version has been launched by the manufacturer or non-availability due to international mergers of the manufacturers or similar unavoidable constraints.

18. Assignment
18.1 The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring Agency’s prior written consent.

19. Subcontracts
19.1 The Supplier shall not be allowed to sublet the job and award subcontracts under this Contract.

20. Delays in the Supplier’s Performance
20.1 Delivery of the goods shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Agency in the Schedule of Requirements.

20.2 If at any time during performance of the Contract, the Supplier should encounter conditions impeding timely delivery of the goods, the Supplier shall promptly notify the Procuring Agency in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier’s notice, the Procuring Agency shall evaluate the situation and may at its discretion extend the Supplier’s time for performance, with or without liquidated damages, in which case the extension shall be ratified by the Parties by amendment of Contract.

20.3 Except as provided under GCC Clause 8.2, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 20.2 without the application of liquidated damages.
21. Penalties/Liquidated Damages

21.1 In case of late delivery beyond the presented period, penalty as specified in SCC shall be imposed upon the Supplier/Manufacturer. The above Late Delivery (LD) is subject to GCC Clause 24, including late delivery for reasons beyond control. Once the maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to GCC Clause 23.

21.2 If the firm provide substandard item and fail to provide the item the payment of risk purchase (which will be purchased by the indenter) the price difference shall be paid by the Firm.

22. Termination for Default

22.1 The Procuring Agency, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:

a. if the Supplier fails to deliver any or all installments of the goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring Agency pursuant to GCC Clause 8.2; or

b. if the Supplier fails to perform any other obligation(s) under the Contract.

c. if the Supplier, in the judgment of the Procuring Agency has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this clause: “corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in Contract execution. “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of the Procuring Agency, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Procuring Agency of the benefits of free and open competition.

23. Force Majeure

23.1 Notwithstanding the provisions of GCC Clauses 21, 22, and 23, the Supplier shall not be liable for forfeiture of its Performance Guaranty/ bid Security, or termination/ blacklisting for 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. For the purposes of this clause Force Majeure means an act of God or an event beyond the control of the Supplier and not involving the Supplier’s fault or negligence directly or indirectly purporting to misplanning, mismanagement and/or lack of foresight to handle the situation. Such events may include but are not restricted to acts of the Procuring Agency in its sovereign capacity, wars or revolutions, fires, floods, earthquakes, strikes, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring Agency in writing with sufficient and valid evidence of such condition and the cause thereof. The Committee, constituted by Zonal Head of Procuring Agency (Medical Superintendent SSH _______) for Redressal of grievances, shall examine the pros and cons of the case and all reasonable alternative means for completion of purchase order under the Contract and shall submit its recommendations to the Commissioner PESSI for approval. However, unless otherwise directed by the Procuring Agency in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek reasonable alternative means for performance not prevented by the Force Majeure event.

24. Termination for Insolvency

24.1 The Procuring Agency may at any time terminate the Contract by giving written notice of one month time to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination shall be without compensation to the Supplier, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued or shall accrue thereafter to the Parties.

25. Arbitration and Resolution of Disputes

25.1 The Procuring Agency 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.
25.2 If, after thirty (30) days from the commencement of such informal negotiations, the Procuring Agency and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred to the Arbitrator for resolution through arbitration.

25.3 In case of any dispute concerning the interpretation and/or application of this Contract shall be settled through arbitration. Commissioner, PESSI or his nominee shall act as sole arbitrator. The decisions taken and/or award made by the sole arbitrator shall be final and binding on the Parties.

26. Governing Language
26.1 The Contract shall be written in English language. Subject to GCC Clause 28, the version of the Contract written in the specified language shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the Parties, shall be written in English.

27. Applicable Law
27.1 This Contract shall be governed by the laws of Pakistan and the courts of Pakistan shall have exclusive jurisdiction.

28. Notices
28.1 Any Notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing and confirmed to other party's address specified in SCC.

28.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
Special Conditions of Contract (SCC)

1. Cash receipt (in original or photo copy) as token of having purchase the tender, must accompany the offer.

2. Reasonable/responsible person should be deputed at the time of opening of tender. In case of misbehavior the bid security will be forfeited besides other punitive action.

3. Offer not fulfilling any of the conditions of the bidding documents shall straightway be rejected.

4. Rates should be quoted in foreign currency for CIF basis in case of imported equipments and in Pak rupees on FOR basis in case of local equipments, including all taxes (in case of FOR).

5. Offer of the firm not quoting rates both in word and figures shall be rejected.

6. Attested copy of any registration certificate held by the company may be attached.

7. The bidder will certify that the price quoted against the tender is/are not more than the prices charged from any agency for the preceding 180 days (Government and Private) in Pakistan and in case of any discrepancy, the bidder hereby undertakes to refund the price charged in excess.

8. The Principal of the firms must give a certificate that the rates offered are not more than the price mentioned in their price list for the region.

9. In case the offering firm is quoting the store of any manufacturer/ foreign principal he should submit ‘authority letter’ from a manufacturer/ foreign principal that they will provide after sales services through its agent and in case of change of its agent, it will provide the services itself or newly appointed Sole agent / Sole Distributor during the warranty period. In case of failure the institution has reserved the right to blacklist the firm and the product of their principal.

10. The Supplier shall arrange the necessary arrangements for training of hospital staff including doctors, technician, paramedical staff and biomedical engineers. The supplier shall provide a factory training of quoted medical equipment to the hospital biomedical engineer and clinical training to the doctors, if specifically demanded in the advertised specifications/ tender.

11. The bidders must certify that:
   a) Item quoted is of latest and current production model and mention the year of manufacture.
   b) Item quoted is being manufacturing batch/serial number within the last two year of date of quotation.
c) Country of manufacturer should be of USA / Europe / Japan. However, country of origin of equipment could be from any geographical region of the world as per laws of Pakistan.

d) In case, any imported part or accessory being provided locally or locally manufactured part or accessory being provided locally, then the same shall be clearly mentioned separately in the quotation and the price of said item shall be quoted in Pak Rupees. The payment of locally provided item shall be made after inspection / installation report.

PROFORMA INVOICE / INSURANCE

12. The firm shall submit complete insurance documents having validity of at least one year. The proforma invoice in original be addressed to the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) and same must be from the Principal on their letter head duly signed and stamped by the authorized person and the same should be submitted within stipulated period.

13. The firm shall submit Insurance cover note alongwith original proforma invoice within stipulated period to be mentioned in the supply order addressed to Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) reflecting the following

i. Proforma Invoice with Number and Date which shall contain the supply order number and specifications of the respective equipment as per supply order.

ii. H.S Code.

iii. Port of loading and discharge.


v. Country of origin.

vi. Currency.

vii. Unit Price and Total Price in words and figures.

viii. Description, make and model as per order.

ix. Proforma invoice having 120 days validity period.

x. Beneficiary with complete address.

xi. Banking details of beneficiary.

xii. Mode of shipment, by Air (CPT) _________ Airport or By Sea (CFR) Karachi within 90 days of the opening of L.C.

14. Confirmation if required has to be intimated in proforma invoice and all charges to be born by the beneficiary.

L/C AND PAYMENT TERMS
15. L/C will be opened in the country of origin or at the head quarter of the company. In case of wrong information security will be forfeited and company will be black listed.

16. A rough draft of L.C by the bank through Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) will be provided to the local bidder who will check, sign and stamp for its confirmation, before opening of L.C within 07-working days from date of the draft.

17. Maximum of 90 clean days shall be allowed for the shipment from the date of opening of L.C. L.C shall be expired after 21-days in case of shipment by sea and 15 days in case of shipment by Air from the last date of shipment (clean original documents must reach the bank within this period).

18. In case of shipment by air, then the same must reach ________ Airport within one week from the date of shipment mentioned on Airway Bill. Furthermore, 3 weeks will be allowed for the clearance of the consignment and delivery at consignee end. In case of failure to meet the time line then penalty @ 1% per week shall be imposed upon the firm.

19. In case of shipment by sea, then the same must reach Karachi Sea Port within 45 days from the date of shipment mentioned on Bill of Lading. Furthermore, 4 weeks will be allowed for the clearance of the consignment and delivery at consignee end. In case of failure to meet the time line then penalty @ 1% per week shall be imposed upon the firm.

20. The payment will be made 100% via establishing the LC in favor of manufacturer/beneficiary at sight and receiving shipping documents/ (Bill of lading)/ Airway Bill, Invoice, Packing list, Inspection certificate of the manufacturer, Country of origin), compliance of International standards of quality as per INCOTERMS of latest version. The payment will be made in the following manner through a letter of credit to be opened by the Procuring Agency. The stated amount of L.C shall be paid to Beneficiary on production of following documents
   i. Supplier’s Invoice
   ii. Invoice showing Purchaser as Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___), Contract No., Description of Goods as per supply orders (concern to them), Qty, Unit & Total Price, Origin, H.S Codes, Airway Bill / Bill of Lading.
   iii. Invoice (Original) is to be stamped / sealed (three original and three copies) certifying Merchandise to be of origin as specified.
   iv. 3 copies of packing list alongwith in original.
   v. One original and two copies of the negotiable, clean, on board through Bill of Lading / one original copy of Airway Bill marked ‘freight prepaid’ and
vi. Copy of Insurance Certificate showing purchaser as beneficiary.

vii. Original Manufacturer’s warranty certificate covering all items being supplied.

viii. Test / Inspection Certificate of Manufacturer from factory with Product Model Nos. and Serial Nos.

ix. Manufacturers guarantee to the effect that:-

x. The goods supplied by them are strictly in conformity with the specifications stipulated in the supply order.

xi. The goods have been packed and marked suitably for export transportation by sea, by Air, by Rail and by Road, which ever are applicable to the consignment as per order.

xii. The stores supplied by them are brand new and absolutely free from any material or manufacturing defects.

xiii. One set of non-negotiable document for verification / confirmation, to be sent at email address _______________ (M.S Address) and _______________ (A.D F&A address).

21. All banking charges outside the country of issuance, the credit on beneficiaries account.

22. Original Document must be presented within 21-days of issuance of Bill of Lading and 15 days of the issuance of Airway Bill to Applicant Bank.

23. After shipment the beneficiary will advise to insurance company within 03-working days, copy of this advice be forwarded to Bank alongwith each set of documents.

24. Intimation of arrival of the consignment at Karachi / Lahore, which ever the case is the responsibility of the local bidder.

25. Invoice exceeding the credit amount will not be acceptable.

26. The Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) reserves the right to wave off/relax any department tender enquiry condition of any particular offer at any stage, in the public interest.

27. If any part is not genuine and it comes to the knowledge of the PESSI (Hospitals), the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) will be entitled for re-claiming or replacing and also damages for it. Institution reserves the rights to blacklist the firm.

28. The purchaser can negotiate the quantity, quality and allied accessories of the respective equipment with the successful bidder before issuing the purchase order.

29. For purchase on both FOR/CIF basis 10% security will be obtained from the successful bidder in the shape of CDR.
30. If any training/demonstration is required by the operating staff, firm will provide such facility free of cost as described in specifications of relevant equipments.

31. Firm will provide the profile of each of the equipment of this tender which has already been installed/working in any government/teaching institution.

32. The successful bidder shall be required to furnish complete details of suitable layout foundations and any type of work therein. The hospital will only provide the source & points, rest of material involved in installation and training will be the entire responsibility of the firm. The firm will submit schedule of maintenance for the whole warranty period at the time of installation. The firm shall also provide check list indicating the detail of procedures to be carried out.

33. The plants and machinery offered shall always be completed with its normal standard accessories fitting and toll kit and spare parts, if any.

34. Inspection authority will be the officer / committee nominated by the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___).

35. 100% payment will be made by the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) on production of satisfactory inspection and installation report duly signed by M.S of respective hospital in case of purchase on F.O.R. Basis.

36. All applicable charges for custom clearance including detention charges if any, insurance and transportation to the consignee’s end shall be borne by the firm however the necessary documents for custom clearance shall be provided by the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) subject to the request submitted by the firm, in the same regard.

37. In case of non-clearance of the stores due to the late receipt of or incomplete shipping documents (not being in-conformity with the contract) the supplier will be fully responsible for payment of demurrage etc. and they will also be held responsible for all consequences arising from such incomplete documents.

**Execution of Warranty**

a. A Log Book for the medical equipment which needs regular after sales services shall be maintained by the Supplier Service Engineer in consultation with the end user department. This will include the name of the equipment, down time, preventive maintenance schedule, replacement of parts, down time etc.

b. The warranty period will be 2-5 years according to specifications of relevant equipments and the firm will be responsible for replacing of equipment/store.
c. Free of charges spares will be provided in case of repairs under entire warranty period. Further the firms will ensure supply of spare parts for 05 years after the expiry of warranty period. In case of failure, the firm will be blacklisted. Furthermore, Manufacturer shall also issue certificate ensuring the availability of spare parts & accessories of offered system for the next 5 years.
d. The contracting firm would supply spare parts/accessories at reasonable rates not more than printed price list for the region by the principal after warranty period.
e. Installation will be made by the supplier and its cost will be borne by the firm. The period of warranty will start from the date of installation and commissioning duly signed by the inspection committee.
f. The maintenance will be the responsibility of the manufacturer / their agent. An annual optimal uptime of 95% is considered as acceptable level of performance.
g. Software and hardware up gradation of the computing system should be carried out as available during warranty period as recommended by the manufacturer. Standard Bidding Document – Purchase of equipment and machinery - Year 2019-20.
h. Manufacturer / Supplier shall be responsible for rectifying with all possible speed at their own expense any defect or fault in the system which may develop at any time during installation, commissioning period.
i. Uptime shall be defined as the time available to the user for doing procedures/ data acquisition and processing during working hours throughout the year.
j. Manufacturer /Supplier shall check system performance during and after every 4-months. An "Optimal Percentage" will be calculated by dividing "System in Service" hours by hours available, both measured on the basis of working hours as detailed above.
k. If the uptime percentage for the measurement period (04-months) shall fall short of 95% the following formula will be applied to determine additional days in the warranty / service contract period.

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<td><strong>a.</strong></td>
<td><strong>100% - 95%</strong></td>
<td><strong>No Penalty</strong></td>
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<td><strong>b.</strong></td>
<td><strong>95% - 90%</strong></td>
<td>The warranty period will be extended by 2.0 times the number of days as extra down time.</td>
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<td><strong>c.</strong></td>
<td><strong>90% - 80%</strong></td>
<td>The warranty period will be extended by 3.0 times the number of days as extra down time</td>
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<td><strong>d.</strong></td>
<td><strong>Below 80%</strong></td>
<td>The warranty period will be extended by 4.0 times the number of days as extra down time</td>
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l. Down time is defined as the failure in the equipment operation to acquire or process the data or procedure, resulting in inability to carry out the required procedure properly.
m. The firm will be bound to make arrangements for availability of qualified technical staff in hospital / site for prompt execution/coordination of after sale services.
n. Down time will start when the end user/ Staff In-charge notifies the designated service facility verbally or in writing to nominated technical staff of the firm.
o. Down time will end once the repairs have been affected and the system is again available for clinical use.
p. The firm will provide the recommended preventive maintenance schedule of each of the equipment at the time of installation.
q. The firm will bound to execute the installation/ maintenance according to the installation/ service protocol and will replace the components/ kits recommended by the manufacturers for installation and Periodic Preventive maintenance.
r. The scheduled preventive maintenance shall be in accordance with Service Protocol recommended/ advised by the manufacturer.
s. Remote service via modem shall be preferred if provided by the manufacturer to pick-up early faults at no cost to the hospital for the high-tech equipment.
t. The manufacturer / supplier will be responsible for preventive maintenance of equipment as per manufacturers’ Service Manuals and shall keep a check for electrical / magnetic / temperature and humidity conditions. Such a check should be made monthly and record should be maintained in the log book of the hospital.

38. Packing & Marking
   a. Packing: Usual export packing to ensure safe journey up to the site of consignee.
   b. The packing of goods shall be suitable for transport by Sea, Rail and Air unless other packing is specifically required in the tender. The cost of packing/repacking shall always be borne by the bidder.
   c. Marking: Each packing should be clearly marked in suitable size in bold letters as per requirement.

39. Shipment and other terms
   a. Transshipment not allowed (can only be allowed if there is a valid reason provided by the principal).
   b. House/ Forwarders Bill of Lading not allowed (can only be allowed if there is a valid reason provided by the principal).
   c. Partial Shipment not allowed (can only be allowed in special conditions at the request of the principal) subject to shipment within stipulated period otherwise L.D charges shall be imposed @ 1% per week.
   d. For all by Sea Consignments, bonded movement from Karachi to Lahore is required and clearance will be made at _______ Dry Port. Undertaking of exemption of duty and authorization of clearing agent, nominated by the local representative of firm will be responsibility of Medical Superintendent.
SSH _________ / Zonal Head of Procuring Agency (Zone-___), once the formal request is received from them. Non bonded movement from Karachi to _________ Dry Port shall only be allowed on formal request of the firm having valid reasons.

40. **Place of delivery**
   a. As per detail to be mentioned in the supply order.

Supplier Address for notice purpose

address

........................................

........................................

Procuring Agency's address for notice purpose shall be the

MEDICAL SUPERINTENDENT
SOCIAL SECURITY HOSPITAL
____________ / ZONAL HEAD OF PROCURING AGENCY (ZONE-___)
Manufacturer’s Authorization Form

[See Clause 3.2 of the Instruction to Bidders]

To: [name of Procuring Agency]

WHEREAS [name of the Manufacturer] who are established and reputable Manufacturers of [name and/or description of the goods] having factories at [address of factory] do hereby authorize [name and address of Supplier/ Agent] to submit a bid, and subsequently negotiate and sign the Contract with you against I FB No. [reference of the Invitation to Bid] for the goods manufactured by us.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Bids.

[Signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letter head of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.
THIS CONTRACT is made at _______ on ___day of 2020, between the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) (hereinafter referred to as the SSH ___________ (Zone-___) of the first Part: and M/s. (Firm Name) a firm having its registered office at (address of the firm) (hereinafter called the “Supplier) of the Second Part (hereinafter referred to individually as “Party and collectively as the “Parties”).

WHEREAS the Medical Superintendent SSH _________ / Zonal Head of Procuring Agency (Zone-___) invited bids for procurement of goods, in pursuance where of M/s. (_________) being the Manufacturer/authorized Supplier/authorized Agent of (Item name ) in Pakistan and ancillary services offered to supply the required item (s); and Whereas the PESSI (Zone-___) has accepted the bid by the Supplier for the supply of (Item name) and services in the sum of Rs. (____________).

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of this Contract hereinafter referred to as “Contract”.
2. The following documents shall be deemed to form and be read and construed ad integral part of this Contract viz:-
   a. The Price schedule submitted by the bidder.
   b. The Schedule of Requirements.
   c. The Technical Specifications.
   d. The General Conditions of Contract.
   e. The Special Conditions of Contract.
   f. The SSH __________ (Zone-__) Notification of Award;
   g. The scope of work.
   h. The Bid & its clarifications.
   i. Any other document deem appropriate.
3. In consideration of the payments to be made by the SSH ________/ Procuring Agency (Zone-__) to the Supplier/Manufacturer as hereinafter mentioned, the Supplier/Manufacturer hereby covenants with the SSH __________ / Procuring Agency (Zone-__) to provide the Goods and services and to remedy defects therein conformity in all respects with the provision of this Contract.
4. The SSH ________/ Procuring Agency (Zone-__) 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 this Contract at the time and in the manner prescribed by this Contract.
5. (The Supplier) hereby declares that it has not obtained or induced the procurement of any Contract, right, interest, privilege or other obligation or benefit from SSH __________ / Procuring Agency (Zone-__) or any administrative subdivision or agency thereof or any other entity owned or controlled by PESSI through any corrupt business practice.
6. Without limiting the generally of the foregoing, (the Seller supplier) represents and warrants that it has fully declared the brokerage, commission, fees etc. paid of payable to anyone and not given or agreed to give and shall not give or agree
to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary any commissioner, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or including the procurement of a Contract, right interest, privilege or other obligation or benefit in whatsoever form from SSH ________ / Procuring Agency (Zone-__), except that which has been expressly declared pursuant hereto.

7. (The Supplier) certifies that has made and shall make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with SSH ________ / Procuring Agency (Zone-__) and has not taken any action or shall not take any action to circumvent the above declaration, representation or warranty.

8. (The Supplier) accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any Contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to SSH ________ / Procuring Agency (Zone-__) under any law, Contract or other instrument, be voidable at the option of SSH ________ (Zone-__).

9. Notwithstanding any rights and remedies exercised by SSH ________ / Procuring Agency (Zone-__) in this regard. (The Supplier) agrees to indemnify SSH ________ / Procuring Agency (Zone-__) for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to SSH ________ / Procuring Agency (Zone-__) in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by (The Seller/Supplier) as aforesaid for the purpose of obtaining or inducing the procurement of any Contract, right, interest, privilege or other obligation or benefit in whatsoever form SSH ________ / Procuring Agency (Zone-__).

10. In case of any dispute concerning the interpretation and/or application of this Contract shall be settled through arbitration. Commissioner PESSI or his nominee shall act as sole arbitrator. The decision taken and/or award made by the sole arbitrator shall be final and binding on the parties.

11. This Contract shall be governed by the laws of Pakistan and the courts of Pakistan shall have exclusive jurisdiction.

IN WITNESS Whereof the parties hereto have caused this contract to be executed at ______________(the place) and shall enter into force on the day, month and year first above mentioned.

Signed/Sealed by the Manufacturer/Authorized supplier/authorized Agent.

Signed/Sealed by Authorized officer SSH ________ / Procuring Agency (Zone-__).
Having examined the Bidding Documents, the receipt of which is hereby duly acknowledged, we the undersigned, offer the supply and deliver the goods specified in and in conformity with the said Bidding Documents for the sum of (Total Bid Amount) (Bid Amount in words) or such other sums as may be ascertained in accordance with the schedule of Prices attached herewith and made part of this bid.

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

If our bid is accepted, we shall obtain an unconditional guarantee of a bank in the sum of 10% percent of the Contract price for the due performance of the Contract, in the form prescribed by the SSH ________ / Procuring Agency (Zone-__).

We agree to abide by this bid for a period of (number) days from the date fixed for bid opening under ITB Clause 18 of the instructions to Bidders and it shall remain binding upon us and may be accepted at any time before the expiration of that period. Until a formal Contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award, shall constitute binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.
Name and address of bidder
(If none, state “none”)

Date this day of 20__.

Signature
(in the capacity of)

Duly authorized to sign bid for and on behalf of
# Price Schedule

(Goods to be procured under DDP/Free delivery at consignee’s end basis)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Item (As listed in invitation)</th>
<th>Make/Model and country of Manufacturer</th>
<th>Specifications (Complete Details)</th>
<th>Qty</th>
<th>Unit Price (Rs)</th>
<th>Sale and other taxes (Specify the type and amount)</th>
<th>Total Cost (Rs)</th>
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<td><strong>Grand Total</strong></td>
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Sign and Stamp of Bidder________________________________________________________

Note: In case of discrepancy between unit price and total, the unit price shall prevail.
### Price Schedule

*(Goods to be procured under LC basis)*

Name of Bidder: ____________________________________________________________

Tender No. ____________________________

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<tr>
<th>Sr. No.</th>
<th>Name of Item (As listed in invitation of)</th>
<th>Make/Model and country of Manufacturer</th>
<th>Specifications (Complete Details)</th>
<th>Quantity</th>
<th>Unit Price (FOB)</th>
<th>Freight Charges</th>
<th>Insurance</th>
<th>Total Cost (foreign)</th>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Grand Total</td>
</tr>
</tbody>
</table>

Sign and Stamp of Bidder: _________________________________________________________

Note: In case of discrepancy between unit price and total, the unit price shall prevail.
Foreign currency rate will be considered on the date of opening of financial bid as per rate of state bank.
<table>
<thead>
<tr>
<th>Sr no.</th>
<th>Name of equipment</th>
<th>Station where required</th>
<th>Total quantit</th>
<th>Total Estimated cost</th>
<th>CIF/FOR Basis</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Multan</td>
<td>Okara</td>
<td>Sahiwal</td>
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</tr>
<tr>
<td>1</td>
<td>ICU Electric Beds For ICU=2, Emergency=2</td>
<td>4</td>
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<tr>
<td>2</td>
<td>Patient Monitor For ICU=2, CCU=2, Emergency=1</td>
<td>5</td>
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<td>3</td>
<td>Defibrillator For ICU=1</td>
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<td>E.T.T Machine</td>
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<td>5</td>
<td>Multipurpose Hydraulic Operation Table</td>
<td>1</td>
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<tr>
<td>6</td>
<td>Electro - HYDRAULIC / electro- mechanical OPERATION TABLE</td>
<td>1</td>
<td>1</td>
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<td>2</td>
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<tr>
<td>7</td>
<td>Diathermy with Vessel Sealing System</td>
<td>1</td>
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<tr>
<td>8</td>
<td>Ultrasonic Dissector system</td>
<td>1</td>
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<tr>
<td>9</td>
<td>Electrosurgical unit</td>
<td>2</td>
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<tr>
<td>10</td>
<td>Anesthesia Machine</td>
<td>2</td>
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<tr>
<td>11</td>
<td>Ceiling O.T Light</td>
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<tr>
<td>12</td>
<td>PCNL-set</td>
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<td>13</td>
<td>Hemodialysis Machine</td>
<td>2</td>
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<tr>
<td>14</td>
<td>R.O system/ RO Water plant</td>
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<tr>
<td>15</td>
<td>Static X-Ray Machine Ceiling Mounted with CR system</td>
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<td>16</td>
<td>Digital Colour Doppler (high end)</td>
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<td>17</td>
<td>CR system only (for 300Ma X-ray machine)</td>
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<td>18</td>
<td>Digital Colour Doppler (Low end)</td>
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<td></td>
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<tr>
<td></td>
<td>Description</td>
<td>Quantity</td>
<td>Rate</td>
<td>Total</td>
<td>Basis</td>
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<td>19</td>
<td>Low end fully automatic random access CHEMISTRY ANALYZER</td>
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<td>Mobile X-Ray Unit with CR system</td>
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<td>21</td>
<td>SEMI AUTOMATIC clinical CHEMISTRY ANALYZER</td>
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<td>22</td>
<td>Blood Storage Cabinets</td>
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<td>600000</td>
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<tr>
<td>23</td>
<td>Hematology Analyzer</td>
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<td>1</td>
<td>750000</td>
<td>CIF Basis</td>
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<tr>
<td>24</td>
<td>Blood Bag Shaker</td>
<td>1</td>
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<td>300000</td>
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<tr>
<td>25</td>
<td>Thermostatic Water Bath</td>
<td>2</td>
<td>2</td>
<td>300000</td>
<td>CIF Basis</td>
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<tr>
<td>26</td>
<td>Binocular Microscope</td>
<td>1</td>
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<td>CIF Basis</td>
</tr>
<tr>
<td>27</td>
<td>Blood Bag Tube Sealer</td>
<td>1</td>
<td>1</td>
<td>100000</td>
<td>FOR Basis</td>
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<tr>
<td>28</td>
<td>ICU Ventilator</td>
<td>2</td>
<td>2</td>
<td>4000000</td>
<td>CIF Basis</td>
</tr>
</tbody>
</table>
SPECIFICATIONS OF BIO-MEDICAL EQUIPMENTS TO BE PROCURED FOR PESSI HOSPITALS (ZONE-IV) FOR THE YEAR 2019-20

Technical Bid / Specification

Tender will be opened on 11-04-2020 (Monday) at 11:00 a.m.

The successful bidder shall provide the following along with the supply of equipment/ instruments etc.:

i. Operational Manuals of the equipment

ii. Original Repair & Service Manuals indicating step by step service/maintenance protocols of each of the equipment.

iii. Periodic Preventive Maintenance schedules with recommended list of parts/ kits to be replaced during PPM.

iv. Quality test certificate by the manufacturer.

v. Operation training to the operating staff Clinical & paramedics.

vi. Basic Service Training to Biomedical Engineers and end users of the Department.

vii. - Optional Equipment, parts, accessories and items will be finalized by Procuring Agency (Department)

viii. Optional Accessories will not Included in financial bid / comparative statement.
<table>
<thead>
<tr>
<th>Sr.#</th>
<th>Name of Equipment</th>
<th>Equipment Specifications</th>
<th>Total Quantity</th>
<th>Price CIF/DDP Basis</th>
</tr>
</thead>
</table>
| 1    | ICU ELECTRIC BEDS | **TECHNICAL SPECIFICATIONS**  
       - Bed length: 7 ft approx.  
       - Bed width: 3 ft approx.  
       - Bed width side rails: 3.5 ft approx. metal/ABS side rails  
       - Height Electrically: 1.5-2.5 ft approx.  
       - Maximum load capacity: 200 kg or more  
       - Castor: 12.5 cm or more  
       - Five positions: High, Low, Trendelenburg, Anti-Trendelenburg, Cardiac Chair  
       - Trendelenburg: 12-16 deg and CPR position (auto button/manual control)  
       - Anti-Trendelenburg: 12-16 deg  
       - Four section bed: 4 section  
       - x-ray cassette holder: as per manufacturer specifications  
       - IV-Hanger Rod: as per manufacturer specifications  
       - Conductive mattress: as per manufacturer specifications  
       - Oxygen cylinder holder: as per manufacturer specifications  
       - Central locking system: as per manufacturer specifications  
       - Bed locker: as per manufacturer specifications  
       - Over bed table: as per manufacturer specifications  
       - Warranty; 03 years’ warranty of complete system including all accessories and allied items  
       - Country of Origin: USA, Europe, Japan only  | 4 | |

| 2    | PATIENT MONITOR  | **TECHNICAL SPECIFICATIONS**  
       - Bedside monitor for Adult, Paeds.  
       - **OPERATING FEATURES AND CHARACTERISTICS:**  
       - Non fade Touch screen TFT color display  
       - Electro-surgical interference suppression/protection  
       - Defibrillator protection  
       - Freeze and cascade facility  
       - Waveform traces speed; 25/50mm/sec.  
       - Screen size: min. 12” TFT/LCD Touch Screen color display.  
       - Capacity to interface with LAN/WLAN for data transfer  | 5 | |
ECG:
- Numeric: heart rate.
- Waveform: Six Wave forms minimum, real time and freeze ECG trace

NON-INVASIVE BLOOD PRESSURE (NIBP):
- Method: Oscillometric principle
- Numeric: systolic, diastolic and mean pressure
- Selectable auto inflate interval settings
- Rising cuff continuous pressure display
- Reusable cuff

TEMPERATURE:
- Numeric: temperature selectable in °C/°F.

PULSE OXIMETRY:
- Numeric: 0-100% oxygen saturation measuring range.
- Waveform-Plethysmograph pulse.
- Reusable sensor electrode.

ARRHYTHMIA ANALYSIS:
- Arrhythmia analysis and St. analysis

RESPIRATION:
- Breath rate display and apnea alarms.
- Sweep speed; 6.25, 12.5 mm/sec.

OTHER FEATURES:
- Trend data; graphical and tabular

ALARMS:
- High & low (settable) on all parameters
- Visual and audible indication of alarms

OPERATING REQUIREMENTS:
- AC 220V/50HZ
- Built-in rechargeable battery for at least 1 - 2 hour AC power failure at full parameter.

NOTE: The system must be complete with all sensors, probes, cables or any other accessories required for measuring all the above selected parameters for Adults and Peds.

ACCESSORIES:
- OPTIONAL:
IBP two Channel/Four Channel.
- Capnography (EtCO2)
- Cardiac output.
- Single / Dual Channel Printer

Warranty: 03 years warranty of complete system including all accessories and allied items

Country of Origin: USA, Europe, Japan only.

### TECHNICAL SPECIFICATIONS

- Biphasic transthoracic (external) defibrillator with LCD colour display
- Synchronized output with ECG.
- Energy selection & delivery on control panel and paddles for external defibrillation.
- Energy selection and delivery on control panel for internal defibrillation.
- Charging Indicator
- The energy range should be adjustable for peads and adults up to 200Joules.
- Charging Time for full energy should be less than 05 sec
- Screen Size of approx. 5 inch colored.
- Display of HR, ECG through paddles and Lead I.II & III patient cable.
- Built in recorder for printing of full summery on standard 50mm paper.
- Alarms for High and low Heart rate, low battery warning.
- Built-in Rechargeable battery with charger for minimum 50 shocks at max energy.
- Auto tester/self check.
- External Paddles (Adult, Paed, Neonate)
- AED facility with cable.
- Pacing facility
- AC 220V / 50Hz operated.

### Accessories:
- Complete with standard accessories, including reusable type Adult, Paediatric & Neonatal sensors
- Original trolley/cart

**Optional (If any):**
- Qty of Reusable sensors
- Internal Paddle(Adult, Paed, Neonate)
- Charging Time for full energy should be less than 07 sec
ETCo2
Spo2
Disposable pacing pads

**Warranty:** 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only.

<table>
<thead>
<tr>
<th>E.T.T MACHINE</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Dedicated Computer based ETT System.</td>
</tr>
<tr>
<td></td>
<td>• Analysis of ST levels, ST slopes and ST-index etc.</td>
</tr>
<tr>
<td></td>
<td>• Report: 12 leads, rhythm and full disclosure arrhythmia, and exercise summary, trend.</td>
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<td></td>
<td>• Holter and Stress test review.</td>
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<tr>
<td></td>
<td>• Display of 12 channels.</td>
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<tr>
<td></td>
<td>• Colour monitor of 15”.</td>
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<tr>
<td></td>
<td>• TREADMILL</td>
</tr>
<tr>
<td></td>
<td>• Programmable.</td>
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<tr>
<td></td>
<td>• Treadmill, medical grade, controllable from main unit.</td>
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<td></td>
<td>• Speed adjustable from 0-15 km/h.</td>
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<tr>
<td></td>
<td>• Emergency stop button.</td>
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<td></td>
<td>• Bearing capacity of minimum 180kg.</td>
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<tr>
<td></td>
<td>• Automatic Blood Pressure measurement Device.</td>
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<tr>
<td></td>
<td>• Automatic baseline drift control filter.</td>
</tr>
<tr>
<td></td>
<td>• Complete integrated full functional workstation.</td>
</tr>
<tr>
<td></td>
<td>• 6KVA UPS for thirty minutes back up time. (Emerson, Liebert, Chloride, MGE or equivalent)</td>
</tr>
<tr>
<td></td>
<td>• AC 220 V/ 50Hz</td>
</tr>
<tr>
<td></td>
<td>• Dedicated imported cart supplied by from same manufacturer</td>
</tr>
</tbody>
</table>

**Accessories:**
Complete with standard accessories

**Optional (If any):**
• TV screen size:10-12”.

**Warranty:** 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only.
<table>
<thead>
<tr>
<th>MULTIPURPOSE HYDRAULIC OPERATION TABLE</th>
<th>TECHNICAL SPECIFICATIONS</th>
<th>ELECTRO-HYDRAULIC/ELECTRO-MECHANICAL OPERATION TABLE</th>
</tr>
</thead>
</table>
| **MULTIPURPOSE HYDRAULIC OPERATION TABLE** | **Table Top (Radiolucent) with antistatic mattress 4-5 sections and equipped with X-ray cassette holder.**  
Patient weight bearing capacity: 150 Kg or more in normal position.**TABLE TOP IS ARRANGED AS:**  
- Head plate  
- Back plate  
- Seat plate  
- Two separate leg plates.  
- Base of the table stainless steel /ABS cover **MOVEMENT:**  
- Height Adjustment 750-1000mm  
- Kidney Bridge / Flex, Reflex  
- Trendelenberg/Reverse Trendelenberg 25/18°  
- Lateral tilt 20°  
- Back plate: 70°/-30°  
- Manual Leg plate movement : up 15°/down 90° **Accessories:**  
- Arm rest with clamp  
- Anesthesia screen  
- Large width body strap  
- Adjustable bottle holder rod  
- Any other accessory to be defined by the end-user.  
Warranty; 03 years warranty of complete system including all accessories and allied items  
**Country of Origin: USA, Europe, Japan only** | **Weight bearing capacity of 200kg or more**  
**4-5 Sectional Operation Table with Single Leg Section**  
**Table top equipped with radiolucent material.**  
**The mattress covers with washable, antistatic material.**  
**X-ray Cassette holder for X-Ray and C-Arm facility**  
**Electric Height adjustment: 750 to 1000 mm or more.**  
**Electric Trendelenburg/Reverse Trendelenburg: 25° / -25° or better.**  
**Electric lateral tilt: 20° / -20° or better.**  
**Manual/electric backrest adjustment: 70° / -15° or better.**  
**Manual leg section adjustment: 20° / -90° or better.** |
- 220-230 V, 50 Hz.
- Hand control unit.
- Override panel in the column for back up control in emergency cases.
- Battery backup control of table in case of main power failure.

**Accessories:**
- Arm rest with clamp
- Fixation strap
- Anesthesia screen
- Adjustable leg rest pads
- Large width body strap
- Adjustable bottle holder rod
- Shoulder support

**Optional (ACCESSORIES): End-user to specify.**

**Provision Of Sliding Table Top**

**ORTHOPAEDIC ACCESSORIES**
- Leg traction device with boots, straps etc.
- Accessory trolley.

**NEUROSURGERY ACCESSORIES:**
- Wilson frame complete with Patient care kit
  - Can be used on any general surgical table
  - Allows 360 degree unrestricted radiolucency
  - Allows unrestricted C-arm access
- Head Frame with following accessories
  - Basal frame complete
  - Quarter frame
  - Slide Adjuster for retractor
  - Head holder with standard head pins
  - Table attachment
  - Spatula 6 mm & 4 mm or equivalent

**OPHTHALMOLOGY/ENT ACCESSORIES**
- Eye/ ENT head rest.

**UROLOGY ACCESSORIES**
- Kidney elevator/ Flex, Reflex
- Knee crutches with pads
- Liquid Basin
- Accessories trolley

Warranty; 03 years warranty of complete system including all accessories and allied items
<table>
<thead>
<tr>
<th>7</th>
<th>DIATHERMY WITH VESSEL SEALING SYSTEM</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Touch screen/pads generator with 300 Watts or more.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microprocessor based solid state electrosurgical unit for normal and under water cutting with permanent safe sealing of vessel on tissue bundle: 7mm. thermal spread should be minor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RF power for monopolar cutting not below 300 watts.</td>
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</tr>
<tr>
<td></td>
<td>Monopolar coagulation 100 Watt or better.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At least 3-4- blend/effect modes</td>
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</tr>
<tr>
<td></td>
<td>Bipolar coagulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bipolar cutting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spray coagulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>220V 50 HZ</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Accessories:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Complete with foot switch, reuse-able patient plate, monopolar handle with cord and surgical needles (knifes, ball electrode, loop electrode and needle (Qty: 12).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bipolar forceps straight.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bipolar forceps bayonet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Imported trolley with lockable wheels.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Optional:</strong> (procuring agency to specify)</td>
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</tr>
<tr>
<td></td>
<td>(i) Reusable/Disposable Laparoscopic Instrument 5mm,</td>
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<tr>
<td></td>
<td>- Standard sealer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bipolar sealing system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Dissect ■ Seal</td>
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</tr>
<tr>
<td></td>
<td>- Autoclaveable at 134°C (273°F)</td>
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</tr>
<tr>
<td></td>
<td>(ii) Reusable/Disposable Open Shear Forceps</td>
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</tr>
<tr>
<td></td>
<td>- Standard bipolar forceps, CVD.</td>
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</tr>
<tr>
<td></td>
<td>- Bipolar vessel sealing system.</td>
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</tr>
<tr>
<td></td>
<td>- Reusable sealing system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Autoclaveable at 134°C (273°F).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) Reusable/Disposable Open Shear bipolar Scissor</td>
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</tr>
<tr>
<td></td>
<td>- Standard bipolar-scissors, CVD.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Autoclaveable at 134°C (273°F).</td>
<td></td>
</tr>
</tbody>
</table>

**Warranty:** 03 years warranty of complete system including all accessories and allied items

Country of Origin: USA, Europe, Japan only

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<table>
<thead>
<tr>
<th>8</th>
<th>ULTRASONIC</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
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</tbody>
</table>
**DISSECTOR SYSTEM**
- Ultrasonic Dissector System for cutting and coagulation.
- Generator with LED feedback indicator.
- Ultrasonic shears with 5mm diameter and 39cm shaft length approx.
- Active blade of 13-15 mm approx.
- Active blade vibrations: 47-55.5 KHz.
- Ability to seal vessel up to 5-8mm.

**Accessories:**
- Laparoscopic Shear 35-45cm long with audio indicator.
- Open shear 20-23cm long with audio indicator.
- Torque wrench.
- User manual.
- Foot switch and cable.
- Mobile cart.
- Sterilization tray.

Warranty; 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>9</th>
<th>ELECTROSURGICAL UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TECHNICAL SPECIFICATIONS</strong></td>
<td></td>
</tr>
<tr>
<td>- Microprocessor based electrosurgical unit for normal and under water cutting usages.</td>
<td></td>
</tr>
<tr>
<td>- Automatic self-test function.</td>
<td></td>
</tr>
<tr>
<td>- Operation in radio frequency range.</td>
<td></td>
</tr>
<tr>
<td>- Controls for cutting, coagulation, spray and blends.</td>
<td></td>
</tr>
<tr>
<td>- Monopolar cutting power of 300 watts.</td>
<td></td>
</tr>
<tr>
<td>- Bipolar cutting power of 80 watts.</td>
<td></td>
</tr>
<tr>
<td>- Monopolar coagulation power of 100 Watts.</td>
<td></td>
</tr>
<tr>
<td>- Bipolar coagulation power of 50 Watts.</td>
<td></td>
</tr>
<tr>
<td>- Spray coagulation mode.</td>
<td></td>
</tr>
<tr>
<td>- Different gradations of blending of cutting and coagulation power.</td>
<td></td>
</tr>
<tr>
<td>- Digital display of all controls and set values of cutting and coagulation power.</td>
<td></td>
</tr>
<tr>
<td>- Audio and visual alarms.</td>
<td></td>
</tr>
<tr>
<td>- 220V, 50 Hz.</td>
<td></td>
</tr>
</tbody>
</table>

**Accessories:**
- Monopolar handle with cord.
- Bipolar forceps with cord.
- Trolley having anti-static lockable wheels.
- Attachment for monopolar coagulation.
- Knife electrode.
- Surgical electrode, ball-shaped.
- Wire loop electrode.
- Needle electrode.
- Ball electrode.
- Bipolar coagulation forceps.
- Reusable silicon patient plate.
- Double paddle foot switch, explosion proof.
- Trolley with lockable antistatic castors.

Warranty; 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>10</th>
<th><strong>ANESTHESIA MACHINE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>TECHNICAL SPECIFICATIONS</strong></td>
</tr>
<tr>
<td></td>
<td>Anesthesia machine to administer anesthetic agents in precise control and flow manner for Adult, pediatric and Neonates.</td>
</tr>
<tr>
<td></td>
<td>Mobile 3-gases O2/N2O/AIR.</td>
</tr>
<tr>
<td></td>
<td>It must comprise of the following components:</td>
</tr>
<tr>
<td></td>
<td>Non-interchangeable pipeline inlets.</td>
</tr>
<tr>
<td></td>
<td>Pipeline &amp; cylinder gauges for O2, N2O and Air.</td>
</tr>
<tr>
<td></td>
<td>Central gas/ electronically driven unit.</td>
</tr>
<tr>
<td></td>
<td>Pin index cylinder yokes for Oxygen &amp; N2O (One each), as backup.</td>
</tr>
<tr>
<td></td>
<td>Pin index type Cylinders will be provided (2xO2 and 2xN2O: BS standard).</td>
</tr>
<tr>
<td></td>
<td>Gas outlet and O2 flush control.</td>
</tr>
<tr>
<td></td>
<td>1 auxiliary O2 outlet.</td>
</tr>
<tr>
<td></td>
<td>Two Lockable castors.</td>
</tr>
<tr>
<td></td>
<td>Stainless steel/fiber work surface.</td>
</tr>
<tr>
<td></td>
<td>Absorber bag support arm.</td>
</tr>
<tr>
<td></td>
<td>Three gas flow meters for precise control and monitoring of gases.</td>
</tr>
<tr>
<td></td>
<td>Drawer unit 4-6” high.</td>
</tr>
<tr>
<td></td>
<td>Scavenging system Passive / Active type.</td>
</tr>
</tbody>
</table>

**ANESTHESIA VENTILATOR:**

- Anesthesia Ventilator with minimum 6” or more color LCD/TFT Screen.
- The ventilator shall be capable of ventilating adult and pediatric patients.
- The ventilator shall have following features as a minimum requirement:
Volume Preset Time Cycled Ventilator (IPPV Mode)
Pressure Controlled and pressure support Modes
Breathing Mode Selection (Standby / Volume / Spontaneous and Pressure)
Built in Oxygen Monitor
Inverse I:E ratio Capability
Gas Specific Input Connectors (Air or Oxygen ISO or ANSI Standards)
Tidal Volume from (5ml to 1400 ml)
Rate or Frequency 4 to 60 bpm
PEEP (4 to 20 cm H2O)
Inspiratory Pressure Limit
Power Supply 220 VAC, 50 Hz
Battery Backup (60 Minutes or more)
Low / High FiO2 Alarm
Incorrect Rate or Ratio alarm
Mains Failure alarm
Low battery alarm advance indication
Hypoxic device guard.
Pressure and Volume (Spirometry) Loops / curves .
High / Low pressure alarm.
The ventilator shall be supplied with complete drive hose and power cable.
Note: Annual maintenance kits (needs to replace annually) will be included in the warranty period as per manufacturer’s guidelines.
The warranty of equipment will be including batteries, oxygen sensor and flow sensor.

Anesthesia Accessories
Power outlet with 3/4 socket outlets to connect the auxiliary equipment.
CO2 absorber 800 – 1,500 gm or better complete with valve for bag/ventilator
Manometer
Breathing bags
Re-usable Silicon Autoclave able breathing circuit (Adult, Peads or Infant 01 each)
Mounts and Y-piece.
Additional breathing hose and connector with 03 adult & 03 pediatric bellows.
Optional:
Two pre calibrated Vaporizers of Isoflurane & Sevoflurane vaporizer, temperature and
flow compensated.

**Monitoring:**
- Vital sign monitor.
- Size of minimum 12" or more for display of vital sign parameters.
- Measurement of ECG 5 leads.
- NIBP with re-usable single hose cuff for children and adults
- SpO2 with re-usable cable and sensors for children and adults size (Massimo Type/Equivalent motion tolerance technology).
- HR
- Temperature with nasal probe.
- Respiration
- EtCO2 (main or side stream) (If required Procuring agency to specify).
- Dual Channel IBP (If required Procuring agency to specify).
- 220V, 50 Hz operated.

Note: Vital sign Monitor must be supplied by the same manufacture and must be Compatible with the machine and Ventilator.

**Monitor Accessories:**
- 2 NIBP Cuff each

Warranty; 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

### TECHNICAL SPECIFICATIONS
- LED shadow less operation theatre ceiling light, hermetically sealed dust proof.
- Adjustable light intensity 160000 LUX at 1 meter distance.
- Satellite combination of 160000 LUX at 1 meter.
- Color temperature 4000°-5000° Kelvin.
- Electronic control panel For light field diameter and light adjustment.
- Color rendition index of 94 or more.
- LED life 50,000 hours or better.
- Autoclaveable handles.
- Operating Voltage 220V, 50Hz.

**Optional:**
(i) Integrated digital camera system:
- Resolution: Full HD (1,920 x 1,080 Pixels)
- Video outputs: 2x HD-SDI or 1x HDMI/DVI-D
- Provision of Video transmission facility
- Medical graded LCD/LED 26” minimum along with mountings.
(ii) Third arm of 160000 LUX at 1 meter.
(iii) UPS for at-least 2 hours battery backup.

Warranty; 03 years warranty of complete system including all accessories and allied items

Country of Origin: USA, Europe, Japan only

<table>
<thead>
<tr>
<th>12</th>
<th>PCNL-SET</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PCNL Set</td>
<td>Percutaneous Nephroscope Set for Adult</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCNL Set</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Broad View Telescope with Parallel eye piece, 0/6/12/20/25 Deg.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 14 Fr, Or better instrument channel</td>
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<tr>
<td></td>
<td></td>
<td>- Automatic valve with sealing membrane and sealing cap</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sheath 20FR to 27 FR. Or better, automatic locking mechanism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- distal tip straight, with swiveling irrigation connector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Obturator Hollow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Telescope dilator 9-27 Fr. Consisting of: 1 hollow guide rod 6 Fr. And telescope</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Dilator 30 Fr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Stone grasping forceps, diameter,. 3.5 mm, working length 30 to 35 CM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Two / Three pronged stone grasper, diam. 3.5 mm, WL 30 to 35 CM</td>
</tr>
</tbody>
</table>

Accessories:
Optional (if any)
- HD Camera
- HD Monitor
- Light Source LED/Xenon
- Trolley Imported
- Video Processor

Note: (The specifications mentioned in laparoscope will be used for items mentioned in optional)

Warranty; 03 years warranty of complete system including all accessories and allied items

Country of Origin: USA, Europe, Japan only
### TECHNICAL SPECIFICATIONS

- Various Dialysis Therapies including double needle system & Single Needle with Single Pump.
- Dialysis machine system should be open consumable types
- Variable Bicarbonate & Acetate Concentration.
- And no binding on consumable or disposable
- Bicarbonate profiling with monitoring
- Variable temperature control
- Water Inlet pressure requirement: 1.5 to 6 Bar maximum
- Heparin Pump Automatic stop & Bolus with flow rate from 0.1-9.9ml/hour
- Programmable Ultra filtration with control or varying rate
- Ultra-filtration with or without diffusion
- Automatic priming with display
- Dialysis machine with touch digital display size 10.4-inches or more
- Touch Display 10.4-inches or more for service diagnostic and calibration
- Touch Electronic control of flow rate and blood flows
- Automatic clean, disinfect and rinsing mechanism, built in heat disinfect system
- Should capable to record disinfection history
- Should capable to record patient data without/with patient Card
- Blood Pump: 0, 50 to 500 ml / minute
- Variable Dialysate Flow: from 300 to 700 ml or better
- Temperature Control: up to 39 deg. C. (Adjustable)
- Arterial Pressure Monitor, Venous Pressure Monitor
- Ultra-filtration Rate Control: Range of UFR 0.0 to 3.00 Kg - hour or above.
- Air Bubble Detection: Air bubble detector alarm threshold.
- Blood leak Detection, Sodium profiling
- Bicarbonate profiling / Proportion /Dialysate Profiling
- Dialysis Adequacy Monitoring (Kt/v) with graphical Display, Built in Heat disinfect system
- Universal Bicarbonate Cartridge Holder / Bag
- Online B.P Monitoring System
- Battery backup for at least 20-min, 220V, 50Hz

### Accessories:
- **Optional (if any):**
  - Paediatric Mode (System should have ability to be used on paediatric patients)
<table>
<thead>
<tr>
<th>14</th>
<th><strong>R.O SYSTEM/ R.O WATER PLANT</strong></th>
<th><strong>TECHNICAL SPECIFICATIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>RO Water Purification System</strong></td>
<td>Meets the highest industry standard (AAMI) for pure water of AAMI or greater of quality for Water to Dialysis Machines and Renal Patients for improvement in quality of life with highest innovation.</td>
</tr>
<tr>
<td></td>
<td><strong>Configuration</strong></td>
<td>- RO Water Purification System to operate 06-8 Dialysis Machines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Direct feed to Dialysis Machines through UV sterilizer</td>
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<tr>
<td></td>
<td></td>
<td>- Mounted on SS305 SKID (corrosion proof)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- RO internal Plumbing HDPVC Schedule 80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Product &amp; Reject Flow Meters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Product &amp; Reject ONLINE TDS / Conductivity Meter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Manual Operation in Case Electrical Control Panel Failure</td>
</tr>
<tr>
<td></td>
<td><strong>Includes Pre Treatment</strong></td>
<td>a. Cartridge Filter Size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Feed Booster Pump 220 VAC,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Multimedia Filter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. ACF Chlorine (KDF) Filtration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Water Softener</td>
</tr>
<tr>
<td></td>
<td></td>
<td>f. UV Sterilizer</td>
</tr>
<tr>
<td></td>
<td><strong>Local / Imported ( Procuring agency to specify)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Accessories:</strong></td>
<td>Optional (if any):</td>
</tr>
<tr>
<td></td>
<td><strong>Warranty; 03 years warranty of complete system including all accessories and allied items</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Country of Origin: Pak Made</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15</th>
<th><strong>STATIC X-RAY MACHINE CEILING MOUNTED WITH CR SYSTEM</strong></th>
<th><strong>TECHNICAL SPECIFICATIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Microprocessor based.</strong></td>
<td>High frequency, 50KW X-Ray generator.</td>
</tr>
<tr>
<td></td>
<td><strong>High frequency, 50KW X-Ray generator.</strong></td>
<td>500 mA at 100 kv</td>
</tr>
<tr>
<td></td>
<td><strong>500 mA at 100 kv</strong></td>
<td>Anatomical programmed radiography.</td>
</tr>
</tbody>
</table>
Digital display of all set parameters.
Rotating anode x-ray tube, with dual focus 0.6 & 1.2/1.5 mm.
Anode heat storage capacity of at least 300 KHU or more
Electronic timer with exposure time of 1msec.
System with AEC facility.
Ceiling mounted with three directional movement
Capable of lateral radiography.
4-way floating table
Chest stands with Bucky.
Complete with grid 8:1 ratio.
Automatic over-load protection device and automatic line compensation.
3-phase, 380 V, 50 Hz.

**Accessories:** *(Procuring agency to select as per its actual requirement)*

**Optional:**
Auto Tracking & Auto Collimation supplied with 6 way floating table.

**CR SYSTEM**

One Digitizer / Reader unit, multiple plates type System for General Radiography & Mammography.
Should be capable to read X-Ray exposed Rigid Imaging Plates (IPs) of all standard sizes in inches/cm.
The productivity of reading / digitizing should be minimum 100 IPs/hour in mixed sizes.
Reading function should be 100 μm and 50 μm
Should support resolution of 10 pixels / mm.
One CR console for Radiographer with medical application software licenses.
An additional workstation for Radiologist with 1TB HDD.
Should be capable to enter & edit Patient ID.
Should support Image Preview & Quality Assurance.
Should have Mammography Software License. *(Procuring agency to specify)*
Should have temporary storage capacity of up to 2,000 or more images.
Should comply with DICOM Conformance 3.0 and have standard functions for future connectivity with PACS or other DICOM modalities inclusive of Print, Storage, etc.
DICOM 3.0 compliant Grayscale Dry LASER Printer with 3 online sizes.
Should have minimum productivity of 150 films/hour in mixed sizes. Printer should be capable of printing 08x10, 10x12, 11x14, 14x14 & 14x17 size films. Minimum resolution should be 10 pixels/mm with 12-bit gradation. Imaging Plates (IP) and Cassettes DICOM 3.0 for Send, Receive, Archive, Retrieve and Print.

**POWER REQUIREMENT:**
Single phase with line voltage of 220V, 50 Hz

**Accessories:** (Procuring agency to select as per its actual requirement of size and quantity)
- Imaging Plates (IP) and Cassettes
- 14x17inch (Set of IPs & Cassettes)
- 10x12inch (Set of IPs & Cassettes)
- 08x10inch (Set of IPs & Cassettes)
- 18x24cm (Set of IPs & Cassettes) for Mammography
- 24x30cm (Set of IPs & Cassettes) for Mammography
- 15x30cm (Set of IPs & Cassettes) for OPG

Warranty: 05 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>16</th>
<th><strong>DIGITAL COLOUR DOPPLER (HIGH END)</strong></th>
<th><strong>TECHNICAL SPECIFICATIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Color Doppler with Fully Digital Beam former having 2D / M-Mode and Doppler Facilities, (PW, HPRF, &amp; Color Flow Imaging) with High Resolution Imaging Doppler Signal Quality; having DICOM Compatibility and Upgradeable to CW and 4D Imaging in Convex, Linear and Endocavity Probe.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>1) B-MODE Specification:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Sector Scan Angle Variable in Four Steps.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Viewing Depth: 30 cm Minimum (Both in B &amp; W and Color).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Frame Rate: 500 f/sec or more</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d) Built-in cine loop with ability to vary reverse and slow motion of display; Internal Memory 2000 / 200MB or more Color Images.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e) Real time and Freeze Image Magnification at least 10X or more with panning for Real,</td>
<td></td>
</tr>
</tbody>
</table>
Freeze and Memorized Images.

2) M-MODE SPECIFICATION:
   a) Magnification: X2 or more.
   b) Sweep Speed: Slow, Medium and Fast.
   c) Color Display of M-Mode.

3) D-MODE SPECIFICATION:
   a) Pulse-Wave Doppler Measureable Velocity Range.
   b) HPRF Doppler.
   c) CONTINUOUS-WAVE DOPPLER:
      - Measurable Velocity Range: Steerable.
      - Must have Doppler Beam Steering and Bi-Directional Stereo-Audio.
   d) Colorized Spectrum Display.
   e) Automatic Baseline and Velocity Range Control.
   f) Live Measurements for Doppler Spectrum.

4) COLOR DOPPLER MODE SPECIFICATIONS:
   - Both CW and PW Doppler must be Continuous Steerable in the Color Blood Flow Image Mode in Real Time.
   - 2D Image with Color, CW and PW Doppler.
   - Windows based System for easy usage with Programmable Control Panel Keys.
   - Tissue Harmonic Imaging with 4THI or more Frequency.

5) MEASUREMENT PACKAGE:
   To provide Comprehensive Software Package for Measurement of Distance, Circumference, Area, Time Depth, ANGLE, Velocity, Frequency, Heart Rate, Volumes, Nuchal Thickness/Measurement Software to be Provided as a Standard.

6) SYSTEM COMPLETE WITH FOLLOWING FACILITIES AND ACCESSORIES:
   - 19-Inches Minimum LCD / LED Color Monitor, with Resolution 1280 x 1024 Pixels minimum.
   - Foot-Switch.
- 3 to 4 Active Transducer Connector for Tran thoracic Probes DVD / CD Drive for Image Storage to be Built-in to the System.
- 100 GB or more Hard Disk Drive to be Built-in to the System.
- Built-in DICOM Compatibility. (3.0 with all components)
- Touch Command Screen Control at least 8-inches LCD / TFT or more.
- Full DICOM (Upgradable)

Probes must be supplied by same manufacturer.

7) UPGRADEABILITY:
- System Software must be Upgradable.

8) STANDARD PROBES:
- 2 – 6 MHz Multi-Frequency Convex Probe for B/M/CDI/PW and Shearwave Elastography.
- 5-9 MHz Multi-Frequency Linear Probe with shearwave elastography.
- TVS/ENDOCAVITORY Color PROBE

NOTE: All Probes must be supplied by same Manufacturer.

9) STANDARD RECORDING DEVICES:
- Thermal Paper Printer with fifty Rolls of Paper (Black & White). WITH HD
- CINEWAVE UPS Online with 30 minutes back up time for the System.(IMPORTED)

10) Tissue Doppler Imaging Mode.

11) Pure Wave / Pulse Inversion / Differential Tissue Harmonic Imaging to Enhance Effective Wide Band Frequency Range to provide Simultaneously Spatial Resolution, Contrast Resolution and increased Penetration using Two Transmission Pulses at Different Frequencies Simultaneously and Reception at Harmonic as well as Differential Component.

12) Auto Image Optimization / Quick Scan Imaging for Automatic STC / GAIN and Doppler Spectrum Adjustment with Optimal Image Quality by using One Touch Operation.


14) Trapezoid Imaging / Virtual Convex Imaging with Linear Probe.

15) Compound / Aplipure Imaging for THI/both Frequency Compounding and Spatial Compounding in B/W and Color Mode.

16) Panoramic / SIESCAPE / Logic view Imaging with Measurements.
17) TISSUE CONTRAST ENHANCEMENT SOFTWARE/SPECTRAL REDUCTION
18) N-Sight / Adaptive Suppression / Precision Imaging / Cross beam / XFlow or equivalent to
Enhance B-Mode Imaging, Xress / Ccare / DTCE or equivalent Detailed in Layers and Boundaries
and Sharpened Outlines of the Lesions and reduce Cluttering.
19) Micro CPA / Superb Micro Imaging/vascular enhancement/B flow with Color/spectral to
Clearly Show Blood Flow in tiny Vessels,
20) Shear wave Elastography with Quantification for body Organs specially Liver with
Convex & Linear Probes to visualize Tissue Stiffness by Generating Images through Shear Wave
Propagation.
21) Live Strain Rate Elastography with Quantification for Body Organs Specially Breast to
Visualize Lesions.
22) Voltage : 220V – 240V, 50 – 60 HZ

**Accessories:**
1. 50 High Density / High Glossy thermal paper Rolls
2. Gel: 20 liters

**Optional:**
7-14 MHz Multi-Frequency Linear Probe for B/M/CDI/PW
Fusion Imaging of CT / MRI 3D Volume DATA to Synchronize with Ultrasound Imaging.
Complete
with Hardware /needle navigation with tracking system.
Contrast Harmonic Imaging Upgradable.

**Warranty:** 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>17</th>
<th>CR SYSTEM (ONLY) FOR 300MA X-RAY MACHINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>TECHNICAL SPECIFICATIONS</strong></td>
</tr>
<tr>
<td></td>
<td>One Digitizer / Reader unit, multiple plates type System for General Radiography &amp; Mammography.</td>
</tr>
<tr>
<td></td>
<td>Should be capable to read X-Ray exposed Rigid Imaging Plates (IPs) of all standard sizes in inches/cm.</td>
</tr>
<tr>
<td></td>
<td>The productivity of reading / digitizing should be minimum 100 IPs/hour in mixed sizes.</td>
</tr>
</tbody>
</table>
Reading function should be 100 μm and 50 μm
Should support resolution of 10 pixels / mm.
One CR console for Radiographer with medical application software licenses.
An additional workstation for Radiologist with 1TB HDD.
Should be capable to enter & edit Patient ID.
Should support Image Preview & Quality Assurance.
Should have Mammography Software License. (Procuring agency to specify)
Should have temporary storage capacity of up to 2,000 or more images.
Should comply with DICOM Conformance 3.0 and have standard functions for future
connectivity with PACS or other DICOM modalities inclusive of Print, Storage, etc.
DICOM 3.0 compliant Grayscale Dry LASER Printer with 3 online sizes.
Should have minimum productivity of 150 films/ hour in mixed sizes.
Printer should be capable of printing 08x10, 10x12, 11x14, 14x14 & 14x17 size films.
Minimum resolution should be 10 pixels/mm with 12-bit gradation.
Imaging Plates (IP) and Cassettes
DICOM 3.0 for Send, Receive, Archive, Retrieve and Print.
POWER REQUIREMENT:
Single phase with line voltage of 220V, 50 Hz
Accessories: (Procuring agency to select as per its actual requirement of
size and quantity)
Imaging Plates (IP) and Cassettes
14x17inch (Set of IPs & Cassettes)
10x12inch (Set of IPs & Cassettes)
08x10inch (Set of IPs & Cassettes)
18x24cm (Set of IPs & Cassettes) for Mammography
24x30cm (Set of IPs & Cassettes) for Mammography
15x 30 cm (Set of IPs & Cassettes) for OPG
Warranty; 03 years warranty of complete system including all accessories and allied items
Country of Origin: USA, Europe, Japan only
HPRF, & Color Flow Imaging) with High Resolution Imaging Doppler Signal Quality; having DICOM Compatibility and Upgradeable to CW and 4D Imaging in Convex, Linear and Endocavity Probe.

1) **B-MODE Specification:**
   a) Viewing Depth: 30 cm Minimum (Both in B & W and Color).
   c) Frame Rate: 500 f/sec or more
   d) Built-in cine loop with ability to vary reverse and slow motion of display; Internal Memory 2000 / 200MB or more Color Images.
   e) Real time and Freeze Image Magnification at least 10X or more with panning for Real, Freeze and Memorized Images.

2) **M-MODE SPECIFICATION:**
   a) Magnification: X2 or more.
   b) Sweep Speed: Slow, Medium and Fast.
   c) Color Display of M-Mode.

3) **D-MODE SPECIFICATION:**
   a) Pulse-Wave Doppler Measureable Velocity Range.
   b) HPRF Doppler.
   c) **CONTINUOUS-WAVE DOPPLER:**
      - Measurable Velocity Range: Steerable.
      - Must have Doppler Beam Steering and Bi-Directional Stereo-Audio.
   d) Colorized Spectrum Display.
   e) Automatic Baseline and Velocity Range Control.
   f) Live Measurements for Doppler Spectrum

4) **COLOR DOPPLER MODE SPECIFICATIONS :**
   - Both CW and PW Doppler must be Continuous Steerable in the Color Blood Flow Image Mode in Real Time.
   - 2D Image with Color, CW and PW Doppler.
   - Windows based System for easy usage with Programmable Control Panel Keys.
   - Tissue Harmonic Imaging with 4THI or more Frequency.
   - Power Doppler.
   - Triplex Mode for Simultaneous Display of Color B/M and D-Mode Displays.
   - 200 db system dynamic range or more.
5) **MEASUREMENT PACKAGE:**
To provide Comprehensive Software Package for Measurement of Distance, Circumference, Area, Time Depth, ANGLE, Velocity, Frequency, Heart Rate, Volumes, Nuchal Thickness/Measurement Software to be Provided as a Standard.

6) **SYSTEM COMPLETE WITH FOLLOWING FACILITIES AND ACCESSORIES:**
- 19-Inches Minimum LCD / LED Color Monitor, with Resolution 1280 x 1024 Pixels minimum.
- Foot-Switch.
- 3 Active Transducer Connector for Tran thoracic Probes DVD / CD Drive for Image Storage to be Built-in to the System.
- 500 GB or more Hard Disk Drive to be Built-in to the System.
- Built-in DICOM Compatibility. (3.0 with all components)
- Touch Command Screen Control at least 8-inches LCD / TFT.
- Full DICOM (Upgradable)

7) **UPGRADEABILITY:**
- System Software must be Upgradable.

8) **STANDARD PROBES:**
- 2 – 6 MHz Multi-Frequency Convex Probe for B/M/CDI/PW.
- 5-9 MHz Multi-Frequency Linear Probe for vascular studies.
- TVS/ENDOCAVITORY Color PROBE

NOTE: All Probes must be supplied by same Manufacturer.

9) **STANDARD RECORDING DEVICES:**
- Thermal Paper Printer with fifty Rolls of Paper (Black & White). WITH HD
- CINEWAVE UPS Online with 30 minutes back up time for the System.(IMPORTED (EUROPE/USA/JAPAN)

10) Tissue Harmonic imaging without contrast with 4 harmonic frequencies.
11) Pure Wave / Pulse Inversion / Differential Tissue Harmonic Imaging or similar.
12) Auto Image Optimization / Quick Scan Imaging for Automatic STC / GAIN and Doppler Spectrum Adjustment with Optimal Image Quality by using One Touch Operation.
14) Trapezoid Imaging / Virtual Convex Imaging with Linear Probe.
15) Compound / Aplipure Imaging for THI/both Frequency Compounding and Spatial
<table>
<thead>
<tr>
<th>LOW END FULLY AUTOMATIC RANDOM ACCESS CHEMISTRY ANALYZER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TECHNICAL SPECIFICATIONS</strong></td>
</tr>
<tr>
<td><strong>Detailed Requirements:</strong></td>
</tr>
<tr>
<td>• Microprocessor controlled fully automated chemistry analyser</td>
</tr>
<tr>
<td>• User programmable with built in bar code reader</td>
</tr>
<tr>
<td>• Sample type: Serum, Plasma, Body Fluids etc.</td>
</tr>
<tr>
<td>• Capability to re-run with automatic on board sample dilution</td>
</tr>
<tr>
<td>• Automatic Sample Quality Analysis for Lipemia, Haemolysis, Icterus</td>
</tr>
<tr>
<td>• CD/USB Storage System</td>
</tr>
<tr>
<td>• RS 232 interface for on line computer</td>
</tr>
<tr>
<td>• 220V, 50 Hz operated</td>
</tr>
<tr>
<td><strong>User Adjustable Settings:</strong></td>
</tr>
<tr>
<td>• Minimum 30 tests on panel including ISE</td>
</tr>
<tr>
<td>• Minimum 35-45 sample/QC positions and continuous loading of samples</td>
</tr>
<tr>
<td>• 130 tests/hr or above for a range of chemistries (Other than ISE i.e. Na+, K+, Cl-)</td>
</tr>
<tr>
<td>• Spectral Range 320-690 nm</td>
</tr>
<tr>
<td>• Diffraction grating wavelength 340, 405, 492, 505, 546, 578, 630 nm or more / Filter</td>
</tr>
<tr>
<td>• Wavelength 340, 405, 492, 505, 546, 578, 630 nm, one free position</td>
</tr>
<tr>
<td>• Sample volume 2-50 µl</td>
</tr>
<tr>
<td><strong>Displayed Parameters:</strong></td>
</tr>
<tr>
<td>• LCD Display Monitor</td>
</tr>
</tbody>
</table>
- On board reagent refrigeration of 2-8 Degree Centigrade / On board reagent refrigeration
- compatible with the kits.
- Temperature control for assays at 37°C
- Self-calibrating against known standards + Storage of QC results
- Independent stat capability, facility of reflex testing
- Automatic calibration of curves and results
- Automatic flagging of results outside user defined limits
- Data entry by keyboard, bar code reader & LIS
- Bubble and sample level detector/Liquid Level Sensing on both Reagent and Sample Probe
- Minimum data storage 10,000 tests

**Accessories:**
- With Built-in Thermal Printer or External Laser Printer
- Compatible Imported Online Sine wave UPS with Battery backup for 30 minutes (Emerson, Liebert, Chloride, MGE, APC or Equivalent)
- Compatible RO System (If required) to operate the Chemistry Analyzer
- Operating Manual with a Soft Copy
- Service Manual with a Soft Copy

**Optional (If any):**
- **Warranty:** 05 years warranty of complete system including all accessories and allied items with free services and maintenance.

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>20</th>
<th>MOBILE X-RAY UNIT WITH CR SYSTEM</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mobile Microprocessor based X-Ray Unit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High frequency, 30KW X-Ray Generator.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>300 mA at 100 kv.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital display of all set parameters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rotating anode x-ray tube, with dual focus / Single Focus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anode heat storage capacity of at least 107 KHU or more</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electronic timer with exposure time of 1-3 msec.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automatic over-load protection device and automatic line compensation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The unit should be battery supported for exposure and movement (Motorized).</td>
<td></td>
</tr>
<tr>
<td><strong>POWER REQUIREMENT:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Single phase with line voltage of 220V, 50 Hz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Accessories: (Procuring agency to select as per its actual requirement of size and quantity)**

- Imaging Plates (IP) and Cassettes
- 14x17 inch (Set of IPs & Cassettes)
- 10x12 inch (Set of IPs & Cassettes)
<table>
<thead>
<tr>
<th>21</th>
<th><strong>SEMI AUTOMATIC CLINICAL CHEMISTRY ANALYZER</strong></th>
<th><strong>TECHNICAL SPECIFICATIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Semi-automatic clinical chemistry analyzer Facility for multiple standards for one parameters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Freely programmable against all commercially available chemistries Temperature controlled cuvette compartment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 220V, 50 Hz operated</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>User Adjustable Settings:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Wavelength selectable via individual filters in the range of 340 – 630 nm End Point, two points kinetic + kinetic modes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Minimum Sample Volume: 400-500 ul or test dependent</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Displayed Parameters:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Digital display for showing values Identification of upper and lower limits</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Accessories:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- With Built-in Thermal Printer or External Laser Printer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Compatible Imported Online Sine wave UPS with Battery backup for 30 minutes (Emerson, Liebert, Chloride, MGE, APC or Equivalent)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Operating Manual with a Soft Copy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Service Manual with a Soft Copy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warranty; 03 years warranty of complete system including all accessories and allied items</td>
<td></td>
</tr>
</tbody>
</table>

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>22</th>
<th><strong>BLOOD STORAGE CABINETS</strong></th>
<th><strong>TECHNICAL SPECIFICATIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Detailed Requirement:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Stainless Steel Interior</td>
<td></td>
</tr>
</tbody>
</table>

**Country of Origin:** USA, Europe, Japan only
- Automatic closing of the door
- Controlled fan cooling
- Key operated power switch
- Safety door lock
- Interior lighting
- Integrated RS485/USB interface
- LAN Converter
- 220V 50 Hz, AC

**User Adjustable Settings:**
- Gross volume: 400 L
- Net capacity: minimum 240 blood bags of 450ml
- Non modifiable temperature set point of +4°C
- 200-250 min hold over time at +25°C ambient temperature
- Safety thermostat

**Displayed Parameters:**
- Digital temperature display
- Temperature recording and online monitoring
- Acoustical and visual alarm for temperature and power failure
- Alarm system with battery backup
- low and high alarm
- Door opening alarm

**Accessories:**
Complete with standard and operation accessories
- Seven day chart recorder
- Servo Controlled Voltage Stabilizer with surge protection facility
- Operating Manual with a Soft Copy
- Service Manual with a Soft Copy

Warranty; 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>HEMATOLOGY ANALYZER</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed Requirements:</td>
<td>Automated Hematology Counter</td>
</tr>
</tbody>
</table>
- Auto probe cleaning/wiping
- RS232/USB interface
- 220V, 50 Hz operated

**User Adjustable Settings:**
- Through put 60 samples/hour or more
- 3-Part differential with minimum 20 parameters
- Histograms for WBC, RBC and Platelet
- Sample Volume: Max 120 ul of whole blood or less

**Displayed Parameters:**
- Digital LCD display
- Auto calibration programme
- Patient data entry and specimen recognition by keyboard/LCD Touch Screen/Bar Code
- Patient data and results storage of 5,000 Results or more

**Accessories:**
- With Built-in Thermal Printer or External Laser Printer
- Consumables, reagents, calibrators, controls for start up
- Compatible Imported Online Sine wave UPS with Battery backup for 30 minutes (Emerson, Liebert, Chloride, MGE, APC or Equivalent)
- Operating Manual with a Soft Copy
- Service Manual with a Soft Copy

**Note:**
Availability of Reagents and Kits must be ensured and guaranteed by the supplying firm in the local market.

**Optional:**
Warranty; 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>24</th>
<th>BLOOD BAG SHAKER</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Detailed Requirement:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Accept all major brands of bag available in the local market</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mixing of blood bags</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• LCD/LED Display of parameters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Self Calibration</td>
<td></td>
</tr>
</tbody>
</table>
### Measuring and shaking of blood bags
- Battery operated

**User Adjustable Settings:**
- Weight range 1-999 gr/ml

**Displayed Parameters:**
- Accuracy +/- 2%
- Error Indication

**Accessories:**
- With all Standard Accessories

**Optional:**
- Bi-directional communication

Warranty: 03 years warranty of complete system including all accessories and allied items

Country of Origin: USA, Europe, Japan only

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### THERMOSTATIC WATER BATH

#### TECHNICAL SPECIFICATIONS

- Microprocessor PID-temperature controller

**Detailed Requirement:**
- Exterior body of steel sheet
- Double skinned tank, inner case made of stainless steel
- Perforated stainless steel bottom tray
- Temperature control for regulation of temperature
- Gabled lid
- Power Source 220V, 50HZ AC

**User Adjustable Settings:**
- Capacity of 20-25 Liters
- Adjustable temperature range from +5C above ambient up to 100C
- Temperature accuracy of + 1%

**Displayed Parameters:**
- Built in thermometer
- Digital display of temperature and time
- Adjustable timer for time setting
### Fault indication system
- Over temperature protection system

### Accessories:
- Three Racks of different sizes
- Servo Controlled Voltage Stabilizer with surge protection facility
- With drain tap
- Operating Manual with a Soft Copy
- Service Manual with a Soft Copy

### Optional:
**Warranty**: 3 years warranty of complete system including all accessories and allied items

**Country of Origin**: USA, Europe, Japan only

<table>
<thead>
<tr>
<th>26</th>
<th><strong>BINOCULAR MICROSCOPE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TECHNICAL SPECIFICATIONS</strong></td>
<td></td>
</tr>
<tr>
<td>• Standard microscope with infinity color corrected optics</td>
<td></td>
</tr>
<tr>
<td>• Binocular head, adjustable inter papillary distance</td>
<td></td>
</tr>
<tr>
<td>• Tube head with an inclination of 30 Degree or more</td>
<td></td>
</tr>
<tr>
<td>• Rotating quadruple/quintuple nose piece</td>
<td></td>
</tr>
<tr>
<td>• 2-layer with mechanical sliding stage, XY moving range Condenser carrier, vertically/horizontal adjustable Bright field condenser, N.A. of 1.25</td>
<td></td>
</tr>
<tr>
<td>• Aperture iris diaphragm LED illumination</td>
<td></td>
</tr>
<tr>
<td>• 220V 50 Hz, AC</td>
<td></td>
</tr>
<tr>
<td><strong>User Adjustable Settings:</strong></td>
<td></td>
</tr>
<tr>
<td>• Coaxial coarse and fine focusing system, with focusing stop mechanism Variable intensity control system</td>
<td></td>
</tr>
<tr>
<td>• Eyepiece lenses:</td>
<td></td>
</tr>
<tr>
<td>• 10x wide field, focusable, Objective lenses</td>
<td></td>
</tr>
</tbody>
</table>

| 1 | | |
(Achromat):
- 4x Scanning lens
  - 10X
  - 20X
  - 40X

**Accessories:**
- Complete with standard and operation accessories;
- Carrying case
- Dust cover
- Immersion oil

Service Manual with a Soft Copy

**Optional:**
- Polarizing lens/attachment

Warranty; 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

<table>
<thead>
<tr>
<th>27</th>
<th>BLOOD BAG TUBE SEALER</th>
</tr>
</thead>
</table>

**TECHNICAL SPECIFICATIONS**

**Detailed Requirement:**
- For electric handling and processing of blood bags in the blood donor area for 5 mm tubes
- Microprocessor controlled high frequency generator unit
- Adjustable sealing time up to 5 sec or less
- Rechargeable battery operated unit with charging unit
- Hand held sealer with 2 meter cable
- 220V 50 Hz, AC

**User Adjustable Settings:**
- Battery backup for 500 sealing

**Displayed Parameters:**
- Digital Display of Temperature, No. of Sealing etc
- Over temperature alarms

**Accessories:**
- Complete with standard and operation accessories;
- Operating Manual with a Soft Copy
- Service Manual with a Soft Copy

**Warranty:** 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only
<table>
<thead>
<tr>
<th>ICU VENTILATOR</th>
<th>TECHNICAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VENTILATION:</strong></td>
<td>Microprocessor controlled powerful ventilation system mounted on trolley.</td>
</tr>
<tr>
<td></td>
<td>LCD/TFT color touch screen 15&quot; Minimum.</td>
</tr>
<tr>
<td></td>
<td>Patient Range: Pediatrics and Adult</td>
</tr>
<tr>
<td></td>
<td>Breathing classification: Pressure control, Volume control Pressure control with set Volume Breath.</td>
</tr>
<tr>
<td></td>
<td>Autoclaveable reusable patient tubing circuit for paeds and adult (01 each)</td>
</tr>
<tr>
<td><strong>MODES OF VENTILATION:</strong></td>
<td>Volume control</td>
</tr>
<tr>
<td></td>
<td>Assisted CMV</td>
</tr>
<tr>
<td></td>
<td>Pressure control PC</td>
</tr>
<tr>
<td></td>
<td>Assist Pressure Control</td>
</tr>
<tr>
<td></td>
<td>CPAP</td>
</tr>
<tr>
<td></td>
<td>SIMV+ Pressure support</td>
</tr>
<tr>
<td></td>
<td>Noninvasive ventilation</td>
</tr>
<tr>
<td></td>
<td>Bi-level /APRV/BI-PAP Ventilation</td>
</tr>
<tr>
<td><strong>CONTROL:</strong></td>
<td>Set &amp; measured parameters simultaneously.</td>
</tr>
<tr>
<td><strong>MEASUREMENT RANGE/ SPECIFICATION:</strong></td>
<td>Inspiratory tidal volume: 5ml to 2000ml Neonatal Mode</td>
</tr>
<tr>
<td></td>
<td>Respiratory frequency: 5 to 120bpm</td>
</tr>
<tr>
<td></td>
<td>SIMV breath frequency: 1 to 50 bmp</td>
</tr>
<tr>
<td></td>
<td>Inspiratory pressure: 10 to 80 cmH2O</td>
</tr>
<tr>
<td></td>
<td>Inspiratory flow: 80 L/Min or cmH2O.</td>
</tr>
<tr>
<td></td>
<td>I : E ratio : 1:4 / 4:1</td>
</tr>
<tr>
<td></td>
<td>PEEP: 3 to 30cm H2O</td>
</tr>
<tr>
<td></td>
<td>FiO2/ O2 delivery: 21 to 100%</td>
</tr>
<tr>
<td>Monitoring parameters for set and measured value simultaneously:</td>
<td>Total breath rate.</td>
</tr>
<tr>
<td></td>
<td>Oxygen concentration FIO2</td>
</tr>
<tr>
<td></td>
<td>Expired minute volume</td>
</tr>
<tr>
<td></td>
<td>Peak expiratory flow</td>
</tr>
</tbody>
</table>
- I : E ratio
- Peak Pressure
- Mean pressure
- Lung Mechanics with pressure and volume loops.
- Others control and functions:
  - Back up ventilation
  - Pause time INSP
  - Microprocessor gas delivery system
  - Breath circuit Compliance Compensation
  - Expiratory hold/ Inspiratory hold
  - Pressure / Volume and flow trigger sensitivity
  - Trigger sensitivity indication
  - Trend Data
- The waveform should be displayed on ventilator’s screen.

**ALARMS:**
- Apnea
- AC power failure
- High and low Expired minute volume
- High and low peak air way pressure
- High and low breath rate
- FiO2 variation
- Low and high base line pressure
- Gas supply source failure
- Low battery

**NEBULIZER:**
- Built in nebulizer of the patient during ventilation
- Supply requirements: Electric 220 V 50 Hz

**BATTERY BACKUP:**
- With internal battery backup of one hour.

**COMPRESSED AIR SUPPLY:**
- The ventilator should be driven on external compressor for powerful ventilation and should have
  the capability to connect with central medical pipeline system of the hospital.
**HUMIDIFIER:**
- Automatic compensation (Servo) controlled heated humidifier with temperature monitoring at air way and Humidification camber with alarm for low/ high limits with water tarp in the patient circuit. Note: The warranty of equipment will be including batteries, oxygen sensor, all kind of sensors and flow sensor.

**Accessories:**
**Optional:**
- Air Compressor
- Capnography module to monitor carbon dioxide of the patient.
- External battery backup (Compatible Pure sine wave UPS) for additional battery backup of one hour for complete system functionality.

**Warranty:** 03 years warranty of complete system including all accessories and allied items

**Country of Origin:** USA, Europe, Japan only

**DR. MUHAMMAD TARIQ SHEIKH**
Medical Superintendent
Khawaja Farid Social Security Hospital Multan.