STANDARD BIDDING DOCUMENT

MEDICAL EQUIPMENT AND MACHINERY
(YEAR 2019-20)

SHEIKH ZAYED MEDICAL
COLLEGE/HOSPITAL
RAHIM YAR KHAN
GOVERNEMENT OF THE PUNJAB
HEALTH DEPARTMENT
TELEPHONE No. 068-9230066
# Table of Contents

Instructions to Bidders (ITB) .................................................................................................................. 5

CHECK LIST ........................................................................................................................................ 5

General Instructions: ............................................................................................................................... 5

1. Content of Bidding Document ........................................................................................................ 5

2. Source of Funds................................................................................................................................. 6

3. Eligible Bidders ................................................................................................................................ 6

4. Eligible Goods and Services ............................................................................................................ 6

5. Cost of Bidding ............................................................................................................................... 6

6. Clarification of Bidding Documents .............................................................................................. 6

7. Amendment of Bidding Documents .............................................................................................. 6

8. Qualification and Disqualification of Bidders ................................................................................ 6

9. Corrupt or Fraudulent Practices ................................................................................................... 6

Preparation of Bids .................................................................................................................................. 7

10. Language of Bid ............................................................................................................................ 7

11. Documents Comprising the Bid .................................................................................................... 7

12. Bid Form and Price Schedule ........................................................................................................ 7

13. Bid Prices ....................................................................................................................................... 7

14. Bid Currencies ................................................................................................................................ 7

15. Documents Establishing Bidder’s Eligibility and Qualification .................................................. 8

16. Documents Establishing Goods’ Eligibility and Conformity to Bidding Documents ................ 8

17. Bid Security ................................................................................................................................... 8

18. Bid Validity ..................................................................................................................................... 9

Submission of Bids ................................................................................................................................ 9

19. Format and Signing of Bid ............................................................................................................. 9

20. Sealing and Marking of Bids .......................................................................................................... 9

21. Deadline for Submission of Bids ................................................................................................... 9

22. Late Bid .......................................................................................................................................... 9

23. Withdrawal of Bids ......................................................................................................................... 9

The Bidding Procedure .......................................................................................................................... 9

24. Single stage – two envelopes bidding procedure ........................................................................ 9

Opening and Evaluation of Bids .......................................................................................................... 10

25. Opening of Bids by the Procuring Agency .................................................................................. 10

26. Clarification of Bids ....................................................................................................................... 10
27. Preliminary Examination .................................................................................................................. 10
28. Evaluation and Comparison of Bids ................................................................................................. 10
29. Evaluation Criteria ........................................................................................................................... 11
30. Contacting the Procuring Agency .................................................................................................... 13
31. Rejection of Bids ............................................................................................................................... 13
32. Re-Bidding ....................................................................................................................................... 14
33. Announcement of Evaluation Report ............................................................................................... 14

Award of Contract ................................................................................................................................... 14

34. Acceptance of Bid and Award criteria ............................................................................................. 14
35. Procuring Agency’s right to vary quantities at time of Award ............................................................ 14
36. Limitations on Negotiations .............................................................................................................. 14
37. Notification of Award ......................................................................................................................... 14
38. Signing of Contract .............................................................................................................................. 14
39. Performance Guarantee ...................................................................................................................... 14
40. Schedule of Requirement ................................................................................................................... 14
41. Redressal of grievances by the Procuring Agency ............................................................................. 15

General Conditions of Contract (GCC) ................................................................................................ 15

1. Definitions ........................................................................................................................................ 15
2. Application .......................................................................................................................................... 15
3. Country of Origin ................................................................................................................................. 15
4. Standards ........................................................................................................................................... 15
5. Use of Contract Documents and Information ...................................................................................... 15
6. Patent Rights ..................................................................................................................................... 15
7. Submission of Samples ........................................................................................................................ 15
8. Ensuring Storage/ Installation Arrangements ...................................................................................... 16
9. Inspections and Tests ........................................................................................................................... 16
10. Physical Examination/ Inspection of Goods ..................................................................................... 16
11. Delivery and Documents ................................................................................................................... 16
12. Insurance ......................................................................................................................................... 16
13. Transportation .................................................................................................................................. 16
14. Incidental Services ............................................................................................................................. 16
15. Warranty .......................................................................................................................................... 16
16. Payment .......................................................................................................................................... 16
17. Prices ................................................................................................................................................. 17
18. Contract Amendments ....................................................................................................................... 17
19. Assignment ................................................................................................................. 17
20. Subcontracts ................................................................................................................ 17
21. Delays in the Supplier’s Performance ........................................................................ 17
22. Penalties/Liquidated Damages .................................................................................... 17
23. Termination for Default .............................................................................................. 17
24. Force Majeure ............................................................................................................. 17
25. Termination for Insolvency ......................................................................................... 18
26. Arbitration and Resolution of Disputes ..................................................................... 18
27. Governing Language .................................................................................................. 18
28. Applicable Law .......................................................................................................... 18
29. Notices ....................................................................................................................... 18

Special Conditions of Contract (SCC) .............................................................................. 18

ANNEXURES

Performance Guarantee Form .......................................................................................... 22
Manufacturer’s Sole Authorization Form ......................................................................... 23
Contract Form .................................................................................................................... 24
Bid Form .......................................................................................................................... 26
Price Schedule .................................................................................................................. 27
Price Schedule .................................................................................................................. 28
AFFIDAVIT ....................................................................................................................... 29
List of Equipment ............................................................................................................. 30
# A. Instructions to Bidders (ITB)

The provision of this checklist is essential prerequisite along with submission of tenders.

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Detail</th>
<th>Yes/No</th>
<th>Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Original receipt for purchase of tender</td>
<td></td>
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</tr>
<tr>
<td>2.</td>
<td>Bid Security 3% in the name of Principal, SZMC/SZH, R.Y. Khan (Photocopy of security (price masked) to be attached with Technical Offer. Original security should be attached with financial offer)</td>
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<td>3.</td>
<td>Name of equipment, Brand Model specifications</td>
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<td>4.</td>
<td>Company profile including engineering and managerial capability. (Name, Address, Tel No; Incl. degrees, diplomas, certificates of training)</td>
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<td>5.</td>
<td>Acceptance of terms and condition of tender documents duly signed and stamped</td>
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<td>6.</td>
<td>Minimum two-year experience regarding supply to Government / Autonomous institutions</td>
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<td>7.</td>
<td>An affidavit (as per specimen Performa on stamp paper of Rs.100/- submitting that the firm is never blacklisted on any grounds whatsoever from Government / Autonomous institutions and the price offered are not more than the offered price in any other institution during current financial year and in case of discrepancy the bidder undertake to return excess paid</td>
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<td>8.</td>
<td>Price should not be mentioned on technical bid</td>
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<td>9.</td>
<td>Valid General Sales Tax certificate, Valid Income Tax certificate, Valid Professional Tax certificate (All three are mandatory)</td>
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<td>10.</td>
<td>Valid Manufacturing License (if applicable)</td>
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<td>11.</td>
<td>Exclusive Authorization / Sole Agent Certificate by the Manufacturer</td>
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<td>12.</td>
<td>Past performance</td>
<td></td>
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<tr>
<td>13.</td>
<td>Availability of relevant Tools and Testing / Calibration Equipment</td>
<td></td>
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<tr>
<td>14.</td>
<td>Compliance of Warranty as per tender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Screenshot shot and web link of quoted model on the official website of the manufacturer as a proof of quoted model quoted by firm</td>
<td></td>
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<tr>
<td>16.</td>
<td>Documentary evidence from Manufacturer that they are original manufacturer (with indication of manufacturer site &amp; location)</td>
<td></td>
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## GENERAL CLAUSES

1. Country of origin and related certificate: (FDA, S.F.IR&D, CE(MDD) for Europe & MHLW for Japan

2. Country of manufacturing and related quality certificate: (FDA, S.F.IR&D, CE(MDD) for Europe & MHLW for Japan

3. Certificate from the manufacturer 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.

4. Latest tax paid, balance sheet, audit inspection reports

5. Supply orders detail over last two years (minimum) from Government organization / Autonomous institutions.

6. The Authorization or Power of Attorney to sign and submit the Bidding

7. The complete list of items quoted

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**NOTE:** 100% complete information according to the bid evaluation criteria provided by the firm will get maximum marks. **THE INFORMATION PROVIDED BY THE FIRM SHOULD BE RELEVANT, CONCISE AND TO THE POINT AS PER BID EVALUATION CRITERIA, UNNECESSARY DOCUMENTATION WILL HAVE A NEGATIVE IMPACT.**

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**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) Technical Specifications;
      (f) Contract Form;
      (g) Manufacturer's Authorization Form;
      (h) Performance Guarantee Form;
      (i) Bid Form; and
      (j) Price Schedule

   1.2 The "Invitation for Bids" does not form part of the Bidding Documents and is included as a reference only. In case of discrepancies between the Invitation for Bid and the Bidding Documents listed in 1.1 said Bidding Documents shall take precedence.
1.3 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 Government of Punjab.

3. Eligible Bidders
3.1 This Invitation for Bids is open to all original Manufacturers/authorized sole Agents of Foreign/Local manufacturers in Pakistan for supply of goods.
3.2 The bidder must possess valid legal enforceable exclusive authorization from the Foreign/Local 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), a local body or a public sector organization.

4. Eligible Goods and Services
4.1 Country of manufacturer should be of USA, Europe and Japan unless otherwise any other country of manufacturer is mentioned in specifications. However, country of origin of equipment could be from any geographical region of the world as per laws of Pakistan.
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. In case of the “manufacturer” the “origin” means the firm is based and registered in that country and registered with their stock exchange. 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.

5. 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.

6. 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 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.

7. 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, 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.

8. 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 criteria listed in ITB Clause 29.2.
8.2 The determination shall take into account the Bidder’s financial, technical or production capabilities (in case of manufacturer), infrastructure of the firm, past performance in similar contracts, engineering staff and their capabilities, inventory of spare parts, repair and calibration tools, workshop facilities to provide the after sales services. It shall be based upon an examination of the documentary evidence of the Bidder’s qualifications submitted by the Bidder, pursuant to ITB Clause 29.2, 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 blacklisted.

9. Corrupt or Fraudulent Practices
9.1 The Procuring Agency requires that all Bidders/Suppliers/Contractors observe the highest standard of ethics in the procurement and execution of such Contracts. In pursuance of rule 2 (P) of PPRA 2014 and its subsequent amendments, if any, the Procuring Agency:
a. defines, for the purposes of this provision, the terms set forth below as follows:

(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

b. shall reject a proposal for Award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract in question; shall declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Contract.

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 ITB Clauses 12 and 13 (to be submitted along with financial proposal);

(b) Documentary evidence established in accordance with ITB 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 ITB Clause 15 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 (Annexure A Form), indicating the goods to be supplied, a brief description of the goods, specifications, taxes, quantity, prices, make, model, country of origin, country of manufacturer and port shipment.

13. Bid Prices

13.1 The Bidder shall indicate on the Price Schedule the unit prices and total Package 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 for complete package/Tender. The specifications of goods, different from the demand of enquiry and packaged items, 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 complete package/Tender with accessories; detail of which is already mentioned in the technical specifications.

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 In case of DDP & CIF tender, the Prices shall be quoted in Pak Rupees or $, £, € and CHF respectively depending upon the case

14.2 State Bank of Pakistan's foreign currency selling rate will be considered from the date of opening of financial bid for comparison purposes.
14.3 The price for complete package/Tender, standard accessories; detail of which is already mentioned in the technical specifications will be considered for determining the lowest bidder. Optional items will not be considered while determining the lowest bidder.

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 bid, is an eligible as defined under ITB Clause 3.

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 Exclusive letter of authorization / Sole Agency Certificate 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, or joint venture/consortium/alliance of the local Sole agents/manufacturers.

(b) National Tax Number (NTN) and General Sales Tax Number (if applicable) with documentary proof shall have to be provided by the bidder(s).

(c) The Bidder 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. On account of submission of false statement, the Bidder shall be disqualified forthwith and subsequently black listed.

(d) The Bidder should have minimum 5 (five) years experience which will be counted from the date of Authorized Letter of Principal/Local Manufacturer. The items quoted by the bidder/Manufacturer should have already been used in different public/private institutions/hospitals, documentary proof is required to submit in this regard. Authorization is not required in case of manufacturer.

(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, Country of manufacturer, 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 and list of qualified technical persons along with qualification and trainings, list of main service, testing and calibration tools and in case of manufacturer, the supervisory staff working in the production and quality control departments in the manufacturing plant.

(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 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-branches or/and representatives.

16. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

16.1 Pursuant to ITB Clause 11, the Bidder shall furnish along with the 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 is not required by the Technical Committee; the bidder shall provide the sample or give demonstration as per requirement for evaluation/satisfaction of the Committee.

16.4 Submission of Original Purchase Receipt of tender.

16.5 Alternative bid is not allowed also a bidder cannot submit two bids. If the bidder quotes an alternative bid or submit two bids, then the bidder will be considered as non-responsive.

17. Bid Security

17.1 Bid Security is 3% of the item price (with standard accessories) in the shape of irrevocable Bank Guarantee or CDR from scheduled bank. Bid Security amounting to less than 3% shall not be acceptable.

17.1 in the form of Demand Draft / Pay Order / Call Deposit Receipt / Bank Guarantee (issued by a scheduled bank operating in Pakistan, as per the format provided in the Tender Document) in the name of the Purchaser.

17.2 Have a minimum validity period of one hundred twenty (120) days from the last date for submission of the tender or until furnishing of the Performance Security, whichever is later.

17.3 The Bid Security shall be forfeited by the Purchaser, on the occurrence of any / all of the following conditions:

17.3.1 If the Tenderer withdraws the Tender during the period of the Tender validity specified by the Tenderer on the Tender Form; or

17.3.2 If the Tenderer does not accept the corrections of his Total Tender Price; or

17.3.3 If the Tenderer, having been notified of the acceptance of the Tender by the Purchaser during the period of the Tender validity, fails or refuses to furnish the Performance Security, in accordance with the Tender Document.

Sheikh Zayed Medical College/Hospital, Rahim Yar Khan
17.4 The Bid security shall be returned to the technically unsuccessful Tenderer with unopened/sealed financial bid while the unsuccessful bidders of financial bid opening procedure will be returned the Bid Security only. The Bid Security shall be returned to the successful Tenderer upon furnishing of the Performance Security

18. Bid Validity

18.1 Bids shall remain valid for a period of 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. Such extension shall not be for 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 Lead Bidder (in case of tender with the permission of alliance/Joint venture for the bidding of complete package i.e. more than one equipment in a single tender) 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, ensures, 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 bidder or Lead Bidder.

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. It should contain the package name and its number.

20.2 The inner and outer envelopes shall:
   a) be addressed to the Principal Sheikh Zayed Medical College/Hospital, Rahim Yar Khan (Procuring Agency) at the address given in the Invitation for Bids and
   b) bear the Institution/Hospital 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/Lead 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 under ITB Clause 19.1 not later than the time and date specified in the Invitation for Bids.

21.2 The Procuring Agency may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in accordance with ITB Clause 7, in which case all rights and obligations of the Procuring Agency and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

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 ITB Clause 21 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 ITB Clause 18.2 Withdrawal of a bid during this interval will make the bidder eligible to be debarred for further procurements for a period as deem necessary by the Procuring Agency.

The Bidding Procedure

24. Single stage - two envelopes bidding procedure

24.1 Single stage - two envelopes bidding procedure shall be applied:
   (i) The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
   (ii) The envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion;
   (iii) Initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened
   (iv) The envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of Procuring Agency without being opened.
(v) The Procuring Agency shall evaluate the technical proposal, without reference to the price and reject any proposal which do not conform to the specified requirements;
(vi) during the technical evaluation no amendments in the technical proposal shall be permitted;
(vii) The financial proposals of bids shall be opened publicly at a time, date and venue to be announced and communicated to the Bidders in advance;
(viii) After the evaluation and approval of the technical proposal the Procuring Agency shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective Bidders; and
(ix) The bid found to be the lowest evaluated bid shall be accepted.
(x) The procuring agency may adopt any other bidding procedure depending on the nature of procurement / Type of Goods / Equipment to be procured as per the methods of procurement prescribed in PPRA 2014 and its subsequent amendments, if any.

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 ITB Clause 21. However, at the opening financial proposals (the date, time and venue would be announced later on), the bid prices, discounts (if any), 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 During evaluation of the bids, the Procuring Agency may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the prices or substance of bid like indication or re-indication of make/model/brand etc. shall be sought, offered, or permitted.

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/Supplier 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 for 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 to ITB Clause 27 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 on the basis of Single items/ Complete package (As demanded in the advertised tender), which have been determined to be substantially responsive, pursuant to ITB Clause 27.

28.2 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 of similar contracts, availability of engineering staff and their capabilities, inventory of spare parts, workshop facility to provide the after sales services, 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 ITB Clause 13, 14.

28.3 All bids shall be evaluated in accordance with the evaluation criteria (ITB Clause 29) and other terms and conditions set forth in these bidding documents.
28.4 In case of procurement on CIF/CIP/C&F basis, for the purpose of comparison of bids quoted in different currencies, the price shall be converted into Pak Rupees in pursuant to ITB Clause 13. The rate of exchange shall be the selling rate, prevailing on the date of opening of Financial Bids specified in the bidding documents, as notified by the State 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, factors other than price such as previous performance, previous experience, engineering/technical capabilities, repair/calibration tool, workshop facilities, financial soundness and such other details as the Procuring Agency at its discretion, may consider appropriate shall be taken into consideration and these should be available with the bidder. The following evaluation factors/criteria will be employed out technical proposals.

29.2 Technical Evaluation Criteria

PART-I

KNOCK DOWN CRITERIA - (COMMERCIAL EVALUATION)

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Evaluation Parameters</th>
<th>M/S ABC</th>
<th>M/S XZY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Item Name/Tender</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2.</td>
<td>Original Receipt of tender</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3.</td>
<td>Affidavit from bidder (as per attached specimen)</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>4.</td>
<td>Bid Security</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>5.</td>
<td>Bid Validity</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>6.</td>
<td>Delivery Period</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

Remarks

Eligible/Not Eligible for further evaluation

PART-II KNOCK DOWN CRITERIA - (VENDOR EVALUATION)

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Evaluation Parameters</th>
<th>M/S ABC</th>
<th>M/S XZY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Exclusive Authorization / Sole Agent Certificate by the Manufacturer</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2.</td>
<td>Certificate from the Manufacturer about the after sales services through agent or itself (In-case specifically demanded in the specifications)</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3.</td>
<td>Compliance of Warranty as per tender</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>4.</td>
<td>Documentary evidence from Manufacturer that they are original manufacturer (with indication of manufacturing site &amp; location)</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>5.</td>
<td>The medical equipment offered from foreign countries of USA, Europe and Japan shall be eligible to participate and must bear FDA510K, CE(MDD) or MHLW (Ministry of Health, Labor and Welfare) standard (Any Two)</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>6.</td>
<td>The quoted model of imported product shall be available on the current official website of the manufacturer; otherwise the quoted product shall be considered obsolete/redundant and will straightaway be rejected (web link &amp; screen shot to be provided)</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>7.</td>
<td>The bid must comply with the advertised technical specifications of the quoted single item Incomplete offer will straightaway be rejected.</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

Remarks

Eligible/not Eligible for further evaluation of product

1. For evaluation of bids KNOCKED DOWN CRITERIA will be applied. The bids conforming to the specifications and pre-requisite conditions indicated in specifications and evaluation criteria will be considered for further technical evaluation.
<table>
<thead>
<tr>
<th>Sr.#</th>
<th>Parameters</th>
<th>Detail Marks</th>
<th>Max Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Particular item Business Experience (Minimum two year experience required)</td>
<td>i. 2 to 4 years</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. 5 to 7 years</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Above 7 years</td>
<td>10</td>
</tr>
<tr>
<td>II.</td>
<td>Financial soundness (Bank statement is not required, attach bank certificates)</td>
<td>i. Audited Accounts 2 years</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Tax Return (3 years)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Bank's Financial Standing Certificate (proportionate)</td>
<td>4</td>
</tr>
<tr>
<td>III</td>
<td>Product Strength Product quality certification</td>
<td>i. FDA, CE MDD, MHLW</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Any two or more above</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Pre-qualification with govt. semi govt. autonomous institutions</td>
<td>4</td>
</tr>
<tr>
<td>IV.</td>
<td>Physical/cosmetic features of the Product (The make, model, country of origin of all standard accessories to be provided with the equipment)</td>
<td>i. 90% of the specifications</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. 100% of the specifications</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Make, model, Country of origin of accessories</td>
<td>4</td>
</tr>
<tr>
<td>V.</td>
<td>Firm Certifications</td>
<td>i. Certifications (ISO: 9001:2008)</td>
<td>4</td>
</tr>
<tr>
<td>VI.</td>
<td>Technical or engineering capacity of company or firm (Bank Salary/ Account for authenticity Evidence of same to be submitted along with the list of staff)</td>
<td>i. 3 to 5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. 5 to 7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. More than 7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>02 for each DAE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>03 for each B.Sc Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>05 for each M.Sc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>07 for Ph.d</td>
<td></td>
</tr>
<tr>
<td>VII.</td>
<td>Engineering / Training on Particular Product (by Manufacturer / Factory)</td>
<td>i. 1 to 2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. 2 to 4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. 5 or more</td>
<td>6</td>
</tr>
<tr>
<td>VIII.</td>
<td>General overall experience in reference to the Product Number of references provided Private sector + Public sector</td>
<td>i. Public sector</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Private sector</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Both</td>
<td>8</td>
</tr>
<tr>
<td>IX.</td>
<td>Overall reputation in reference to the Product Affidavit on court stamp paper of minimum Rs. 100/- is required</td>
<td>i. No complaint investigated &amp; established for last 02 years</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. No complaint investigated and established in last 01 years</td>
<td>5</td>
</tr>
<tr>
<td>X.</td>
<td>Local Manufacturer / Local Agent capacity for technical services Reference to the Product Repair</td>
<td>i. Spare Part and Backup for installed Base Inventory</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Calibration tools (2) Testing Tools (2) workshop (1)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GRAND TOTAL</td>
<td>100 (min 65)</td>
</tr>
</tbody>
</table>
29.2.1 Bidders are required to submit the information in the following format along with documentary evidence as under

29.2.2 Profile of the Bidder

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Particulars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of the company</td>
</tr>
<tr>
<td>2.</td>
<td>Registered Office</td>
</tr>
<tr>
<td></td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td>Office Telephone Number</td>
</tr>
<tr>
<td></td>
<td>Fax Number</td>
</tr>
<tr>
<td>3.</td>
<td>Contact Person</td>
</tr>
<tr>
<td></td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td>Personal Telephone Number</td>
</tr>
<tr>
<td></td>
<td>Email Address</td>
</tr>
<tr>
<td>4.</td>
<td>Local office if any</td>
</tr>
<tr>
<td></td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td>Office Telephone Number</td>
</tr>
<tr>
<td></td>
<td>Fax Number</td>
</tr>
<tr>
<td>5.</td>
<td>Bid Signing Authority</td>
</tr>
<tr>
<td></td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td>Personal Telephone Number</td>
</tr>
<tr>
<td></td>
<td>Email Address</td>
</tr>
<tr>
<td></td>
<td>Please enclose Authorisation or Power of Attorney to sign and submit the Bidding</td>
</tr>
<tr>
<td>6.</td>
<td>Address for communication under the current Bidding</td>
</tr>
<tr>
<td>7.</td>
<td>Registration Details</td>
</tr>
<tr>
<td></td>
<td>NTN Registration Number</td>
</tr>
<tr>
<td></td>
<td>GST Registration Number</td>
</tr>
<tr>
<td></td>
<td>Banker's Name, Address and Account Numbers</td>
</tr>
</tbody>
</table>

### Bid Security

<table>
<thead>
<tr>
<th>#</th>
<th>Particulars</th>
<th>Please furnish details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of the Bank</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>CDR</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

29.2.3 Submission of original receipt of purchase of tender

29.3 Financial proposals would be evaluated as follows:

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) Incomplete bid shall stand rejected. All items described in the technical proposal must be priced in financial proposal. Items described in the technical proposal but not priced, shall be assumed to be included in the price of other items.

iii) Minor oversight, clerical mistakes, other minor inconsistencies that do not alter the substances of the financial bid may be corrected by the Procuring Agency. When correcting computation error in case of discrepancy between a partial amount and the total amount or between the words and figures, the formers will prevail.

iv) The bidders will quote the Price Schedules. The total price of the system will be calculated by converting the price to single currency (Pak Rs.) on the rate of date of opening of Financial Proposal; in case of import of item.

v) The lowest responsible bidder will be declared with standard accessories. The price of optional items will not be considered while establishing the lowest bid.

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. The Procuring Agency shall upon request communicate to any Bidder who submitted a bid, the grounds for its rejection of any or all bids, but it is not required to justify those grounds.

31.2 The Procuring Agency incurs no liability, solely by virtue of its invoking Clause 30.1 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.

31.4 The items contained in the tender /enclave should be bid in total and technical rejection of any item not complying with the technical specifications may lead to the rejection of complete package/Tender.
32. Re-Bidding

32.1 If the Procuring Agency rejects all bids in pursuant to ITB Clause 30, 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 of a report giving justification for acceptance or rejection of bids at least ten days prior to the award of procurement Contract.

34. Award of Contract

34.1 Acceptance of Bid and Award criteria

34.1.1 The Bidder with technically evaluated lowest financial bid, if not in conflict with any other law, rules & regulations, policy of the Government or having less Bid Security shall be awarded the Contract, within the original or extended period of bid validity for complete package / Tender.

34.1.2 The Bidder having lesser Bid Security will be rejected as non-responsive and Acceptance of Bid be awarded to next bidder being the responsive lowest bidder.

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 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 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 regulations issued by the PPRA 2014 and its subsequent amendments, if any.

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. The Procuring Agency shall issue Purchase Order on the same date of signing of Contract after ensuring the submission of Bank Security for execution of the contract by the Contractor. If the successful Bidder, after completion of all legal formalities shows inability to sign the Contract then their Bid Security/ Contract Security to the extent of proportionate percentage shall be forfeited and the firm shall be blacklisted minimum for three 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.

The contract is to be made on 04 stamp paper worth of Rs. @ 25 paisa per every one hundred rupees of the total value of the contract, under section 22(A)(B) of schedule 1 of Stamp Duty Act 1899 read with Finance Act 1995 (Act-VI of 1995) Notification No. JAW/H/HD/8-21/77 (PG) dated 1st January, 2014. Or stamp duty should be collected from the hall of contractor.

39. Performance Guarantee

39.1 On the date of signing of the Contract, the successful Bidder shall furnish the Performance Guarantee/Security in accordance with the Special Conditions of Contract, in the Performance Guarantee/Security Form. The Performance Guarantee will be 5% of the contract amount. The performance security shall be deposited in the shape of Deposit at Call only

39.2 Failure of the successful Bidder to comply with the requirement of ITB Clause 37 or ITB Clause 38.1 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/ shipped within 60 to 75 days (in case of free delivery at consignee's end/DDP) & 90 to 105 (in case CIF / C&F / CIP) days w.e.f the next date after the date of issue of Purchase Order (without penalty)/ opening of LC, and with prescribed penalty, as per following schedule of requirement:

<table>
<thead>
<tr>
<th>Mode of Penalty</th>
<th>Mode of Purchase</th>
<th>Delivery Period</th>
<th>Grace Period</th>
<th>Total Delivery Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Penalty</td>
<td>Free delivery at consignee's end/DDP</td>
<td>60 days</td>
<td>15 days</td>
<td>75 days</td>
</tr>
<tr>
<td>Without Penalty</td>
<td>CIF/C&amp;F/CIP</td>
<td>90 days</td>
<td>15 days</td>
<td>105 days</td>
</tr>
</tbody>
</table>

Note: Procuring agency may vary the delivery period according to the nature and volume of goods

40.2 However, in special cases, delivery period can be fixed shorter or longer than the above mentioned schedule of requirement as deem appropriate by the Procuring Agency.
40.3 In case of late delivery of goods beyond the periods specified in the Schedule of Requirements, penalty @ 0.1% per day of the cost not exceeding 10% of the purchase order/contract value for late delivered supply shall be imposed upon the Supplier.
40.4 In case of DDP the delivery period will be started from the date of issuance of Purchase order to the Contractor and in case of CIF it will be from the date of establishment of LC by the bank in favor of manufacturer/Beneficiary.
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.
41.3 The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint.
41.4 Merely 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.

B. 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 entered into between the Procuring Agency and the Supplier, as recorded in the Contract Form signed by the Parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
   b. "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
   c. "The Goods" means medical equipment and machinery and other items 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, Insurance, transportation of goods up to the desired destinations, commissioning, training and other such obligations of the supplier covered under the Contract.
   e. "GCC" means the General Conditions of Contract contained in this section.
   f. "SCC" means the Special Conditions of Contract.
   g. "The Procuring Agency" means the Principal Sheikh Zayed Medical College/Hospital, R.Y. Khan.
   h. "The Procuring Agency's Country" is the country named in SCC.
   i. "The Supplier" means the individual or firms or joint venture 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 and Japan; unless otherwise any other country of manufacturer is mentioned in specifications. However, country of origin of equipment could be from any geographical region of the world as per laws of Pakistan.

4. Standards
4.1 The medical equipment of USA must comply with 510(K) FDA (Food & Drug Administration) in case of Europe MDD (Medical Device Directive) and for Japan MHLW (Ministry of Health, Labour & Welfare) for specific quoted model.

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.

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 the use of the Goods or any part thereof in the country.

7. Submission of Samples
7.1 The samples shall be submitted as per detail in ITB 16.3.
8. Ensuring Storage/Installation Arrangements
8.1 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 decides by the given time frame he shall not be penalized for delay.
8.2 In case of late delivery of goods beyond the periods specified in the Schedule of Requirements, penalty @ 0.16% per day of the cost not exceeding 10% of the purchase order/contract value for late delivered supply shall be imposed upon the Supplier.

9. Inspections and Tests
9.1 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.
9.2. For the purpose of inspections and tests of equipment. The Supplier shall furnish all reasonable facilities and assistance, to the inspectors at no charge to the Procuring Agency. In the event that inspection & testing is required prior to dispatch and categorically mentioned in the LC clauses, the goods shall not be supplied unless a satisfactory inspection report has been issued in respect of those Goods by 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. The cost of such lab tests shall be borne by the Manufacturer/Supplier.
9.3 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.
9.4 Nothing in GCC Clause 9 shall in any way release the Supplier from any warranty or other obligations under this Contract.

10. Physical Examination/Inspection of Goods
10.1 The goods shall be acceptable subject to physical inspection, tests and/or in accordance with the approved sample as decided by the Procuring Agency.
10.2 The Inspection Team will be designated by the Procuring Agency which will inspect each of the equipment/goods as per contract specifications and installation protocols recommended by the manufacturers.

11. Delivery and Documents
11.1 The Supplier in accordance with the terms specified in the Schedule of Requirements shall make delivery of the goods which is maximum 90-days from the date of issuance of this contract or opening/establishment of L/C. The details of original documents to be furnished by the Supplier. Are as follows;
   a. Operational Manuals of the medical equipment.
   b. Service Manuals indicating step by step service/maintenance protocols of each of the equipment.
   c. Periodic Preventive Maintenance schedules with recommended list of parts/kit to be replaced
   d. Any other requirement by the procuring agency.

12. Insurance
12.1 The goods supplied under the Contract shall be delivered duty paid (DDP) or CIF as mentioned under which risk is transferred to the buyer after having been delivered; hence, marine and inland insurance coverage is Supplier's responsibility. The Supplier shall ensure insurance in advance in full on prevailing premium rates at the time of shipment of the Goods on the behalf of the Purchaser for which the cost is inclusive in the Contract Price.

13. Transportation
13.1 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.
13.2 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.

14. Incidental Services
14.1 The Supplier shall be required to provide all the incidental service charges and the cost of such incidental services include in total Contract price.
14.2 The Procuring Agency will not pay any extra amount against any expenditure incurred on it, as the Contract shall be construed as fixed amount Contract and includes all costs.
14.3 All Custom Duties, if any, Oecotri, Clearing Charges, transportation etc. will be borne by the Contracting firm. However, Procuring Agency will provide all necessary documents for facilitation but no amount to be given in any case except the Contracted amount.

15. Warranty
15.1 A comprehensive warranty of three (03) years for complete system will be provided free of cost including parts, Labour, unless otherwise separately mentioned in the specifications. The procuring agency may increase or decrease the span of warranty period as per their institutional requirement. The supplier will categorically mention the disposable/consumable items of the equipment good in advance along with the submitted tender, any item declaration as consumable/disposable after the submission of bid/quotations will not be submitted.
15.2 In case of high tech equipment, a comprehensive warranty of five (05) years (amounting to Rupees 10 Million or higher for single item) for complete system will be provided free of cost including parts, Labour, unless otherwise separately mentioned in the specifications.

16. Payment
16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC.
16.2 In case of imported goods to be procured on CIF basis, the payment will be made 100% via establishing the LC in favor of manufacturer at sight and receiving the shipping documents/ Bill of lading, Insurance, Inspection certificate of the manufacturer, Country of origin, compliance of International standards of quality as per INCOTERMS of latest version Contract.

16.3 In case of DDP, the payment will be made 100% after presentation of the delivery/installation/commissioning/completion/execution report of the contract and all other works described in Contract. Unless otherwise part payment, part delivery mentioned in the specifications.

17. Prices

17.1 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.

18. Contract Amendments

18.1 No variation in or modification of the terms of the Contract shall be made except in case of written amendment signed by both parties.

18.2 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.

19. Assignment

19.1 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.

20. Subcontracts

20.1 The Supplier shall not be allowed to sublet the job and award subcontracts under this Contract except the firms involved in the Joint Venture/ Consortium.

21. Delays in the Supplier’s Performance

21.1 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.

21.2 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 notified by the Parties by amendment of Contract.

22. Penalties/Liquidated Damages

22.1 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.

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

23. Termination for Default

23.1 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;

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 anything 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.

24. Force Majeure

24.1 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 mis-planning, mis-management 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

[Signature]

Sheikh Zayed Medical College/Hospital, Rashid Yar Khan.
freight reimburses. 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 of Ministry of Health, constituted 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 competent authority. 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.

25. Termination for Insolvency
25.1 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.

26. Arbitration and Resolution of Disputes
26.1 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.
26.2 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.
26.3 In case of any dispute concerning the interpretation and/or application of this Contract shall be settled through arbitration. The arbitrator will be appointed with mutual consent of both the parties. The decisions of the Arbitrator shall be final and binding on the Parties.

27. Governing Language
27.1 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.

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

29. Notices
29.1 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.
29.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

Special Conditions of Contract (SCC)

Special Conditions of Contract shall be concluded between the Procuring Agency and the successful bidder(s) as per specific requirement of the specific Product. In case where there is a conflict between the general conditions of the contract and the special conditions of contract, the special condition of contract shall prevail.

1. General:
1.1 The imported goods shall be of USA, European or Japanese Origin firms; unless otherwise any other country of manufacturer is mentioned in specifications however their delivery/ provision may vary according to geographical location of their factories.
1.2 The fee of all necessary licenses required to install and operate the equipment shall be borne by the Supplier and Procuring agency will facilitate through documents only.
1.3 The Supplier shall be deemed to have obtained all the information regarding facilities and changes, in respect of port clearance, loading and unloading, storage, transportation, congestion, Octri, licensing fee and confirmed the requirements thereof at his own responsibility and all such costs and charges are deemed to be included in the rates and prices mentioned in the Priced BOQ and the Procuring Agency will not pay any amount over this contracted amount whether in case of CIF or free delivery consignments.
1.4 For smooth functioning and management of medical and other equipment, it is mandatory for the bidders to provide sufficient technical training for high tech equipment for the biomedical engineers and allied staff from factory trained experienced engineers.

2. Insurance of Local Goods
2.1 Insurance of Local Goods and other materials from factory to Site shall include all insurance costs covering the responsibility of all losses or damages, while loading, unloading, storing, trimming on the carrier and transporting to Site up to the installation, testing & commissioning of the medical equipment.
2.2 Checking and verifying of consignments, issuance of receiving reports and damage reports (when applicable) shall be the Contractor’s responsibility.
2.3 The cost of insurance shall be quoted on the basis of insurance through National Insurance Company (NICO) of Pakistan or any other insurance company operating in Pakistan acceptable to the Procuring Agency.

3. Payment
3.1 In case of imported goods; the payment will be made 100% via establishing the LC in favor of manufacturer/beneficiary at sight and receiving shipping documents/ Bill of lading, Insurance, 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 procuring agency may define its own financial values for the establishment of LC, in case of any special requirement.
3.2 The amount of Letter of Credit shall be paid to beneficiary/Manufacturer on production of the following non- negotiable documents.
i. Draft.
ii. Three original and two copies of the Supplier's Invoice showing purchaser as Secretary, Health, Government of Punjab, Pakistan, the Contract No. Goods description, quantity, unit price and total amount. Invoice must be signed in original stamped or sealed with company stamp or seal.
iii. Four copies of packing list identifying content of each package.
iv. One original and two copies of the negotiable, clean, on board through bill of lading marked "freight prepaid" and showing purchaser as Secretary Health.
v. Copy of insurance certificate showing purchaser as the beneficiary.
vi. The original of the manufacturer's warranty certificate covering all items supplied;
vii. One original copy of the Supplier's Certificate of origin covering all items supplied.
viii. Original copy of the certificate of Pre-Shipment inspection furnished to Supplier by the purchaser representative (if specifically required by the purchaser).
ix. Test/Inspection Certificate of manufacturers.
x. Compliance Report of Internal Quality Standards.
xii. Product model, serial numbers.
xiii. Manufacturer's Guarantee Certificate to the effect that:
   a) the goods supplied by them are strictly in conformity with the specifications stipulated in the contract.
   b) the goods have been packed and marked suitable for transport by Sea, Rail, Road and Air in terms of the contract.
   c) the stores supplied by them are brand new and absolutely free from any material or manufacturing defects.
   d) Manufacturer's test certificate in respect of each consignment.

3.3 In case of DDP; the payment will be made 100% after presentation of the delivery/Installation/commissioning/completion report of the equipment and all other works described in Contract. Unless otherwise part payment, part delivery mentioned in the specifications.

4. Execution of Warranty

4.1 A Log Book for the medical equipment which needs regular after sales service (To be specified by the procuring agency in bidding document) 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.

4.2 The Warranty will start from the date of acceptance of equipment (properly installed, as per contracted specifications and handing over of related documents mentioned in GCC and will last for its warranty period at 95% uptime.

4.3 The maintenance will be the responsibility of the manufacturer / their agent. An annual optimal uptime of 95% is considered as acceptable level of performance.

4.4 Software and hardware up gradation of the computing system should be carried out as available during warranty period as recommended by the manufacturer.

4.5 Manufacturer / Supplier shall be responsible for rectifying all possible speed at their own expense any defect or fault in the system which may develop at any time during installation, commissioning period.

4.6 Manufacturer will guarantee the availability of spare parts and accessories for the system for ten years.

4.7 Uptime shall be defined as the time available to the user for doing procedures/ data acquisition and processing during working hours throughout the year.

4.8 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.

4.9 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.

<table>
<thead>
<tr>
<th></th>
<th>100% - 95%</th>
<th>No Penalty</th>
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<tbody>
<tr>
<td>b</td>
<td>95% - 90%</td>
<td>The warranty period will be extended by 2.0 times the number of days as extra down time.</td>
</tr>
<tr>
<td>c</td>
<td>90% - 80%</td>
<td>The warranty period will be extended by 3.0 times the number of days as extra down time</td>
</tr>
<tr>
<td>d</td>
<td>Below 80%</td>
<td>The warranty period will be extended by 4.0 times the number of days as extra down time</td>
</tr>
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</table>

4.10 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.

4.11 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.

4.12 Down time will start when the end user/ Staff In-charge notifies the designated service facility verbally or in writing to qualified technical staff of the firm stationed in the Hospital.

4.13 Down time will end once the repairs have been affected and the system is again available for clinical use.
4.14 The firm will provide the recommended preventive maintenance schedule of each of the equipment at the time of delivery.
4.15 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.
4.16 The scheduled preventive maintenance shall be in accordance with Service Protocol recommended/advised by the manufacturer.
4.17 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.
4.18 The manufacturer/supplier will be responsible for preventive maintenance of equipment as per manufacturers’ Service Manuals and shall keep a check on 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.

5. Packing & Marking
5.1 Packing: Usual export packing to ensure safe journey up to the site of consignee.
Marking: Each packing should be clearly marked in suitable size in bold letters as per requirement.

6. Trans-shipment
6.1 Trans-shipment is not allowed (In case of no direct flight from the shipping country to the destination, this may be reviewed by the procuring agency on case to case basis).

7. Place of delivery
7.1 Principal, Sheikh Zayed Medical College/Hospital, Rahim Yar Khan
8. List of detailed specifications are attached
8.1 The item wise detail list of specifications is attached as the part of Special Terms & Conditions.

9. Correspondence addresses

Procuring Agency

Contracting Firm

M/S
TENDER NOTICE

SHEIKH ZAYED MEDICAL COLLEGE/HOSPITAL, R.Y. KHAN

Procurement of Medical Equipment for the titled Scheme "Revamping of Emergency Department in Tertiary Care Hospitals of Punjab (Sheikh Zayed Hospital, Rahim Yar Khan)"

Sheikh Zayed Medical College/Hospital, Rahim Yar Khan invites sealed bids from firms having established credentials in terms of Technical, Financial and Managerial capabilities for the procurement of Medical Equipments amounting Rs.100.00 million estimated from Pre-Qualified Firms for the ADP Scheme "Revamping of Emergency Department in Tertiary Care Hospitals of Punjab (Sheikh Zayed Hospital, Rahim Yar Khan)" as per detail given in Tender/bidding document during financial year 2019-20 on free delivery on consignee's Rahim Yar Khan or LC basis, as the case may be.

1. Interested bidders may get the bidding document from “Engineering & Development Wing, Sheikh Zayed Medical College/Hospital, Rahim Yar Khan” during office hours immediately after the publication of this advertisement up to 12-10-2019 by 10:00 a.m. on submission of written application and a copy of CNIC along with payment of non-refundable fee of Rs. 1000/- (Ten Hundreds only) for bidding documents including detailed specification and terms & conditions.

2. Single-Stage – Two Envelops bidding procedure shall be applied. The envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters. The Financial Proposal of bids found technically non-responsive shall be returned unopened to the respective bidders.

3. Sealed bids are required to be brought in person by the authorized representative of the interested bidder on or before 12-10-2019 by 10:00 a.m positively. The bids received till the stipulated date & time shall be opened on the same day at 10:30 a.m in the presence of the bidders or their authorized representatives.

4. The bidders are required to submit the company profile including Technical, Engineering, Managerial capabilities, after-sale services and past Experience/Performance along with their Technical Bid.

5. The bidders are required to give their best and most competitive prices for the equipment.

6. The procuring agency may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.

7. The Procuring Agency shall incur no liability, solely by virtue of its invoking Clause (6) towards suppliers or contractors who have submitted bids or proposals.

8. Notice of the rejection of all bids or proposals shall be given promptly to all suppliers or contractors that submitted bids or proposals.


10. All Taxes & Duties will be charged as per Government rules (if applicable) and there will be 3% bid security of the bid price.

(Prof. Dr. Zafar Hussain Yanveer)
Principal
Sheikh Zayed Medical College/Hospital
Rahim Yar Khan

Phone No. 068-9239060 & 9230066, Fax: 068-9230066
Performance Guarantee Form

To: Principal, Sheikh Zayed Medical College/Hospital, Rahim Yar Khan

Whereas [Name of Supplier] (hereinafter called “the Supplier”) has undertaken, in pursuance of Contract No. [number] dated [date] to supply [description of goods] (hereinafter called “the Contract”).

And whereas it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a scheduled bank for the sum of 5% of the total Contract amount as a Security for compliance with the Supplier’s performance obligations in accordance with the Contract.

And whereas we have agreed to give the Supplier a Guarantee:

Therefore, we hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of [Amount of the Guarantee in Words and Figures] and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [Amount of Guarantee] as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the ______________ day of __________, 201__

Signature and Seal of the Guarantors/Bank

Address

Date

Note: 1. It should be valid for a period equal to the warranty period.
2. The contract will be signed/issued after submission of this Performance Security.
3. The firm may submit the Performance Security for the Complete Package by the Lead Contractor or individually for the respective portions of the firms in case of alliance.
(Sample)
Manufacturer's Sole Authorization Form

[See Clause 3.1 (a) of the Instruction to Bidders]
To: Principal, Sheikh Zayed Medical College, Rahim Yar Khan

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 Exclusively authorize [name and address of Supplier/ Agent] to submit a bid, and subsequently negotiate and sign the Contract with you against IFB 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. We further undertake that the [name of supplier] is a sole agent / Exclusively authorized dealer for the territory of Health Department, Government of Punjab, Pakistan.

[Signature for and on behalf of Manufacturer]

Note: 1. 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.
2. It should be included by the Biddler in its bid.
3. The standard authorization letter without the declaration of Sole Distribution / Exclusive authorization by the manufacturer will not be considered and rejected Straight away.
4. The non-exclusive authorization letter is acceptable only in the case of general Machinery, IT equipment and minor nature of medical equipment where extensive after sales services is not required. In this particular case, the procuring agency need to Specify the requirement in the advertised specifications / tender.
Contract Form

(On stamp paper worth Rs. @ 25 paisa per every one hundred rupees of the total value of the contract or the stamp duty shall be deducted from the price of contract)

THIS CONTRACT is made at on day of 2014, between the Principal, Sheikh Zayed Medical College/Hospital, Rahim Yar Khan (hereinafter referred to as the “Procuring Agency”) 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 Procuring Agency invited bids for procurement of goods, in pursuance of which tender of M/s (firm name) was found to be the lowest bidder. And Whereas the Procuring Agency has accepted the bid by the Supplier for the supply of (item name) and services in the sum of Rs. (amount in figures and words) cost per unit, the total amount of (quantity of goods) shall be Rs. (amount in figures and words) for free delivery items and/or unit price (£/€/$/¥/CHF) for the total price (£/€/$/¥/CHF) of the items of CIF portion for establishing the LC.

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 as 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 Procuring Agency’s Notification of Award;
   g. the scope of work;
   h. the Contract; and
   i. the Bid & its clarifications.
   j. the contracted specifications (attached as annexure)
   k. any undertaking provided by the firm

3. In consideration of the payments to be made by the Procuring Agency to the Supplier/ Manufacturer as hereinafter mentioned, the Supplier/Manufacturer hereby covenants with the Procuring Agency to provide the Goods and Services and to remedy defects therein in conformity with all the provisions of this Contract.

4. The Procuring Agency 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 Government of the Punjab or any administrative subdivision or agency thereof or any other entity owned or controlled by it (Government of the Punjab) through any corrupt business practice.

6. Without limiting the generality of the foregoing, [the Seller/ Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc., paid or 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 commission, 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 Government of the Punjab, 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 Government of the Punjab 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 Government of the Punjab under any law, Contract or other instrument, be voidable at the option of Government of the Punjab.

9. Notwithstanding any rights and remedies exercised by Government of the Punjab in this regard, [The Supplier] agrees to indemnify Government of the Punjab for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to Government of the Punjab in an amount equivalent to ten time 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 from Government of the Punjab.

10. In case of any dispute concerning the interpretation and/or application of this Contract shall be settled through arbitration. The decisions taken and/or award made by the 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 Procuring Agency

1. 

2. 

Note: 1. In case of all alliance, all the firms have to sign this document jointly along with Procuring Agency, as all firms will bear equal responsibility in execution of the contract.
Bid Form

Date:
Tender No:
Name of the Item:

To: Principal, Sheikh Zayed Medical College/Hospital, Rahim Yar Khan

Respected Sir

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 ___ percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring Agency.

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 a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive. Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of bidder
(if none, state “none”).

Amount and Currency

Dated this day of __________, 201_

Signature
(in the capacity of)

Duly authorized to sign bid for and on behalf of

Attachment
Price Schedule
(CIF Tender)

Name of Bidder

Tender No. and the name of the package/Tender

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Model</th>
<th>Country of Origin</th>
<th>Government Effort</th>
<th>Supplier</th>
<th>Name of Tender</th>
<th>Qtv</th>
<th>Name of Beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Total Package Cost after conversion (Rs.)

Sign and Stamp of Bidder

Note: 1. In case of discrepancy between unit price and total, the unit price shall prevail.
2. Foreign currency rate will be considered on the date of opening of Financial Bid as per selling rate announced by the National/State Bank.
Price Schedule
(DDP Tender)

Name of Bidder

Tender No. and the name of the package/Tender

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Brand/Supplier/Model</th>
<th>Make</th>
<th>Model</th>
<th>Country of Origin</th>
<th>Quantity</th>
<th>Supplier</th>
<th>Qty</th>
<th>Unit Price(Rs.)</th>
<th>Total Package Cost (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Total Package Cost (Rs.)

Sign and Stamp of Bidder

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

I/We the undersigned solemnly state that

1. I/We have read the contents of bidding documents and have fully understood it.
2. The bid being submitted by the undersigned complies with the requirements enunciated in the bidding documents.
3. The goods that we proposed to supply under this tender/contract are eligible goods within the meaning of Clause 04 of ITB
4. The undersigned are also eligible bidders within the meaning of clause 03 of ITB
5. The undersigned are solvent and competent to undertake the subject contract under the laws of Pakistan
6. The undersigned have not paid nor have agreed to pay any commission/kickbacks or gratuities to any official or agent related to this bid or award or contract
7. The undersigned are not blacklisted or facing debarment from any government/semi-government/autonomous institute, or its organization or projects
8. That the prices offered are not more than the trade price/market price or the offered prices in other public sector institution during current financial year

I/we affirm that the contents of this affidavit are correct to the best of our knowledge and belief

Sign & Stamp

In the capacity of (insert: title or position)

Duly authorized to sign this bid on behalf of (insert: name of Bidder)
## ICU VENTILATORS

**VENTILATION:**
Microprocessor controlled powerful ventilation system mounted on trolley.
LCD/TFT color touch screen 15”.
Patient Range: Pediatrics and Adult
Breathing classification: Pressure control, Volume control Pressure control with set

**Volume Breath.**
Autoclaveable reusable patient tubing circuit for paeds and adult (01 each)

**MODES OF VENTILATION:**
Volume control
Assisted CMV
Pressure control PC
Assist Pressure Control
CPAP
SIMV + Pressure support
Noninvasive ventilation
Bi-level /APRV/BIPAP Ventilation

**CONTROL:**
Set & measured parameters simultaneously.

**MEASUREMENT RANGE/SPECIFICATION:**
Inspiratory tidal volume: (5ml to 2000ml Neonatal Mode).
Respiratory frequency: 5 to 120bpm
SIMV breath frequency: 1 to 50 bpm
Inspiratory pressure: 10 to 80 cmH2O
Inspiratory flow: 80 L/Min or cmH2O.

I : E ratio : 1:4 / 4:1
PEEP: 3 to 30cm H2O
FiO2/ O2 delivery: 21 to 100%

Monitoring parameters for set and measured value simultaneously:
Total breath rate.
Oxygen concentration FIO2
Expired minute volume
Peak expiratory flow

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: Electric220 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 airway 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:
Air Compressor
External battery backup (Compatible Pure sine wave UPS) for additional battery backup of one hour for complete system functionality.

Country of Manufacturer: USA, EU, Japan

5E & 7L CARDIAC MONITOR (NON INVASIVE)

For Adults & Paeds
For monitoring patients vital signs.
Operating Features and Characteristics:
Non fade TFT, LCD color display
Electro-surgical interference suppression/protection
Defibrillator protection
Freeze and cascade facility.
Waveform tracheo speed: 25 & 50 mm/sec.
Screen size: min. 15" TFT, LCD color display.

Parameters:

ECG:
Numeric: heart rate.
Waveform: real time and freeze ECG trace
Minimum 6 waveforms

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 for adult & paed

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

PULSE OXIMETRY:
Numeric: 0-100% oxygen saturation measuring range.
Waveform-plethysmograph pulse.
Reusable sensor electrode.
| 6E & 16L | **ECG MACHINE 12 CHANNELS**
| | Twelve Channel ECG on at least 5 inches LCD display
| | Automatic Operation
| | Variable gain: 1/2, 1, 2 cm/mV
| | Thermal recorder for printing out Twelve channels simultaneously.
| | Interpretation software.
| | Recording Trace speed: 10, 25 and 50 mm/sec,
| | Muscle artifact and AC (50Hz) interference filters
| | Defibrillator protection
| | Built-in AC operation & battery backup minimum 30mins
| | Paper size: A4/210mm
| | Built-in AC interference, noise filter and baseline drift control.
| | Capability to interface with LAN/WLAN for data transfer
| | Paper Roll 50.
| **ACCESSORIES:**
| | Complete with standard accessories, including separate patient cables for Adult,
| | Pediatric & Neonatal use with re-usable electrodes. No. of Electrodes 2 sets each.
| | (Adult, Paeds, Neonates)
| | Mobile Cart (Local)
| **Country of Manufacturer:** USA, EU, Japan

| 7E & 36L | **SUCTION MACHINE (LIGHT DUTY)**
| | Reciprocating, oil free pump mechanism.
| | Heavy duty Mobile Suction Unit with twin jars (Polysulfone / Polycarbonate type)
| | of capacity up to 2 or 3 liter each. Autoclave able.
| | Aspiration rate up to 20-30 liters/minutes or more at 650-900mm.Hg
| | Vacuum continuously adjustable
| | Foot Vacuum regulator
| | Triple flow safety device
| | Change over valve
| | Suction tubing of silicone with coupling connection for each jar
| | Noise Level 45 dB or less.
| | 220V/50Hz.
| **ACCESSORIES:**
| | • 10 x bacterial filter
| | • Jars 2 extra.
| | • Original trolley with lockable wheels.
| **Country of Manufacturer:** USA, EU, Japan

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**Medical Superintendent**

**Sh. Zayed Hospital R.Y.K**

Page 3 of 27
<table>
<thead>
<tr>
<th>8E &amp; 35L</th>
<th><strong>SUCTION MACHINE (HEAVY DUTY)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reciprocating, oil free pump mechanism.</td>
</tr>
<tr>
<td></td>
<td>Heavy duty Mobile Suction Unit with twin jars (Polysulfone / Polycarbonate type) of capacity up to 4 or 5 liter each, Autoclaveable.</td>
</tr>
<tr>
<td></td>
<td>Aspiration rate up to 40-50 liters/minutes or more at 650-900mm.Hg</td>
</tr>
<tr>
<td></td>
<td>Vacuum continuously adjustable</td>
</tr>
<tr>
<td></td>
<td>Triple flow safety device</td>
</tr>
<tr>
<td></td>
<td>Change over valve</td>
</tr>
<tr>
<td></td>
<td>Suction tubing of silicone with coupling connection for each jar</td>
</tr>
<tr>
<td></td>
<td>Noise Level 45 dB or less.</td>
</tr>
<tr>
<td></td>
<td>220V/50Hz.</td>
</tr>
<tr>
<td></td>
<td><strong>ACCESSORIES:</strong></td>
</tr>
<tr>
<td></td>
<td>• 10 x bacterial filter</td>
</tr>
<tr>
<td></td>
<td>• Original trolley with lockable wheels</td>
</tr>
<tr>
<td></td>
<td><strong>Country of manufacturer:</strong> USA, EU, Japan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9E &amp; 10L</th>
<th><strong>ELECTRO SURGICAL UNITS/DIATHERMY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Microprocessor based electrosurgical unit for normal and under water cutting usages.</td>
</tr>
<tr>
<td></td>
<td>Automatic self-test function.</td>
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<tr>
<td></td>
<td>Operation in radio frequency range.</td>
</tr>
<tr>
<td></td>
<td>Controls for cutting, coagulation, spray and blends.</td>
</tr>
<tr>
<td></td>
<td>Monopolar cutting power of 300 watts. 400watt(Preferable)</td>
</tr>
<tr>
<td></td>
<td>Bipolar cutting power of 80 watts.</td>
</tr>
<tr>
<td></td>
<td>Mono polar coagulation power of 100 Watts.</td>
</tr>
<tr>
<td></td>
<td>Bipolar coagulation power of 50 Watts.</td>
</tr>
<tr>
<td></td>
<td>Spray coagulation mode.</td>
</tr>
<tr>
<td></td>
<td>Different gradations of blending of cutting and coagulation power.</td>
</tr>
<tr>
<td></td>
<td>Digital display of all controls and set values of cutting and coagulation power.</td>
</tr>
<tr>
<td></td>
<td>Audio and visual alarms.</td>
</tr>
<tr>
<td></td>
<td>220V, 50 Hz.</td>
</tr>
<tr>
<td></td>
<td><strong>ACCESSORIES:</strong></td>
</tr>
<tr>
<td></td>
<td>• Monopolar handle with cord. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Bipolar forceps with cord. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Trolley having anti-static lockable wheels. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Attachment for monopolar coagulation. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Knife electrode. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Surgical electrode, ball-shaped. Qty 2</td>
</tr>
<tr>
<td></td>
<td>• Wire loop electrode. Qty 1</td>
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<tr>
<td></td>
<td>• Needle electrode. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Ball electrode. Qty 2</td>
</tr>
<tr>
<td></td>
<td>• Bipolar coagulation forceps. Qty 1</td>
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<tr>
<td></td>
<td>• Reusable silicon patient plate. Qty 1</td>
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<tr>
<td></td>
<td>• Double paddle foot switch, explosion proof. Qty 1</td>
</tr>
<tr>
<td></td>
<td>• Trolley with lockable antistatic castors. Qty 1</td>
</tr>
<tr>
<td></td>
<td><strong>Country of Manufacturer:</strong> USA, EU, Japan</td>
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</tbody>
</table>

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<thead>
<tr>
<th>10</th>
<th><strong>DEFIBRILLATOR</strong></th>
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<tbody>
<tr>
<td></td>
<td>Biphasic transthoracic (external) defibrillator with LCD colour display</td>
</tr>
<tr>
<td></td>
<td>Synchronized output with ECG.</td>
</tr>
<tr>
<td></td>
<td>Energy selection &amp; delivery on control panel and paddles for external defibrillation. Energy selection and delivery on control panel for internal defibrillation.</td>
</tr>
<tr>
<td></td>
<td>Charging Indicator</td>
</tr>
<tr>
<td></td>
<td>The energy range should be adjustable for peads and adults up to 200Joules.</td>
</tr>
<tr>
<td></td>
<td>Charging Time for full energy should be less than 0.5 sec</td>
</tr>
<tr>
<td></td>
<td>Screen Size of approx. 5 inch colored.</td>
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<tr>
<td></td>
<td>Display of HR, ECG through paddles and Lead I,II &amp; III patient cable.</td>
</tr>
</tbody>
</table>
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, Pediatric & Neonatal sensors
Original trolley/cart
Qty of Reusable sensors 2 No.
Internal Paddle (Adult, Paed, Neonate)
Charging Time for full energy should be less than 07 sec
ETCo2 Qty 2 No.
Spo2 Qty 2 No.
Pacing pads Qty 2 No.
Country of Manufacturer: USA, EU, Japan

<table>
<thead>
<tr>
<th>11E &amp; 17L</th>
<th>Water Cooler (Loca Best Quality with installation)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Electrically operated. Capacity 60 Liter. Body made of S.S material.</td>
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<table>
<thead>
<tr>
<th>12 Water Dispenser</th>
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<tbody>
<tr>
<td>Brands: Waves, PEL, Orient, Haeir, KENWOOD,</td>
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<td>15</td>
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<table>
<thead>
<tr>
<th>13E &amp; 22L</th>
<th>LIFE LINE TROLLEY (COMPLETE)</th>
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<tbody>
<tr>
<td>Trolley structure and drawers die made advanced polymer construction.</td>
<td></td>
</tr>
<tr>
<td>Rounded corners and Microban antimicrobial product protection help maintain a cleaner cart to improve infection control.</td>
<td></td>
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<tr>
<td>Full extension drawers have self-closing ball bearing slides to provide easy access to medications and supplies.</td>
<td></td>
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<tr>
<td>Top cavity tray and 3 side bins with locking system.</td>
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<tr>
<td>Adjustable Defib tray.</td>
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<tr>
<td>One shelf for suction pump / aspirator.</td>
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<tr>
<td>Backboard with front assembly kit</td>
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<tr>
<td>Oxygen tank holder</td>
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<tr>
<td>1.V pole with cart mount</td>
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<tr>
<td>Storage / Gel bin</td>
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<tr>
<td>Plastic security seals (Pack of 100) Approximately dimens.</td>
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<tr>
<td>3&quot; (76mm) Drawer (2)</td>
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<tr>
<td>6&quot; (152mm) Drawer (1)</td>
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</tr>
<tr>
<td>9&quot; (203mm) Drawer (1)</td>
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<tr>
<td>5&quot; (127mm) polymer caster, 2 directional and 2 brake casters provide control and stability.</td>
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<tr>
<td>One lock mechanism top compartment for locking the all drawers.</td>
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<tr>
<td><strong>AED Defibrillator</strong></td>
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<tr>
<td>Biphasic transthoracic (external) defibrillator with high resolution colorful liquid crystal display (LCD) Synchronized output with ECG.</td>
<td></td>
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<tr>
<td>Control of energy charging/ delivering on main panel &amp; apex paddle.</td>
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<tr>
<td>Charging Indicators.</td>
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<tr>
<td>The energy range adjustable for paed and adults up to 360Joules.</td>
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<tr>
<td>Charging Time of 3 seconds for 200J and 5 seconds for 360J</td>
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</tr>
</tbody>
</table>

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**JAM TAHIR RASOOL**  
Bio-Medical Engineer  
SZMC/SZH Rahim Yar Khan

**Medical Superintendent**  
Sh. Zayed Hospital R.Y.K
Screen Size of approx. 5.7 inch or more colored high resolution. Display of HR, ECG through paddles and Lead I,II & III patient cable. Built in recorder for printing of full summary on standard record is made on thermal-sensitive paper of 48 mm (width) x 30 m (length) for GSI printer; 48 mm (width) x 20 m (length) or 75 mm (width) Alarms for High and low Heart rate, low battery warning. AC 220V / 50Hz operated. Built-in Rechargeable battery with charger for 150 shocks at maximum energy, 50 shocks (triggers) at 360J Auto tester External pediatric and adults Paddles, ECG cable. Complete with above parameter standard accessories AED Mod Accessories: Laryngoscope Set 1 for paed and 1 for adult. Compatible Suction machines. B.P Apparatus. Country of Manufacturer: USA, EU, Japan

15 HAND SANITIZER
Non-Alcohol based Foam Hand Sanitizer. Use without water to kill 99.99% of many common germs in 30 seconds. Should be with hygienically ultrasonically sealed cartridge

16 FOWLER BEDS WITH MATTRESS, BEDSIDE LOCKER, PATIENT ATTENDANT BENCEHS, IV STANDS

Fowler Bed with mattress
Over all dimensions: 37” W x 88” L x 21” H Approximately.
Main Frame:
Made of 16 SWG pipe 1-1/4” x 2-1/2 rectangular pipe section CO2 welded together at corners. Head and foot board with plastic corners.
Mattress Frame:
Should be in 4 parts. The 2nd part fixed and 3 moveable parts made of 1” x 1” longitudinal & ¼” cross pipes of steel square pipe of 16SWG. The end of each moveable part should be attached to the main frame by means of bolt having metal reinforced Teflon plastic Bushes.
FIXED SIZES (Approx.):
1) Head Raise part: 29” x 33”
2) Fixed Part: 7” x 33”
3) Knee Bridge Part: 11½ x 33”
4) Leg Rest part: 24½ “x 33”
Bedding area made of ABS mesh.
Head Raise & Knee Raise by means of two crank. The moving lifting pipe at both places be of 16SWG 1 - 1/2” rounded pipe across Head part with triangular brackets of 15/64” thick x 1 - 1/4” and knee bridge part with triangular bracket of 23/64” thick steel plate at ends panel. The foot part should have vascular position with a plate mechanism for moving of foot part in knee bridge position. The handle of the cranks should be retractable and collapsible and be made in one piece of ½” steel rod. Cranks main screw made of dia: ⅜” for knee steel rod with square / ACMI type of threading with safe limit mechanism. Head & Foot Part of Mattress frame have (Mattress stay) steel brackets CO2 welded for keeping the mattress in proper place. High quality head & foot panels made of ABS material. The height of head panel is greater than foot side; imported. The panels of both ends are protected by MS pipe from being damaging while moving/ pushing of the bed.
Foundation Frame:
Made of 16 SWG 1-1/4" x 2-1/2 and 1" x 2" Rectangular pipe welded together at corner. Bed should provided with I.V. Rod, S.S 5/8” dia, adjustable from (36” to 50” approx.), with 4Nos Non traumatic prongs/hooks. The provision should made to attach the IV rod on both side of the patient between mid and foot end area. Foot end should have hooks for urine bags hanging on both sides and N.G bag hook at head end of both

Bed Side Locker
Powder coated sheet steel construction. Mild steel sheet 20 SWG. Two drawers with one bottom compartment. Built-in handles for durability. Plastic top laminated with raised edges on 3 side’s .75mm twin castors rust proof waterproof, all lockable. Castors with plastic tires for noise free operation on floors. All metal parts should be welded by CO2 gas. Approx. overall size: 18” W x 15” D x 34” H (Approx).

Patient Attendant Bench
MS Pipe/ tube base structure (1”x1½”) with aluminum paint. Full Wooden Top of rose wood ¾” thick (best quality). Size of the bench is 60” x18”x15” (LxHxW) approx.

IV Stand
Base made of Mild steel Strip 1.5 width, with 2” casters. Central rod of 1” round pipe Mild steel. The height adjustable pipe made of ¾“tubular stainless steel with four prongs rod of SS 4mm for infusion bags. Heavy Base Steel construction powder coated.

17 SANG TAKEN BLACK MORE TUBE
(Life Saving Tube)
It should be made of silicone and LATEX free
No need to store in the fridge
Removable stylet and guidewire to stiffen the tube catheter and assist in insertion
Suction holes both above and below the balloons to enable drainage in the oesophagus and stomach
Oesophageal and Gastric Balloon
Should be with In-built clamps and one way valves on balloon.
Sponge included for patient comfort
Long shelf life

18 HIGH DEFINITION VIDEO GASTROSCOPE
(All the Below Mentioned Equipments Should be from the Same Manufacturer)
Compatible Imported Online Pure Sinewave UPS for up to 30 Min Backup Time for the whole System
To diagnose, Treat, Therapy of Esophageal, stomach for ulcer, gastric cancer, Biliary Diseases, Barret’sesophageal treatment for Adult & Peds Patients

TECHNICAL SPECIFICATIONS
High Definition Video Gastroscope with CCD / CMOS and advanced technological features
Field of view 140 degree
Direction of view Forward viewing
Depth of field 2 -100 mm or better.
Insertion tube diameter: 9.8 mm or less
Channel inner diameter: 2.8 mm or more
Bending Section: Up 210°, Down 90°, Right 100°, Left 100° or better
Working Length: 1030 mm or more
Observation facility for greater contrast of blood vessels and mucosa.
Accessories:
Cardiac Monitor with all Accessories.
Complete with imported Trolley System
1x Transport Case
1x ETO Cap
1x Suction valve
1x Air-Water Valve
1x Leakage tester
1x Caps for biopsy channel (10 pcs.)
1x Biopsy forceps (reusable)
1x Cleaning brush (reusable)
1x Valve brush for video endoscopes

Country of Manufacturer: USA, EU, Japan

(B) **HIGH DEFINITION VIDEO GASTROSCOPE (THERAPEUTIC)**
For the Therapeutic, cutting, treatment, resection, and usage of
electrosurgical unit and laser treatment for mucosal and
submucosal dissection and diagnosis.

**TECHNICAL SPECIFICATIONS**
High Definition Video Gastroscope (Therapeutic) with CCD / CMOS and advanced
technological features
Field of view: 140° or better
Direction of view 0° (Forward Viewing)
Depth of field 4 - 100 mm or better
Distal end diameter 11 mm or less
Insertion tube diameter 11 mm or less
Channel inner diameter 3.2 mm or more
Working Length: 1050mm or more
Angulations: Up 210°, Down 90°, Right 100°, Left 100° or better
Water Jet Function.
Observation facility for greater contrast of blood vessels and mucosa

Accessories:
Cabinet for Scope Hanging
State of the art Cabinet Storage and Drying cabinets with full traceability for the safe
storage of the equipment
Storage up to 5-10 endoscopes upto 30 days storage.
HEPA filtered air supplied to each endoscope ensures channels are dried within 3 hours
secure mounting for endoscope control and light guide plug.

Country of Manufacturer: USA, EU, Japan

(C) **HIGH DEFINITION VIDEO COLONOSCOPE (THERAPEUTIC)**
High Definition Video Colonoscope (Therapeutic) with CCD / CMOS and advanced
technological features
Direction of view: Forward viewing
Field of view 140° or better
Depth of field 2 - 100 mm
Distal end diameter 13.2 mm or less
Insertion tube diameter 12.8 mm or less
Channel inner diameter 3.7 mm or more
Working Length: 1650mm or more
Angulations: Up 180°, Down 180°, Right 160°, Left 160° or better
Water jet function.
Observation facility for greater contrast of blood vessels and mucosa
Gradual Stiffness / Graduated Decreasing Flexibility / RIT

Country of Manufacturer: USA, EU, Japan

(D) **DUODENO VIDEO SCOPE**
To diagnose and treat conditions associated with the pancreatobiliary system.

**TECHNICAL SPECIFICATIONS**
Video Duodenoscope with CCD / CMOS and advanced technological features
Field of view: 100°
Direction of view 5°-10° or better (Backward Viewing)
Depth of field: 5 - 60 mm or better
Distal end diameter: 13.7 or less
Insertion tube diameter 11.6 mm or less
Working length: 1200 mm or more
Channel inner diameter: 4.2 mm
Angulation: Up 120° Down 90° Right 105° Left 90° or better
Observation facility for greater contrast of blood vessels and mucosa.

Country of Manufacturer: USA, EU, Japan

(E) HIGH DEFINITION VIDEO SYSTEM CENTRE (HD)
It helps in vivo diagnostic ensures faster detection, easier demarcation and characterization of gastrointestinal lesions to support improved patient outcomes.
TECHNICAL SPECIFICATIONS
High Definition Video System having following features.
- HD-SDI and DVI outputs
- HD Image Quality with 1920x1080 Resolution
Programmable functions through endoscope switches
- White balance adjustment
- Automatic gain control
- Freeze screen display
- Patient data/image storage facility
- Keyboard for data handling
- Capable for visual enhancement and differentiation of vessels and Capillaries.

ACCESSORIES:
- Standard Accessories with Leakage Taster.

Country of Manufacturer: USA, EU, Japan

(F) XENON LIGHT Source 300W
Separate or built in advanced 300W Xenon light Source for Video Scopes.
- Average lamp life, Approx 500 hours
- Emergency Lamp Halogen or LED
- Brightness level adjustable
- High intensity mode
- Air pump
- Monitoring of lamp usage.

(G) WORKSTATION FOR ENDO SCOPY ROOM
Trolley based Workstation.
- Swivel arm for monitor
- Electrical wiring with sockets and isolation transformer
- Sliding Keyboard shelf / tray
- Placement provision of printer

(H) MEDICAL GRADE MONITOR 21-26” (Compatible)

21-26-inch full-color medical grade monitor
- 8 megapixel resolution at 4 x HD (3840 x 2160 pixels)
- Fully integrated tableside control
- Choose from over 200 layouts
- Should be Connect over 20 image sources

Country of Manufacturer: USA, EU, Japan

19E & 15L COLOR DOPPLER ULTRASOUND (LOW END) WITH TVS PROBE
Color Doppler with Fully Digital Beam former having 2D / M-Mode and Doppler Facilities, (PW, 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 EndocavityProbe.

1) B-MODE Specifications:
   a) Viewing Depth: 30 cm Minimum (Both in B & W and Color).
   b) Frame Rate: 500 f/sec or more
   c) Built-in cine loop with ability to vary reverse and slow motion of display; Internal

Page 9 of 27
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 Measurable 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
ImageMode 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:
For Emergency one each
- 2 – 6 MHz Multi-Frequency Convex Probe for B/M/CDI/PW.
- 5-9 MHz Multi-Frequency Linear Probe for vascular studies.
For Labour Room one each
- 2 – 6 MHz Multi-Frequency Convex Probe for B/M/CDI/PW.
- 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

[Signatures]
Doppler Spectrum Adjustment with Optimal Image Quality by using One Touch Operation.
14) Trapezoid Imaging / Virtual Convex Imaging with Linear Probe.
15) Compound / Apilpure Imaging for THI/both Frequency Compounding and Spatial Compounding in B/W and Color Mode.
16) Panoramic / SI-Escape / Logic view Imaging with Measurements.
17) Voltage: 220V – 240V, 50 – 60 HZ

Accessories:
1. Thermal Printer 256-Gray scale (Sony, Mitsubishi or equivalent)
2. UPS: on line with sine waves 2 KVA with thirty minutes back up time. (IMPORTED)
3. 50 High Density / High Glossy thermal paper Rolls
4. Gel: 20 liters

Optional: The Firms should quote the prices for the optional items separately.
7-14 MHz Multi-Frequency Linear Probe for B/M/C/DI/PW
Complete with Hardware / needle navigation with tracking system & Software Upgradeable.

Country of Manufacturer: USA, EU, Japan

<table>
<thead>
<tr>
<th>20E</th>
<th>MOBILE X-RAY UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>They are used in wards, in ICUs and at accident sites.</td>
<td></td>
</tr>
<tr>
<td>TECHNICAL SPECIFICATIONS</td>
<td></td>
</tr>
<tr>
<td>Mobile Microprocessor based X-Ray Unit.</td>
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<tr>
<td>High frequency, 30KW X-Ray Generator.</td>
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<tr>
<td>300 mA at 100 kv.</td>
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<tr>
<td>Digital display of all set parameters.</td>
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<tr>
<td>Rotating anode x-ray tube, with dual focus / Single Focus</td>
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<tr>
<td>Anode heat storage capacity of at least 107 KHU or more</td>
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<tr>
<td>Electronic timer with exposure time of 1-3 msec.</td>
<td></td>
</tr>
<tr>
<td>Automatic over-load protection device and automatic line compensation.</td>
<td></td>
</tr>
<tr>
<td>The unit should be battery supported for exposure and movement (Motorized).</td>
<td></td>
</tr>
<tr>
<td>220 V, 50 Hz.</td>
<td></td>
</tr>
<tr>
<td>Accessories:</td>
<td></td>
</tr>
<tr>
<td>Compatible Servo Motor Stabilizer for the Equipment.</td>
<td></td>
</tr>
<tr>
<td>Country of Manufacturer: USA, EU, Japan</td>
<td></td>
</tr>
</tbody>
</table>

| 24E | ELECTRO-HYDRAULIC/ELECTRO-MECHANICAL OPERATION TABLE |
| Operating Tables used to conduct the different kind of surgical interventions of patients, the dedicated tables provide all the positions required by the surgeon. |
| TECHNICAL SPECIFICATIONS |
| 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
Provision Of Sliding Table Top

**Optional: Firm should quote the prices of optional items.**

**A) HIP SPICA TABLE ATTACHMENT**

- Hip Spica Assembly Adult compatible with Orthopedic operation Table.
- Hip Spica Assembly Pediatric compatible with Orthopedic operation Table.
- Hip Spica Assembly Pediatric compatible with Orthopedic Extension

Custom version for Adult version compatible with Orthopedic Extension -
The elevated sacral rest provides added height for casting in sacrolumbar area. The Assembly includes elevated back board, elevated sacral rest, body slat, and perineal post. A pair of Siderail Locks.

**B) ORTHOPAEDIC ACCESSORIES**

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

**C) NEUROSURGERY ACCESSORIES:**

- Wilson frame complete with Patient care kit
- Can be used on any general surgical table
- Allows 360 degree unrestricted radioluency

**Country of Manufacturer:** USA, EU, Japan

**Note:** Firm have to specify that OT Table quoted is for labor room or Emergency

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td><strong>INSTRUMENT TROLLEY (SS) LOCAL</strong> Mobile, 4 leg frame made of 18/10 or 18/8 CrNi steel, Pipe 16 SWG all made of stainless steel 1” Dia. Tubular frame forms a safety rail, no sharp edges. Two shelves surface ground to reduce glare, resistant to disinfectants Instrument trolley, 800mm high, fitted above and below with frames and shelf 20 SWG made of CrNi steel size 24” x 18” to accept two sterilization tray. Four 75mm swivel castors, electrically conductive. Export Quality Subject to approval of Sample.</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td><strong>DUST BIN (SS) (Local)</strong> Best Quality Dust Bin made of Stainless Steel Approx. Size 12 L.</td>
<td>8</td>
</tr>
<tr>
<td>27</td>
<td><strong>IV STAND (Local Made)</strong> Base made of Mild steel Strip 1.5 width, with 2” casters. Central rod of 1” round pipe Mild steel. The height adjustable pipe made of ¾” tubular stainless steel with four prongs rod of SS 4mm for infusion bags. Heavy Base Steel construction powder coated.</td>
<td>20</td>
</tr>
<tr>
<td>28</td>
<td><strong>CEILING OT LIGHT</strong> <strong>TECHNICAL SPECIFICATIONS</strong> 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. Autoclavable handles. Operating Voltage 220V, 50Hz. <strong>Optional:</strong> The Firms should quote the prices for the optional items separately. (i) Integrated digital camera system: Resolution: Full HD (1,920 x 1,080 pixels) Video outputs: 2x HD-SDI or 1x HDMI/DVI-D <strong>Country of Manufacturer:</strong> USA, EU, Japan</td>
<td>1</td>
</tr>
</tbody>
</table>
| 29 | **PENDANTS (ANESTHESIA)**  
Ceiling mounted Anesthesia Pendant system should be powder coated, Hygienically smooth surface, impact and disinfectant resistant.  
Shelves – 3 or 4Pcs  
Drawer – 1 or 2 Pcs  
No. of Arms: 2  
Length of first arm: 1000mm  
Length of second arm: 800mm  
Max. Degree of rotation at each arm: 300° or better  
Max. Loading capacity: 200Kg or better  
Braking system: Electromagnetic / Electric / pneumatic brakes to control horizontal movement.  
Electrical Sockets British Standard – 16 to 20 Pcs  
LAN Data ports RJ45 for PC – 1 Pcs  
Telephone Outlets RJ11 – 1 Pcs  
Oxygen Outlet: 2 Pcs  
Medical Air 4 Bar: 2 Pcs  
Vacuum Outlet: 2 Pcs  
Nitrous Oxide Outlet: 2 Pcs  
AGSS Outlet: 1 Pcs  
I.V Pole – 1 Pc  
Basket for accessories  
**Country of Manufacturer:** USA, EU, Japan |
|---|---|
| 30 | **PENDANTS (SURGICAL)**  
Ceiling mounted Surgical Pendant system should be powder coated, hygienically smooth surface, impact and disinfectant resistant  
Shelves – 3 or 4Pcs  
Drawer – 1 or 2 Pcs  
No. of Arms: 2  
Length of first arm: 1000mm  
Length of second arm: 800mm  
Max. degree of rotation at each arm: 350° or better  
Max. loading capacity: 200Kg or better  
Braking system: Electromagnetic/electric/pneumatic brakes to control horizontal movement.  
Electrical Sockets British Standard – 16 to 20 Pcs  
LAN Data ports RJ45 for PC – 1 Pcs  
Telephone Outlets RJ11 – 1 Pcs  
Oxygen Outlet: 2 Pcs  
Medical Air 4 Bar: 2 Pcs  
Vacuum Outlet: 2 Pcs  
Nitrous Oxide Outlet: 2 Pcs  
AGSS Outlet: 1 Pcs  
I.V Pole – 1 Pc  
Basket for accessories  
**Country of Manufacturer:** USA, EU, Japan |
| 31 | **TROLLEY FOR PATIENT TRANSPORT/ PATIENT SHIFTING TROLLEY IMPORTED**  
2-3 sections Patient Shifting Trolley.  
Back section should be adjustable from 0 – 70 Degree Approx.  
Should have Trendelenburg / Revere Trendelenburg positions 15/-15 degree approx.  
Oxygen Bottle Holder  
Wire basket  
4 Bumper at all corner to protect trolley |
32 **(HIP SPICA) OT TABLE**

Hip Spica Assembly Adult compatible with Orthopedic operation Table.
Hip Spica Assembly Pediatric compatible with Orthopedic operation Table.
Hip Spica Animation Pediatric compatible with Orthopedic Extension
Custom version for Adult version compatible with Orthopedic Extension -
The elevated sacral rest provides added height for casting in sacrolumbar area. The Assembly includes elevated back board, elevated sacral rest, body slat, and perineal post. A pair of Siderail Locks.

Country of Manufacturer: USA, EU, Japan

33E **ELECTRONIC AUTOCLAVE I STU**


Complete with standard accessories and removable shelves, capable of taking both packets and containers of all standard sizes. Chamber capacity 01 STU, rectangular shape. Chamber, jacket and doors made of AISI 316 L/Ti. The system complete with built-in water saving system, automatic heat exchanger and Air detector (Optional) Two loading / unloading trolleys and one loading carts compatible with system. UPS of suitable capacity with minimum 15 minutes for Controller cum display for monitoring and controlling of parameters during power shedding provided/installed by the manufacturer.

R.O Plant (50 Gallon/Day) as a part standard specifications. (Local Made)
The firms should quote the prices of R.O Plant with the steam sterilizer.

Compatible Servo motor Stabilizer for the Equipment.
Country of Manufacturer: USA, EU, Japan

34 **MEDIUM STEAM STERILIZER 4 STU**

High pressure Steam Sterilizer each with external steam supply as primary source with integrated steam generator as backup.


Complete with standard accessories and removable shelves, capable of taking both packets and containers of all standard sizes. Chamber capacity 04 STU, rectangular shape. Chamber, jacket and doors made of AISI 316 L/Ti. The system complete with built-in water saving system, automatic heat exchanger and Air detector. Two loading / unloading trolleys and one loading carts compatible with system.

UPS of suitable capacity with minimum 15 minutes for Controller cum display for monitoring and controlling of parameters during power shedding provided/installed by the manufacturer.

R.O Plant (100 Gallon/Day) as a part standard specifications (Local made).
The firms should quote the prices of R.O Plant with the Medium steam sterilizer.
Country of Manufacturer: USA, EU, Japan

35 **REVERSE OSMOSIS SYSTEM 1000 Gallon/Day or 150L/H (Approx)**

Including Civil/Plumbing Work and Installation.

RO system should be compatible with the CSSD equipment requirement and in
accordance with the quality of the local water where it is being installed. It should have imported parts that may be locally assembled.

The reverse osmosis unit including filters, hardness stabilizing unit, activated carbon with prefilter 5um, Pre-filter 1um, DS reverse osmosis system. Capacity of 150 or higher L/h Storage tank 1,000L (for laundry and CSSD). Level control for tank, vent filter, pressure pump, ion exchanger, conductivity meter control, distribution manifold, hose set and installation material.

Total Dissolved Salts Level (TDS) of Filtered water should not be more than 15 PPM.

<table>
<thead>
<tr>
<th>36</th>
<th>CLEANING AND WASHING UNIT WITH NOZZELS (FOR TSSU)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cleaning &amp; washing unit, Approx. 2000 x 700 x 900 mm (WxDxH), consisting of Stainless Steel square meter Table Top 40-50 mm backsplash, made of Ni-chrome steel/SS sheet. 02 No's Sinks each approx. 500x500x250 mm made of stainless steel with the provision of counter top; equipped with drain valve and stand pipe and with siphon trap. Substructure cabinets with shelves. Cabinet is in chrome steel/SS design. 01/02 No's (procuring agency to specify) of integrated Spray Guns for dematerialized water/air with 08 cleaning nozzles, hose, table lead through Space to hose the 01/02 ultrasonic cleaners</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>37</th>
<th>ULTRASONIC CLEANER (FOR TSSU)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>38</th>
<th>GENERAL ANESTHESIA SURGICAL INSTRUMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Towel clips 6</td>
</tr>
<tr>
<td></td>
<td>Artery Forceps 12</td>
</tr>
<tr>
<td></td>
<td>Allis Forceps 12</td>
</tr>
<tr>
<td></td>
<td>B.P Handle 2 small &amp; 2 large</td>
</tr>
<tr>
<td></td>
<td>Plain Forceps 2</td>
</tr>
<tr>
<td></td>
<td>Tooth Forceps 2</td>
</tr>
<tr>
<td></td>
<td>Touch Forceps 2</td>
</tr>
<tr>
<td></td>
<td>Babcock Forceps 3</td>
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<tr>
<td></td>
<td>Sponge Holder 2</td>
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<tr>
<td></td>
<td>Kidney Tray 2</td>
</tr>
<tr>
<td></td>
<td>Bowl 2</td>
</tr>
<tr>
<td></td>
<td>Right Angle Retractors 2 small &amp; 2 large</td>
</tr>
<tr>
<td></td>
<td>Deavour Retractors 2 small, 2 medium &amp; 2 large</td>
</tr>
<tr>
<td></td>
<td>Morris Retractor 2</td>
</tr>
<tr>
<td></td>
<td>Self Retaining abdominal retractors 1</td>
</tr>
<tr>
<td></td>
<td>Moynihan Forceps 2</td>
</tr>
<tr>
<td></td>
<td>Shwanzey Forceps 2</td>
</tr>
<tr>
<td></td>
<td>Needle Holders 2</td>
</tr>
<tr>
<td></td>
<td>Desjordian Forceps 2</td>
</tr>
<tr>
<td></td>
<td>Meigle's Forceps 1</td>
</tr>
<tr>
<td></td>
<td>Sucker Nozzel 2</td>
</tr>
</tbody>
</table>

Subject to Approval of Sample

<table>
<thead>
<tr>
<th>39</th>
<th>ANESTHESIA WORK STATION (with Imported Trolley Mounted)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Anesthesia work station machine to administer anesthetic agents in precise control and flowmanner.</td>
</tr>
<tr>
<td></td>
<td>• The machine will equip to monitor the vital sign parameters and anesthetic agents during operation.</td>
</tr>
</tbody>
</table>

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Page 15 of 27

[Signature]

Medical Superintendent
Sh. Zayed Hospital R.Y.K
- It should stay on the theatre housing
- 3-gases O2/N2O/AIR.
- Provision of communication port for sharing and transfer of data.
- Unit shall comprise of the following components:
  - Electronically/digitally control, mixing and monitoring of anesthetic gases (O2, AIR, and N2O) both bydigits as well as virtual tubes.
  - Built-in illumination system.
  - Non-interchangeable pipeline inlets
  - Pipeline & cylinder gauges for O2, N2O and AIR
  - Central gas/electronically driven unit.
  - Pin index cylinder yokes for Oxygen & N2O (One each), as backup.
  - Pin index type cylinders will be provided with the unit (2xO2 and 2xN2O: BS standard).
  - Gas outlet and O2 flush control
  - 1 auxiliary O2 outlet (preferably electronics).
  - Two Lockable castors
  - Stainless steel/fiber work surface
  - Absorber bag support arm
  - Integrated heated breathing system.
  - Three gas electronic digital flow meters for precise control and monitoring of gases.
  - Drawer unit 5-6" high.
  - Power outlet with 3/4 socket outlets to connect the auxiliary equipment.
  - CO2 absorber 800 – 1,500 gm or better with changeable during the surgery.
  - Complete with valve for bag/ventilator, manometer, 0.5, 1.0, 1.5, 2 & 3 L breathing bags,
  - Breathing tube (adult and paed's).
  - Mounts and Y-piece.
  - Additional breathing hose and connector (adult and paed's).
  - Scavenging system passive / active type.
  - Suction system.

**ANESTHESIA VENTILATOR:**

- Anesthesia Ventilator with minimum 12” or more LCD/TFT Screen.
- The ventilator shall be capable of ventilating Neonates/pediatric patients/Adult Patients.

The ventilator shall have following features as a minimum requirement:

- Volume Preset Time Cycled Ventilator (IPPV Mode)
- Manual, spontaneous; Volume Mode (IPPV) / CMV
- Pressure Mode (PCV)
- Pressure Support (PS)
- Pressure Control (PC)
- Pressure Controlled and pressure support Modes
- Synchronized volume controlled ventilation (SIMV) with PS
- PS with apnea back up
- 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 1400ml.
- Rate or Frequency 4 to 60 bpm
- PEEP 3 to 20 cm of H2O.
- Inspiratory Pressure Limit
- Pressure and Volume (Spirometry) Loops / Curve.
- Oxygen / Electronically Driven
- 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.
- Oxygen Sensor: Paramagnetic / Galvanic / Equivalent
- Hypoxic Device.
- 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.

**MONITORING:**
- Modular Vital sign monitor.
- Size of minimum 17” touch screen or more for display of vital sign parameters of neonates, infants and adults.
- Measurement of ECG
- NIBP with re-usable single hose cuff for neonates, child and small adults
- SpO2 (Massimo Technology / Equivalent motion tolerant technology) with re-usable cable and sensors for neonates, infant, adult and small adults sizes (Qty 1.O specify).
- HR
- Temperature with nasal probe
- Respiration
- Four Channel IBP
- Anesthetic Agent monitoring (with monitor or with in the anesthesia machine)
- EtCO2 main / side stream (Complete with all sensors probes, reusable).
- Provision of communication port for sharing and transfer of data.
- 220V, 50 Hz operated.
- Battery backup of at least 60 minutes
- Online UPS with backup of 30 minutes for complete unit.

Note: Monitors must be supplied by the same manufacturer (not from the same supplier) and must be compatible with the machine and ventilator.

- The warranty of equipment will be including batteries, oxygen sensor, all kinds of filters and flow sensor.

**ACCESSORIES:**
- 2 NIBP Cuff each.
- 2 Spo2 probe.
- 2 temperature probe
- Skin Probe
- 2 ECG Leads
- Four Channel IBP leads.
- Complete with main unit with monitor and sensors including disposable head sensor/probe (Qty 50 Nos.)
- BIS Monitoring.
- Two pre calibrated Vaporizers of Isoflurane & Sevoflurane vaporizer temperature and flow compensated.
- Compatible Imported Online Pure Sinewave UPS for up to 30 Min Backup Time
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<tr>
<th>Item Description</th>
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<td>Poole suction tube dia 8mm stainless steel 2</td>
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<td>Scalpel handle # 4 S/S for blades # 20-27 2</td>
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<td>Mayo dissecting scissors straight 17 cm 2</td>
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<tr>
<td>Mayo dissecting scissors curved 14 cm 2</td>
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<td>Mayo dissecting scissors curved 17 cm 2</td>
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<tr>
<td>Metzenbaum scissors straight BL/BL 14.5cm 1</td>
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<td>Metzenbaum scissors curved BL/BL 14.5cm 1</td>
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<tr>
<td>Universal scissors TC 12cm 2</td>
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<tr>
<td>Dressing forceps standard narrow 14cm 2</td>
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<tr>
<td>Dressing forceps standard narrow 20cm 1</td>
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<td>Dressing forceps 1x2 T. 14cm 2</td>
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<tr>
<td>Dressing forceps 1x2 T. 20cm 1</td>
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<td>Halsted-Mosquito forceps straight 12cm 12</td>
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<td>Kelly haemostatic forceps straight 14cm 6</td>
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<td>Kelly haemostatic forceps curved 14cm 12</td>
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<td>Pean haemostatic forceps straight 22cm 6</td>
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<td>Backhaus towel clamp 11cm 6</td>
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<td>Deaver retractor 75mm 30cm 1</td>
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<td>Grooved director with button 14cm 2</td>
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<td>Forster sponge forceps straight serrated 25cm 8</td>
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<td>Parker retractor set consisting of # 1+2, 18cm 2</td>
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<tr>
<td>Parker-Langenbeck retractor set consisting of # 1+2, 21cm 2</td>
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<td>Deaver retractor 25mm 36cm 1</td>
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<td>Volkman retractor 22cm 4 prongs sharp 2</td>
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<td>Balfour abdominal retractor spreading 200mm, lateral blades 35+100mm, central blade 60x100mm 1</td>
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<td>Probe with eye 2mm 14 cm 1</td>
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<td>Ochsner trocar dia 4mm 14 cm 1</td>
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<td>Crile wood needle holder TC mini profile 15cm 2</td>
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<td>Deschamps ligature needle curved to left for the right hand sharp 21cm 1</td>
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<td>Deschamps ligature needle curved to right for the left hand sharp 21cm 1</td>
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<td>Allis intestinal forceps 4x5 teeth 15cm 12</td>
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<td>Thomas allis tissue forceps 20cm 4</td>
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<td>Babcock tissue forceps 16cm 4</td>
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<td>Proctoscope cold light dia 20mm length 130mm, complete 2</td>
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<td>Sterile container 1/1 safe 580x280x200 mm lid gray lid perforated 1</td>
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<td>Subject to Approval of Sample</td>
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<tr>
<td><strong>VASCULAR SET</strong></td>
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<td>POTT'S-DE MARTEL SCISSORS25DGS/S185MM 2</td>
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<td>POTT'S-DE MARTEL SCISSORS45DGS/S185MM 2</td>
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<tr>
<td>WEITLANER RETRACCTOR 2X3T.SH.105MM 1</td>
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<td>WEITLANER RETRACCTOR 3X4T.SH.130MM 1</td>
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<td>WEITLANER RETRACCTOR 3X4T.SH.165MM 1</td>
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<td>TC RYDER NEEDLE HOLDERDELSERR 195MM 1</td>
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<td>DUROGRIP NDL HLDR SERR 0.2/180MM 2</td>
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<td>FERG-FRAIZER SUCT 6FR 2/110MM WRK-LGTH 1</td>
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<td>DE'BABEY ATR.BULLDOGCLAMP STR.30/90MM 2</td>
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<td>DE'BABEY ATR.BULLDOGCLAMP STR.45/105MM 2</td>
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<td>HALSTED-MOSQUITO FORCEPS DELSTR125MM 12</td>
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<td>DEAVER RETRACCTOR FIG 1 25MM305MM 1</td>
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<td>DEAVER RETRACCTOR FIG 2 25MM 318MM 1</td>
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<td>DEAVER RETRACCTOR FIG 3 338MM305MM 1</td>
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<td>DEAVER RETRACCTOR FIG 4 50MM 311MM 1</td>
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<td>DEAVER RETRACCTOR FIG 5 75MM 324MM 1</td>
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<td>FINOCCHETTO RIB SPREADER 36X45MM BLDS 2</td>
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<td>MAYO-HEGAR NEEDLE HOLDER185MM 2</td>
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<td>MAYO-HEGAR NEEDLE HOLDER 200MM</td>
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<td>ADSON RETRACTOR 3X4 SHARP 265MM</td>
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<td>LOVE NERVE ROOT RETRACTOR 45°ANG. 220MM</td>
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<td>WATSON-CHEYNE DISSECTOR LGTH 191MM</td>
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<td>FORCEPS BAYO SMOOTH 160MM</td>
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<td>FORCEPS BAYO 1X2 160MM2</td>
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<td>HALSTED-MOSQUITO FORCEPS DEL CVD125MM</td>
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<td>FORCEPS BAYO 1X2 200MM1</td>
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<td>MICRO-SCISSORS RND-HDL STR S/S145MM</td>
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<td>VASCULAR SPATULA 3MM BLUNT 185MM2</td>
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<td>YASARGIL/LEYLA SELF-RETAINING RETR1-ARM</td>
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<tr>
<td>BRAIN SPATULA FLAT MALL 11&amp;13MM178MM</td>
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<td>BRAIN SPATULA FLAT MALL 15&amp;18MM178MM</td>
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<td>OLIVECRONA SPATULA FLAT FLEX79MM178MM</td>
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<td>OLIVECRONA BRAIN SPATULA 18 A.22MM</td>
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<td>TISSUE FORCEPS SERR CVD 140MM</td>
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Subject to Approval of Sample

(C) THORACIC SET

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<td>BURFORD RIB SPREADER 65X62X260MM</td>
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LID FOR CONTAINER ANTHRACITE 2
RETAINING ARM 1
TIGHTENING CLAMP 1
OP TABLE FIXTURE F/HOLDING ARM 1
T-RING ADAPTER F/ABDOMINAL RINGS 1
ACTIV O TRAY F/TABLE RAIL CLAMP SYSTEM 1
PACKING STENCIL 1
BOTTOM FOR CONTAINER HEIGHT:90MM 1
LID ANTHRACITE 1

Subject to Approval of Sample

(F) TRACHEOSTOMY SET
BOX 11" X 13"
LUER TRACHEOSTOMY TUBE NICKELE 24Fr 1
LUER TRACHEOSTOMY TUBE NICKELE 26Fr 1
LUER TRACHEOSTOMY TUBE NICKELE 28Fr 1
LUER TRACHEOSTOMY TUBE NICKELE 30Fr 1
LUER TRACHEOSTOMY TUBE NICKELE 34Fr 1
LUER TRACHEOSTOMY TUBE NICKELE 36Fr 1
LUER TRACHEOSTOMY TUBE NICKELE 38Fr 1
SCALPEL HANDLE NO 4 1
SCALPEL HANDLE NO 3 1
SURGICAL SCISSORS SH/BL STRAIGHT 5 X 130MM 1
METZENBAUM SCISSORS CURVED 5 X 145MM 1
LANGENBACK RETRACTOR 6 X 20MM, 215MM 1
MAINDOE SKIN HOOK 120MM 1
TROUSSEAU TRACHEAL DILATING FORCPS 1
ADSON ARTERY FORCEPS STRAIGHT 180MM 1
ADSON ARTERY FORCEPS CURVED 180MM 1
DEBAKEY NEEDLE HOLDER 180MM TC 1
DEBAKEY NEEDLE HOLDER 230MM TC 1
ALLIS TISSUE FORCEPS 2 X 3 TEETH 152MM 1
CRILE NERVE HOOK 200MM 1
SENN MULLAR RETRACTOR D/E 165MM 1
GERALD DISSECTING FORCEPS DELICATE TOOTH 7 X 180MM 1
Subject to Approval of Sample

44E & 11L Air Conditioner 4TR Inverter Cool + Heat Type

Floor Standing type inverter based unit capacity 48000 BTU/Hour.
4TR Refrigerant R-410 heat and cool.

Copper pipe with closed cell insulation with PVC tape raping 1250 RFT.
PVC duct patti fitting 1250RFT. UPBC drain pipe 2000 RFT.

Power cable 110/76, Three core PVC/PVC 1000 meter.

45 NEONATAL MONITOR

TECHNICAL SPECIFICATION
• Configured Bedside monitor for display of vital signs monitoring
• Measuring all physiological parameters of Paeds, Neonates
• Mounted on original wall mounted stands
• Monitors should be connected with central station wirelessly / wired
OPERATING FEATURES & CHARACTERISTICS
• Electro-surgical interference suppression/ protection
• Defibrillator protection
• Freeze and cascade facility
- Waveforms traces speeds 25/50mm/sec
- Screen size min 12" or more with touch screen colored
- Minimum 5-6 waveforms or more

**STANDARD PARAMETERS**
- ECG, NIBP, SpO2, 2-Temp, Respiration, Trends, Arrhythmia Analysis
- ECG: (Cable Alligator Type)
  - Numeric heart rate
  - Waveform: Six waveform minimum, real time freeze ECG trace
  - 3 and 6 lead monitoring
  - Measuring range: 15 to 250bpm
  - 5 and 10 lead each ECG cable with electrodes
  - Ability to detect Adult & Pediatric Heart rate range, QRS widths and amplitudes

**NONINVASIVE BLOOD PRESSURE (NIBP): (Paeds, Neonates Cuff)**
- Method: Oscillometric principle
- Numeric: Systolic, Diastolic and Mean Pressures
- Ability to measure Adult & Pediatric B.P
- Rising Cuff / continuous pressure display
- Selectable auto inflate interval settings

**TEMPERATURE (Rectal, Skin Probes)**
- Numeric. Temperature selectable in °C / °F
- Channels: 2 channels or more
- Ability to measure Adult & Pediatric temperature range

**PULSE OXIMETRY: (Paeds, Neonates Probes)**
- Numeric: 0-100% Oxygen saturation measuring range
- Massimo Technology/ Other patent technology with motion tolerance
- Waveform: Plethysmograph pulse with Sensor for Pediatrics & Neonates Patients

**RESPIRATION:**
- Sweep speed: 6.25, 12.5mm/sec.
- Breathe rate display and Settable Apnea Alarm.

**ARRHYTHMIA ANALYSIS:**
- Arrhythmia analysis and ST analysis with minimum 10 Arrhythmia detection

**TRENDS:**
- Trends for at least 48-96 hours with graphical and tabular representation for all parameters

**ALARMS:**
- Selectable automatic Adult and Pediatric Mode alarm limits High and low (settable)
  - on all parameters
- Visual and Audible indication of alarms

**BACKUP SUPPORT**
- Built-in Rechargeable Battery with back up of at least 1-2 hours in case of AC power failure for full parameters.
- Wall mount or trolley original from manufacturer.
- The system must be complete with all sensors, probe, cable or any other accessories required for measuring all the above selectable parameters for adult & Pediatric applications. All the accessories must be supplied by the same manufacturer

**Accessories:**
- ECG Paper Roll (05)
- 2 Channel Recorder for printing of ECG Waveforms

**Country of Manufacturer:** USA, EU, Japan

---

**Signature:**

Medical Superintendent
Sh. Zayed Hospital R.Y.K
### Computer
Desktop Model Type: Commercial Business Series Model or higher series model (known international brands only)
- Processors: 9th Generation Intel® Core™ i3-9100 (4 Cores/6MB/4T/3.6GHz to 4.2GHz/65W) or higher
- Chipset: Intel® H370 Chipset or higher
- Memory: 04 GB (1X04GB) DDR4 2666 UDIMM NECC Un buffered Memory or higher
- Networking: Integrated Realtek RTL8111HSD-CG Ethernet LAN 10/100/1000 or higher
- I/O Ports: 6 External USB: 4 x 3.1 Gen 1 (2 front/2 rear) and 2 x 2.0 (2 rear-1 SmartPower On). Two independent displays with DP and HDMI connectivity included, Combo Jack for mic & headphone
- Hard Drive: HDD 1TB 7200RPM single unit pre-installed or higher
- Optical Drive: DWDR
- LED: Same brand 18.5-inch Monitor or higher (compatible with quoted system)

#### Hardware Security
- BIOS Resilience, BIOS Recovery, and additional BIOS Controls: SafeID credential protection; Trusted Platform Module (TPM) 2.0, Self-Encrypting Storage Drives (OpaL, FIPS), or higher

#### Keyboard & Mouse
- Keyboard & Mouse should be of same brand

#### Form Factor
- MiniTowerCasing

#### Warranty
- 3 Year Channel Warranty on site

#### Operating System
- Windows 10 Professional with original Media Kit (OEM) with scratchable Windows product Keys inside the CD) or WinPro 10 SNGL OLP NL Legalization GetGenuine License (Part# FQC-09478)

Note: All quoted items should be channel products; the serial Numbers/Service TAG should be verifiable from website.

### RO Plant (6000 Gallons) including Civil Works

- RO system should be compatible with the CSSD equipment requirement and in accordance with the quality of the local water where it is being installed. It should have imported parts that may be locally assembled.
- R.O. unit assembled with USA, Europe or Japanese components; will be provided. The capacity, flow and reservoir should be as per requirement of these systems.
- The reverse osmosis unit including filters, hardness stabilizing unit, activated carbon with prefilter
- Sum Pre-filter 1µm, DS reverse osmosis system. Capacity 6000 Gallons/Day.
- Level control for tank, vent filter, pressure pump, ion exchanger, conductivity meter control, distribution manifold, hose set and installation material.
- Total Dissolved Salts Level (TDS) of Filtered water should not be more than 15 PPM

### Mobile Echocardiography Machine

- A complete dedicated digital Echocardiography unit for wide range of premium performance application of cardiovascular imaging in pediatrics and adult. Mobile trolley mounted system with built-in workstation / data management system for digital acquisition, storage and review
of complete ultrasound studies including static and dynamic clips in DICOM format, read/write.

Studies can be reviewed and output to CD / DVD/MOD. The machine must have sharp

and high quality image reproduction with heavy duty performance. It should have minimum

following specification:

DISPLAY:

High resolution 1280x1024 non interlaced, flicker free.

Display size Min. 19" LCD, TFT, tilt able and swiveable type.

OPERATING MODES:

B, 2D M-Mode, Power Doppler, HPRF, Spectral Doppler, Color Doppler, Velocity Mode, Pw,

Doppler, Duplex And Triplex Doppler, CW Doppler Steerable and ECG Gating

CONTROL PANEL:

Alphanumeric keyboard with built-in trackball.

Direct access to system functions through dedicated keys.

Indicator lights identify activated keys.

Audio volume control with bidirectional / stereo speakers and foot switch

User selectable image magnification control.

Adjustable transmit focusing control.

Total and Lateral Gran Compensation controls (6 or more).

CALIPER / MEASUREMENTS:

6 to 8 calipers for measurement per screen trace length measurements for:

Distance, angle, distance depth from skin line, area, circumferences, compound / volume,

slope, time, heart rate and acceleration.

APPLICATION:

Cardiac, Peripheral, pediatric, adult cephalic and transesophageal with all required software for measurements.

OPERATING MODES:

2D tissue, 2D angio flow, color M-Mode, tissue velocity M-mode, tissue strain imaging,

continuous wave Doppler, tissue m-mode, pulse wave Doppler, tissue velocity imaging, tissue

tracking, tissue synchronization, blood flow imaging, blood flow angio flow imaging.

DISPLAY MODES:

Live and stored display format: full size and split screen. Review image format: for still and cine, simultaneous capability B+PW, B+ CFM/TVI+PW, CW, B+ or triplex mode., B+ color split screen display. Tissue Imaging, 2D mode., M-mode, color Doppler imaging, color flow imaging, color

Doppler imaging, color angio, color m-mode, blood flow imaging, blood flow angio imaging,

tissue velocity imaging mode/CRT evaluation tool, tissue synchronization imaging mode, PW /

HPRF Doppler, CW Doppler, vascular calculations/IMT, cardiac measurements.
FRAME RATE
(machine to be quoted with Maximum available frame rate)
Min. 200fps in B-Mode and 100fps in Doppler mode.
CINE MEMORY
Min. Cine Memory for 1000 frames or 250mb min.
IMAGE VIEWING DEPTH:
20 – 280 mm or more for cardiac application
IMAGING MODES / TECHNIQUES:
Tissue harmonic Imaging, Tissue Doppler Imaging, Color Angio, Tissue Velocity Imaging
Tissue Imaging (Display real time Doppler shift information from moving tissue to better visualize and quantify myocardial function).
Strain Imaging tools: Doppler(Doppler based as well as speckle tracking base)
Quantitative strain rate imaging; An advanced quantitative technique of Tissue Doppler Velocity. Strain rate is a measure of the contractile motion of myocardium.
The software should have the capability to show contrast agent only, tissue only or contrast and tissue displays.
Vascular imaging software for carotids/IMT measurement.
STRESS ECHO:
Integrated multi stage stress echo system for advance and flexible stress echo Acquisition and measurement for LV B-Mode imaging.
Quantitative analysis for contrast during stress. examinations Used with TDI protocols.
STORAGE DEVICE
Built-in CD / DVD Drive WITH 10 DISKETTES.
SYSTEM DYNAMIC RANGE
Dynamic range minimum 160 dB or more
COMMUNICATION SOFTWARE
System should conform to DICOM 3 communication software for:
Image Storage, print, Query / Retrieve, Network Communication.
Probes:
Should be light weight, capable of multiple centre frequencies on transmit for 2D, color Doppler
PW/CW (Steerable) Imaging and to perform Harmonics.
PORTS:
Video Output
USB / RS 232
Networking
220-240VAC 50 Hz
Accessories:
STANDARD TRANSDUCERS:
Linear Probe multi frequency to cover frequency of 6.0-8.0 MHz.
Multi frequency Phased array sector probe to cover 2.0/2.5 – 4.0MHz.
Multi frequency Phased array sector probe to cover 5.0 – 8.0MHz.
CW Pencil Probe
Online UPS for 30 min. backup time for complete unit including...
Printer (Emerson, Liebert, Chloride, MGE & Riello)
Digital B/W Thermal Printer with 50 rolls of papers.
Jelly 20 L in bottles.
Optional (If any):
Digital Color Thermal Printer with 10 Packs of 100.
Multiplan TEE Transducer (3 – 6 MHz) for adults.
Multiplane TEE Transducer (4 – 6 MHz) for peads

Accessories:
Compatible Imported Online Pure Sinewave UPS for up to 30 Min Backup Time for the whole System
Country of Manufacturer: USA, EU, Japan

49 Air Curtain (Local)
Electric Air Curtains to create an invisible downward airflow barrier to keep outside air separate from temperature controlled indoor air. Reduce energy wastage and keep out pests, odours and dust at the same time.
Rated Voltage Single Phase 220V~240V
Rated Frequency 50/60 Hz (60Hz is only for Single Phase 220V)
Supply Voltage Rated Voltage ± 10%
Operating Conditions Temperature: -10~40 °C Relative humidity: below 85%
RH Storage Conditions Temperature: -10~60 °C Relative humidity: 30~85% RH
Motor Form 4-pole motor, double shafts
Fan Category: Cross-flow impeller

BIOENGINEER
Sheikh Zayed Medical College/Hospital
Yar Khan

MEDICAL SUPERINTENDENT
Sheikh Zayed Medical College/Hospital
Rahim Yar Khan

Associate Professor of Medicine
Sha. Zayed Medical College Hospital

Page 27 of 27
# Detailed Specifications of Equipments

**Required for Up-Gradation of Labour Room**

<table>
<thead>
<tr>
<th>Sr #</th>
<th>Equipment Specifications</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC (4 TR) Inverter Cool + Heat type</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Please refer to Sr. No 44 of Emergency Block</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>Electronic Autoclave 1 STU</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Please Refer to Sr. No 33 of Emergency Block</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Incubator</strong></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>- Primary Care Incubator Comprises Microprocessor controlled unit with 5 inch LCD display of set and measure temperature</td>
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</tr>
<tr>
<td></td>
<td>- Air temperature control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Temperature regulation range 28°C - 38°C +/- 1°C with uniform heat distribution over the bed surface</td>
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<tr>
<td></td>
<td>- Replaceable bacteria filter for filtration of fresh air and oxygen</td>
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<tr>
<td></td>
<td>- Bed surface 700 mm x 460 mm (approx.) with mattress</td>
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<tr>
<td></td>
<td>- Bed surface can be Trendelenburg and anti Trendelenburg</td>
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<td></td>
<td>- Highly thermo stable acrylic glass or similar material double/Triple wall with fourirris/elbow (sleeve) window and one side port</td>
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<tr>
<td></td>
<td>- Humidification of the incubator air regulate able between 40-60%</td>
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<tr>
<td></td>
<td>- Oxygen flowmeter 0-15 liter/min</td>
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<tr>
<td></td>
<td>- Noise Level: Equal or less than 45 dBA</td>
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<tr>
<td></td>
<td>- Alarm signals safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The visual and audible battery powered alarm for power failure</td>
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<tr>
<td></td>
<td>- Visual &amp; Audible alarm for temperature excess (39°C)</td>
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<tr>
<td></td>
<td>- A visual and audible alarm warns in case of fan failure</td>
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<tr>
<td></td>
<td>- Test buttons to check the individual alarms or automatic test system</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Accessories</strong></td>
<td></td>
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<tr>
<td></td>
<td>- Complete with air temperature sensor</td>
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<td></td>
<td>- IV pole</td>
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<tr>
<td></td>
<td>- Hand held pulse oximeter built in / separate</td>
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<tr>
<td></td>
<td>- Guard rail</td>
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<td></td>
<td>- Restraint straps</td>
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<tr>
<td></td>
<td>- Water nebulizer</td>
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<tr>
<td></td>
<td>- Oxygen distributor/manifold</td>
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<tr>
<td></td>
<td>- Bronchial aspirators</td>
<td></td>
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<tr>
<td></td>
<td>- Mattress</td>
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<tr>
<td></td>
<td>- Digital weighing scale to weigh baby inside the incubator</td>
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<tr>
<td></td>
<td>- Ultrasonic nebulizer &amp; Humidity Indicator</td>
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<td></td>
<td><strong>Country of Manufacturer: USA, EU, Japan</strong></td>
<td></td>
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<tr>
<td>4</td>
<td><strong>Baby Resuscitation Trolley (Fully Equipped)</strong></td>
<td>2</td>
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<tr>
<td></td>
<td>Baby resuscitation Trolley with warming system.</td>
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<tr>
<td></td>
<td>Microprocessor controlled heating system.</td>
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<tr>
<td></td>
<td>Open intensive care system for pre-mature and newborn, mobile with antistatic castor,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lockable, bumper guard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manual heat output control : 0% to 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin and Manual temp control settings.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Display range of temperature: LED / LCD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heating power / source : 500 W Quartz/Ceramic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Selection for operating modes: Skin or Manual</td>
<td></td>
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<tr>
<td></td>
<td>Pivot arm technology for heating. Head can be moved in both directions allowing</td>
<td></td>
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<tr>
<td></td>
<td>X-ray procedure without moving the baby.</td>
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</tr>
</tbody>
</table>

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**Medical Superintendent**

**Sh. Zayed Hospital R.V.K**

**Prof. Dr. Yuzhat Rashheed**

Head of Obs & Gynae Unit

L.M.C Hospital, Rahim Yar Khan
Integrated observation lamp.
Integrated baby bed 700 x 450 mm approx. with secured Plexiglas side panels, foldable down, with grid for X-ray.
Manual bed inclination.
Audio and visual alarms for Power failure, Skin Temperature deviations, High Temperature, Skin probe defective/ unplugged.
Combined O2 humidifier with venturi suction complete including flow meter and suction bottle dedicated to neonates. Corrugated tube for O2 humidifier and O2 connection hose. 1 x O2 Cylinder with fittings.
Accessories:
- Complete with O2 hood
- IV pole
- Skin probe (reusable)
- Resuscitation device for babies, breathe delivery system to deliver CPAP and PEEP
- Country of Manufacturer: USA, EU, Japan

<table>
<thead>
<tr>
<th>5</th>
<th><strong>BABY WARMER/OVER HEAD WARMER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Baby warming system.</td>
</tr>
<tr>
<td>5</td>
<td>Microprocessor controlled heating system.</td>
</tr>
<tr>
<td>5</td>
<td>Mobile with antistatic castor, lockable, bumper guard.</td>
</tr>
<tr>
<td>5</td>
<td>Manual heat output control: 0% to 100%</td>
</tr>
<tr>
<td>5</td>
<td>Skin and Manual temp control settings.</td>
</tr>
<tr>
<td>5</td>
<td>Display range of temperature: LED / LCD</td>
</tr>
<tr>
<td>5</td>
<td>Heating power/ source: 500 W Quartz/Ceramic</td>
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<td>5</td>
<td>Selection for operating modes: Skin or Manual</td>
</tr>
<tr>
<td>5</td>
<td>Pivot arm technology for heating. Head can be moved in both directions allowing Xrayprocedure without moving the baby.</td>
</tr>
<tr>
<td>5</td>
<td>Integrated observation lamp</td>
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<tr>
<td>5</td>
<td>Integrated baby bed 700 x 450 mm approx. with secured plexi glass side panels, foldable down, with grid for X-ray.</td>
</tr>
<tr>
<td>5</td>
<td>Manual bed inclination.</td>
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<tr>
<td>5</td>
<td>Audio and visual alarms for Power failure, Skin Temperature deviations, High Temperature, Skin probe defective/ unplugged.</td>
</tr>
<tr>
<td>5</td>
<td>Lockable antistatic castors</td>
</tr>
<tr>
<td>5</td>
<td>Accessories:</td>
</tr>
<tr>
<td>5</td>
<td>- IV pole,</td>
</tr>
<tr>
<td>5</td>
<td>- Skin probe (reusable)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th><strong>C SECTION SETS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3 Sponge Holders</td>
</tr>
<tr>
<td>6</td>
<td>3 Needle Holders</td>
</tr>
<tr>
<td>6</td>
<td>2 Kocher Forceps Straight</td>
</tr>
<tr>
<td>6</td>
<td>2 Kocher Forceps Curved</td>
</tr>
<tr>
<td>6</td>
<td>2 Curved Harrison Artery Forceps</td>
</tr>
<tr>
<td>6</td>
<td>5 Crile Artery Forceps Straight</td>
</tr>
<tr>
<td>6</td>
<td>5 Crile Artery Forceps Curved</td>
</tr>
<tr>
<td>6</td>
<td>2 Babcocks Forceps</td>
</tr>
<tr>
<td>6</td>
<td>5 Green Amytage Clamps</td>
</tr>
<tr>
<td>6</td>
<td>4 Allis Tissue Forceps</td>
</tr>
<tr>
<td>6</td>
<td>1 Vulsellum Uterine Forceps</td>
</tr>
<tr>
<td>6</td>
<td>1 Tenaculum Forceps</td>
</tr>
<tr>
<td>6</td>
<td>5 Backhaus Towel Clips</td>
</tr>
<tr>
<td>6</td>
<td>1 Mayo Scissors Straight</td>
</tr>
<tr>
<td>6</td>
<td>1 Mayo Scissors Curved</td>
</tr>
<tr>
<td>6</td>
<td>1 Metzenbaum Scissors Straight</td>
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<tr>
<td>6</td>
<td>1 Metzenbaum Scissors Curved</td>
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<tr>
<td>6</td>
<td>1 Suture Scissors</td>
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<tr>
<td>6</td>
<td>1 Bandage Scissors</td>
</tr>
<tr>
<td>6</td>
<td>1 Heavy Plain Dissecting Forceps</td>
</tr>
</tbody>
</table>
1. Heavy Toothed Dissecting Forceps
2. Gillis Dissecting Forceps Toothed
3. McIndoe Dissecting Forceps
4. Scalpel Blade Handle No.3
5. Scalpel Blade Handle No.4
6. Yankauer Suction Head
7. Doyen Retractor
8. Retractor
9. Farabeuf Retractor
10. Collin Speculum
11. Estetoscopio Pinard
12. Uterine Sound
13. Kidney Tray S,M,L
14. Bowl
15. Instruments Box

**7. CARDIAC MONITOR (NON INVASIVE)**

Please refer to item No. 05 of Emergency Block

**9. EXAMINATION COUCHES (Local Made)**

Made of 1-1/4” x 1-1/4” square pipe 16 SWG bended at all corners notwelded. Back rest adjustable +60 and -20 Deg, by means of liver ratchet mechanism. Bedding area ½” Lasani Wood upholstered with 2” foam 1”quality and good quality Rexene. Size 24” x 72” x 32”. Finish: All metal parts to be chemically degreased/de-rusted through phosphate treatment and covered with powder coating.

**Subject to Approval of Sample**

**10. DIATHERMY MACHINE/ELECTROSURGICAL UNITS**

Please Refer to item No.09 of Emergency

**11. CTG MACHINE**

Single, Twin or Triplet Ultrasound
Color LCD Display
Fetal monitor for Antepartum monitoring
FHR range: 50-200 bpm
Ultrasound transducer with marker and recorder for FHR
Sensitive frequency 2Mhz or less
Alarms: Low Bradycardia, High Tachycardia,
Strip chart recorder/ printer
Paper width size: 110 mm or more (The manufacturer shall ensure the availability of printing paper minimum for the next five years)
Paper/record Speed: 1,2,3 cm/min
220V/50Hz AC

**Accessories:**
- Mobile Imported Trolley
- 20 paper roles
- 20 bottles of gel

**Country of Manufacturer: USA, EU, Japan**

**12. D & C SETS**

1. PHOTOMACROGRAPHIC SCALE, 105 mm, L-shaped, plastic
2. KIDNEY DISH, medium, 250x140x40mm, stainless steel
3. SCISSORS, MAYO, 17 cm, curved
4. FORCEPS, TOWEL CLAMP, BACKAUS, 13 cm
5. FORCEPS, SPONGE, FOERSTER, 24cm, serrated jaws, straight
6. SPECULUM-RETR., KALLMORGEN, size 1 / 70x40mm, set of 2, vag.
7. SPECULUM-RETR., KALLMORGEN, size 2/ 90x40mm, set of 2, vag.
8. SPECULUM, AUWARD, 240 x 75 x 38 mm, vaginal, with weight
9. DILATATOR, UTERINE, HEGAR, double-ended, set of 8 dilatators
10. SOUND, UTERINE, SIMS, 32 cm, rigid
11. FORCEPS, SEIZING, POZZI, 25 cm, tenaculum, straight
12. FORCEPS, SEIZING, KELLY, OVARY, 32 cm, 18 mm jaws, curved
13. CURETTE, UTERINE, RECAMIÉR, 8 mm wide, rigid, sharp
### 13 DELIVERY SETS

2 CUSCO Vaginal Specula 85 x 32 mm
1 Episiotomy Scissors, 200 mm
1 Uterine Curette, malleable, 280 mm, sharp, jaw Ø 10 mm
2 Tissue Forceps, 125 mm
1 Tissue Forceps, 200 mm
2 Dissecting Forceps, 125 mm
1 Dissecting Forceps, 200 mm
4 ALLIS Tissue Forceps, 5 x 6 teeth, 160 mm
6 Towel Forceps, Backhaus, 140 mm
4 Towel Forceps, Backhaus, 110 mm
2 Surgical Scissors, 140 mm, blunt, straight
1 Surgical Scissors, 140 mm, blunt/blunt, curved
1 Needleholder, HEGAR, 180 mm, without groove
1 Needleholder, HEGAR, 180 mm, with groove
1 Dressing Forceps, curved, 250 mm, smooth
1 Dressing Forceps, straight, 250 mm
1 Scalpel Handle No. 3
1 Scalpel Handle No. 7
1 Sim’s speculum small
1 Sim’s speculum medium
1 Sim’s speculum large

Subject to Approval of Sample (Local Made)

### 15 Color Doppler USG

Please refer to item No. 19 of Emergency Block

### 16 ECG MACHINE (12 CHANNEL)

Please refer to item No. 06

### 17 Electric Water Cooler

Please refer to item No. 11 of Emergency Block

### 18 FOWLER BEDS WITH MATTRESS, BED SIDE LOCKERS, PATIENT ATTENDANT AND IV STAND

**Fowler Bed with mattress**

Over all dimensions: 37” W x 88” L x 21” H Approximately.

Main Frame:

Made of 16 SWG pipe 1-1/4” x 2-1/2 rectangular pipe section CO2 welded together at corners. Head and foot board with plastic corners.

Mattress Frame:

Should be in 4 parts. The 2nd part fixed and 3 moveable parts made of 1” x1” longitudinal & ¼” cross pipes of steel square pipe of 16SWG. The end of each moveable part should be attached to the main frame by means of bolthaving metal reinforced Teflon plastic Bushes.

**FIXED SIZES (Approx.):**

1) Head Raise part: 29” x 33”
2) Fixed Part: 7” x 33”
3) Knee Bridge Part: 11½ x 33”
4) Leg Rest part: 24½ “x 33”

Bedding area made of Strips (3 inch) of Mild Steel with internal distance of 3 inch. Head Raise & Knee Raise by means of two crank. The moving lifting pipe at both places
be of 16SWG 1 - 1/2" rounded pipe across Head part with triangular brackets of 15/64" thick x 1 - 1/4" and knee bridge part with triangular bracket of 23/64" thick steel plate at ends panel. The footpart should have vascular position with a plate mechanism for moving of footpart in knee bridge position. The handle of the cranks should be retractable and collapsible and be made in one piece of 1/2" steel rod. Cranks main screw made of dia: 3/4" for knee steel rod with square / ACMI type of threading with safe limit mechanism. Head & Foot Part of Mattress frame have (Mattressstay) steel brackets CO2 welded for keeping the mattress in proper place. High quality head & foot panels made of Mild Steel material. The height of head panel is greater than foot side; imported. The panels of both ends are protected by MS pipe from being damaging while moving/ pushing of the bed.

Foundation Frame:
Made of 16 SWG 1-1/4" x 2-1/2 and 1" x 2" Rectangular pipe welded together at corner. Bed should be provided with I.V. Rod, S.S 5/8" dia. adjustable from (36" to 50" approx.), with 4 Nos Non traumatic prongs/hooks. The provision should be made to attach the IV rod on both side of the patient between mid and foot end area. Foot end should have hooks for urine bags hanging on both sides and N.G bag hook at head end of both

Bed Side Locker
Powder coated sheet steel construction. Mild sheet steel 20 SWG. Twodrawers with one bottom compartment. Built in handles for durability. Plastic top laminated with raised edges on 3 side's .75mm twin castors rustproof waterproof, all lockable. Castors with plastic tires for noise free operation on floors. All metal parts should be welded by CO2 gas. Approx. overall size: 18" W x 15" D x 34" H (Approx).

Patient Attendant Bench
MS Pipe/ tube base structure (1" x 1 1/2") with aluminum paint. Bench Top made of Mild Steel Strips of 3 inch width Guage 18 (best quality). Size of the bench is 60" x 18" x 15" (LxHxW) approx.

IV Stand
Base made of Mild steel Strip 1.5 width, with 2" casters. Central rod of 1" round pipe Mild steel. The height adjustable pipe made of 3/4" tubular stainless steel with four prongs. Rod of SS 4mm for infusion bags. Heavy Base Steel construction powder coated.

Subject to Approval of Sample

<table>
<thead>
<tr>
<th>19</th>
<th>HYSTERECTOMY SETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x Foerster Sponge Forceps Straight 9-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>6 x Allis Tissue Forceps 5x6 Teeth 9-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>2 x Mixer Rt Angle Forceps</td>
<td></td>
</tr>
<tr>
<td>2 x Schmidt Curved Hemostat</td>
<td></td>
</tr>
<tr>
<td>2 x Heaney Needle Holders</td>
<td></td>
</tr>
<tr>
<td>6 x Heaney Clamps</td>
<td></td>
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<tr>
<td>2 x Heaney-Ballentine Clamps Str</td>
<td></td>
</tr>
<tr>
<td>1 x Heaney-Ballentine Clamps Curved</td>
<td></td>
</tr>
<tr>
<td>8 x Rochester-Ochsner Forceps Straight 8&quot;</td>
<td></td>
</tr>
<tr>
<td>4 x Rochester-Ochsner Forceps Curved 8&quot;</td>
<td></td>
</tr>
<tr>
<td>1 x Mayo Dissecting Scissors Curved 6-3/4&quot;</td>
<td></td>
</tr>
<tr>
<td>1 x Metzenbaum Scissors Curved</td>
<td></td>
</tr>
<tr>
<td>1 x Russian Tissue Forceps</td>
<td></td>
</tr>
<tr>
<td>1 x DeBukey Tissue Forceps</td>
<td></td>
</tr>
<tr>
<td>1 x Scalpel Handle 3/4</td>
<td></td>
</tr>
<tr>
<td>1 x Deaver Retractor 1&quot; x 9&quot;</td>
<td></td>
</tr>
<tr>
<td>1 x Deaver Retractor 1&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>1 x Deaver Retractor 1-1/2&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>1 x Abdominal retractors</td>
<td></td>
</tr>
</tbody>
</table>

Subject to Approval of Sample (Local Made)

<table>
<thead>
<tr>
<th>20</th>
<th>IV STAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base made of Mild steel Strip 1.5 width, with 2&quot; casters. Central rod of 1&quot; round pipe Mild steel. The height adjustable pipe made of 3/4&quot; tubular stainless steel with four prongs. Rod of SS 4mm for infusion bags. Heavy Base Steel construction powder coated.</td>
<td></td>
</tr>
</tbody>
</table>

Subject to Approval of Sample (Local Made)
**LAPAROTOMY SETS**

- 1-T/C (TUNGSTEN CARBIDE INSERTS) MAYO SCISSORS 6.75" STRAIGHT
- 1-T/C (TUNGSTEN CARBIDE INSERTS) MAYO SCISSORS 6.75" CURVED
- 1-T/C (TUNGSTEN CARBIDE INSERTS) METZENBAUM SCISSORS 7.00" CURVED
- 1-T/C (TUNGSTEN CARBIDE INSERTS) METZENBAUM SCISSORS 9.00" CURVED
- 1-T/C (TUNGSTEN CARBIDE INSERTS) METZENBAUM SCISSORS 9.00" STRAIGHT
- 1-T/C (TUNGSTEN CARBIDE INSERTS) MAYO HEGAR NEEDLE HOLDER 6.00"
- 1-T/C (TUNGSTEN CARBIDE INSERTS) MAYO HEGAR NEEDLE HOLDER 7.00"
- 1-T/C (TUNGSTEN CARBIDE INSERTS) MAYO HEGAR NEEDLE HOLDER 8.00"
- 1-T/C (TUNGSTEN CARBIDE INSERTS) MAYO HEGAR NEEDLE HOLDER 10.50"
- 1-YANKAUER SUCTION TUBE
- 2-SCALPEL (KNIFE) HANDLE # 3
- 2-SCALPEL (KNIFE) HANDLE # 4
- 1-SCALPEL (KNIFE) HANDLE # 7
- 1-OPERATING SCISSORS 5.50" STR SHARP/BLUNT
- 1-THUMB DRESSING FORCEPS 5.50"
- 1-TISSUE FORCEPS 5.50" 1X2 TEETH
- 1-ADSON DRESSING FORCEPS 4.75" SERRATED
- 1-ADSON TISSUE FORCEPS 4.75" 1X2 TEETH
- 1-RUSSIAN TISSUE FORCEPS 8.00"
- 1-DRESSING FORCEPS 7.00"
- 1-TISSUE FORCEPS 7.00" 1X2 TEETH
- 6-HALSTED MOSQUITO FORCEPS 5.00" STRAIGHT
- 6-HALSTED MOSQUITO FORCEPS 5.00" CURVED
- 6-ROCHESTER-PENN FORCEPS 6.25" CURVED
- 2-ROCHESTER PENN FORCEPS 8.00" CURVED
- 4-ROCHESTER OCHSNER FORCEPS 6.25" STR 1X2 TEETH
- 1-MIXTER FORCEPS 7.25" FULLY CURVED
- 1-MIXTER FORCEPS 9.00"
- 1-BABY MIXTER FORCEPS 5.25" FULLY CURVED
- 8-BACKHAUS TOWEL CLAMP 5.25"
- 1-FOERSTER SPONG FORCEPS 9.50" STR SERRATED
- 1-POOL SUCTION TUBE
- 1-U.S ARMY RETRACTOR SET OF 2 PCS.
- 1-RIBBON RETRACTOR 3/4" X 13"
- 1-DEAVER RETRACTOR 1" X 12"
- 1-DEAVER RETRACTOR 2" X 12"
- 1-RICHARDSON RETRACTOR SMALL
- 1-RICHARDSON RETRACTOR LARGE
- 1-KELLY RETRACTOR
- 2-LAHEY GALL DUCT FORCEPS 7.50"
- 2-ALLIS TISSUE FORCEPS 6.00" 4X5 TEETH
- 2-ALLIS TISSUE FORCEPS 10.00"
- 2-BAHCOCK TISSUE FORCEPS 6.25"
- 2-BAHCOCK TISSUE FORCEPS 9.25"
- 2-DeBAKEY TISSUE FORCEPS 8.00"

Subject to Approval of Sample (Local Made)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>LIFE LINE TROLLEY (COMPLETE)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Please refer to the item No. 13 Emergency Block</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>MEDICINE FRIDGE</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Capacity 18 Cubic Feet, Operation Free from chlorofluorocarbons (CFCs)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>MEDICINE TROLLEYS</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Frame and carcass shall be constructed from mild steel powder coated/ Polymer</td>
<td></td>
</tr>
</tbody>
</table>

Medical Superintendent
Sh. Zayed Hospital R.Y.K.

Page 6 of 11
Mounted on approx 125mm coaster.
The approximate internal dimensions of the medicine container shall be 80 w x 50 d x 30 h cm.
The hinged lid of the unit shall slope down to the front.
Lockable with heavy duty dead lock.
Shall be fitted with the following accessories:
4 tier rack for holding medications.
Ampoule holding rack.
Side mounted fold down writing flap.
Different compartments for medicine with labeling.
Lower shelf mounted under medicine container.
Unit should be supplied with a security clamp for wall fixing at the appropriate location,
thus ensuring that the trolley is secure when not in use.
Local Made Subject to Approval of Sample.

25 **MVA (DOUBLE VALVE)**
It Should be Made from medical grade polypropylene
Kit Contains MTP Syringe, Karman Cannula, lubricating oil
The MTP Syringe with high vacuum suction during abortion procedure
With Smooth cannula with rounded tip and smooth eyes for atraumatic cannulation
Subject to Approval of Sample

26 **OPERATING LAPAROSCOPE (ADULT)**
Imaging System should have backward and forward compatibility and modularity for futures upgrade and with latest image enhancement mode for better image quality and identification of the land marks and pathology for better outcomes of the surgery.
Laparoscope and all allied components of these specifications shall be providing with full HD, minimum of 1920 x 1080 pixels with the method of progressive scanning.

**Telescope**
Diameter 10mm 0° (working length 290 – 310mm).
10mm straight 30° (working length 290 – 310mm).
5mm straight forward 0°.
5mm forward oblique 30°.
Camera full HD with 3CCD
Camera control unit and video camera head, pal system.
Resolution 1920 x 1080 pixel progressive scan
Power supply 100 – 240 VAC, 50Hz
Automatic white balance
Powerful video signal processing
Image enhancement modes
Picture in picture mode control via camera head button / monitor
Control of peripheral i.e light source, recording system parameter via camera head button.
Still image capturing in full HD quality (JPEG) format via camera head button.
Video capturing in full HD quality (MPEG 4 format) via camera head button.
5 individual preset or better.
3 patient data backup or better
Max. resolution 1920 x 1080 pixel, progressive scan.
Video output through processing unit / monitor.
Composite signal to BNC socket
S-Video signal to 4 pin, mini DIN socket (2x)
RGB Signal to D-sub socket
DVI signal to DVI socket (Only with DVI module)
SDI signal to BNC socket (Only with SDI module) (2x)
HDTV signal to DVI D-socket

**Monitor**
Medical Grade Full HD LED, 26” from the same principal.
Trolley
From the same principal
| Light source  
| LED type working hours 25K or more  
| Light guide cable internal bundle diameter 4mm or more  
| Length 200 – 300 cm  
| Electronic CO2 Insufflator  
| 40 – 50 liter / min, complete in all respect with all standard accessories  
| Suction Irrigation System  
| Suction irrigation system complete in respect with all standard accessories  
| Recording System  
| Integrated / separate medical grade video recorder with storage capacity of 500GB or more.  

**Accessories**

- Clip Applicator
- Trocar with trocar sleeve 10mm Approx
- Trocar with trocar sleeve 5mm Approx
- High flow verses needle
- Reducing sleeve
- Imported Online 2KVA UPS with 30minutes backup to be provided locally
- CO2 Cylinder 240 CFT with complete accessories (duly attested by the authorized agency)
- Imported storage boxes for optics & instruments
- Imported disinfection boxes
- Standard cleaning set as per manufacturer recommendation for cleaning of tubular shafts and other instruments.
- Diathermy lead autoclave able
- Bipolar forceps and lead

**Note:**
The minor variation in sizes and types of the instrument would be acceptable. The size of instruments is approximate. The mentioned shape and style of instruments is for reference and may be quoted their equivalent.

**Optional:** Firms should quote the prices for optional items separately.

Peads mode availability low flow insufflator vessel enhancement mode.

**Infrared Light Source, 4K Monitor**

**27 CEILING OT LIGHT**

- 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 4000⁰-5000⁰ 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:** The firm should quote the price of optional items separately

- 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.
  - Country of Manufacturer: USA, EU, Japan

**28 MOBILE OPERATION LIGHT**

- Mobile LED emergency shadow less operation theater light.
- Hermetically dust proof LED head.
- Luminance at 1m distance 130,000 lux or above.
- Color temperature 4000⁰-5000⁰ degree kelvin or better.
Light field diameter between 15 – 30 cm or better (required lux should be available within max. light field area).
- Color rendering index 94 or more.
- LED life 50,000 hours or more.
- Temp. rise in surgical surface <2°C
- 220 V / 50 Hz 1 phase.
- Built-in rechargeable battery backup for at least 2 hours.
- Autoclaveable handles.
- Country of Manufacturer: USA, EU, Japan

29 **HYDRAULIC OPERATION TABLE (Labour Room)**

Manually Operated.
- Weight bearing capacity of 200kg or more
- 4-5 Sectional Operation Table with Single Leg Section
- Table top equipped with radioolucent material.
- The mattress covers with washable, antistatic material.
- X-ray Cassette holder for X-Ray and C-Arm facility
- Height adjustment: 750 to 1000 mm or more.
- Trendelenburg/Reverse Trendelenburg: 25°/-25° or better.
- 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.

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

**Note:** Firm have to specify that OT Table quoted is for labor room or Emergency

30 **OUTLET FORCEPS**

Very good quality steel and rust free.
- Abrasion resistance
- Longer service life
- Easy to operate

34 **DESKTOP FETAL HEART RATE DETECTOR (Sonic Aid)**

Desktop type
- LCD display with visualization of at least fetal heart rate.
- Ultrasound working frequency in the range 2MHz or more
- High sensitivity equipment compatible probe: 2 MHz or more
- Heart rate measurement range not smaller than 50-210 bpm
- Audio output reproduction of the fetal heart rate with integrated speaker and headphones.
- Integrated Audio volume control system
- Battery backup for 2hrs or more.

**Accessories:**
- 10 bottles of gel for patient application.
- Local trolley with lockable casters

35 **SUCTION MACHINE (HEAVY DUTY)**

- Please refer to Emergency Item No.7 of Emergency Revamping Tender

36 **SUCTION MACHINE (LIGHT DUTY)**

- Please refer to Emergency Item No.8 of Emergency Revamping Tender

37 **VACUUM DELIVERY SETS (Local Made)**

2
VACUUM EXTRACTOR

Oil free, noise free and vibration free suction unit
Noise level of maximum 45 db.
Aspiration rate of 30 liter per min at 0-640 mmHg
Vacuum continuously adjustable
Vacuum meter in mmHg or KPa and regulator on/off switch
Triple flow safety device
Change over valve
(2) suction bottle, autoclave able 2 liters each (polysulfone / Polycarbonate).
(2) suction tubing of silicone tubing with coupling connection

Accessories
- 10X bacterial filter
- Imported Trolley
- Foot vacuum regulator
- Autoclave able silicon cups of following size. 50 mm, 60 mm and 70 mm
  (4 Set)

Country of Manufacturer: USA, EU, Japan

MEDICAL GAS PIPELINE SYSTEM

GENERAL:

This is the requirement for design, installation, function, performance, documentation, testing and commissioning of pipeline system for compressed medical gases, gases for driving surgical tools and vacuum from pipeline system. It will include requirements for supply systems, pipeline distribution systems of medical gases from VIE Tank to different Wards of Hospital.

These below mentioned specs are as per PVMS approved by Specialized Healthcare and Medical Education Department.

APPLIABLE STANDARDS / CONFIGURATION:

The Medical gas Pipe line should strictly comply with the international standards and configuration for requirements of HTM 2022, however, ISO 7396-1 can be used. It would be the choice of the bidder for adherence to any standard which would be mentioned in the bid. The objectives are to ensure the following:-

a) Continuous supply of gases
b) Required flow rates in particular areas/outlet;
c) Use of suitable material;
d) Cleanliness of components;
e) Correct installation;
f) Correct marking of pipeline system.
g) Following of testing commissioning protocols;
h) Maintaining the purity of the gases delivered by the pipeline system;

The firm will follow the specifications mentioned below and if found contradiction between specifications and design standard then the design standard would prevail (only if the quantities mentioned are
MUST NOT BE LESS: otherwise adjustment will be made).

MUTIPLE ZONE VALVE BOXES:

Multiple zone valve box for Oxygen gas. Each wall type zone valve box shall consist of the following Components. A steel valve box which can house two to six shutoff ball valves. Pressure gauges to display the pressure of various gases.

- Area Valve Box for 2 gases. 01 Nos.
- Area Valve Box for 4 gases. 01 Nos.

Note: It will be preferable to have multiple zone valve box with microprocessor controlled alarm system in one assembly box.

COPPER PIPING

Supply and installation of seamless medical graded copper pipe, deoxidized and degreased of various sizes / diameter as per design standard of the bidder with matching colour indications. The sizes will vary as per design offered by the firm.

Copper Pipe Size:
Size 28 mm
Size 22 mm.
Size 12 mm.

HANDLE VALVES:
Stainless Steel/Brass complete with fittings
Size 28 mm.
Size 22 mm.
Size 12 mm.

If Required: Size 2" Gi/PPR Pipe to cover the Copper pipe laying in earth/Trench.

Note: Participating firms have to quote unit rate in ft, length will be purchased as per actual requirement at the time of installation.

WALL MOUNTED GAS OUTLETS (BS STANDARD)
Gas outlets, complete in Box/casing gas Specific, Self-sealing valve, indexed to eliminate interchangeability / erroneous tapping of gas, with parking position Filter and cover plate as per Standard Design Requirements of the bidder with following color-coding:

- Oxygen White 01 Nos.
- Compressed Air Black 01 Nos.
- Nitrous oxide 01 Nos.
- Vacuum 01 Nos.

Participating firms have to quote unit rate of each gas outlets. No. Of Outlet points will be purchased as per requirement.

Gas outlets, complete in Box/casing gas Specific, Self-sealing valve, indexed to eliminate interchangeability / erroneous tapping of gas, with parking position

Note: The Financial Evaluation will be considered on the prices of Copper Pipe.

BIOMEDICAL ENGINEER
Sheikh Zayed Medical College/Hospital
Yar Khan

MEDICAL SUPERINTENDENT
Sheikh Zayed Medical College/Hospital/Rahim
Rahim Yar Khan

Prof. Dr. Nuzhat Rasheed
Head of Obs & Gynae Unit-II
S.Z.M.C.Hospital, Rahim Yar Khan
**Important Note:**
Firms participating in medical gas pipe line system should quote the prices of Medical Air Compressor, Air Dryer, Filtration System, Reducing Panel and Control Panel Separately.

The financial evaluation will be considered for overall lowest rate for the following system.

All the system must be of USA, Eu, Japan manufacturer.

**MEDICAL AIR COMPRESSOR**

Reciprocating type.  
Capacity of air producing approximately minimum of each compressor 1000 L/min at 10 bar.  
Mounted on anti-vibration base.  
The other capacities of medical air compressor System are 1000 L/min per medical compressor.

**AIR DRYER SYSTEM**

Desiccant type.  
Dew Point range between -40 to -80oC  
Dew point monitoring on LCD Panel  
Capacity suitable according to the compressor output.  
Including oil water separator.

**FILTRATION SYSTEM**

Clean Medical Grade Air supply in accordance with the requirements of HTM/ISO standards.  
Consisting of Pre-filter / humidity, Oil free and sterile/bacteria filter.  
Mounted with shut-off valves on an assembly panel.  
Parallel Connections of the filters. This will make it possible to exchange filter without interrupting the air supply.  

**REDUCER PANEL COMPRESSED AIR**

Parallel switched reducer with gauge, safety valve, pressure switch for high and low Pressure and shut off valve with assembly panel size 4+ 7 bar.  
Complete with distribution block according to requirement, Incl. Shut off valve and pressure gauge for every distribution block, complete assemble panel with incoming and outgoing copper pipe for complete system.

**CONTROL**

Complete with 1x main warning system for compressed air for visual and acoustic monitoring of alarms conditions for the compressor room.  
Test point in the system for air quality.  
1x switch cabinet for automatic Unit incl. All necessary fitting and installation material for smooth running of the system without any interruption.

**POWER:**

Power Supply- 3 Phase, 380 – 400V/50 Hz.

---

[Signature]

Biomedical Engineer  
SE/IC/SH Rahim Yar Khan