



REPUBLIC OF KENYA



**MINISTRY OF HEALTH
STATE DEPARTMENT FOR MEDICAL SERVICES**

**PROCUREMENT OF: SUPPLY, DELIVERY, INSTALLATION, COMMISSIONING,
TESTING AND ON USE TRAINING OF BIOMEDICAL EQUIPMENT**

OCBI/LCB No: MOH/SDMS/EACE/OCBI/001/2025-2026
**Project: EAST AFRICA'S CENTERS OF EXCELLENCE FOR SKILLS AND
TERTIARY EDUCATION IN BIOMEDICAL SCIENCES**
Purchaser: MINISTRY OF HEALTH
Country: KENYA
Issued on: 12th JUNE 2026

Standard Bidding Document

SBD for Procurement of Goods (One-Envelope Bidding Process)

Part 1 - Bidding Procedures

Section I - Instructions to Bidders (ITB)

This Section provides information to help Bidders prepare their Bids. It is based on a one-envelope Bidding process. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts. **Section I contains provisions that are to be used without modification.**

Section II - Bid Data Sheet (BDS)

This Section includes provisions that are specific to each procurement and that supplement Section I, Instructions to Bidders.

Section III - Evaluation and Qualification Criteria

This Section specifies the criteria for evaluation of Bids and qualification of Bidders to perform the contract to determine the successful Bidder or Bidders that are substantially responsive to the bidding document and whose Bid (s) offer the lowest evaluated cost to the Purchaser. Only such criteria will be specified as determined appropriate for each procurement.

Section IV - Bidding Forms

This Section includes the forms for the Bid submission, Price Schedules, Bid Security, and the Manufacturer's Authorization to be completed and submitted by the Bidder as part of its Bid.

Section V - Eligible Countries

This Section contains information regarding eligible countries.

Section VI - Fraud and Corruption

This section includes the fraud and corruption provisions which apply to this Bidding process.

Part 2 - Supply Requirements

Section VII - Schedule of Requirements

This Section includes the List of Goods and Related Services, the Delivery and Completion Schedules, the Technical Specifications and the Drawings that describe the Goods and Related Services to be procured.

Part 3 - Conditions of Contract and Contract Forms**Section VIII - General Conditions of Contract (GCC)**

This Section includes the general clauses to be applied in all contracts. **The text of the clauses in this Section shall not be modified.**

Section IX - Special Conditions of Contract (SCC)

This Section consists of Contract Data and Specific Provisions which contains clauses specific to each contract. The contents of this Section modify or supplement, but not over-write, the General Conditions and shall be prepared by the Purchaser.

Section X - Contract Forms

This Section contains the Letter of Acceptance, Contract Agreement and other relevant forms.

Standard Bidding Document (One-Envelope Bidding Process) (No Provision for Evaluation Using MEAT)

Procurement of Biomedical Equipments Batch 3

OCBI/LCB No: MOH/SDMS/EACE/OCBI/001/2025-2026

**Project: EAST AFRICA CENTRE OF EXCECELLENCE FOR SKILLS AND TERTIARY
EDUCATION IN BIOMEDICAL SCIENCES**

Purchaser: STATE DEPARTMENT OF MEDICAL SERVICES
Country: KENYA
Issued on: 12TH JUNE 2026

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Part 1: Bidding Procedures

Section I - Instructions to Bidders

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Section I. Instructions to Bidders

General

1. Scope of Bid

- 1.1 In connection with the Specific Procurement Notice, Invitation for Bids (IFB), specified **in the Bid Data Sheet (BDS)**, the Purchaser, as **specified in the BDS**, issues this bidding document for the supply of Goods and, if applicable, any Related Services incidental thereto, as specified in Section VII, Schedule of Requirements. The name, identification and number of items, lots or combination of lots (packages) of this IFB are **specified in the BDS**.
- 1.2 Throughout this bidding document:
- (a) the term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, including if **specified in the BDS**, distributed or received through the electronic-procurement system used by the Purchaser) with proof of receipt;
 - (b) if the context so requires, “singular” means “plural” and vice versa; and
 - (c) “Day” means calendar day, unless otherwise specified as “Business Day”. A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower’s official public holidays.

2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called “Borrower”) **specified in the BDS** has applied for or received financing (hereinafter called “funds”) from the Specific Financing Institution named in the BDS (hereinafter called “the Bank”) in an amount **specified in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this bidding document is issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the Loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import is prohibited by decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

- 3.1 The Bank requires compliance with the Bank’s Integrity Framework comprising the African Development Bank Group’s Sanctions Procedures, the Bank’s Whistleblowing and Complaints Policy, the Bank’s Procurement Policy under the Procurement Framework and any other applicable Policies and Procedures

including their updates regarding corrupt and fraudulent practices as set forth in Section VI, Fraud and Corruption.

3.2 In further pursuance of this policy, Bidders shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and their personnel, to permit the Bank to inspect all accounts, records and other documents relating to any, prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

4.1 A Bidder may be a firm that is a private entity, a state-owned enterprise or institution subject to ITB 4.6, or any combination of such entities in the form of a joint venture, consortium, or association (JVCA) hereinafter called JV, under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, consortium, or association (JV): a) Unless otherwise **specified in the BDS**, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms; b) The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution; c) The maximum number of members proposed in a JV shall not exceed the number **specified in the BDS**, or the number derived from the percentage specified under ITB 4.1 (d), whichever is smaller unless both are equal, in which case anyone shall apply; and d) Participation by value of the contract as share of each of the JV partner (member) shall not be less than the percentage **specified in the BDS**. In case of any inconsistency between ITB 4.1 c) and ITB 4.1 d) that both cannot be applied simultaneously, the latter shall prevail.

4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:

- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- (b) receives or has received any direct or indirect subsidy from another Bidder; or
- (c) has the same legal representative as another Bidder; or
- (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Purchaser regarding this Bidding process; or
- (e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods, or works if any, that are the subject of the Bid; or
- (f) or any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower for the Contract implementation; or

- (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project **specified in the BDS** ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
- (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the Contract, and/or the Bid evaluation process of such Contract; or (ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the Bidding process and execution of the Contract.
- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a subcontractor. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member, may participate as a subcontractor in more than one Bid.
- 4.4 A Bidder and all parties constituting the Bidder including any subcontractors or suppliers shall have the nationality of an eligible country of the Bank in accordance with the Bank's Procurement Policy for the Bank Group Funded Operation described under the Bank's Procurement Framework, and as listed in Section V, Eligible Countries subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Integrity Framework and in accordance with its prevailing sanctions policies and procedures as set forth in the Bank's Integrity Framework as described in Section VI paragraph 2.2 d, shall be ineligible to be prequalified for, bid for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address **specified in the BDS**.
- 4.6 Bidders that are state-owned enterprises or institutions in the Purchaser's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they: (i) are legally and financially autonomous; (ii) operate under commercial law; and (iii) are not under supervision of the Purchaser.
- 4.7 A Bidder shall not be under suspension from Bidding by the Purchaser as the result of the operation of a Bid-Securing Declaration.

- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower’s country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower’s country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.
- 4.10 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- 4.11 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower’s request, is satisfied that the debarment;
- (a) relates to fraud or corruption; and
 - (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.

5. Eligible Goods and Related Services

- 5.1 All the Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their country of origin in an eligible country of the Bank in accordance with the Bank’s Procurement Policy for Bank Group Funded Operations described under the Bank’s Procurement Framework, and as listed in Section V, Eligible Countries.
- 5.2 For purposes of this ITB, the term “goods” includes commodities, raw material, machinery, equipment, and industrial plants; and “related services” includes services such as insurance, installation, training, and initial maintenance.
- 5.3 The term “origin” means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
- 5.4 The nationality of the firm that produces, assembles, distributes, or sells the Goods shall not determine their origin.

Contents of the Bidding Document

6. Sections of Bidding Document

6.1 The bidding document consist of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I - Instructions to Bidders (ITB)
- Section II - Bidding Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

PART 2 Supply Requirements

- Section VII - Schedule of Requirements

PART 3 Contract

- Section VIII - General Conditions of Contract (GCC)
- Section IX - Special Conditions of Contract (SCC)
- Section X - Contract Forms

6.2 The Specific Procurement Notice, Invitation for Bids (IFB), issued by the Purchaser is not part of this bidding document.

6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information or documentation as is required by the bidding document.

7. Clarification of Bidding Document

7.1 A Bidder requiring any clarification of the bidding document shall contact the Purchaser in writing at the Purchaser's address **specified in the BDS**. The Purchaser will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period **specified in the BDS**. The Purchaser shall forward copies of its response

to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so **specified in the BDS**, the Purchaser shall also promptly publish its response at the web page identified **in the BDS**. Should the clarification result in changes to the essential elements of the bidding document, the Purchaser shall amend the bidding document following the procedure under ITB 8 and ITB 22.2.

8. Amendment of Bidding Document

- 8.1 At any time prior to the deadline for submission of Bids, the Purchaser may amend the bidding document by issuing addenda.
- 8.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Purchaser in accordance with ITB 6.3. The Purchaser shall also promptly publish the addendum on the Purchaser's web page in accordance with ITB 7.1.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

Preparation of Bids

9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

10. Language of Bid

10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

11.1 The Bid shall comprise the following including all forms specified under Section IV, duly completed by the Bidder:

- (a) **Letter of Bid** prepared in accordance with ITB 12;
- (b) **Price Schedules**: completed in accordance with ITB 12 and ITB 14;
- (c) **Bid Security** or **Bid-Securing Declaration**, in accordance with ITB 19.1;
- (d) **Technical Bid-Base Bid**;
- (e) **Commercial Terms and Conditions**
- (f) **Alternative Technical Bid**: if permissible, in accordance with ITB 13;
- (g) **Authorization**: written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3;
- (h) **Qualifications**: documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the Contract if its Bid is accepted;
- (i) **Bidder's Eligibility**: documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid;
- (j) **Eligibility of Goods and Related Services**: documentary evidence in accordance with ITB 16, establishing the eligibility of the Goods and Related Services to be supplied by the Bidder;
- (k) **Conformity**: documentary evidence in accordance with ITB 16 and ITB 31, and in support of above sub-paragraphs (d) and (e) of ITB 11.1 as necessary to establish that the Goods and Related Services, and Terms and Conditions of the Bid conform to requirements and provisions of the bidding document;
- (l) **Manufacture's Authorization** in accordance with ITB 17.2 (a); and

(m) any other document required **in the BDS**.

11.2 In addition to the requirements under ITB 11.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Letter of Bid and Price Schedules

12.1. The Letter of Bid and Price Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

13.1. Unless otherwise **specified in the BDS**, alternative Bids shall not be considered.

14. Bid Prices and Discounts

14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Price Schedules shall conform to the requirements specified below.

14.2 All lots (contracts) and items must be listed and priced separately in the Price Schedules.

14.3 The price to be quoted in the Letter of Bid in accordance with ITB 12.1 shall be the total price of the Bid, excluding any discounts offered.

14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid, in accordance with ITB 12.1, ITB 14.6 and 14.7.

14.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise **specified in the BDS**. A Bid submitted with an adjustable price basis shall be treated as nonresponsive and shall be rejected, pursuant to ITB 30. However, if in accordance with **the BDS**, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

14.6 In accordance with ITB 1.1, Bids are being invited for individual items, individual lots (contracts) or for any combination of lots (packages) as specified in **BDS**. Unless otherwise **specified in the BDS**, prices quoted shall correspond to 100% of the quantity for each individual item (of bids invited for individual items), 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot (of bids invited for individual lots and combination of lots). Bidders wishing to offer discounts for the award of more than one individual item (of bids invited for individual items), for award of more than one lot (of bids invited for individual lots or combination of lots) shall specify in their Bid the price reductions, as applicable, to each item, to each individual lot, and to the

combination of lots (package), as applicable or alternatively, to individual Contracts within the package provided in all cases how discounts will be applied to individual items is made clear. Discounts shall be submitted in accordance with ITB 14.4 and 14.6 with due regards to consequences of unclear or ambiguous discounts as per ITB 14.7 provided the Bids for all lots (contracts) are opened at the same time.

14.7 Discounts offered shall be clear and without any vagueness or ambiguity as no clarification shall be requested or permitted on this account after Bid submission. The Purchaser's decision on discounts will be based on the contents of the Bid itself, without recourse to any extrinsic evidence. If in the Purchaser's opinion, which will be final, a discount offered in the bid: (i) is seriously unclear, ambiguous or vaguely presented to such extent that it cannot be either interpreted or applied with reasonable accuracy, the Bid shall be rejected; (ii) has a minor discrepancy or unclarity which could be interpreted reasonably, the Purchaser in this case may decide to apply the discount as it deems reasonable and appropriate resulting in the lowest evaluated cost to the Purchaser. If the Bidder does not accept the Purchaser's decision based on any of the above, the Bid shall be rejected.

14.8 The terms EXW, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, as **specified in the BDS**.

14.9 Prices shall be quoted as specified in each Price Schedule included in Section IV, Bidding Forms as mentioned under (a), (b), (c) and (d) below. For a specific item of Goods only one Price Schedule shall be used as per applicable classification of that item i.e. whether the item is manufactured and offered within the Purchaser's country or to be imported pursuant to the award of contract or previously imported. No changes in the offered Price Schedule or classification shall be permitted after bid opening. Failure to follow these instructions may result in rejection of bids. The disaggregation of price components is required solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered e.g. instead of taking delivery at the final destination, the delivery may be taken at ex-works or at the destination. Similarly, if bids have been invited on CIP destination price in addition to other terms e.g. FOB or FCA, etc. then at the Purchaser's option, the award may be made on such other terms instead of CIP Price although comparison and evaluation of bids shall still be based on CIP final destination prices. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Bank's Procurement Framework and as listed in Section V, Eligible Countries. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Bank Procurement Framework and as listed in Section V, Eligible Countries. BDS indicates if the "Final Destination" (project site) is different from the "Destination" and their addresses. Prices shall be entered in Price Schedules accordingly and in the following manner:

(a) For Goods manufactured in the Purchaser's Country:

- (i) the price of the Goods quoted EXW (ex-works, ex-factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable on the

components and raw material used in the manufacture or assembly of the Goods;

- (ii) any Purchaser’s Country sales tax and other taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
 - (iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) **specified in the BDS.**
- (b) For Goods manufactured outside the Purchaser’s Country, to be imported:
- (i) the price of the Goods, quoted CIP named place of destination, in the Purchaser’s Country, as **specified in the BDS.** If “final destination” is the same as “destination” then CIP price under columns 6 and 7 of the Price Schedule form applicable for Goods to be imported shall be quoted for named place of final destination;
 - (ii) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) **specified in the BDS.** If named place of “final destination” is the same as “destination” then cost under (b) (ii) shall not be indicated under column 8 of the Price Schedule form applicable for Goods to be imported and will state “Not Applicable”. But instead, CIP final destination price quoted as per (b) (i) above shall include such costs;
- (c) For Goods manufactured outside the Purchaser’s Country, already imported:
- (i) the price of the Goods, including the original import value of the Goods; plus any mark-up (or rebate); plus any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported;
- the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;
- (ii) the price of the Goods, obtained as the difference between (i) and (ii) above;
 - (iii) any Purchaser’s Country sales and other taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
 - (iv) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) **specified in the BDS.**
- (d) For Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements, the price of each item comprising the Related Services (inclusive of any applicable taxes).

15. Currencies of Bid and Payment

15.1 The currency(ies) of the Bid and the currency(ies) of payments shall be the same. The Bidder shall quote in the currency of the Purchaser’s Country the portion of

the Bid price that corresponds to expenditures incurred in the currency of the Purchaser's Country, unless otherwise **specified in the BDS**.

15.2 The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Purchaser's Country.

16. Documents Establishing the Eligibility and Conformity of the Goods and Related Services

16.1 To establish the eligibility of the Goods and Related Services in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.

16.2 To establish the conformity of the Goods and Related Services to the bidding document, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section VII, Schedule of Requirements.

16.3 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

16.4 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Purchaser.

16.5 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements.

17. Documents Establishing the Eligibility and Qualifications of the Bidder

17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.

17.2 The documentary evidence of the Bidder's qualifications to perform the Contract if its Bid is accepted shall establish to the Purchaser's satisfaction:

- (a) that, if required **in the BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Purchaser's Country;

- (b) that, if required **in the BDS**, in case of a Bidder not doing business within the Purchaser's Country, the Bidder is or will be (if awarded the Contract) represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
- (c) that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

18. Period of Validity of Bids

- 18.1. Bids shall remain valid for the Bid Validity period **specified in the BDS**. The Bid Validity period starts from the date fixed for the Bid submission deadline (as prescribed by the Purchaser in accordance with ITB 22.1). A Bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
- 18.2. In exceptional circumstances, prior to the expiration of the Bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 19, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.
- 18.3. If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity period, the Contract price shall be determined as follows:
- (a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor **specified in the BDS** to reflect any increase in the cost of inputs over the period starting from the date immediately after expiry of 56 days until the date of award;
 - (b) in the case of adjustable price contracts, no adjustment shall be made;
 - (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

19. Bid Security

- 19.1. The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid Security amount, as **specified in the BDS**, in original form and, in the case of a Bid Security amount, in the amount and currency **specified in the BDS**.
- 19.2. A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.
- 19.3. If a Bid Security amount is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:
- (a) an unconditional guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company);
 - (b) an irrevocable letter of credit;

(c) a cashier's or certified check; or

(d) another security **specified in the BDS**,

from a reputable source, and an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Purchaser's Country, the issuing non-bank financial institution shall have a correspondent financial institution located in the Purchaser's Country to make it enforceable unless the Purchaser has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Purchaser prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 18.2.

19.4. If a Bid Security in amount or Bid-Securing Declaration is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive Bid Security in amount or Bid-Securing Declaration, whichever is required shall be rejected by the Purchaser as non-responsive.

19.5. If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the Performance Security pursuant to ITB 46.

19.6. The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.

19.7. The Bid Security amount may be forfeited:

(a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Letter of Bid, or any extension thereto provided by the Bidder; or

(b) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB 45; or

(ii) furnish a Performance Security in accordance with ITB 46.

19.8. The Bid Security amount or Bid- Securing Declaration of a JV must be in the name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of Bidding, the Bid Security amount or Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.

19.9. If a Bid Securing Declaration is required **in the BDS**, pursuant to ITB 19.1, and

(a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereto provided by the Bidder; or

(b) if the successful Bidder fails to: sign the Contract in accordance with ITB 45; or furnish a performance security in accordance with ITB 46;

the Borrower may execute the Bid-Securing Declaration, as provided for **in the BDS**, and declare the Bidder ineligible to be awarded a contract by the Purchaser for a period of time as stated **in the BDS**.

20. Format and Signing of Bid

20.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 11 and clearly mark it “ORIGINAL.” Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked “ALTERNATIVE.” In addition, the Bidder shall submit copies of the Bid, in the number **specified in the BDS** and clearly mark them “COPY.” In the event of any discrepancy between the original and the copies, the original shall prevail.

20.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.

20.3 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as **specified in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.

20.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

20.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

Submission and Opening of Bids

21. Sealing and Marking of Bids

21.1. The Bidder shall deliver the Bid in a single, sealed envelope (one-envelope Bidding process). Within the single envelope the Bidder shall place the following separate, sealed envelopes:

- (a) in an envelope marked “ORIGINAL”, all documents comprising the Bid, as described in ITB 11; and
- (b) in an envelope marked “COPIES”, all required copies of the Bid; and,
- (c) if alternative Bids are permitted in accordance with ITB 13, and if relevant:
 - i. in an envelope marked “ORIGINAL -ALTERNATIVE”, the alternative Bid; and

- ii. in the envelope marked “COPIES – ALTERNATIVE BID” all required copies of the alternative Bid.

21.2. The inner and outer envelopes, shall:

- (a) bear the name and address of the Bidder;
- (b) be addressed to the Purchaser in accordance with ITB 22.1;
- (c) bear the specific identification of this Bidding process indicated in ITB 1.1; and
- (d) bear a warning not to open before the time and date for Bid opening.

21.3 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the Bid.

22. Deadline for Submission of Bids

22.1. Bids must be received by the Purchaser at the address and no later than the date and time **specified in the BDS**. When so **specified in the BDS**, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids electronically shall follow the electronic Bid submission procedures **specified in the BDS**.

22.2. The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

23.1. The Purchaser shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 22. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

24. Withdrawal, Substitution, and Modification of Bids

24.1. A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:

- (a) prepared and submitted in accordance with ITB 20 and 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” or “MODIFICATION;” and
- (b) received by the Purchaser prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.

24.2. Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

24.3. No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25. Bid Opening

25.1. Except as in the cases specified in ITB 23 and ITB 24.2, the Purchaser shall, at the Bid opening, publicly open and read out all Bids received by the deadline at the date, time and place **specified in the BDS** in the presence of Bidders' designated representatives and anyone who chooses to attend Any specific electronic Bid opening procedures required if electronic bidding is permitted in accordance with ITB 22.1, shall be as **specified in the BDS**.

25.2. First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal envelope does not contain a copy of the "power of attorney" confirming the signature as a person duly authorized to sign on behalf of the Bidder, the corresponding Bid will be opened. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid opening.

25.3. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.

25.4. Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening.

25.5. Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Prices, per item, and/or per lot (contract) as applicable, including any discounts and alternative Bids; the presence or absence of a Bid Security, if required; and any other details as the Purchaser may consider appropriate.

25.6. Only Bids, alternative Bids and discounts that are opened and read out at Bid opening shall be considered further in the evaluation. The Letter of Bid and the Price Schedules are to be initialed by representatives of the Purchaser attending Bid opening in the manner **specified in the BDS**.

25.7. The Purchaser shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 23.1).

25.8. The Purchaser shall prepare a record of the Bid opening that shall include, as a minimum:

- (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
- (b) the Bid Price, per item, and/or per lot (contract) as applicable, including any discounts;

- (c) any alternative Bids;
- (d) the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required.

25.9. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

Evaluation and Comparison of Bids

26. Confidentiality

- 26.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until the information on Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 40.
- 26.2 Any effort by a Bidder to influence the Purchaser in the evaluation or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the Bidding process, it should do so in writing.

27. Preliminary Examination of Bids

- 27.1 Prior to the detailed evaluation, pursuant to ITB 35, the Purchaser will conduct preliminary examination of all bids that have been received by the deadline for bid submission and opened at public bid opening as the first step towards determination of their substantial responsiveness to the bidding document. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB 11 without recourse to extrinsic evidence.
- 27.2 The Purchaser will verify and examine bids to determine whether they are complete, properly signed to bind the bidder, meet eligibility requirements of bidders, goods and services, bidders have no conflict of interest and have provided required bid validity, bid security or bid securing declaration, as required and other essential documents to complete the evaluation, and whether the bids are generally in order. Subject to ITB 28, Bids failing to meet the above requirements shall be rejected and not retained for further review.

28. Clarification of Bids

- 28.1 To assist in the examination, evaluation, comparison of the Bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or

substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the Bids, in accordance with ITB 32

28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Purchaser’s request for clarification, its Bid may be rejected.

29. Deviations, Reservations, and Omissions

29.1 During the evaluation of Bids, the following definitions apply:

- (a) “Deviation” is a departure from the requirements specified in the bidding document;
- (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
- (c) “Omission” is the failure to submit part or all of the information or documentation required in the bidding document.

30. Determination of Responsiveness

30.1 Following rejection of Bids if any, pursuant to ITB 27 and ITB 28, as the next step, the remaining Bids will be further reviewed in detail to determine their substantial responsiveness. The Purchaser’s determination of a Bid’s responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.

30.2 A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

- (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
 - (ii) limit in any substantial way, inconsistent with the bidding document, the Purchaser’s rights or the Bidder’s obligations under the Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

30.3 The Purchaser shall examine the technical aspects of the Bid in accordance with ITB 16 and ITB 17, ITB 30, ITB 31, the BDS if applicable, and Section III Evaluation and Qualification Criteria in particular, to confirm that all requirements of Section VII, Schedule of Requirements and technical specifications have been met without any material deviation or reservation, or omission. To this end, in consideration of materiality of any deviations, reservations or omissions, Bids failing to meet the mandatory technical requirements or minimum pass-fail technical criteria or failing to substantially meet any other technical requirements of the bidding document will be rejected.

30.4 The Purchaser shall similarly examine the commercial aspects of the bids including any deviations, other than technical specifications, submitted in

response to the provisions of the bidding document, to determine if they conform to the terms and conditions of the draft contract and other documents included in the bidding document without any material deviation, reservation or omission, and establishment of materiality in such aspects will similarly risk rejection of the Bids.

30.5 If a Bid is not substantially responsive to the requirements of the bidding document, it shall be rejected by the Purchaser and not subsequently be made responsive by correction of the material deviation, reservation, or omission. All other bids determined substantially responsive will be retained for further evaluation.

31. Nonconformities, Errors and Omissions

31.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonconformities in the Bid.

31.2 Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

31.3 Provided that a Bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component, and costs associated, if any, with non-material deviations, reservations and omissions to the requirements of the bidding documents in the manner **specified in the BDS**.

32. Correction of Arithmetical Errors

32.1 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:

- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

32.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 32.1, shall result in the rejection of the Bid.

33. Conversion to Single Currency

33.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as **specified in the BDS**.

34. Margin of Preference

34.1 Unless otherwise **specified in the BDS**, no margin of domestic or regional preference shall apply. If a margin of preference applies, the application methodology shall be as specified in Section III, Evaluation and Qualification Criteria, and in accordance with the provisions stipulated in the Bank's Procurement Framework.

35. Evaluation of Bids

35.1 The Purchaser shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies, the Purchaser shall determine the successful Bid or Bids which has/have been determined to:

- (a) be substantially responsive to the bidding document;
- (b) offer the lowest evaluated total cost to the Purchaser for all items to be procured based on either a single Contract or all multiple Contracts combined, as the case may be, in accordance with the ITB 14.6 inviting bid prices and discounts, and provisions made in the Bidding Document for evaluation of bids and award of contract (s); and
- (c) be offered by Bidder or Bidders that substantially meet the qualification criteria applicable for Contract or Contracts for which they are selected.

35.2 To evaluate a Bid, the Purchaser shall consider the following factors with respect to the Base Bid and Alternative Bid (s) (if the latter is permitted in the BDS), in accordance with the criteria and methodology described in Section III— Evaluation and Qualification Criteria:

- (a) evaluation will be done for Items or Lots (contracts) or combination of Lots (Packages), as **specified in the BDS**; and the Bid Price as quoted in accordance with ITB 14;
- (b) price adjustment for correction of arithmetic errors in accordance with ITB 32.1;
- (c) price adjustment due to discounts offered in accordance with ITB 12.1, ITB 14.4, ITB 14.6 and ITB 14.7;
- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 33;

- (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31.3;
- (f) the additional evaluation factors **specified in the BDS** if any, and Section III, Evaluation and Qualification Criteria; and
- (g) price adjustment due to application of Margin of Preference, if applicable, as per ITB 34, BDS and Section III, Evaluation and Qualification Criteria.

35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

35.4. If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the Letter of Bid, is specified in Section III, Evaluation and Qualification Criteria.

35.5 The Purchaser's evaluation of a Bid will exclude and not take into account:

- (a) in the case of Goods manufactured in the Purchaser's Country, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder; and
- (b) in the case of Goods manufactured outside the Purchaser's Country, already imported or to be imported, customs duties and other import taxes levied on the imported Good, sales and other similar taxes, which will be payable on the Goods if the contract is awarded to the Bidder.

35.6 The Purchaser's evaluation of a Bid may require the consideration of other factors, in addition to the Bid Price quoted in accordance with ITB 14. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise **specified in the BDS** from amongst those set out in Section III, Evaluation and Qualification Criteria. The criteria and methodologies to be used shall be as specified in ITB 35.2(f).

36. Comparison of Bids

36.1 The Purchaser shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 35.2 to determine the Bid that has the lowest evaluated cost. The comparison shall be on the basis of CIP (place of final destination) prices for goods to be imported and prices for delivery to final destination for goods already imported less the custom duties and other import taxes already paid or to be paid on such goods (need to be supported with documentary evidence) and EXW prices, plus cost of inland transportation and insurance to place of final destination, for goods manufactured within the Borrower's country, together with prices for any required installation, training, commissioning and other services as per price schedules included in Section IV. The evaluation of prices shall not take into account custom duties and other taxes levied on imported goods (to be imported or already imported) and sales and similar taxes levied in connection with the sale or delivery of goods.

37. Qualification of the Bidder

37.1 The Purchaser shall determine, to its satisfaction, whether the eligible Bidder or Bidders that is/are selected for Items, Lots, Packages and/or their combinations as having submitted the lowest evaluated cost and substantially responsive Bid (s) substantially meet the respective minimum qualifying criteria specified in Section III, Evaluation and Qualification Criteria. To this end, the Purchaser will determine for which Items, Lots and Packages, and their combinations, as the case may be, for which Bidder submitted bid, it substantially meets the respective minimum qualification criteria.

37.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than specialized subcontractors if permitted in the bidding document), or any other firm(s) different from the Bidder.

37.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Purchaser shall proceed to the Bidder or Bidders who offered the substantially responsive Bid (s) with the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.

37.4 The Purchaser reserves the right to waive minor deviations from the qualification criteria if they do not materially affect the technical capability and financial resources of the Bidder to perform the Contract or combination of Contracts.

38. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

38.1 The Purchaser reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

39. Standstill Period

39.1 The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 44. The Standstill Period starts the day after the date the Purchaser has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply.

40. Notification of Intention to Award

40.1 The Purchaser shall send to each Bidder the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:

- (a) the name and address of the Bidder submitting the successful Bid;
- (b) the Contract price of the successful Bid;
- (c) the names of all Bidders who submitted Bids, and their Bid prices as readout, and as evaluated;

- (d) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notification is addressed) was unsuccessful, unless the price information in c) above already reveals the reason;
- (e) the expiry date of the Standstill Period;
- (f) instructions on how to request a debriefing and/or submit a complaint during the standstill period.

Award of Contract

41. Award Criteria

41.1 Subject to ITB 38 and consistent with determination of successful Bid or Bids as per ITB 35, and unless otherwise **specified in the BDS**:

- i) For evaluation based on individual items as per ITB 1.1, 14.6 and 35.2 (a)

The Purchaser shall award the Contract or Contracts to the Selected Bidder or Bidders that have offered bids substantially responsive to the Bidding Document and have been determined successful for one or more items, evaluated bid prices of which shall result in the lowest evaluated cost to the Purchaser for all items combined provided further that the selected Bidder or Bidders substantially meet the required qualifying criteria for item or items for which they are successful.

- ii) For evaluation based on Lots or Packages as per ITB 1.1, 14.6 and 35.2 (a)

Same as i) above except replace “item” or “items” wherever appearing with “Lot” and “Lots”, or “Package” and “Packages” as the case may be.

42. Purchaser’s Right to Vary Quantities at Time of Award

42.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VII, Schedule of Requirements, provided this does not exceed the percentages **specified in the BDS**, and without any change in the unit prices or other terms and conditions of the Bid and the bidding document.

43. Notification of Award

43.1 Prior to the expiration of the Bid Validity Period and upon expiry of the Standstill Period, specified in ITB 39.1 or any extension thereof, and upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the Contract Forms called the “Letter of Acceptance”) shall specify the sum that the Purchaser will pay the Supplier in consideration of the execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”).

43.2 Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Purchaser shall publish the Contract Award Notice which shall contain, at a minimum, the following information:

- (a) name and address of the Purchaser;
- (b) name and reference number of the contract being awarded, and the selection method used;
- (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;

- (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefor;
- (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope; and
- (f) successful Bidder's Beneficial Ownership Disclosure Form, if specified in BDS ITB 45.1.

43.3 The Contract Award Notice shall be published on the Purchaser's website with free access if available, or in at least one newspaper of national circulation in the Purchaser's Country, or in the official gazette. The Purchaser shall also publish the contract award notice on the Bank's website and in UNDB online.

43.4 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

44. Debriefing by the Purchaser

44.1 On receipt of the Purchaser's Notification of Intention to Award referred to in ITB 40.1, an unsuccessful Bidder has three (3) Business Days to make a written request to the Purchaser for a debriefing. The Purchaser shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

44.2 Where a request for debriefing is received within the deadline, the Purchaser shall provide a debriefing within five (5) Business Days, unless the Purchaser decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Purchaser shall promptly inform, by the quickest means available, all Bidders of the extended standstill period

44.3 Where a request for debriefing is received by the Purchaser later than the three (3)-Business Day deadline, the Purchaser should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.

44.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidders shall bear their own costs of attending such a debriefing meeting.

45. Signing of Contract

45.1 The Purchaser shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement, and, if **specified in the BDS**, a request to submit the Beneficial Ownership Disclosure Form providing additional information on its beneficial ownership. The Beneficial Ownership Disclosure Form, if so requested, shall be submitted within eight (8) Business Days of receiving this request.

- 45.2 The successful Bidder shall sign, date and return to the Purchaser, the Contract Agreement within twenty-eight (28) days of its receipt.
- 45.3 Notwithstanding ITB 45.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its Bid, always provided however, that the Bidder can demonstrate to the satisfaction of the Purchaser and of the Bank that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract.

46. Performance Security

- 46.1 Within twenty-eight (28) days of the receipt of Letter of Acceptance from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC 18, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Purchaser. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Purchaser. A foreign institution providing a bond shall have a correspondent financial institution located in the Purchaser's Country, unless the Purchaser has agreed in writing that a correspondent financial institution is not required.
- 46.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the Bidder or Bidders offering the next Lowest Evaluated Cost to the Purchaser as per the bid Evaluation and award criteria.

47. Procurement Related Complaint

- 47.1 The procedures for making a Procurement-related Complaint are as **specified in the BDS**.

Section II - Bid Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in the ITB.

ITB Reference	A. General																										
<p>ITB 1.1</p>	<p>The reference number of the Invitation for Bids (IFB) is: MOH/SDMS/EACEOCBI/001/2025-2026</p> <p>The Purchaser is: STATE DEPARTMENT FOR MEDICAL SERVICES; MINISTRY OF HEALTH; EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION IN BIOMEDICAL SCIENCES PHASE 1-AF.</p> <p>The name of the IFB is: Open Competitive Bidding (International) (OCBI)</p> <p>The number and identification of lots comprising this IFB is:</p> <table border="1"> <thead> <tr> <th>Lot No</th> <th>Lot Description</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Imaging/Outpatient</td> </tr> <tr> <td>2.</td> <td>Pharmacy/Mortuary</td> </tr> <tr> <td>3.</td> <td>Surgical Sets</td> </tr> <tr> <td>4.</td> <td>Molecular / Microbiology/ Anatomy Laboratory /ICU</td> </tr> <tr> <td>5.</td> <td>Cytology / BTU Laboratory</td> </tr> <tr> <td>6.</td> <td>Biorepository/Clinical Chemistry Laboratory</td> </tr> <tr> <td>7.</td> <td>Renal Hemodialysis</td> </tr> <tr> <td>8.</td> <td>Operation Theatres</td> </tr> <tr> <td>9.</td> <td>Super Specialty Equipment</td> </tr> <tr> <td>10.</td> <td>Critical Care Unit</td> </tr> <tr> <td>11.</td> <td>Inpatient Services</td> </tr> <tr> <td>12.</td> <td>Waste Management Unit</td> </tr> </tbody> </table>	Lot No	Lot Description	1.	Imaging/Outpatient	2.	Pharmacy/Mortuary	3.	Surgical Sets	4.	Molecular / Microbiology/ Anatomy Laboratory /ICU	5.	Cytology / BTU Laboratory	6.	Biorepository/Clinical Chemistry Laboratory	7.	Renal Hemodialysis	8.	Operation Theatres	9.	Super Specialty Equipment	10.	Critical Care Unit	11.	Inpatient Services	12.	Waste Management Unit
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ITB 2.1	<p>The Borrower is: The Republic of Kenya</p> <p>Loan or Financing Agreement amount: KES 2,402,786,000.00 (USD 18,482,969.23)</p> <p>The Specific Bank financing institution is: African Development Fund [ADF]</p> <p>The name of the Project is: EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION IN BIOMEDICAL SCIENCES PHASE 1: ADDITIONAL FINANCING.</p>
ITB 4.1 (a)	i) The firms in a Joint Venture, Consortium or Association (JV) shall be in all cases jointly and severally liable.
ITB 4.1 (c)	Maximum number of members in the Joint Venture, Consortium or Association (JV) shall be: Three (3)
ITB 4.1 (d)	Minimum share of a member of Joint Venture, Consortium or Association (JV) in the contract shall not be less than 25% of the total value of the contract.
ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: https://www.afdb.org/en/projects-operations/debarment-and-sanctions-procedures

B. Contents of Bidding Document	
ITB 7.1	<p>For Clarification of Bid purposes only, the Purchaser's address is:</p> <p>Ministry of Health Headquarters P.O Box 30016-00100 Nairobi located at Afya House Cathedral Road Off Ngong' Road; Supply Chain Management Office, East African Kidney Institute Project offices; ADB Prefabricated Block during normal working hours; email procurement@health.go.ke or view it in the Ministry Website; www.health.go.ke</p> <p>Requests for clarification should be received by the Purchaser no later than: Fifteen (15) Days prior to the deadline of submission of Bids. No Clarifications shall be admissible after the 15 days.</p>
C. Preparation of Bids	
ITB 10.1	<p>The language of the Bid is: English.</p> <p>All correspondence exchange shall be in English language.</p>
ITB 11.1 (m)	<p>The Bidder shall submit the following additional statutory documents in its Bid:</p> <ul style="list-style-type: none"> (b) <ul style="list-style-type: none"> i. Certificate of registration or incorporation ii. Company Profile i. valid tax compliance certificate as of the date of tender opening for local firms and an equivalent for International firms ii. bid security as described in 19.1 below iii. Proof of Registration with Registrar of Companies. In addition for local bidders, tenderers shall submit copies of current Company Registry Form 12 (CR12) for Limited Companies, Company Registry Form 13 (CR13) for Sole Proprietorship or Partnership Deed for Partnership Companies. Copies of CR12 and CR13 submitted shall be those issued within the last 12 months from the tender submission date; and for International bidders, equivalent company registry documentation from their country of incorporation, showing ownership,

	<p>shareholders/partners, and legal status.</p> <p>iv. Valid audited and Certified accounts for the year 2022, 2023 and 2024 for all bidders.</p> <p>v. If the bid is submitted by a joint venture, attach a letter of intent or a copy of an existing agreement.</p> <p>vi. Duly filled, signed and stamped Letter of Bid with Letter Head clearly showing the bidders company</p> <p>vii. Technical brochures for each item;</p> <p>viii. Power of attorney for person signing in joint venture signed by all parties.</p> <p>ix. Duly filled and signed schedule of requirement table/ price schedule</p> <p>x. Digital integration, PACS/RIS, and software update obligations are included in the specs</p>
ITB 13.1	Alternative Bids <i>shall not be</i> considered.
ITB 14.5	The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract.
ITB 14.6	Bids are invited for individual lot(s): Bidders have the option to bid for one or more lots. Bids shall be evaluated, and contract(s) awarded lot-wise taking into account discounts offered for combination of lots.
ITB 14.6	<p>i) Prices shall be quoted for each lot (contract) item by item and shall correspond at least to a One Hundred [100%] percent of the items specified for each lot (contract).</p> <p>ii) Prices quoted for each item of a lot shall correspond at least to One Hundred [100%] percent of the quantities specified for the respective item of a lot.</p> <p>Failure to quote and pricing of all the items in the Lot shall lead to automatic rejection of the bid.</p>
ITB 14.8	The Incoterms edition is: Incoterms 2020, published by The International Chamber of Commerce
ITB 14.9 (b)(i)	Place of destination: <i>EAST AFRICA KIDNEY INSTITUTE PROJECT SITE - NAIROBI, KENYA.</i>
ITB 14.9 (a)(iii), (b)(ii) and	Final Destination (Project Site): <i>EAST AFRICA KIDNEY INSTITUTE PROJECT SITE - NAIROBI, KENYA.</i>

(c)(v)																																								
ITB 15.1	The Bidder <i>is</i> required to quote in the currency of the Purchaser's Country the portion of the Bid price that corresponds to expenditures incurred in that currency.																																							
ITB 16.4	Period of time the Goods are expected to be functioning (for the purpose of spare parts): Minimum Ten (10 No.) Years from time of commissioning and acceptance by the Purchaser.																																							
ITB 17.2 (a)	Manufacturer's authorization is required .																																							
ITB 17.2 (b)	Representation by an Agent for after sales service is required .																																							
ITB 18.1	The Bid validity period shall be One Hundred and Forty Nine (149) days.																																							
ITB 18.3 (a)	The Bid price shall be adjusted by the following factor(s): Not Applicable.																																							
ITB 19.1	<p>A <i>Bid Security amount shall be</i> required. This amount shall be Kenyan Shillings as shown below and valid for 177 days from the day of Bid Opening:</p> <table border="1"> <thead> <tr> <th>Lot No.</th> <th>Lot Description</th> <th>Amount (KES)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Imaging/Outpatient</td> <td>130,000</td> </tr> <tr> <td>2</td> <td>Pharmacy/Mortuary</td> <td>200,000</td> </tr> <tr> <td>3</td> <td>Surgical Sets</td> <td>210,000</td> </tr> <tr> <td>4</td> <td>Molecular / Microbiology/ Anatomic /ICU (Laboratory)</td> <td>2,200,000</td> </tr> <tr> <td>5</td> <td>Cytology / BTU Laboratory</td> <td>1,000,000</td> </tr> <tr> <td>6</td> <td>Biorepository/ clinical chemistry (Laboratory)</td> <td>900,000</td> </tr> <tr> <td>7</td> <td>Renal Hemodialysis</td> <td>1,600,000</td> </tr> <tr> <td>8</td> <td>Operation Theatres</td> <td>2,200,000</td> </tr> <tr> <td>9</td> <td>Super Specialty Equipment</td> <td>7,000,000</td> </tr> <tr> <td>10</td> <td>Critical Care Unit</td> <td>2,000,000</td> </tr> <tr> <td>11</td> <td>Inpatient Services</td> <td>2,500,000</td> </tr> <tr> <td>12</td> <td>Waste Management Unit</td> <td>700,000</td> </tr> </tbody> </table> <p><i>NOTE: The Bid Security should be from a Reputable Bank and in the format provided in Section IV-Bidding Forms - Form of Bid Security (BANK GUARANTEE). Any other bid security not in this format shall be rejected.</i></p>	Lot No.	Lot Description	Amount (KES)	1	Imaging/Outpatient	130,000	2	Pharmacy/Mortuary	200,000	3	Surgical Sets	210,000	4	Molecular / Microbiology/ Anatomic /ICU (Laboratory)	2,200,000	5	Cytology / BTU Laboratory	1,000,000	6	Biorepository/ clinical chemistry (Laboratory)	900,000	7	Renal Hemodialysis	1,600,000	8	Operation Theatres	2,200,000	9	Super Specialty Equipment	7,000,000	10	Critical Care Unit	2,000,000	11	Inpatient Services	2,500,000	12	Waste Management Unit	700,000
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ITB 19.3	Other types of acceptable securities: None																																							

(d)	
ITB 20.1	In addition to the original of the Bid, the number of copies is: One [1]
ITB 20.3	<p>The written confirmation of authorization to sign on behalf of the Bidder shall consist of: A Notorized Power of Attorney issued to the Authorized person to sign the tender if the signatory of the tender is not a director.</p> <p>NOTE: Firms with more than One Director must also issue a Power of Attorney to the Director Signing the bid.</p>
D. Submission and Opening of Bids	
ITB 22.1	<p>For <u>Bid submission purposes</u> only, the Purchaser's address is:</p> <p>Attention: Principal Secretary, Ministry of Health</p> <p>Street Address: Afya House, Cathedral Road off Ngóng Road</p> <p>Floor/ Room number: First Floor in Tender Box</p> <p>City: Nairobi, Kenya</p> <p>Postal Code: P.O BOX 30016-00100</p> <p>Country: Kenya</p> <p>The deadline for Bid submission is:</p> <p>Date: Friday 24th July 2026</p> <p>Time: 10:00 am East African Time.</p> <p>NB: Bulky documents submitted earlier than the date of opening should be delivered to the office of the Head, Supply Chain Management Services, on 5th floor Room 514 A, at Ministry of Health, Afya House, Cathedral Road, off Ngong' Road with a delivery note in duplicate.</p> <p>Bidders shall not have the option of submitting their Bids electronically.</p>
ITB 25.1	<p>The Bid opening shall take place at:</p> <p>Street Address: Ministry of Health , Afya House, Cathedral Road off Ngóng Road</p> <p>Floor/ Room number: ADB Prefabricated Block Boardroom.</p> <p>City: Nairobi</p>

	<p>Country: Kenya</p> <p>Date: Friday 24th July, 2026</p> <p>Time: 10:00 am East African Time.</p>
ITB 25.6	<p>The Letter of Bid and Price Schedules shall be initialed by _____ Three (3) representatives of the Purchaser conducting Bid opening. Each Bid shall be initialed by all representatives and shall be numbered, any modification to the unit or total price shall be initialed by the Representative of the Purchaser.</p>
E. Evaluation and Comparison of Bids	
ITB 31.3	<p>The adjustments with respect to a missing or non-conforming item or component, and costs associated, if any, with non-material deviations, reservations or omissions to the requirements of the bidding document shall be based on the average price of the item or component and cost, if any, of non-material deviations, reservations or omissions as quoted in or derived from other substantially responsive Bids unless any other specific evaluation criteria has been provided elsewhere in the bidding document for such adjustments in which case the latter shall be applied. If the price or cost of any of the above cannot be derived from the price or cost of other substantially responsive Bids, the Purchaser shall use its best estimate based on its own judgment, past experience or market search, as considered appropriate.</p>
ITB 33.1	<p>The currency that shall be used for Bid evaluation and comparison purposes to convert at the selling exchange rate all Bid prices expressed in various currencies into a single currency is: Kenya Shillings.</p> <p>The source of exchange rate shall be: Central Bank of Kenya</p> <p>The date for the exchange rate shall be: The deadline for submission of bids.</p>
ITB 34.1	<p>A margin of domestic preference shall not apply.</p> <p>A margin of regional preference shall not apply</p>
ITB 35.2(a)	<p>Evaluation shall be done for <i>Lots(contracts) consistent with ITB 1.1 and ITB14.6]</i></p> <p>Note:</p> <p>Bids will be evaluated, and Contracts awarded Lot by Lot taking into account all unconditional discounts including discounts offered for</p>

	<p>combination of Lots, if any. Contract or Contracts will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Purchaser for all Lots combined.</p>
<p>ITB 35.6</p>	<p>The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: [refer to Section III, Evaluation and Qualification Criteria; insert complementary details if necessary]</p> <ul style="list-style-type: none"> (a) Deviation in Delivery schedule: No. (b) Deviation in payment schedule: No. (c) The cost of major replacement component, mandatory spare parts, and service: No (d) The availability in the Purchaser’s Country of spare parts and after-sales services for the equipment offered in the Bid: No (e) Life cycle costs: the costs during the life of the goods or equipment: No. (f) The performance and productivity of the equipment offered; No.
<p>F. Award of Contract</p>	
<p>ITB 42</p>	<p>The maximum percentage by which quantities may be increased is: 15%</p> <p>The maximum percentage by which quantities may be decreased is: 15%</p>
<p>ITB 45. 1</p>	<p>The successful Bidder shall submit the Beneficial Ownership Disclosure Form.</p>
<p>ITB 47.1</p>	<p>The procedures for making a Procurement-related Complaint are detailed in the Part B of the Operations Procurement Manual under the Procurement Framework of the African Development Bank. If a Bidder wishes to make a Procurement-related Complaint, the Bidder shall submit its complaint following these procedures to the Purchaser, in writing (by the quickest means available, such as by email in accordance with the following:</p> <p>For the attention: Principal Secretary Purchaser: State Department for Medical Services Email address: procurement@health.go.ke</p> <p>In summary, a Procurement-related Complaint may challenge any of the following:</p>

1. the terms of the Bidding Documents;
2. the purchaser's decision to exclude a bidder from the procurement process prior to the award of contract; and
3. the Purchaser's decision to award the contract.

The Bank's Procurement Framework stipulates that bidders may send copies of their communications with the Borrowers to the Bank or write to the Bank directly when, Borrowers do not respond promptly, any questions on any issues regarding the implementation of Bank funded projects, or when the communication is a complaint against the Borrower. In this regard, if a bidder wishes to protest against a decision made by a Borrower or the Bank with regards to the procurement process or wishes to inform the Bank that the Bank's procurement rules and/or provisions of the bidding documents have not been complied with, an email can be sent to the following address:

Email: procurementcomplaints@afdb.org

Section III - Evaluation and Qualification Criteria

This Section contains the criteria that the Purchaser shall use to evaluate a Bid and qualify the Bidders. No other factors, methods or criteria shall be used other than specified in this bidding document. Wherever a Bidder is required to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- For annual turnover or financial data required for each year - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- Value of single contract - Exchange rate prevailing on the date of the contract.

Exchange rates shall be taken from the publicly available source identified in the ITB 33.1. Any error in determining the exchange rates in the Bid may be corrected by the Purchaser.

Contents

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I. Margin of Preference (ITB 34)

Preference for Domestically Manufactured Goods

If the Bid Data Sheet (BDS) so specifies, the Purchaser will grant a margin of preference to goods manufactured in the Purchaser's country for the purpose of bid comparison, in accordance with the procedures outlined in subsequent paragraphs.

Bids will be classified in one of three groups, as follows:

- (a) **Group A:** Bids offering goods manufactured in the Purchaser's Country, for which (i) labor, raw materials, and components from within the Purchaser's Country account for twenty (20) percent or more of the EXW price; and (ii) the production facility in which they will be manufactured or assembled has been engaged in manufacturing or assembling such goods at least since the date of bid submission.
- (b) **Group B:** All other bids offering Goods manufactured in the Purchaser's Country.
- (c) **Group C:** Bids offering Goods manufactured outside the Purchaser's Country that have been already imported or that will be imported.

To facilitate this classification by the Purchaser, the Bidder shall complete whichever version of the Price Schedule furnished in the Bidding Documents is appropriate. Incorrect classification may render the bid non-responsive as no reclassification will be permitted after bid opening. Bidders shall provide correct information especially with respect to duties, taxes etc. paid on previously imported Goods and percentage of local labor, materials and components for Goods manufactured in the Purchaser's country as any false information which cannot be supported by documentation may render the bid non-responsive besides other sanctions for providing falsified information as per provisions under Section VI.

The Purchaser will first review the bids to confirm the appropriateness of the bid group classification to which bidders assigned their bids in preparing their Bid Forms and Price Schedules.

All evaluated bids in each group will then be compared to determine the lowest evaluated bid of each group. Such lowest evaluated bids shall be compared with each other and if as a result of this comparison a bid from Group A or Group B is the lowest, it shall be selected for the award.

If as a result of the preceding comparison, the lowest evaluated bid is a bid from Group C, all bids from Group C shall be further compared with the lowest evaluated bid from Group A after adding to the evaluated price of goods offered in each bid from Group C, for the purpose of this further comparison only, an amount equal to 15% (fifteen percent) of the respective CIP bid price for goods to be imported and already imported goods. Both prices shall include unconditional discounts and be corrected for arithmetical errors. If the bid from Group A is the lowest, it shall be selected for award. If not, the lowest evaluated bid from Group C shall be selected as paragraph above."

Preference for Regionally Manufactured Goods

If the Bid Data Sheet (BDS) so specifies, the Purchaser, for the purpose of bid comparison, will grant a regional preference to goods manufactured in RMCs that have joined the Borrower's country in a regional preferential tariff arrangement, designed to foster economic integration, by a customs union, or a free trade area, in accordance with the procedures outlined in subsequent paragraphs.

All responsive bids will be classified in one of the following two groups:

Group A, which includes bids offering goods, which the respective bidders must have established, to the satisfaction of the Borrower and the Bank, to be eligible for regional preference; and

Group B, which includes all other bids.

- i) In order to determine the Lowest Evaluated Bid of each group, all evaluated bids in each group shall first be compared among themselves. Such Lowest Evaluated Bids shall then be compared with each other, and if, as a result of this comparison, a bid from Group A is the lowest, it shall be selected for the award.
- ii) If, as a result of the comparison under Paragraph i) above, the Lowest Evaluated Bid is a bid from Group B, all Group B bids shall be further compared with the Lowest Evaluated Bid from Group A, after adding to the evaluated bid price of the imported goods offered in each Group B bid, for the purpose of this further comparison only, an amount equal to:
 - (a) the difference between the import duty applicable to such goods, when they originate in countries not parties to the preferential tariff arrangement, and that which is applicable to those goods when they originate from countries that are parties to the agreement; or
 - (b) 10% of the CIF or CIP bid price of such goods, if the difference indicated under a) above exceeds 10% of such price.

If the Lowest Evaluated Bid from Group A, in such further comparison is the lowest, it shall be selected for the award. If not, the Lowest Evaluated Bid from Group B, as determined from the comparison under Paragraph i) above, shall be selected.

II. Successful Bid or Bids

The Purchaser shall apply the criteria and methodologies listed in this Section to evaluate Bids and determine the successful Bid or Bids which has/have been determined to:

- (a) be substantially responsive to the bidding document;
- (b) offer the lowest evaluated total cost to the Purchaser for all items to be procured based on either a single Contract or all multiple Contracts combined, as the case may be, in accordance with the ITB 14.6 inviting bid prices and

discounts, and provisions made in the Bidding Document for evaluation of bids and award of contract (s); and

- (c) be offered by Bidder or Bidders that substantially meet the qualification criteria applicable for Contract or Contracts for which they are selected.

1. Evaluation: Technical Bid and Commercial Conditions (ITB 30.3 and ITB 30.4)

1.1 Evaluation of Technical Bid (Reference ITB 16 and ITB 30.3): The Purchaser shall evaluate the Technical Bid to determine compliance with the Purchaser’s requirements under Section VII ‘Schedule of Requirement’ and whether the Bids are substantially responsive to the Technical Specifications and other Requirements. **[Bidder shall provide form (s) titled “Technical Bid-Base Bid” as per Section IV]**

S/ No	REQUIREMENT	PASS/FAIL
1.	Documentary Evidence that goods and related services are eligible; Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.	
2.	Bidder to provide Original Manufacturers’ Brochures/ Technical Data Sheets for all items in the lot, showing compliance with specifications. Soft copies are acceptable for international bidders.	
3.	The bidder to provide a compliance sheet to the technical specifications of all the items in the Lot and a statement of deviation and exceptions to the provisions on schedule of requirements.	
4.	Manufacturer’s Authorization if bidder does not manufacture or produce the goods it offers.	
5.	The bidder shall also provide warranty of all the items and shall remain valid for not less than 2	

	years after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination	
6.	Proof of local presence either directly or through local agent and guarantee of Availability of consumables and spare Parts as well as after sales support throughout the life of equipment (office location technical staff ,response time and support capacity	
7.	Standards Specification where specified- The bidder shall be required to submit a certificate of conformity to standards for each of the product offered. Particular standard for each products are indicated in technical specifications	
8.	Training schedule for Operation and maintenance	
9.	Duly filled, signed and stamped Delivery Schedule.	
10.	Documentary evidence that the Goods conform to the technical specifications and standards specified in Section VII , Schedule of Requirements.	

1.2 Evaluation of Commercial Terms and Conditions of the Bid (Reference ITB 30.4): The Purchaser shall determine whether the Bids are substantially responsive to the Commercial and Contractual Terms and Conditions. **[Bidder shall provide form titled “Commercial Terms and Conditions” as per Section IV]**

- a) **Payment and delivery Schedules**
- b) **Performance securities**

2. Evaluation (ITB 35.6)

2.1. Evaluation Criteria (Other Factors) (ITB 35.6)

The Purchaser's evaluation of a Bid may take into account, in addition to the Bid Price quoted in accordance with ITB 14.9, one or more of the following factors as specified in ITB 35.2(f) and in BDS referring to ITB 35.6, using the following criteria and methodologies.

(a) Delivery schedule. (As per Incoterms specified in the BDS)

The Goods specified in the List of Goods are required to be delivered within the acceptable time range (after the earliest and before the final date, both dates inclusive) specified in Section VII, Schedule of Requirements. No credit will be given to deliveries before the earliest date, and Bids offering delivery after the final date shall be treated as nonresponsive. Within this acceptable period, an adjustment of **0.5%** will be added, for evaluation purposes only, to the Bid price of Bids offering deliveries later than the "Earliest Delivery Date" specified in Section VII, Schedule of Requirements.

(b) Deviation in payment schedule.

- (i) Bidders shall state their Bid price for the payment schedule outlined in the Special Conditions of Contract (SCC). Bids shall be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in Bid price they wish to offer for such alternative payment schedule. The Purchaser may consider the alternative payment schedule and the reduced Bid price offered by the Bidder selected on the basis of the base price for the payment schedule outlined in the SCC.

(c) Cost of major replacement components, mandatory spare parts, and service.

- (i) Bidder shall provide along with its Bid, the list of recommended spare parts for Goods offered indicating for each item of spare part the recommended quantity and unit, and total CIP final destination prices required during the initial period of operation **specified in the BDS 16.4**. The prices offered shall not exceed the prevailing prices charged to other parties by the Bidder. The cost of such spare parts will not be taken into account for bid evaluation. The Purchaser may award the contract for spare parts to the Bidder that is successful for the supply of Goods, by selecting at its option, from the Bidder's list of recommended spare parts, such items and quantities against each as the Purchaser may deem appropriate at the unit prices indicated by the Bidder but not exceeding 10% (Ten percent) of the cost of Goods.

(d) Availability in the Purchaser's Country of spare parts and after sales services for equipment offered in the Bid.

An adjustment equal to the cost to the Purchaser of establishing the minimum service facilities and parts inventories if quoted separately shall be added to the Bid price, for evaluation purposes only.

(f) Performance and productivity of the equipment:

(i) Performance and productivity of the equipment. An adjustment representing the capitalized cost of additional operating costs over the life of the goods will be added to the Bid price, for evaluation purposes if **specified in the BDS 35.6**. The adjustment will be evaluated based on the drop in the guaranteed performance or efficiency offered in the Bid below the norm of 100, using the methodology specified below.

2.2. Evaluation of Multiple Contracts (ITB 35.4)

- a) Determination of substantial responsiveness of Bids and Qualifications of Bidders shall strictly follow the criteria and procedures described in Sections F, and G, of the ITB, Bid data Sheet and this Section III, 'Evaluation and Qualification Criteria'.
- b) Bids invited based on an item-wise approach, lot or package-wise shall be evaluated and the relevant contract shall be awarded based on each item, each lot or each package, as applicable. Contract(s) shall be awarded to the bidder or bidders offering substantially responsive Bid(s) and the lowest evaluated cost to the Purchaser for combined Items, lots, or packages, as the case may be, after considering all possible combinations, and discounts offered subject to the selected bidder(s) substantially meeting the required Qualification Criteria for which they are selected (Ref: Section III, Qualification Requirements, including ITB 33, ITB 35 to ITB 40 and ITB 44). For each of the above approaches, a contract may contain more than one item, lot, or package, if a Bidder is determined successful accordingly.
- c) For each of the above approaches the determination of the lowest cost to the Purchaser will be based on the following:
- (i) Each and every item quoted in a bid for any approach of bidding and award of contract (Item, or lot or package-wise). shall be classified in one of the three Groups, namely, A, B and C as quoted in the bid;
 - (ii) The lowest evaluated cost of an item shall be determined by application of all criteria specified under sections, ITB, BDS and Section III as mentioned above in para (a) taking into account discounts offered for combined items (provided the Bidder (s) selected substantially meet the qualification criteria for combined items), and application of margin of domestic preference, if applicable. If an item in a bid qualifies for a margin of domestic preference, the evaluated price of such item in Group C will account for the applicable margin of preference over the CIP price for comparison with other bids in Group A; and

- (iii) The lowest evaluated cost of a lot or a package as the case may be will be the sum of the evaluated cost of all Individual items in the lot or package, as applicable, determined as per para (c) (ii) above, taking into account discounts offered for combined lots or package, as applicable (provided that the Bidder (s) selected substantially meet the qualification criteria for combined lots or packages, as applicable).

3. Qualification of Bidders (ITB 37)

3.1 Qualification Criteria (ITB 37.1)

After determining the substantially responsive Bid which offers the lowest-evaluated cost in accordance with ITB 35, the Purchaser shall carry out the post-qualification of the Bidder in accordance with ITB 37, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications. The minimum qualification requirements for multiple contracts will be the sum of the minimum requirements for respective individual contracts, unless otherwise specified.

(I) If the Bidder is a manufacturer:**(i) Financial Capability: [**

The Bidder shall furnish documentary evidence that it meets the following financial requirement(s): ***[list the requirement(s) including period]***

(i) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial or Bank statements acceptable to the Purchaser, for the last **Three (3)** years, namely years 2022, 2023 and 2024 shall be submitted demonstrating the current soundness of the Bidder's financial position and availability of adequate financial resources to perform the contract. In case of JV, each member of the JV shall furnish its own financial statement as required above. Refer to Form FIN - 3.1 to provide the required information.

(ii) For Bid evaluation to be performed Lot-wise as per ITB 1.1, ITB 14.6, 14.7 and ITB 35.2 (a): The Bidder shall demonstrate the minimum average annual financial turnover of **per lot for which bid has been submitted** as certified payments received by the Bidder since Jan. 1 2022 for contracts in progress and completed for all Goods manufactured and supplied divided by the number of years and part thereof elapsed since Jan. 1 2022. If the average annual turnover amount is less than the required turnover amount for all lots for which the Bidder is successful, limitation will be placed on the number of lot(s) that will be awarded to the Bidder and Purchaser will decide which lot or lots will be awarded based on the most economical combination that will result in the lowest evaluated cost to the Purchaser for all lots. In case the Bidder is a JV, average annual turnover of all members to the JV shall be added to determine the turnover of the Bidder. Refer to Form FIN—3.2 to provide the required information.

(ii) Experience and Technical Capacity

The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s). In case the Bidder is a JV, experience and demonstrated technical capacity of only the JV shall be taken into account and not of individual members nor their individual experience/capacity will be aggregated. Wherever the words "Similar Goods" have been used it includes upgrades, latest and improved versions or models of similar specifications and technology. Refer to Form Exp-1 to provide the required information.

Requirements:

1. The Bidder shall be manufacturing similar Goods since Jan. 1, 2022
2. The Bidder shall furnish documentary evidence to demonstrate successful completion of at least Three (3) contracts of similar Goods since Jan 1, 2022) .
3. The Bidder shall furnish documentary evidence of support services capacity for the equipment and services provided under this tender.. This is

in form of Technical, Human resource and equipment There has to be demonstration of having been in operation for not less than three(3) years.

(II) If the Bidder is not a manufacturer:

If a Bidder is not a manufacturer, but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section IV, Bidding Forms), the Manufacturer shall demonstrate the above qualifications (i), (ii), (iii) and the Bidder shall demonstrate that it has successfully completed at least *Three (3)* contracts of similar goods in the past since Jan. 1 2016. *If the Bidder is a JV, past performance contracts shall be in the name of the JV.* Refer to Form Exp-1 to provide the required information.

(III) History of non-performing contracts:

Bidder including manufacturer, if the Bidder is not a manufacturer, and each members of JV in case the Bidder is a JV, shall demonstrate that Non-performance of a contract did not occur as a result of the default of the Bidder, manufacturer or the member of JV as the case may be, since 1st January 2016. The required information shall be furnished as per form CON-2.

(IV) Pending Litigation:

Financial position and prospective long-term profitability of the Single Bidder, and in the case the Bidder is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under paragraph I (i) above assuming that all pending litigation will be resolved against the Bidder. Bidder shall provide information on pending litigations as per Form CON-2.

(V) Litigation History:

There shall be no consistent history of court/arbitral award decisions against the Bidder¹ since 1st January 2016. All parties to the contract shall furnish the information as per Form CON-2.

¹ The Bidder shall provide accurate information on the related Form (CON-2) about any litigation or arbitration resulting from contracts completed or ongoing under its execution since Jan. 1----(year). A consistent history of awards against the Bidder or any member of a JV may result in rejection of the bid.

Section IV - Bidding Forms

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Letter of Bid

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

OCBI / LCB No.: *[insert number of bidding process as per procurement plan]*

Invitation for Bid No.: *[insert same IFB No. as advertised]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: ***[insert complete name of Purchaser]***

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with Instructions to Bidders (ITB 8);
- (b) **Eligibility-of Bidder:** We including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries and meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Eligibility of Goods and Related Services:** We meet the eligibility requirements for Goods and Related Services in accordance with ITB 5;
- (d) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid-Securing Declaration in the Purchaser's Country in accordance with ITB 4.7;
- (e) **Conformity:** We offer to supply in conformity with the bidding document and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *[insert a brief description of the Goods and Related Services]*;
- (f) **Bid Price:** The total price of our Bid, excluding any discounts offered in paragraph (g) below is:

Option 1: Procurement of one or several Items--Item-wise:

- (a) Total bid price of each item in words and figures, indicating item number and total amounts of respective currencies in which bid prices for that item have been submitted and payment requested;
- (b) Grand Total Bid Price of all Bid items in respective currencies. Use the following format.

Item No.	Total Price of each item in quoted currency (ies) in words and figure
1; 2; etc.	

Grand Total Bid Price of all Bid Items: Currency A-----; Currency B-----, etc.in words and figures

Or

Option 2: Procurement of items in one or several Lots---Lot-wise- each lot containing one or more items:

- (a) Total bid price of each lot in words and figures, indicating lot number and total amounts of respective currencies in which bid prices for that lot have been submitted and payment requested:
- (b) Grand Total Bid Price of all Bid lots in respective currencies. Use the folloing format.

Lot No.	Total Price of each lot in quoted currency (ies) in words and figure
1; 2; etc.	

Grand Total Bid Price of all Bid lots: Currency A-----; Currency B-----, etc. in words and figures

Or

Option 3: Procurement of itmes in one or several Packages—each package containing one more lots:

- (a) Total bid price of each lot of the package and total bid price of each package in words and figures, indicating lot numbers and corresponding package number and total amounts of respective currencies in which bid prices for each package have been submitted and payment requested:
- (b) Grand Total Bid Price of all Bid packages in respective currencies. Use the folloing format.

Package No	Lot No	Total Price of each lot in quoted currency(ies) in words and figures
1	Lot 1	
	Lot 2, etc.	

Total Price of Package 1=Total Price of Lots 1, 2, etc.=		
Package No	Lot No	Total Price of each lot in quoted currency(ies) in words and figures
2	1	
	Lot 2, etc.	
Total Price of Package 2=Total Price of Lots 1, 2, etc.=		

Grand Total Bid Price of all Bid packages: Currency A-----; Currency B-----
etc.-in words and figures.

- (g) **Discounts:** The discounts offered and the methodology for their application are:
- (i) The discounts offered are: [*Specify in detail each discount offered.*]
 - (ii) The exact method of calculations to determine the net price of each item, and in case of multiple lots or multiple packages, net price of each item, each lot and each package as applicable, after application of discounts is shown below: [*Specify in detail the method that shall be used to apply the discounts and ensure clarity, unambiguity, etc. in accordance with ITB 14.7*];
- (h) **Bid Validity Period:** Our Bid shall be valid for the period specified in BDS 18.1 (as amended, if applicable) from the date fixed for the Bid submission deadline specified in BDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (i) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (j) **One Bid per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other Bid(s) as a Joint Venture member, or as a subcontractor, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;
- (k) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Bank or a debarment imposed by the Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Bank and other development banks. Further, we are not ineligible under the Purchaser's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;

(l) **State-owned enterprise or institution:** *[select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6];*

(m) **Commissions, gratuities, fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity];*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

(n) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

(o) **Purchaser Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, or any other Bid that you may receive; and

(p) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month], [insert year]*

* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture (JV) as Bidder or names of all members (partners) of JV and sign on behalf of the JV and not on behalf of only one member that has been given power of attorney.

** Person signing the Bid shall have the power of attorney given by the Bidder. If the Bidder is a JV the power of attorney shall be given by the JV or by all members of the JV. The power of attorney shall be attached with the Bid Schedules.

Price Schedule Forms

*The Bidder shall fill in these Price Schedule Forms for the Base-Bid in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements.*

[For Alternative Bid, if permitted, use same set of Price Schedules by identifying and differentiating them as Alternative Price Schedule from the Base-Bid] NOT PERMITTED

Bidders to complete the price schedules per Lot. All the items in the lot must be quoted, otherwise it will lead to automatic disqualification.

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported

LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° ____ of ____		
1	2	3	4	5	6	7	8	9	
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP <i>[insert place of destination] as specified in BDS</i> in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)	
<i>[insert number of the item]</i>	<i>[insert name of Good]</i>	<i>[insert country of origin of the Good]</i>	<i>[insert quoted Delivery Date]</i>	<i>[insert number of units to be supplied and name of the physical unit]</i>	<i>[insert unit price CIP per unit]</i>	<i>[insert total CIP price per line item]</i>	<i>[insert the corresponding price per line item]</i>	<i>[insert total price of the line item]</i>	
Total Price									
Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[Insert Date]</i>									

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, already imported*

Lot No.....			(Group C Bids, Goods already imported) Currencies in accordance with ITB 15						Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° ____ of ____		
1	2	3	4	5	6	7	8	9	10	11	12 ***
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price including Custom Duties and Import Taxes paid, in accordance with ITB 14.9(c)(i)	Custom Duties and Import Taxes paid per unit in accordance with ITB 14.9(c)(ii), [to be supported by documents] **	Unit Price net of custom duties and import taxes, in accordance with ITB 14.9 (c) (iii) (Col. 6 minus Col.7)	Price per line item net of Custom Duties and Import Taxes paid, in accordance with ITB 14.9(c)(i) (Col. 5×8)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the goods to their final destination, as specified in BDS in accordance with ITB 14.9 (c)(v)	Sales and other taxes paid or payable per item if Contract is awarded (in accordance with ITB 14.9(c)(iv)	Total Price per line item (Col. 9+10)
<i>[insert number of the item]</i>	<i>[insert name of Goods]</i>	<i>[insert country of origin of the Good]</i>	<i>[insert quoted Delivery Date]</i>	<i>[insert number of units to be supplied and name of the physical unit]</i>	<i>[insert unit price per unit]</i>	<i>[insert custom duties and taxes paid per unit]</i>	<i>[insert unit price net of custom duties and import taxes]</i>	<i>[insert price per line item net of custom duties and import taxes]</i>	<i>[insert price per line item for inland transportation and other services required in the Purchaser’s Country]</i>	<i>[insert sales and other taxes payable per item if Contract is awarded]</i>	<i>[insert total price per line item]</i>

										Total Bid Price	
Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[insert date]</i>											

* *[For previously imported Goods, the quoted price shall be distinguishable from the original import value of these Goods declared to customs and shall include any rebate or mark-up of the local agent or representative and all local costs except import duties and taxes, which have been and/or have to be paid by the Purchaser. For clarity the Bidders are asked to quote the price including import duties, and additionally to provide the import duties and the price net of import duties which is the difference of those values.]*

** *i) No Supporting documents for customs duties and import taxes already paid or to be paid shall be accepted unless such documents establish beyond any reasonable doubt the actual amounts of customs duties and import taxes actually paid by the Bidder for each item for which the Bid is submitted and amount shown in the documents tally with the amounts indicted in the price schedule under column 7 of the Bid. Similarly, for amount yet to be paid, the Bidder shall provide documents from concerned governmental authorities indicating amounts of such duties and taxes to be paid for each item of the Bid. A Bid submitted with supporting documents not in conformance with the above requirement shall be rejected. To this end any falsified information on payment of such duties and taxes or falsification of document in support to derive unjustified benefit shall be treated seriously in accordance with Bank’s Integrity Framework and as per Section VI -Fraud and Corruption;*

ii) If the Bidder is unable to submit supporting evidence for past or future payment of customs duties and import taxes in accordance with requirements under i) above, for justified reasons, such Bid may not be rejected unless the Bidder does not accept the following procedure for the purpose of comparison and evaluation of its bid which disallows the benefit that would have otherwise accrued to the Bidder for payment of customs duties and taxes in comparison of bids had it not failed to submit the supporting documents. Accordingly, for the purpose of evaluation, the amount of customs duties and import taxes whether indicated under column 7 of the price schedule or not will be treated as “0” “Zero” and the price per line item under column 9 will be calculated as: [5x6] and total price per line item under column 12 will be calculated as: [5x 6 + 10]. If the Bidder is successful on this basis it will be selected for award and contract amount will be = [5x6+ 10+11]. If the Bidder does not accept the above approach for evaluation, the Bid shall be rejected.

*** *[Total contract amount will be [7+11+12] [In case of Bid at (ii) above all calculations shall be based on value of 7 as “0” “Zero”]*

Price Schedule: Goods Manufactured in the Purchaser’s Country

Purchaser’s Country _____				(Group A and B Bids) Currencies in accordance with ITB 15				Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9	10
Line Item N°	Description of Goods	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price EXW	Total EXW price per line item (Col. 4×5)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination	Cost of local labor, raw materials and components from with origin in the Purchaser’s Country % of Col. 5	Sales and other taxes payable per line item if Contract is awarded (in accordance with ITB 14.9(a)(ii))	Total Price per line item (Col. 6+7)
<i>[insert number of the item]</i>	<i>[insert name of Good]</i>	<i>[insert quoted Delivery Date]</i>	<i>[insert number of units to be supplied and name of the physical unit]</i>	<i>[insert EXW unit price]</i>	<i>[insert total EXW price per line item]</i>	<i>[insert the corresponding price per line item]</i>	<i>[Insert cost of local labor, raw material and components from within the Purchase’s country as a % of the EXW price per line item]</i>	<i>[insert sales and other taxes payable per line item if Contract is awarded]</i>	<i>[insert total price per item]</i>
Total Price									
Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[insert date]</i>									

Price and Completion Schedule - Related Services

Currencies in accordance with ITB 15

Date: _____

OCBI / LCB No: _____

Alternative No: _____

Page N° _____ of _____

1	2	3	4	5	6	7
Service N°	Description of Services (excludes inland transportation and other services required in the Purchaser's Country to convey the goods to their final destination)	Country of Origin	Delivery Date at place of Final destination	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6 or estimate)
<i>[insert number of the Service J]</i>	<i>[insert name of Services]</i>	<i>[insert country of origin of the Services]</i>	<i>[insert delivery date at place of final destination per Service]</i>	<i>[insert number of units to be supplied and name of the physical unit]</i>	<i>[insert unit price per item]</i>	<i>[insert total price per item]</i>
Total Bid Price						
Name of Bidder <i>[insert complete name of Bidder]</i> Signature of Bidder <i>[signature of person signing the Bid]</i> Date <i>[insert date]</i>						

LOT:1 IMAGING/OUTPATIENT

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 “Unit price CIP final destination”]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)
	Outpatient							

							Total Price	

Authorized Bidder's Signature.....

Date.....

LOT:2 PHARMACY/MORTUARY

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 “Unit price CIP final destination”]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)

LOT:3 Surgical Sets

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 “Unit price CIP final destination”]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)
							Total Price	

Authorized Bidder’s Signature.....

Date.....

LOT 4: LABORATORY(Molecular Laboratory, Microbiology Laboratory, Anatomic Laboratory, Intensive Care Unit LAB)

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)

Molecular Laboratory								
Microbiology Laboratory								
Anatomic Laboratory								
Intensive Care Unit LAB								
							Total Price	

Authorized Bidder's Signature.....

Date.....

Lot 5: CYTOLOGY/ BTU Laboratory

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____	
							Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)
Cytology								

BTU Laboratory								
							Total Price	

Authorized Bidder's Signature.....

Date.....

LOT 6: BIOREPOSITORY LABORATORY/ Clinical Chemistry Laboratory

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported									
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____		Alternative No: _____ Page N° _____ of _____
1	2	3	4	5	6	7	8	9	
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 “Unit price CIP final destination”]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)	
Biorepository Laboratory									
Clinical Chemistry Laboratory									

	Total Price	
--	-------------	--

Authorized Bidder's Signature.....

Date.....

LOT 7: RENAL HEMODIALYSIS

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)
							Total Price	

Authorized Bidder's Signature.....

Date.....

LOT 8: OPERATION THEATRES

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)
General Surgery Rooms								
Theatre Recovery								

							Total Price	

Authorized Bidder's Signature.....

Date.....

LOT 9: SUPER SPECIALTY EQUIPMENT

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 “Unit price CIP final destination”]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)

	Total Price	

Authorized Bidder's Signature.....

Date.....

LOT 10: CRITICAL CARE UNIT

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)
							Total Price	

Authorized Bidder's Signature.....

Date.....

LOT 11: INPATIENT SERVICES

Price Schedule: Goods Manufactured Outside the Purchaser’s Country, to be Imported								
LOT No.....				(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 “Unit price CIP final destination”]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser’s Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)

							Total Price	

Authorized Bidder's Signature.....

Date.....

LOT 12: WASTE MANAGEMENT UNIT

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported								
LOT No.....			(Group C Bids, goods to be imported) Currencies in accordance with ITB 15			Date: _____ OCBI / LCB No: _____ Alternative No: _____ Page N° _____ of _____		
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [<i>insert place of destination</i>] as specified in BDS in accordance with ITB 14.9(b)(i) [Include herein the cost applicable under column 8 if the destination is the same as final destination and indicate under column 6 "Unit price CIP final destination"]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination as specified in BDS in accordance with ITB 14.9 (b) (ii) [This column is not applicable if destination as per column 6 under ITB 14.9 (b) (i) and final destination as per ITB 14.9 (b) (ii) is the same]	Total Price per Line item (Col. 7+8)

Bidder Information Form -Form ELI-1.1

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid submission]*

OCBI / LCB No.: *[insert number of bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each member: <i>[insert legal name of each member in JV]</i>
3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Purchaser
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 45.1, the successful</i>

Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]

Name of Bidder[insert complete name of

Bidder] Signature of Bidder..... [signature of person

signing the Bid] Date..... [insert date]

Bidder’s JV Members Information Form-Form ELI-1.2

[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture].

Date: *[insert date (as day, month and year) of Bid submission]*
 OCBI / LCB No.: *[insert number of Bidding process]*
 Alternative No.: *[insert identification No if this is a Bid for an alternative]*
 Page _____ of _____ pages

1. Bidder’s Name: <i>[insert Bidder’s legal name]</i>
2. Bidder’s JV Member’s name: <i>[insert JV’s Member legal name]</i>
3. Bidder’s JV Member’s country of registration: <i>[insert JV’s Member country of registration]</i>
4. Bidder’s JV Member’s year of registration: <i>[insert JV’s Member year of registration]</i>
5. Bidder’s JV Member’s legal address in country of registration: <i>[insert JV’s Member legal address in country of registration]</i>
6. Bidder’s JV Member’s authorized representative information Name: <i>[insert name of JV’s Member authorized representative]</i> Address: <i>[insert address of JV’s Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV’s Member authorized representative]</i> Email Address: <i>[insert email address of JV’s Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Purchaser, in accordance with ITB 4.6.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 45.1, the successful Bidder shall provide additional information on beneficial ownership for each JV]</i>

member using the Beneficial Ownership Disclosure Form.]

Name of Bidder[insert complete name of Bidder]
Signature of Bidder..... [signature of person signing the Bid]
Date..... [insert date]

Technical Bid-Base Bid

[Note for information of Bidder: Bidder shall demonstrate compliance with the Purchaser's requirements and Technical Specifications as described in Section VII of the Bidding Documents. Any departures or deviations from the required Technical Specifications shall be highlighted and if there are none, full compliance shall be confirmed.

The Bidder shall provide complete information and documentation of technical standards, codes, designs and specifications, of Goods and Related Services offered along with Model number or any other identification number of the manufacturer wherever applicable and in accordance with all requirements mentioned in ITB 16. Bidding document may stipulate a Table, Form, or Template to present Technical designs, specification, characteristics, functional or other guaranteed parameters, the Bidder shall invariably use the same without any changes and ensure that all requested details and supporting documents are provided. Lack or omission or non-confirmation of substantial details, information and documentation for major or essential technical requirements/features may result in rejection of the Bid.

If the details of specifications for the offered Goods in the written text of the Bid differ from the details provided in the supporting literature, drawings or other parts of the document, all such discrepancies shall be explained to the satisfaction of the Purchaser failing which the Purchaser, may reject the Bid, or if deemed appropriate, may consider the information in the written text of the Bid to be valid ignoring details in other parts of the Bid. Failure of the Bidder to confirm this will result in rejection of the Bid.

Bid shall establish conformity with the Purchaser's Specifications and requirements as specified in the Bidding Document along with all supporting documents mentioned in ITB 16. The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

Any deviations in the technical standards, codes, designs or specifications or other requirements from those stated in the Bidding Documents shall be explained indicating their impact on the performance requirements, characteristics or parameters of the Goods and Related Services required. To this end, for any such deviations to be acceptable, Bid shall establish substantial responsiveness to the required technical specifications by explaining and documenting for the offered Goods, and Related Services equivalency with or improvement to the required technical standards, codes, designs and Specifications.

Any Major deviation from the Purchaser's requirements shall be the cause for rejection of the Bid. Any deviation which in the Bidder's opinion is considered minor, the Bidder shall provide evidence to this effect including evidence of any monetary

implications caused by such deviation. The Purchaser's evaluation shall be independent of Bidder's opinion on such matters and shall be final】

Technical Bid-Alternative Bid

(If permitted in the Bidding Document)

[Note for information of Bidder: Text under Appendix A applicable for the Base Bid is also applicable for Alternative Bid. In addition, the Bidder shall explain and establish to the satisfaction of the Purchaser how the specification under the Alternative bid is equal or better than the Purchaser's required Specifications and that offered in the Base Bid when Alternative Bid is permitted only with the Base Bid]

Commercial Terms and Conditions

[Bidder shall specify any deviations to the provisions of the Bidding Document (other than Technical Specifications) in particular those specified in Part 3 of the Bidding document including General and Special Conditions of Contract. If "None" it shall be confirmed accordingly]

**Historical Contract Non-Performance--Pending
Litigation--Litigation History Form CON-2**

Bidder's Legal Name: _____ Date: _____
JV Member's Legal Name: _____
OCBI / LCB No.: _____
Page _____ of _____ pages

<p>Non-Performing Contracts in accordance with Section III, Evaluation Criteria</p>			
<ul style="list-style-type: none"> • Contract non-performance did not occur during the stipulated period, in accordance with Section III, Evaluation Criteria • Contract non-performance during the stipulated period, in accordance with Section III, Evaluation Criteria. List all Non-performed contracts since date specified in the Section III. 			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/number, and any other identification]</i> Name of Purchaser: <i>[insert full name]</i> Address of Purchaser: <i>[insert street/city/ country]</i> Reason(s) for non-performance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
<p>Pending Litigation, in accordance with Section III, Evaluation Criteria</p>			
<ul style="list-style-type: none"> • No pending litigation in accordance Section III, Evaluation Criteria • Pending litigation in accordance with Section III, Evaluation Criteria, as indicated below. List all pending litigation contracts. 			
Year	Brief reasons for litigation	Contract Identification	Total Contract Amount (current value, US\$ equivalent)
_____	_____	Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Amount in dispute	_____

		Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Amount in dispute:	
Form CON-2 Continued			
Litigation History in accordance with Section III—List all contracts since the date specified in Section III indicating:			
Year	Brief reasons for litigation	Contract Identification Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Amount in dispute Court or Arbitral award decision:	Total Contract Amount (current value, US\$ equivalent)

Name of Bidder*[insert complete name of Bidder]*

Signature of Bidder..... *[signature of person signing the Bid]*

Date..... *[insert date]*

Financial Situation

Form FIN - 3.1

Historical Financial Performance

Bidder's Legal Name: _____ Date: _____

JV Member's Legal Name: _____ OCBI / LCB No.: _____

Page _____ of _____ pages

To be completed by the Bidder and, if JV, by each member

Financial information in US\$ equivalent	Historic information for previous _____ () years (US\$ equivalent in 000s)						
	Year 1	Year 2	Year 3	Year ...	Year n	Avg.	Avg. Ratio
Information from Balance Sheet							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information from Income Statement							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

• Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- (a) Must reflect the financial situation of the Bidder or partner to a JVCA, and not sister or parent companies;
- (b) Historic financial statements must be audited by a certified accountant;
- (c) Historic financial statements must be complete, including all notes to the financial statements;

(d) Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

Name of Bidder[insert complete name of

Bidder] Signature of Bidder..... [signature of person

signing the Bid] Date..... [insert date]

Average Annual Turnover

Form FIN - 3.2

Bidder's Legal Name: _____ Date: _____
 JV Member Legal Name: _____ OCBI / LCB No.: _____

Page _____ of _____ pages

To be completed by the Bidder and, if JV, by each member

Annual turnover data		
Year	Amount and Currency	US\$ equivalent
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
*Average Annual Turnover	_____	_____

*Average annual turnover calculated as total certified payments received for supply in progress or completed, divided by the number of years as per Section III, Evaluation Criteria.

Name of Bidder *[insert complete name of*

Bidder] **Signature of Bidder**..... *[signature of person*

signing the Bid] **Date**..... *[insert date]*

Experience—Form Exp-1

Bidder’s Legal Name: _____
 Manufacturer’s Legal name: _____ Date: _____
 JV ’s Legal Name: _____ OCBI / LCB No.: _____
 Page _____ of _____ pages

If Bidder is JV specify only those contracts that were performed by the same JV

Complete all information requested below that are required to assess Bidder’s qualifications as per post qualification criteria specified under Section III

To be completed by Bidder, Bidder and Manufacturer if Bidder is not the Manufacturer, and by JV if JV is the Bidder

Similar Contract Number: ___ of ___ required.	Information	
Contract Identification	_____	
Award date	_____	
Completion date	_____	
Role in Contract	_____	
Total contract amount	_____	US\$ _____
Purchaser’s Name:	_____	
Address:	_____ _____	
Telephone/fax number:	_____	
E-mail:	_____	
Description of Goods	_____	
Quantity of Goods supplied under this contract	_____	
Quantity of Goods supplied under all other contracts since the date indicated in Section III- Provide similar separate details as for this contract for all such other contracts	_____	
Form Exp-1 continued		

Similar Contract Number: ___ of ___ required.	Information
First date of manufacturing similar goods as offered in the bid	
Period of Successful use/operation -Number of Years	
Installed manufacturing capacity—Number of units per month of item (s) specified in section III	
Demonstrated proven capacity to supply since the date and for Item (s) specified in Section III	

Name of Bidder*[insert complete name of*

Bidder] **Signature of Bidder**..... *[signature of person*

signing the Bid] **Date**..... *[insert date]*

Form of Bid Security

(Bank Guarantee)

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Purchaser to insert its name and address]*

IFB No.: *[Purchaser to insert same IFB No as advertised]*

Alternative No.: *[Insert identification No if this is a Bid for an alternative]*

OCBI / LCB No.: *[Purchaser to insert same OCBI number as in procurement plan]*

Date: *[Insert date of issue]*

Bid Guarantee No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _____ *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. _____ – ("the IFB") and Open Competitive Bidding (International) No. (" the OCBI").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant to issue this guarantee, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid during the period of Bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i)

our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[Signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its Bid, if so indicated in the **BDS.**]*

Date: *[insert date (as day, month and year) of Bid submission]*
OCBI / LCB No.: *[insert number as in procurement plan]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a Bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank Group Financed Procurement

A. Provisions under Section 5 “Eligibility” of the Procurement Policy for Bank Group Funded Operations and Chapter A2 of the Operations Procurement Manual under Procurement Framework of the African Development Bank

1. The African Development Fund (ADF) permits firms and individuals from all countries to offer goods, works and services for ADF funded projects.

However, the proceeds of any Financing undertaken in the operations of the African Development Bank (ADB) and the Nigeria Trust Fund (NTF) shall be used for procurement of goods and works, including the related services, provided by bidders from Eligible¹ Countries.² Any conditions for participation shall be limited to those that are essential to ensure the firm’s capability to fulfill the contract in question. In the case of ADB and NTF, bidders from non-Member Countries offering goods, works and related services (including transportation and insurance) are not eligible even if they offer these from Eligible Member Countries. Any waiver to this rule will be in accordance with the Articles 17(1) (d) of the Agreement Establishing the African Development Bank and 4.1 of the Agreement Establishing the Nigeria Trust Fund.

B. Rules and Procedures for Procurement of Goods and Works

Overview

1. The eligibility criteria for participation in the supply of goods, works and related services, to be procured through the ADB and NTF Financing, derive from the requirements of the Agreement Establishing the African Development Bank, Article 17.1.d, and the Agreement Establishing the Nigeria Trust Fund, Article 4.1. The foregoing requirements basically prescribe two types of eligibility criteria:
 - (a) The eligibility of the bidder;
 - (b) The eligibility of the goods, works and related services.

Eligibility of the Bidder Under the ADB & NTF Financing

2. The eligibility of the bidder shall be based on nationality, in accordance with the following rules:
 - (a) Natural Persons: A natural person is eligible if he or she is a national of a Member Country of the ADB. Where a person has more than one nationality, such a person shall be eligible if the nationality indicated in his or her bid is that of a Member Country of the ADB.
 - (b) Corporations: A corporation is eligible if it satisfies the following criteria:

¹ Refer to Bank Framework for additional information on Eligibility.

² “Eligible Countries” shall mean: (a) in the case of the African Development Bank (ADB) and the Nigeria Trust Fund, the Member Countries of the ADB; and (b) in the case of the African Development Fund (ADF), any country.

- i) it is incorporated in a country that is a Member of the ADB;
 - ii) it is a national of a country that is a Member of the ADB, as determined by the law of its place of incorporation;
 - iii) it has its principal place of business in a country that is a Member of the ADB.
- (c) Joint Ventures and Associations: An unincorporated joint venture, partnership, or association, shall be eligible if more than 50 % of the value of its works and/or services is executed by its members satisfying the eligibility requirements for individuals or corporations.

Eligibility of the Goods, Works and Related Services

3. In order to be eligible, the goods to be procured must have been mined, grown, or produced, in the form in which they are purchased, in an Eligible Member Country.
4. For works contracts, which may include civil works, plant construction, or turnkey contracts, the contractor must satisfy the nationality criteria of eligibility, either as a natural person, or corporation, or joint venture and association. Labour, equipment, and materials needed for carrying out the works contract, shall be supplied from Eligible Member Countries.
5. For contracts, which have been awarded on the basis of Cost, Insurance and Freight (CIF), or Carriage and Insurance Paid (CIP), bidders shall be free to arrange for ocean and other transportation, and the related insurance, from any Eligible Member Country. On the other hand, where goods are shipped on FOB basis, and the Bank has agreed to finance transportation and insurance separately, which are arranged by the purchaser, under a separate contract, the Bank shall be satisfied that the services are supplied from Eligible Member Countries.

List of Eligible Countries

6. List of Eligible countries can be found in African Development Bank's website:

Eligible Countries

Ineligible Countries in reference to ITB 4.8 and ITB 5.1

7. In reference to ITB 4.8 and ITB 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8(a) and ITB 5.1: **none**.

Under ITB 4.8(b) and ITB 5.1: **none**

Section VI - Fraud and Corruption

(Section VI shall not be modified)

1. Purpose

1.1 The Bank's Integrity Framework and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption³.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party⁴;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party⁵ to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

³ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

⁴ For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution, including Bank staff and employees of other organizations taking or reviewing procurement decisions.

⁵ For the purpose of this sub-paragraph, "party" refers to a public official, including Bank staff and employees of other organizations taking or reviewing procurement decisions.; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution."

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Integrity Framework, and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;⁶ (ii) to be a nominated⁷ sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect⁸ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

⁶ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

⁷ A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

⁸ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.



Part 2 - Supply Requirements

Section VII - Schedule of Requirements

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Notes for Preparing the Schedule of Requirements

The Schedule of Requirements shall be included in the bidding document by the Purchaser, and shall cover, at a minimum, a description of the goods and services to be supplied and the delivery schedule.

The objective of the Schedule of Requirements is to provide sufficient information to enable Bidders to prepare their Bids efficiently and accurately, in particular, the Price Schedule, for which a form is provided in Section IV. In addition, the Schedule of Requirements, together with the Price Schedule, should serve as a basis in the event of quantity variation at the time of award of contract pursuant to ITB 42.1.

The date or period for delivery should be carefully specified, taking into account (a) the implications of delivery terms stipulated in the Instructions to Bidders pursuant to the *Incoterms* rules (i.e., EXW, or CIP, FOB, FCA terms—that “delivery” takes place when goods are delivered **to the carriers**), and (b) the date prescribed herein from which the Purchaser’s delivery obligations start (i.e., notice of award, contract signature, opening or confirmation of the letter of credit).

1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column "Bidder's offered Delivery date" to be filled by the Bidder]

Line Item N°	Description of Goods	LOT NO.	QUANTITY	Final Destination (Project Site) as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date	Latest Delivery Date	Bidder's offered Delivery date [to be provided by the Bidder]
1.	Imaging/Outpatient	LOT 1	NO.	EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.	Three months (3) after contract signing	Six (6) months after contract signing	
2.	Pharmacy/Mortuary	LOT 2	NO.	EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.	Three months (3) after contract signing	Six (6) months after contract signing	
3.	Surgical Sets	LOT 3	NO.	EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.	Three months (3) after contract signing	Six (6) months after contract signing	
4.	Laboratory (Molecular, Microbiology, Anatomic, Intensive Care Unit)	LOT 4	NO.	EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.	Three months (3) after contract signing	Six (6) months after contract signing	
5.	Laboratory(Cytology, BTU)	LOT 5	NO.	EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.	Three months (3) after contract signing	Six (6) months after contract signing	

Section VII – Schedule of Requirements

6.	Laboratory (Biorepository, Clinical Chemistry)	LOT 6	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Six (6) months after contract signing	
7.	Renal Hemodialysis	LOT 7	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Six (6) months after contract signing	
8.	Operation Theatres	LOT 8	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Six (6) months after contract signing	
9.	Super Specialty Equipment	LOT 9	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Six (6) months after contract signing	
10.	Critical Care Unit	LOT 10	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Six (6) months after contract signing	
11.	Inpatient Services	LOT 11	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Three (3) months after contract signing	
12.	Waste Management Unit	LOT 12	NO.	<i>EAST AFRICA CENTRES OF EXCELLENCE (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS.</i>	Three months (3) after contract signing	Three (3) months after contract signing	

2. List of Related Services and Completion Schedule

[This table shall be filled in by the Purchaser. The Required Completion Dates should be realistic, and consistent with the required Goods Delivery Dates (as per Incoterms)]

Service	Description of Service	Quantity¹	Physical Unit	Place where Services shall be performed	Final Completion Date(s) of Services
<i>[insert Service No]</i>	<i>[insert description of Related Services]</i>	<i>[insert quantity of items to be supplied]</i>	<i>[insert physical unit for the items]</i>	<i>[insert name of the Place]</i>	<i>[insert required Completion Date(s)]</i>

1. If applicable

3. Technical Specifications

The purpose of the Technical Specifications (TS), is to define the technical characteristics of the Goods and Related Services required by the Purchaser. The Purchaser shall prepare the detailed TS take into account that:

- *The TS constitute the benchmarks against which the Purchaser will verify the technical responsiveness of Bids and subsequently evaluate the Bids. Therefore, well-defined TS will facilitate preparation of responsive Bids by Bidders, as well as examination, evaluation, and comparison of the Bids by the Purchaser.*
- *The TS shall require that all goods and materials to be incorporated in the goods be new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided for otherwise in the contract.*
- *The TS shall make use of best practices. Samples of specifications from successful similar procurements in the same country or sector may provide a sound basis for drafting the TS.*
- *The Bank encourages the use of metric units.*
- *Standardizing technical specifications may be advantageous, depending on the complexity of the goods and the repetitiveness of the type of procurement. Technical Specifications should be broad enough to avoid restrictions on workmanship, materials, and equipment commonly used in manufacturing similar kinds of goods.*
- *Standards for equipment, materials, and workmanship specified in the bidding document shall not be restrictive. Recognized international standards should be specified as much as possible. Reference to brand names, catalogue numbers, or other details that limit any materials or items to a specific manufacturer should be avoided as far as possible. Where unavoidable, such item description should always be followed by the words “or substantially equivalent.” When other particular standards or codes of practice are referred to in the TS, whether from the Borrower’s or from other eligible countries, a statement should follow other authoritative standards that ensure at least a substantially equal quality, then the standards mentioned in the TS will also be acceptable.*
- *Reference to brand names and catalogue numbers should be avoided as far as possible; where unavoidable the words “or at least equivalent” shall always follow such references.*
- *Technical Specifications shall be fully descriptive of the requirements in respect of, but not limited to, the following:*
 - (a) *Standards of materials and workmanship required for the production and manufacturing of the Goods.*
 - (b) *Any sustainable procurement technical requirements shall be clearly specified. Please refer to the Bank’s Procurement Framework for further information. The requirements to be specified shall be specific enough to not demand evaluation based on rated criteria/merit point system. The sustainable procurement requirements shall be specified to enable evaluation of such a requirement on a pass/fail basis. To encourage bidders’*

innovation in addressing sustainable procurement requirements, as long as the bid evaluation criteria specify the mechanism for monetary adjustments for the purpose of bid comparisons, bidders may be invited to offer Goods that exceeds the specified minimum sustainable procurement requirements.

- (c) Detailed tests required (type and number).*
- (d) Other additional work and/or Related Services required to achieve full delivery/completion.*
- (e) Detailed activities to be performed by the Supplier, and participation of the Purchaser thereon.*
- (f) List of detailed functional guarantees covered by the Warranty and the specification of the liquidated damages to be applied in the event that such guarantees are not met.*

[The TS shall specify all essential technical and performance characteristics and requirements, including guaranteed or acceptable maximum or minimum values, as appropriate. Whenever necessary, the Purchaser shall include an additional ad-hoc Bidding form (to be an Attachment to the Letter of Bid), where the Bidder shall provide detailed information on such technical performance characteristics in respect to the corresponding acceptable or guaranteed values.]

[When the Purchaser requests that the Bidder provides in its Bid a part or all of the Technical Specifications, technical schedules, or other technical information, the Purchaser shall specify in detail the nature and extent of the required information and the manner in which it has to be presented by the Bidder in its Bid.]

[If a summary of the Technical Specifications (TS) has to be provided, the Purchaser shall insert information in the table below. The Bidder shall prepare a similar table to justify compliance with the requirements]

“Summary of Technical Specifications. *The Goods and Related Services shall comply with following Technical Specifications and Standards:*

Item No	Name of Goods or Related Service	Technical Specifications and Standards
<i>[insert item No]</i>	<i>[insert name]</i>	<i>[insert TS and Standards]</i>

Detailed Technical Specifications and Standards *[insert whenever necessary].*

[Insert detailed description of TS]

LOT:1 IMAGING/OUTPATIENT

S/ No	LOT:1 IMAGING/OUTPATIENT	
	Imaging Department	Qty
1.	Emergency Resuscitation Trolley	2
2.	Wheelchairs	2
3.	Patient stretcher	1
4.	Portable Electric Suction units	2
5.	Ultrasound examination couches	2
	Outpatient	
6.	Patient monitor	2
7.	Emergency Resuscitation Trolley	2
8.	Diagnostic set (Wall mounted)	2
9.	Blood pressure Machine (Wall Mounted)	2
10.	Portable Electrical suction machines	2
11.	Wall mounted Examination lights	2
12.	Oxygen Flow Meters	3
13.	Wall suction units	3
14.	X-ray viewer LED	2
15.	Ceiling mounted Drip stand	3
16.	Procedure trolley	3
17.	Vital signs monitor	2
18.	Weighing Scale with height meter	2
19.	Thermometer	10

Specifications LOT 1**LOT 1 - 1Emergency Resuscitation Trolley**

Item Code No.	Department	Section	Item Description
LOT 1-1	Intensive Care Unit	Critical Care Unit	Resuscitation trolley
1. General Description			
Resuscitation trolley for use in ICU. Epoxy coated mild steel, with drawers, protection perimeter and defibrillator holder. The Unit should be mobile on four castors , 2 lockable			

2. Composition			
2.1.	Main unit,		
3. Performance Specifications			
3.1. Main Unit			
3.1.1. Should be durable with Ergonomic handle and should have easy grip			
3.1.2. Height should be 40-45"			
3.1.3. Should have 6-8 drawers of sizes 3x3", 2x6", 1x9"			
3.1.4. Should have interchangeable 3", 6", 9" drawers which run smoothly on good quality channels			
3.1.5. Should have provision of side storage which allows storage of variety accessories like can, storage bins, glove storage, sharp container set			
3.1.6. An over bridge can with baskets, shelves and bins to keep important things			
3.1.7. Should have AMS top surface & advance polymer material which is easy to clean. It should not dent, chip flake or corrode			
3.1.8. Should be easily rolling and has toe brakes			
3.1.9. Should have I.V. pole with clamps each 3" drawer should have provision for 25-30 compartments			
3.1.10. Should have twin swivel castors & central lock			
3.1.11. Should be CE and ISO 9001/2000 and FDA approved			
3.1.12. Should have CPR board & O2 cylinder holder			

LOT 1-2: Wheelchairs

Item Code No.	Department	Section	Item Description
LOT 1-2	Imaging	SPECT CT	Wheelchairs
1. General Description			
The wheelchair unit is required to transport physically impaired patients from one place to another whilst in a seated position.			
2. Composition			
2.1.	Main unit		
3.			
3.1. The wheelchair shall be suitable for adult patients and shall be capable of withstanding minimum patient weights of 120 kg.			
3.2. The wheelchair shall be as light as possible (not more than 15kg) and its frame shall only be manufactured from aluminum which is resistant to scratches and heavy detergents cleaning materials.			
3.3. The wheelchair shall incorporate two handle bars for an attendant to be able to push the wheelchair from one place to another.			
3.4. The wheelchair shall be both patient and attendant propelled.			
3.5. The width of the seat shall measure not less than 460mm±30mm			
3.6. The depth of the seat shall measure not less than 400mm ±50mm			
3.7. The unit shall incorporate swinging detachable footrests.			

Item Code No.	Department	Section	Item Description
LOT 1-2	Imaging	SPECT CT	Wheelchairs
<p>3.8. The armrests shall also be flipping back and/or detachable.</p> <p>3.9. The front and rear tyres shall be solid.</p> <p>3.10. The rear tyres shall have a diameter of 610mm±200mm and shall also be solid.</p> <p>3.11. The front tyres must be castor type and shall vary anywhere between 150mm and 200 mm in diameter.</p> <p>3.12. The wheelchair shall be supplied in K.D. Form.</p> <p>3.13. The wheelchair shall be supplied fully assembled.</p> <p>3.14. The wheel chair's upholstery shall be in welded nylon material</p> <p>3.15. All materials from which this wheelchair is to be manufactured from shall be easy to clean and shall be resistant to various disinfectant solutions utilized in a hospital environment.</p> <p>3.16. The Wheel chair shall also incorporate a safety belt to ensure that the patient can be kept securely in place especially when in motion.</p> <p>3.17. Brakes extend from the frame to the wheels with some form of mechanical locking (LEVER) system, which permit the wheels to be locked in place preventing unwanted motion. Brake lever must not protrude above seat level to the extent that it interferes with the transferring process when armrest is flipped back.</p> <p>3.18. The original manufacture's specification brochure must always be included.</p> <p>3.19. All equipment supplied shall be supplied brand new, implying that any demo unit or already used equipment will not be considered acceptable for the purpose of this tender.</p> <p>Documentation:</p> <ul style="list-style-type: none"> • Two copies of Service Manuals • Two copies of Operators' Manuals • Declaration of Conformity' from the parent Company ISO 13485 • FDA/ CE Declaration Certificate • All Tenderers are requested to submit the manufacturer and model of the equipment offered. Failing this, the submission/quotation will be ignored and refused irrevocably. 			

LOT 1-3 Patient Stretcher(With siderails)

Item Code No.	Department	Section	Item Description
LOT 1-3	Imaging	SPECT CT	Patient stretchers (with siderails)
<p>1. General Description</p> <p>Standard Patient stretcher with siderails individually packaged and cleared marked in English with the name and characteristics of the article and number of units per carton and with Manufacturer's Name</p>			

Item Code No.	Department	Section	Item Description
LOT 1-3	Imaging	SPECT CT	Patient stretchers (with siderails)
Submission of sample:			
Submit a brochure for evaluation			
2. Composition			
2.1.	Main unit		
3.			
<ul style="list-style-type: none"> Shock absorbing, non-marking wrap around bumper system protects stretcher, and facility walls 3in High density foam mattress 24in Patient surface width Collapsible side rails 2 IV receptacles 1 Stainless steel IV pole Central locking brakes Steering pedal activator Integrated oxygen bottle holder <ul style="list-style-type: none"> Retractable 5th wheel steering system Dual pneumatic assisted backrest (0-80 degrees) Dual sided foot pedal for height adjustment Hands free trendelenburg Patient restraints O₂ holder (requires shelf); holds E-size tank Heavy-gauge, tubular frame, powder coated white Continuous heavy rubber bumper Overall length: 2-2.5M Overall width(side rails up): 80-85cm Overall width (side rails down): 60-70cm Height: 40-90cm Backrest: 0-80 degrees Trend/ Reverse trend: ± 18 degrees Weight capacity: 200kg Caster size: Approx. 200mm <p>Quality standards:</p> <p>Manufacturing standards: - ISO 13485</p> <ul style="list-style-type: none"> Conformity to standards: - FDA/ CE Standard 			

LOT 1-4 Portable Electric Suction Units

Item Code No.	Department	Section	Item Description
LOT 1-4	Imaging	General	Portable Electric Suction Units
1. General Description			
Suction machine suitable for use in theatre, for both adult and pediatric use.			
Should be constructed from coated non-corrosive, extreme heat resistance material and			

Item Code No.	Department	Section	Item Description
LOT 1-4	Imaging	General	Portable Electric Suction Units
electrically insulated and mobile on antistatic castors ϕ 60 mm, 2 No. lockable, with high level push handle.			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	High flow rate	40 litres per minute.	
3.1.2.	Suction vacuum	Maximum 700mmHg	
3.1.3.	Suction pump	oil free	
3.1.4.	Jars	2 X 2 liter polycarbonate autoclavable and unbreakable complete with overflow devices and valves.	
3.1.5.	Vacuum gauge	Graduated in mmHg and kPa.	
3.1.6.	Vacuum control	Adjustable at the front panel	
3.1.7.	Switch	Main on front panel and foot switch (water proof type)	
3.1.8.	Cable towage	On back with reversible cleats	
3.1.9.	Anti-bacterial filters	Available preferable autoclavable	
3.1.10.	Suction tubing connection	Antistatic neoprene or silicone	
3.1.11.	Safety	Overflow pump protection	
3.1.12.	Handle	High level push handle type	
3.1.13.	Movements	Mobile on four antistatic castors 2 No. lockable.	
4.	Physical characteristics		
4.1.	Main unit	Mobile on castors with push handle	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug BS standard, 3m long cord with PE	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6	Accessories	The following accessories will be provided as startup kits.	

Item Code No.	Department	Section	Item Description
LOT 1-4	Imaging	General	Portable Electric Suction Units
5.4.	Sterilizable, silicone tubing	5 Set	
5.5.	Bacterial filters	1 Box	
5.6.	Foot switch	1 No.	
5.7.	Cannula with handle for general purpose	4 Sets	
6.	Quality standards		
6.1.	Manufacturing standards	EN 10079-1, IEC 60601-1, ISO 9001, ISO 13485	
6.2.	Conformity to standards	CE and FDA marked	
7.	Local back up service		
7.1.	Available	Should be available locally	
7.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
8.	Delivery point		
8.1.	See Schedule	For inspection and testing	
8.2.	Nil		
9.	Pre installation requirements		
	Nil		
10.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
11.	Training		
11.1.	User Training	On site user training on operation and daily up keep	
11.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
12.	Technical documentations		
12.1.	User manuals	2 Sets	
12.2.	Service Manual	1 Set	
12.3.	Drawings	Nil	
13.	Commissioning		

Item Code No.	Department	Section	Item Description
LOT 1-4	Imaging	General	Portable Electric Suction Units
13.1.	Testing and commissioning of the machine to the satisfaction of the user.		
14.	Warranty: Two (2) Years		
14.1.	Equipment	Minimum of one year after commissioning on all parts.	
14.2.	Equipment System	Nil	

LOT 1- 5: Ultrasound examination couches

Item Code No.	Department	Section	Item Description
LOT 1-5	Imaging	Ultrasound Rooms	Ultrasound Examination Couches
1. General Description			
Ultrasound Examination Couch Stainless Steel with Mattress			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1 Constructed from round polished SS Pipes</p> <p>3.2 Fully adjustable headrest. Top of Polished SS Sheet.</p> <p>3.3 Top is upholstered and covered with washable plastic material</p> <p>3.4 Legs fitted with thick high-quality nylon gromets.</p> <p>3.5 5 cm 50PU density foam cushioned top covered with leathered Rexene of 2mm thickness</p> <p>3.6 Top dimensions - L = 72inch X W= 24inch H= 32 inches</p> <p>3.7 All the Stainless Steel should be seamless conforming to 304 grade/ 16 gauge and polished finished</p> <p>3.8 Should have sliding footstep.</p> <p>The head section should be raised with mechanical pneumatic</p>			

LOT 1: OUTPATIENT

LOT 1-6 Patient monitor

Item Code No.	Department	Section	Item Description
LOT 1-6	Outpatient	Consulting Room	Patient Monitor
1. General Description			
<p>Portable Bedside monitor suitable for use in ICU. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric.</p> <ul style="list-style-type: none"> • SpO₂ • Temperature • Blood pressure • ECG • Respiration • CO₂ • Pulse Rate 			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
Portable Bed side monitors			
Type	Roll stand Mounted type, complete with internal rechargeable battery		
Application	Can be used as a both bedside monitor and a transport monitor		
Parameter & waveforms	SpO ₂ , Pulse rate, ECG, NIBP, IBP, Respiration, CO ₂ and temperature		
SpO ₂ , with reusable sensor	0 - 100% ± 3%		
Pulse Rate	30-300 bpm ± 1%		
Temperature	0-50°C ± 0.1%		
NIBP	Mean 10- 300mmHg ± 5 mmHg		
IBP X2	Mean 00 - 300mm Hg ± 1 mmHg		
ECG	5 lead, standard configuration		
CO ₂	0 to 99 mmHg ± 4 mmHg		
Display	Minimum 12.0 inches color touch screen/scroll type		
	6 to 8 waveforms with large font		
Networking	Wireless and wired connection to the central work station		
Storage	Capable of storing patient data and transferring to the central workstation for viewing or printing.		
Audio and visual alarm	For all parameter.		
Printer	Inbuilt Thermal Printer		
Alarm setting limits	Adjustable by user		

Item Code No.	Department	Section	Item Description
LOT 1-6	Outpatient	Consulting Room	Patient Monitor
	Low battery indicator	Audio and visual alarm	
	Power Requirement	Rechargeable internal battery, that can last at least 3 hours when fully charged	
	Wireless networking	Latest technology.	
4.	Accessories	The following accessories will be provided as startup kits.	
4.1.	ECG connection lead and reusable electrodes	2 Set	
4.2.	SpO ₂ connection cable and sensor (finger probe), reusable	2 Sets	
4.3.	Adult cuff	3 Sets	
4.4.	Paediatric cuff	2 Sets	
	Temperature connection cable and probe (reusable)	2 Sets	
4.5.	Recording paper	20 Boxes	
5.	Quality standards		
5.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
5.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA marked	
6.	Local back up service		
6.1.	Available	Should be available locally	
6.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, consumables and qualified and skilled technical staff	
7.	Delivery point		
7.1.	See Schedule	For inspection and testing	
7.2.	Nil		
8.	Pre installation requirements		
	Nil		
9.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's		

Item Code No.	Department	Section	Item Description
LOT 1-6	Outpatient	Consulting Room	Patient Monitor
	instructions		
10.	Training		
10.1.	User Training	On site user training on operation and daily up keep	
10.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
11.	Technical documentations		
11.1.	User manuals	2 Sets	
11.2.	Service Manual	1 Set	
11.3.	Drawings	Nil	
12.	Commissioning		
12.1.	Testing and commissioning of the machine to the satisfaction of the user.		
13.	Warranty		
13.1.	Equipment	Minimum of Two years after commissioning on all parts.	
13.2.	Equipment System	Nil	

LOT 1-7 Emergency Resuscitation Trolley

Item Code No.	Department	Section	Item Description
LOT 1-7	Outpatient	Consulting Room	Resuscitation trolley
1. General Description			
Resuscitation trolley for use in ICU. Epoxy coated mild steel, with drawers, protection perimeter and defibrillator holder. The Unit should be mobile on four castors , 2 lockable			
2. Composition			
2.1.	Main unit,		
3. Performance Specifications			
3.1.Main Unit			
3.1.1. Should be durable with Ergonomic handle and should have easy grip			
3.1.2. Height should be 40-45"			
3.1.3. Should have 6-8 drawers of sizes 3x3",2x6",1x9"			
3.1.4. Should have interchangeable 3",6",9" drawers which run smoothly on good quality channels			
3.1.5. Should have provision of side storage which allows storage of variety accessories like can, storage bins, glove storage, sharp container set			

- 3.1.6. An over bridge can with baskets, shelves and bins to keep important things
- 3.1.7. Should have AMS top surface & advance polymer material which is easy to clean. It should not dent, chip flake or corrode
- 3.1.8. Should be easily rolling and has toe brakes
- 3.1.9. Should have I.V. pole with clamps ach 3” drawer should have provision for 25-30 compartments
- 3.1.10. Should have twin swivel castors & central lock
- 3.1.11. Should be CE and ISO 13485 and FDA approved
- 3.1.12. Should have CPR board & O2 cylinder holder

LOT 1-8 Diagnostic set (Wall mounted)

Item Code No.	Department	Section	Item Description
LOT 1-8	Outpatient	Consulting Room	Diagnostic Set
1. General Description			
Diagnostic Set Wall Mounted			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1.3.5-volt Ophthalmoscope and otoscope set suitable for Wall-mounting with locking collars and locking device. Must include light intensity rheostat in the handle and automatic on/ off cradle switches. All screws, wall plugs etc. necessary for mounting the unit on the wall must be included.</p> <ul style="list-style-type: none"> i. Ophthalmoscope, mirror type with 3.5 volt Halogen/LED lamp, sliding focusing device from -25 to +40 diopters and five apertures including a slit, pinhole, large hole fixation or white line grid and red-free filter. ii. Otoscope, fibre-optic with 3.5 volt Halogen/LED lamp 2mm, 3mm, 4mm and 5mm polypropylene flanged specula. iii. Two spare lamps for ophthalmoscope and two spare lamps for the otoscope. iv. Wall mounting facility with locking collars, mains operated and +-3m spiral cord with sealed 3pin plug. v. Locking device to secure Ophthalmoscope and otoscope heads to handles <p>Specula for item No. ii and spare lamps must be freely available.</p>			

LOT 1-9 Blood pressure Machine (Wall Mounted)

Item Code No.	Department	Section	Item Description
LOT 1-9	Outpatient	Consulting Room	Blood Pressure Machine (Aneroid Type)
1. General Description			

Item Code No.	Department	Section	Item Description
LOT 1-9	Outpatient	Consulting Room	Blood Pressure Machine (Aneroid Type)
Sphygmomanometer - Aneroid Type			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1. Should be aneroid type,</p> <p>3.2. Should have ISI mark.</p> <p>3.3. Should have a measuring range from 0 to 300 mmHg,</p> <p>3.4. Should be provided with adult arm cuffs of size medium & large and paediatric cuff.</p> <p>3.5. The dial manometer markings and graduations should be permanent and clearly visible and filled with pigments, with diameter of minimum diameter of 160 mm.</p> <p>3.6. Body & Bezel - Aluminum die casted (Powder coated), screw type bezel</p> <p>3.7. Sensing-corrugated phosphorous bronze twin capsule bellows.</p> <p>3.8. Movement mechanism - Brass</p> <p>3.9. Connection: brass, nickel plated for 3-4 mm rubber hose.</p> <p>3.10. Dial - Aluminum</p> <p>3.11. Pointer - White coated, thin & sharp made of phosphorous Bronze</p> <p>3.12. Window lenses - Clear plastic.</p> <p>3.13. All plastic parts, if any used should not crack, flake, peel or disintegrate in normal use.</p> <p>3.14. The inflating rubber bag should be capable of withstanding an internal pressure of 450 mmHg without leaking.</p> <p>3.15. The inflating bulb should be soft and should not have any joints or ridges.</p> <p>3.16. The fastening arrangements of the cuff should be of hook and loop type (Velcro)</p> <p>3.17. The threading and fastening arrangement of the cuff should show no sign of slip or failure when subjected to the maximum test conditions.</p> <p>3.18. The rubber tubes used should have an internal diameter of 3 ± 0.5mm and the external diameter should not be less than 8mm.</p> <p>3.19. The tubes should be fitted with male and female leuc connectors.</p> <p>3.20. Should provide a carry bag to keep the whole system safe and sound. All parts should be replaceable in case of breakage.</p>			

LOT 1-10 Portable Electrical Suction Machines

Item Code No.	Department	Section	Item Description
LOT 1-10	Outpatient	Consulting Room	Electrical Suction Machines
1. General Description			
Suction machine suitable for use in theatre, for both adult and pediatric use. Should be constructed from coated non-corrosive, extreme heat resistance material and electrically insulated and mobile on antistatic castors ϕ 60 mm, 2 No. lockable, with high level push handle.			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	High flow rate	40 litres per minute.	
3.1.2.	Suction vacuum	Maximum 700mmHg	
3.1.3.	Suction pump	oil free	
3.1.4.	Jars	2 X 2 liter polycarbonate autoclavable and unbreakable complete with overflow devices and valves.	
3.1.5.	Vacuum gauge	Graduated in mmHg and kPa.	
3.1.6.	Vacuum control	Adjustable at the front panel	
3.1.7.	Switch	Main on front panel and foot switch (water proof type)	
3.1.8.	Cable towage	On back with reversible cleats	
3.1.9.	Anti-bacterial filters	Available preferable autoclavable	
3.1.10.	Suction tubing connection	Antistatic neoprene or silicone	
3.1.11.	Safety	Overflow pump protection	
3.1.12.	Handle	High level push handle type	
3.1.13.	Movements	Mobile on four antistatic castors 2 No. lockable.	
4.	Physical characteristics		
4.1.	Main unit	Mobile on castors with push handle	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug BS standard, 3m long cord with PE	
5.2.	Ambient temperature	10°C to 40°C	
5.3.	Relative humidity	20% to 90%	

Item Code No.	Department	Section	Item Description
LOT 1-10	Outpatient	Consulting Room	Electrical Suction Machines
6.	Accessories	The following accessories will be provided as startup kits.	
6.1.	Sterilizable, silicone tubing	5 Set	
6.2.	Bacterial filters	1 Box	
6.3.	Foot switch	1 No.	
6.4.	Cannula with handle for general purpose	4 Sets	
7.	Quality standards		
7.1.	Manufacturing standards	ISO 13485	
	Conformity to standards	CE and FDA marked	
8.	Local back up service		
8.1.	Available	Should be available locally	
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
9.	Delivery point		
9.1.	See Schedule	For inspection and testing	
9.2.	Nil		
10.	Pre installation requirements		
	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		
12.1.	User Training	On site user training on operation and daily up keep	
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
13.	Technical documentations		
13.1.	User manuals	2 Sets	
13.2.	Service Manual	1 Set	

Item Code No.	Department	Section	Item Description
LOT 1-10	Outpatient	Consulting Room	Electrical Suction Machines
13.3.	Drawings	Nil	
14.	Commissioning		
14.1.	Testing and commissioning of the machine to the satisfaction of the user.		
15.	Warranty		
15.1.	Equipment	Minimum of Two years after commissioning on all parts.	
15.2.	Equipment System	Nil	

LOT 1-11 Wall Mounted Examination Lights

Item Code No.	Department	Section	Item Description
LOT 1-11	Outpatient	Consulting Room	Wall Mounted Examination Lights
1. General Description			
The LED technology should be of highly engineered optical system which delivers the precisely controlled natural white light that is so important for an accurate examination.			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
Should have mobile Floor Stand SLSE50-CM or Wall/Ceiling Mount			
STANDARD DESIGN FEATURES			
3.1. High-intensity of 39,000 lux (3623 fc) at 24" (61 cm)			
3.2. 4000 K color temperature			
3.3. CRI (Color Rendering Index) of 92			
3.4. Natural white light			
3.5. LED light module with at least 40,000-hour life			
3.6. Universal input voltage			
3.7. Drift-free K-arm with 42" (107 cm) arm range			
3.8. IEC 60601-1/ 60601-2-41 certified			
3.9. Should have European CE or USA certificate			
3.10. Should be supplied with European or USA country of origin certificate.			

LOT 1-12 Oxygen Flow Meters

Item Code No.	Department	Section	Item Description
LOT 1-12	Outpatient	Consulting Room	Oxygen Flow meters
1. General Description			
Oxygen Flow meter with Humidifier:			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1. Should be duly USFDA or CE marked by the European notified body</p> <p>3.2. The Flowmeter should be fitted with BS standard Medical Oxygen Probe.</p> <p>3.3. Back Pressure Compensated flow meter will be of accurate gas flow measurement with control within a range of 0 to 15 Lpm.</p> <p>3.4. It should meet strict precision and durability standard.</p> <p>3.5. The flow meter body should be made of brass chrome plated materials.</p> <p>3.6. The flow tube and shroud components should be made of clear, impact resistant polycarbonate.</p> <p>3.7. Flow Tube should have large and expanded 0 – 5 lpm range for improved readability at low flows.</p> <p>3.8. Inlet filter of stainless-steel wire mesh to prevent entry of foreign particles.</p> <p>3.9. The humidifier bottle should be made of unbreakable & Reusable of polycarbonate material and autoclavable at 134 degree centigrade.</p>			

LOT 1-13 Wall Suction Units

Item Code No.	Department	Section	Item Description
LOT 1-13	Outpatient	Consulting Room	Wall Suction Unit
1. General Description			
Ward Wall Vacuum Units:			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1. Should be duly USFDA or CE marked by the European notified body</p> <p>3.2. Vacuum Unit should be wall mounted and should consists of Suction Controller/ Regulator & Collection bottle of 1000ml. with mounting arrangement.</p> <p>3.3. The Vacuum unit should be fitted with BS standard Vacuum probe.</p> <p>3.4. The vacuum regulator should be step-less adjustable and have large vacuum gauge providing indication of the suction supplied by the regulator.</p>			

Item Code No.	Department	Section	Item Description
LOT 1-13	Outpatient	Consulting Room	Wall Suction Unit
<p>3.5. Safety trap should be provided inside the jar to safeguard the regulator from overflowing.</p> <p>3.6. The unit should be consisting of reusable 1000ml. shatter resistant bottle, each made up of poly carbonate material and fully autoclavable at 1340C.</p>			

LOT 1-14 LED X-Ray Viewer

Item Code No.	Department	Section	Item Description
LOT 1-14	Outpatient	Consulting Room	X-ray Viewer
1. General Description			
X-RAY-VIEW BOX (LED Light)			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
A) Product & Manufacturer Quality Standards:			
3.1. Should be FDA/ CE approved product.			
3.2. Manufacturer and Supplier should have ISO 13485 certification for quality standards.			
B) TECHNICAL CHARACTERISTICS			
3.3. Should be ultra-thin X ray film illuminator using LED light			
3.4. It should have a thickness of 30 mm			
3.5. It should be suitable for viewing 14''x17' film.			
3.6. Should have position to insert 8 films in 2 rows.			
3.7. The LED light must have a life span of more than 50,000 hours.			
3.8. It should have easy insertion & removal of the film.			
3.9. It should have homogeneous illumination more than 95% and maximum intensity of over 10,000 lux.			
3.10. It should have an on-off switch along with digital feather touch dimmer and a button to set the intensity			
3.11. It should have fully electronic continuous brightness control, with adjustment range of approximately 90%.			
3.12. It should be directly connected to power supply without any external adapters.			
3.13. It should have flicker free high frequency light for reduction of eye strain.			
3.14. It should have external fuses for protection against power surge.			
3.15. 10 step Digital dimmer facility with step up/step down intensity of 500 lux or less.			
3.16. Should have automatic film sensor			
3.17. Should have facility to switch on only the section where the film needs to be viewed.			

Item Code No.	Department	Section	Item Description
LOT 1-14	Outpatient	Consulting Room	X-ray Viewer
C) Power supply:			
3.18. 240V, AC, 50Hz. Single phase			

LOT 1-15 Ceiling mounted Drip stand

Item Code No.	Department	Section	Item Description
LOT 1-15	Outpatient	General Ward	Ceiling mounted Drip stand
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
Material: High-quality stainless steel for durability and corrosion resistance.			
Suspension System: Adjustable ceiling suspension with a secure locking mechanism.			
Load Capacity: Able to support multiple IV bags, typically up to 10 kg.			
Height Adjustment: Smooth and easy height adjustment to accommodate various patient needs.			
Hooks: Multiple hooks (usually 4-6) for hanging IV bags, with anti-slip features.			
Safety Features: Rounded edges and a stable design to prevent accidents.			
Compliance: Must meet healthcare safety and hygiene standards.			

LOT 1-16 Procedure Trolley - Dressing and Treatment Room

Item Code No.	Department	Section	Item Description
LOT 1-16	Outpatient	Consulting Room	Procedure Trolley
1. General Description			
Procedure/Dressing Trolley			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Overall approx. Size: 780mmL x 500mmW x 900mmH			
3.2. Approximate shelf dimension 750mmL x 500mmW.			
3.3. Tubular CRC frame mounted on four castors of minimum 100mm dia and should be pre-treated and epoxy coated finish.			
3.4. Two S.S. of 304 grade shelves with protective railings on three sides.			
3.5. Should have provision for stainless steel holding bowl and bucket.			
3.6. Warranty: 2year			

LOT 1-17 Vital Signs Monitor

Item Code No.	Department	Section	Item Description
LOT 1-17	Outpatient	Triage	Vital Signs Monitor
1. General Description			
Vital signs Monitor suitable for use in operating theaters. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric. <ul style="list-style-type: none"> • SpO₂ • Temperature • Blood pressure • Pulse Rate 			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	The unit should be a model or type on current production capable of measuring/monitoring the following parameters		
3.1.2.	SpO ₂ , with reusable sensor	0 - 100% ± 3%	
3.1.3.	Pulse Rate	30-300 bpm ± 1%	
3.1.4.	Temperature	0-50°C ± 0.1%	
3.1.5.	NIBP	Mean 10- 300mmHg ± 5 mmHg	
3.1.6.	IBP	Mean 50 - 300mm Hg ± 1 mmHg	
3.2.	Display	At least 12 inches color touch screen type/rotary knob	
3.2.1.		6 to 8 waveforms mode with large font	
3.3.	Printer	Inbuilt, thermal array or equivalent	
3.3.1.		Two speed, selectable	
3.3.2.		Port for external printer	
3.4.	Networking	Port for networking with Ethernet or equivalent Or Serial Port RS 232	
3.5.	Input		
3.6.	Storage	Capable of storing patient data	
4. Safety requirements			
4.1.	Audio and visual alarm	For all parameter.	
4.2.	Alarm setting limits	Adjustable by user	
4.3.	Low battery indicator	Audio and visual alarm	
4.4.	Internal battery	Provided, rechargeable, can operate for at least 3 hours	

Item Code No.	Department	Section	Item Description
LOT 1-17	Outpatient	Triage	Vital Signs Monitor
5.	Physical characteristics		
5.1.	Main unit		
5.2.	Dimensions	Portable with a recharge dock or equivalent recharging unit	
6.	Operating environment		
6.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug, 3m long cord BS type with PE	
6.2.	Ambient temperature	10° C to 40° C	
6.3.	Relative humidity	20% to 90%	
7.	Accessories	The following accessories will be provided as startup kits.	
7.1.	SpO ₂ connection cable and sensor (finger probe), reusable	2 Sets	
7.2.	Adult cuff	2 Sets	
7.3.	Paediatric cuff	2 Sets	
7.4.	Temperature connection cable and probe (reusable)	2 Sets	
7.5.	Recording paper	2 sets of 5 rolls	
7.6.	Grounding lead	1 No.	
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 13485	
8.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA approved	
9.	Local back up service		
9.1.	Available	Should be available locally	
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, consumables and qualified and skilled technical staff	
10.	Delivery point		
10.1.	See Schedule	For inspection and testing	
10.2.	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		
12.1.	User Training	On site user training on operation and daily upkeep	
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance	

LOT 1-18 Weighing Scale with Height Meter- Triage

Item Code No.	Department	Section	Item Description		
LOT 1-18	Outpatient	Consulting Room	Weighing Scale		
1. General Description					
2. Composition					
2.1.	Main unit				
3. Description of the medical supply unit design type					
<ul style="list-style-type: none"> 3.1. Mobile Weighing Scale with height meter 3.2. Capacity approx. 0-200kg 3.3. With circular scale/readout 3.4. With mechanical height rod able to measure between 70cm-2000cm 3.5. With BMI display 3.6. Easy to clean platform with reset to zero function 3.7. With flat tread area platform approximately 360mm (W) X 630mm (D) 3.8. Height approx. 1000mm 3.9. With mechanical column scale 3.10. Digital Display weight with BMI function 3.11. Graduation approximately 500g. 3.12. Warranty 2 years 3.13. With Calibration Certificate 3.14. FDA/ CE Marked 3.15. With heavy duty transport castors 3.16. Operator and service manuals to be provided 					

LOT 1-19 Thermometer - Triage

Item Code No.	Department	Section	Item Description
LOT 1-19	Outpatient	Consulting Room	Thermometer
1. General Description			
Digital Thermometer			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Range of temperature measurement 32 °C- 42°C (89.60F-109.40F)			
3.2. Can be calibrated in both centigrade and Fahrenheit, but if only one option is available, then Centigrade is preferable.			
3.3. Buzzer signal function.			
3.4. Takes 10-15 seconds to measure temperature.			
3.5. Can be used in the armpit/axilla, orally and rectally.			
3.6. Accuracy of temperature ± 0.1 0C and ± 0.2 F.			
3.7. User's interface: LCD display			
3.8. Manufacturer should be ISO13485 approved			
3.9. Product should be FDA/CE approved			

LOT:2 PHARMACY/MORTUARY

S/ No	LOT:2 PHARMACY/MORTUARY	
	Pharmacy	
1.	Pharmaceutical refrigerators	2
2.	Balance, Precision	1
3.	Balance, Heavy duty	1
4.	Tablet Counter	1
5.	DDA cupboards	2
6.	Rapid vial reconstitution mixer	1
7.	Slow vial shaker	1
8.	Laminar flow system	1
9.	Electronic weighing scale	1
10.	Pestle & Motor	2
11.	Magnetic stirrer with hot plate	1
12.	Measuring cylinder- large	2
13.	Measuring cylinder- Small	2
14.	Beaker- large	2
15.	Beaker- Small	2
16.	Pharmacy Drug trolley	5
17.	Hand Truck Push/Pull Cart (Heavy duty)	1

18.	Vaccine Carrier	5
Mortuary (Body Holding Room)		
19.	Body storage trays	2
20.	Stacking trolley	1
21.	Body stretcher and cover	1

LOT 2: PHARMACY/MORTUARY**LOT 2-1 Pharmaceutical refrigerators**

Item Code No.	Department	Section	Item Description
LOT 2-1	Pharmacy	Pharmacy	Pharmaceutical refrigerators
1. General Description			
Pharmaceutical refrigerator with Freezer			
2. Composition			
2.1.	Main unit		
3. Technical Specifications			
3.1. Should be ISO 9001, 13485 & 14001 certified product			
3.2. Non- CFC Natural refrigerant			
3.3. Power 220- 240 V, 50Hz A.C.			
3.4. Refrigerator capacity should be approximately 800-900 liters			
3.5. Cabinet Temperature within 2°C – 8°C			
3.6. Exterior material: Galvanized steel with baked on finish			
3.7. Interior material: Stainless steel			
3.8. Dual pane glass door- Double door of layer glass with heat reflection film to reduce condensation			
3.9. With 10-12 shelves			
3.10. Finned-tube evaporator design			
3.11. Accurate temperature control by Microprocessor control system, digital display, temperature adjust with an increment of 0.1°C			
3.12. Fan-forced air circulation system for fast recovery of temperature and better uniformity			
3.13. Alarm system, audible buzzing and visible flashing alarm, alarms conditions include higher or lower temperature alarm, sensor malfunction alarm, open door alarm, remote alarm, power failure alarm, refrigeration system malfunction alarm			
3.14. Built-in storage battery, digital display and alarms for 72 hours in case of power failure			
3.15. Multi-level and adjustable shelves for various dimensions of pharmaceutical products, making full use of the space			
3.16. Large digital display screen			
3.17. Applicable in special condition: ambient temperature 10°C -32°C with the humidity below 75%			
3.18. Polyurethane foam insulation door, transparent vacuum toughened glass door, with dual lockable casters			
3.19. Should have 4 casters with 2 adjustable leveling feet			
3.20. Should have Door key lock			

Item Code No.	Department	Section	Item Description
LOT 2-1	Pharmacy	Pharmacy	Pharmaceutical refrigerators
3.21. Inner light 3.22. With operator and service manuals 3.23. Service training to be provided			

LOT 2-2 Balance, Precision

Item Code No.	Department	Section	Item Description
LOT 2-2	Pharmacy	Pharmacy	Balance, Precision
1. General Description			
Analytical balance			
2. Composition			
2.1.	Main unit		
3. Detailed specifications			
3.1.	Maximum Capacity (or) Range of the balance	80-90/220 gm	
3.2.	Readability	0.01 mg (0.00001 gm) / 0.1 mg (0.0001 gm)	
3.3.	Tarring Range	0 – 220 gm	
3.4.	Display	Backlit graphics display/LCD with touch screen operation.	
3.5.	Repeatability (Standard deviation)	0.03 mg (small range)/ 0.10 mg (large range)	
3.6.	Linearity	±0.20 mg / ±0.10 mg	
3.7.	Eccentric Load	0.30 mg	
3.8.	Calibration	Adjustment with internal weights, fully automatic calibration technology with temperature controlled.	
3.9.	Data Memory Function	For keeping Weighing data & Calibration history data.	
3.10.	Sensitivity drift	±2ppm/°C (when automatic self-calibration is not used)	
3.11.	Stabilization (typical and fast)	Approx. 4.0 sec (0.1mg) / 15 sec (0.01mg)	
3.12.	Size of weighing pan	~ 80 - 90 mm	
3.13.	Shielding	Glass draft shield with flexible configuration Protective cover for the terminal, replaceable Feed	

Item Code No.	Department	Section	Item Description
LOT 2-2	Pharmacy	Pharmacy	Balance, Precision
			through for weighing below the balance
3.14.	Power Supply		To be operable with 230 V AC, 50 Hz power supply and on battery
3.15.	Accessories		Power supply cable with all accessories for operation.
3.16.	Operating & Service Manual		2 Sets (of Hard copies) with Calibration certificate of the balance. Soft copy of Instrument Operating manual to be sent during the time of installation.
3.17.	Interface		Standard bi-directional RS-232 interface.
3.18.	Dust Cover		One
General terms and remarks			
The above equipment has to be supplied (along with all its accessories), installed and commissioned (functional and performance testing) at MAPS chemistry control section by the supplier. Calibration certificate is to be supplied.			
Standard accessories shall be supplied with the main Instruments. A Dust cover to be provided along the instrument.			
The system should be installed and demonstrated for trouble free operation at MAPS laboratory by the supplier at their own cost.			
The equipment should be accompanied with two sets of OPERATION & MAINTANANCE MANUAL with full circuit DIAGRAM.			

LOT 2-3 Balance, Heavy duty

Item Code No.	Department	Section	Item Description
LOT 2-3	Pharmacy	Pharmacy	Balance, Heavy duty
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed specifications			
3.1.	Maximum Capacity (or) Range of the balance		0.25- 50kg
3.2.	Readability		0.01 g (0.00001kg) / 0.1 g (0.0001kg)
3.3.	Tarring Range		1 – 50kg
3.4.	Display		Backlit graphics display/LCD with touch screen operation.
3.5.	Repeatability (Standard deviation)		0.03 g (small range)/ 0.10 g (large range)
3.6.	Linearity		±0.20 g / ±0.10 g
3.7.	Eccentric Load		0.30 g
3.8.	Calibration		Adjustment with internal weights, fully automatic calibration technology with temperature controlled.

Item Code No.	Department	Section	Item Description
LOT 2-3	Pharmacy	Pharmacy	Balance, Heavy duty
3.9.	Data Memory Function	For keeping Weighing data & Calibration history data.	
3.10.	Sensitivity drift	±2ppm/°C (when automatic self-calibration is not used)	
3.11.	Size of weighing pan	~ 60 - 80 cm	
3.12.	Shielding	Protective cover for the terminal, replaceable	
3.13.	Power Supply	To be operable with 230 -250V AC, 50 Hz power supply and on battery	
3.14.	Accessories	Power supply cable with all accessories for operation.	
3.15.	Operating & Service Manual	2 Sets (of Hard copies) with Calibration certificate of the balance. Soft copy of Instrument Operating manual to be sent during the time of installation.	
3.16.	Interface	Standard bi-directional RS-232 interface.	
3.17.	Dust Cover	One	
General terms and remarks			
<ul style="list-style-type: none"> The above equipment has to be supplied (along with its all accessories), installed and commissioned (functional and performance testing) at MAPS chemistry control section by the supplier. Calibration certificate is to be supplied. Standard accessories shall be supplied with the main Instruments. A Dust cover to be provided along the instrument. The system should be installed and demonstrated for trouble free operation at MAPS laboratory by the supplier at their own cost. The equipment should be accompanied with two sets of OPERATION & MAINTANANCE MANUAL with full circuit DIAGRAM. 			

LOT 2-4 Tablet Counter

Item Code No.	Department	Section	Item Description
LOT 2-4	Pharmacy	Pharmacy	Tablet Counter
1. General Description			
TABLET COUNTING MACHINE			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
3.1. Tablet Counting Machine that must provide 3 counting options that is Single, Multiple and Inventory.			
3.2. The counting speed of up to 500 tablets per minute, providing an accuracy of 99.9% and must come with large LCD Colour display which must be easy to read.			
3.3. Its construction must be from FDA approved plastic and the machine must have counting sensor			
3.4. Dimensions: Approximate (H) 5½ inch *(W) 10½ inch* (D) 12½ inch.			
3.5. The machine must be portable weighs about 3-4Kg with voltage of about 110 -220 volt.			

Item Code No.	Department	Section	Item Description
LOT 2-4	Pharmacy	Pharmacy	Tablet Counter
3.6. Must come with at least two years warranty. 3.7. Both user and technical training must be provided to staff on the Machine upon installation and commissioning			

LOT 2-5 DDA cupboards- Pharmacy (Drug) store

Item Code No.	Department	Section	Item Description
LOT 2-5	Pharmacy	Pharmacy	DDA cupboards
1. General Description			
Wall mounted Lockable cupboard with audio/visual alarm for storage of Psychotropics and controlled substances in the drug store			
2. Composition			
2.1.	Main unit		
3. Detailed specifications			
Size: L(cm)- 80-120 W(cm)-30-50 H(cm)-120-140 Steel sheet constructed Twin lockable doors Fixed sheet metal shelves Inner lockable compartment for storage of poison Audio buzzer (12W DC) activated when inner Compartment not closed Visual red pilot lamp (12W DC) activated when doors not closed Finishing: Epoxy powder coated Internal cabinet size: L(cm)- 40-60 W(cm)- 30-50 H(cm)- 80-100 Transformer : AC/DC 230V-250V/ 12W DC			

LOT 2 -6 Rapid vial reconstitution mixer

Item Code No.	Department	Section	Item Description
LOT 2-6	Pharmacy	Pharmacy	Rapid vial reconstitution mixer
1. General Description			

Item Code No.	Department	Section	Item Description
LOT 2-6	Pharmacy	Pharmacy	Rapid vial reconstitution mixer
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
Gentle rolling mechanism			
Mix and match vial sizes			
Adjustable speed from 0 to 150 RPM			
Small table top size ([15-16] inches x [10-11] inches x [4- 5] inches high) fits near BioSafety hood			
Tilting action			
Mixer accommodates six to eighteen vials depending on size			
Supply- 110- 240 V			

2-7 Slow vial shaker

S/No.	Characteristic Features	Specification Requirements
Technical Specifications		
1.	Shaking Mechanism:	<ul style="list-style-type: none"> Gentle orbital or linear motion to ensure uniform mixing without excessive agitation.
2.	Speed Control:	<ul style="list-style-type: none"> Adjustable speed settings, typically ranging from 10 to 200 RPM.
3.	Capacity:	<ul style="list-style-type: none"> Ability to accommodate multiple vial sizes, ranging from 2 mL to 50 mL.
4.	Timer Function:	<ul style="list-style-type: none"> Programmable shaking duration for precise mixing.
5.	Material:	<ul style="list-style-type: none"> Corrosion-resistant and easy-to-clean surfaces, preferably stainless steel or medical-grade plastic.
6.	Power Supply:	<ul style="list-style-type: none"> Compatible with standard electrical outlets (110V/220V).
7.	Noise Level:	<ul style="list-style-type: none"> Low operational noise for use in laboratory or pharmacy settings.
8.	Compliance:	<ul style="list-style-type: none"> Must meet ISO 13485 or equivalent medical device standards.
9.	Warranty:	<ul style="list-style-type: none"> 2-year warranty.
10.	Supplier Qualifications:	<ul style="list-style-type: none"> Vendor must provide proof of previous supply contracts for similar equipment.
11.	Delivery Timeline:	<ul style="list-style-type: none"> Expected within 4-6 weeks from order confirmation.
12.	Maintenance & Support:	<ul style="list-style-type: none"> Availability of after-sales service and technical support.
		<ul style="list-style-type: none"> Availability of both User and technical manuals (hard and soft copies)

LOT 2-8 Laminar Flow System

Item Code No.	Department	Section	Item Description
LOT 2-8	Pharmacy	Pharmacy	Laminar Flow System
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Technical Specifications			
Specification	Specification Name	Bid Requirement (Allowed Values)	
Certifications	Conformity to Certifications	CE European, US FDA, CE European and US FDA	
	Conformity to Manufacturing Standards	ISO 9001 & ISO 13485	
Technical Specifications	Type of configuration	Mobile	
	Type of air flow direction	Top out	
	Material used for the work bench	Stainless steel 304 grade	
	Material used for the front door	Acrylic transparent	
	Material used for the Side panels	Acrylic	
	Type of light	LED	
	Number of LED lamps	1	
	Availability of motorized sliding door	Yes	
	LCD display for velocity, time & lamp on/off	Yes	
	UV Hour meter	Yes	
	UV Germicidal lamp	Yes	
	DOP HEPA filter testing	Yes	
	Digital Pressure Gauge with Alarm	Yes	
	Size of the working area(W×D×H) (feets)	3×2×2	
		Availability of display	Yes
Type of display		LCD	
Purchase Information	Warranty	At least 2 years	

LOT 2-9 Electronic weighing scale

Item Code No.	Department	Section	Item Description
LOT 2-9	Pharmacy	Pharmacy	Electronic weighing scale
1. General Description			
2. Composition			
2.1.	Main unit		
2.2.	Maximum Capacity (or) Range of the balance	80-90 / 220 gm	
2.3.	Readability	0.01 mg (0.00001 gm) / 0.1 mg (0.0001 gm)	
2.4.	Tarring Range	0 – 220 gm	
2.5.	Display	Backlit graphics display/LCD with touch screen operation.	
2.6.	Repeatability (Standard deviation)	0.03 mg (small range)/ 0.10 mg (large range)	
2.7.	Linearity	± 0.20 mg / ± 0.10 mg	
2.8.	Eccentric Load	0.30 mg	
2.9.	Calibration	Adjustment with internal weights, fully automatic calibration technology with temperature controlled.	
2.10.	Data Memory Function	For keeping Weighing data & Calibration history data.	
2.11.	Sensitivity drift	± 2 ppm/ $^{\circ}$ C (when automatic self-calibration is not used)	
2.12.	Stabilization (typical and fast)	Approx. 4.0 sec (0.1mg) / 15 sec (0.01mg)	
2.13.	Size of weighing pan	~ 80 - 90 mm	
2.14.	Shielding	Protective cover for the terminal, replaceable	
2.15.	Power Supply	To be operable with 230 V-250V AC, 50 Hz power supply and on battery	
2.16.	Accessories	Power supply cable with all accessories for operation.	
2.17.	Operating & Service Manual	2 Sets (of Hard copies) with Calibration certificate of the balance. Soft copy of Instrument Operating manual to be sent during the time of installation.	
2.18.	Interface	Standard bi-directional RS-232 interface.	
2.19.	Dust Cover	One	
General terms and remarks			
<ul style="list-style-type: none"> The above equipment has to be supplied (along with its all accessories), installed and commissioned (functional and performance testing) at MAPS chemistry control section by the supplier. Calibration certificate is to be supplied. Standard accessories shall be supplied with the main Instruments. A Dust cover to be provided along the instrument. The system should be installed and demonstrated for trouble free operation at MAPS laboratory by the supplier at their own cost. The equipment should be accompanied with two sets of OPERATION & MAINTANANCE MANUAL with full circuit DIAGRAM. 			

LOT 2-10 Pestle & Motor

Item Code No.	Department	Section	Item Description	
LOT 2-10	Pharmacy	Pharmacy	Pestle & Motor	
1. General Description				
2. Composition				
2.1.	Main unit			
S/No	Technical Description		Qty	Unit
2.2.	Grey Agate mortar and pestle, Outer Dia (O.D) 3.5”(inch), Inner Dia (I.D) 3.0”(Inch), Depth 0.8” Inch (21 mm)		1	Sets
	Grey Agate mortar and pestle, Outer Dia (O.D) 4.5”(inch), Inner Dia (I.D) 4.0”(Inch), Depth 1.1” Inch (27 mm)		1	Sets
2.3.	Grey Agate mortar and pestle, Outer Dia (O.D) 5.5”(inch), Inner Dia (I.D) 5.0”(Inch), Depth 1.3” Inch (34 mm)		1	Sets
2.4.	Grey Agate mortar and pestle, Outer Dia (O.D) 6.0”(inch), Inner Dia (I.D) 5.5”(Inch), Depth 1.4”Inch(36 mm)		1	Sets
2.5.	Grey Agate mortar and pestle, Outer Dia (O.D) 6.5”(inch), Inner Dia (I.D) 6.0”(Inch), Depth 1.6”Inch(40mm)		1	Set
Each set consists of one mortar and one pestle				
Note:				
<ul style="list-style-type: none"> • Tolerance in above dimensions in inch is ± 0.2 inch (± 0.5 mm) maximum. • The mortar and pestle should be made of natural agate with highly polished grinding surfaces, excellent for preparing laboratory samples and high purity powders. The agate material is a special silicate with a main composition of SiO_2 ($\sim 97.3\%$). It should be resistant to detergent and should be resistant to abrasion. Thermal endurance should be up to 350°C (minimum). The material should have the following features; <ul style="list-style-type: none"> a. Colour: Grey, b. Material: Silica (SiO_2), c. Crystal Habit: Cryptocrystalline silica, d. Crystal system: Rhombohedral Microcrystalline, e. Cleavage: None, f. Fracture: Conchoidal with sharp edges, g. Mohs scale hardness: ≥ 6.5 h. Luster: Waxy, i. Diaphaneity: Translucent, j. Density: ≥ 2.5 gm/cc 				

LOT 2-11 Magnetic Stirrer with Hot plate

Item Code No.	Department	Section	Item Description
LOT 2-11	Pharmacy	Pharmacy	Magnetic Stirrer with Hot Plate
1. General Description			
2. Composition			
2.1.	Main unit		
S/No	Technical Description		Qty Unit
Maximum stirring speed – 100-1500 rpm with stepless speed control and good speed stability			
Maximum stirring quantity (Liters)- 5liters			
Heating capacity – 500W- 1000W			
Hotplate size – 150- 300 mm diameter			
Supply – 220V-250 V, 50Hz, A.C			
Temperature range- up to 340°C			
Speed/ Temperature display- LCD			
Speed display resolution(rpm)- 1			
Top plate material – stainless steel chemically resistant to acid and alkali			
Stirring paddle (PTFE coated) length- 25-50mm			
Stirring Unit – should be enclosed so that corrosive fumes do not enter it			
Controls for both hotplate and stirrer should be provided with suitable indicators			
Necessary electrical cables should be provided			
Warranty – 2 years			

LOT 2-12 Measuring Cylinder- Large

Item Code No.	Department	Section	Item Description
LOT 2-12	Pharmacy	Pharmacy	Measuring cylinder- large
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
Capacity- 100-250ml			
Graduations(ml)- 1-2			
Tolerance(ml)- 1-2			
Height(mm)- 250-350			
Diameter Neck(mm) 25-50			
Diameter base (mm)- 70-100			
Material- Borosilicate glass highly resistant to chemicals, temperature changes and shock			

LOT 2-13 Measuring cylinder- small

Item Code No.	Department	Section	Item Description
LOT 2-13	Pharmacy	Pharmacy	Measuring cylinder- small
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
Capacity (ml)- 25-50			
Graduations(ml)- 0.5-1			
Tolerance(ml)- 0.5-1			
Height(mm)- 180-220			
Diameter Neck(mm) 20-25			
Diameter base (mm)- 60-65			
Material- Borosilicate glass highly resistant to chemicals, temperature changes and shock			

LOT 2- 14 Beaker- large

Item Code No.	Department	Section	Item Description
LOT 2-14	Pharmacy	Pharmacy	Beaker-large
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
Volume(ml)- 250ml			
Diameter(mm)- 50-70			
Height(mm)- 80-120			
Material- Borosilicate glass highly resistant to chemicals, temperature changes and shock			
Graduation interval-25ml			
Accuracy- $\pm 5\%$			

LOT 2-15 Beaker- small

Item Code No.	Department	Section	Item Description
LOT 2-15	Pharmacy	Pharmacy	Beaker- small
1. General Description			
2. Composition			

Item Code No.		Department	Section	Item Description		
LOT 2-15		Pharmacy	Pharmacy	Beaker- small		
2.1.	Main unit					
3. Detailed Specifications						
Volume(ml)- 100ml						
Diameter(mm)- 40-60						
Height(mm)- 50-90						
Material- Borosilicate glass highly resistant to chemicals, temperature changes and shock						
Graduation interval-10ml						
Accuracy- $\pm 5\%$						

LOT 2-16 Pharmacy drug trolleys

Item Code No.		Department	Section	Item Description		
LOT 2-16		Pharmacy	Pharmacy	Pharmacy drug trolley		
1. General Description						
2. Composition						
2.1.	Main unit					
3. Detailed Specifications						
Material: solid stainless steel mesh and round pipes						
Structure: wiremesh platform						
Mesh thickness: 4-6mm						
Castors: 4 (2 fixed, 2 swivel)						
Surface finishing: colour coated						
Corrosion resistance: Yes						
Carrying capacity: Max 250kg						
Dimensions:						
L(cm)-100-120						
W(cm)- 80-100						
H(cm)- 90-110						

LOT 2-17 Hand truck push/pull cart (Heavy duty)- drug store

Item Code No.	Department	Section	Item Description
LOT 2-17	Pharmacy	Pharmacy	Hand truck push/pull cart
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
Foldable steel frame			
Anti-slip/skip platform			
Height(cm): 80-100			
Folding height(cm) 25-35			
Castors: Diameter 100mm (2 fixed, 2 swivel)			
Corrosion resistance: Yes			
Carrying capacity: Max 200kg			
Platform Dimensions:			
L(cm)-120-150			
W(cm)- 60-80			
H(cm)- 10-15			

LOT 2-18 Vaccine carrier

Item Code No.	Department	Section	Item Description
LOT 2-18	Pharmacy	Pharmacy	Vaccine carrier
4. General Description			
5. Composition			
5.1.	Main unit		
6. Detailed Specifications			
Vaccine storage capacity(L): 1.5-3			
Number of ice packs: 4 x 0.4L			
Cold life without opening (hrs at 43oC): 20-30			
Weight fully loaded(kg): 4-7			
Weight empty(kg): 2-3.5			
External surface material: High Density Polyethylene			
Internal lining material: High Impact Polyethylene			
Insulation material: CFC- free polyurethane			
Insulation thickness(mm): 30-40			
External dimensions			

Item Code No.	Department	Section	Item Description
LOT 2-18	Pharmacy	Pharmacy	Vaccine carrier
L(cm):30-30			
W(cm):20-30			
H(cm):30-35			
Lid type and fixing: Removable			

LOT 2-Mortuary (Body Holding Room)

Lot 2-19 Body storage trays

No.	Description
	<p>Body Racks (4 levels) with Trays, stainless steel.</p> <p>Minimum Specifications.</p> <p>Material: High-quality stainless steel for durability and easy cleaning.</p> <p>Levels: Four-tier structure for efficient body storage.</p> <p>Trays: Removable stainless steel trays for easy handling.</p> <p>Rollers: Full conveyor rollers with guide rails for smooth movement.</p> <p>Weight Capacity: 150-250 KG per tray.</p> <p>Adjustable Features: Heavy-duty adjustable leveling pads for stability.</p> <p>Standard Features: Seismic anchoring kits, scissor lift compatibility, and forklift compatibility.</p> <p>Safety Considerations: Proper handling instructions to reduce exposure to bloodborne diseases.</p>

Lot 2- 20 Stacking trolley

1.	<p>Body Transport and lifting trolley, stainless steel</p> <p>Minimum Specifications.</p> <p>Material: High-quality stainless steel for durability and hygiene.</p> <p>Load Capacity: Typically 200-250 kg</p> <p>Lifting Mechanism: electro-hydraulic with manual option.</p> <p>Frame Design: Double-scissors lifting frame for stability and smooth operation.</p> <p>Wheels: Swivelling braked castors for easy manoeuvrability.</p> <p>Adjustable Height: Inclination up to 45° for body preparation.</p> <p>Standard Features: Canvas covers, body trays, and smooth top roller rails.</p>
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Lot 2-21 Body stretcher and cover

S/No.	Characteristic Features	Specification Requirements
Technical Specifications		
	Material:	<ul style="list-style-type: none"> High-quality 304 stainless steel for durability and sanitation.
	Size:	<ul style="list-style-type: none"> Standard dimensions of 208cm x 66cm x 66/93cm (customizable sizes available).
	Mobility:	<ul style="list-style-type: none"> Heavy-duty castors for smooth transportation.
	Adjustable Elevation:	<ul style="list-style-type: none"> Hand-crank mechanism for height adjustment.
	Cover Design:	<ul style="list-style-type: none"> Discreet top cover for respectful transportation of deceased individuals.
	Weight Capacity:	<ul style="list-style-type: none"> Supports up to 150 kg.
	Security Features:	<ul style="list-style-type: none"> Locking mechanism for stability during movement.
Procurement Requirements		
	Compliance:	<ul style="list-style-type: none"> Must meet ISO 9001 or equivalent quality standards.
	Warranty:	<ul style="list-style-type: none"> Minimum 2-year warranty.
	Maintenance & Support:	<ul style="list-style-type: none"> Availability of after-sales service and technical support.
		<ul style="list-style-type: none"> Availability of both User and technical manuals (hard and soft copies)

LOT 3: Surgical Sets

LOT 3: Surgical Sets		
Surgical Sets		
1.	Bladder set	2
2.	Kidney set	2
3.	Supplement for vascular surgery	2
4.	Supplement for Thoracotomy	2
5.	Urethra set	2
6.	Supplement Micro urethral	2
7.	Genital set	2
8.	Cut Down Set	2
9.	Suture Set	2
10.	Suture Removing Set	2
11.	Wound Dressing Set 1	2
12.	Wound Dressing Set 2	2
13.	Epispadias Set	2
14.	Prostatectomy , Radical supplementary Set	2
15.	Hypospadias Set	2
16.	Circumcision Set	2

17.	Major Basic Paediatric Set	2
18.	Perfusion Set	2
19.	Vascular Clamps (set)	2
20.	Kidney Transplant Set-Donor	2
21.	Kidney Transplant Set -Recipient	2
22.	AV Fistula Sets	3

Lot 3-Surgical Sets

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
LOT 3-1	BLADDER SET	1		1
			Forceps, Gross-Maier, Curved., 26.5 Cm	2
			Towel Forceps, Backhaus, Sharp, 11 Cm	6
			Towel Forceps For Paper Drapes, 11.5 Cm	6
			Scalpel Handle, No. 4, 13.5 Cm	1
			Scalpel Handle, No. 3, 12 Cm	1
			Scalpel Handle, No. 4L, Long, 20.5 Cm	1
			Scalpel Handle, No. 3L, Long, 21.5 Cm	1
			Tungsten carbide-Dissecting. Scissors, Fine, Curved., 18 Cm	1
			Tungsten carbide-Dissecting Scissors, Curved., 23 Cm	1
			Tungsten carbide-Dissecting Scissors, Curved., 26 Cm	1
			Tungsten carbide-Dissecting. Scissors, Curved., Serrated., 18 Cm	1
			Tungsten carbide-Scissors, Mayo-Lexer, Curved., 16 Cm	1
			Scissors, Potts, Angled Upwards., 19.5 Cm	1
			Tungsten carbide-Scissors, De Bakey, 45°, 23 Cm	1
			Operating Scissors, Sharp/Blunt, Straight., 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth., Slim, 14.5 Cm	2
			Tissue Forceps, 1X2 Teeth., Slim, 20.5 Cm	2
			Tissue Forceps, 1X2 T., Slim, 25 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Atraumatic. Forceps, De Bakey, 2 Mm, 16 Cm	2
			Atraumatic. Forceps, De Bakey, 2 Mm, 20 Cm	2
			Atraumatic. Forceps, De Bakey, 2 Mm, 25 Cm	2
			Dressing Forceps, 21 Cm	1
			Forceps, Kocher, 1X2 T., Straight., 14 Cm	10
			Haemostatic. Forceps, Mosquito, Curved, 12 Cm	10
			Forceps, Mosquito, 1X2 Teeth., Straight, 18.5 Cm	2
			Forceps, Kocher, 1X2 T., Straight., 20.5 Cm	2
			Forceps, Kocher, 1X2 T., Str., 24 Cm	2
			Forceps, Gross-Maier, Str., 26.5 Cm	4
			Peritoneal. Forceps, Mikulicz, Heavy, 20 Cm	6
			Dissecting. Forceps, Overholt, No. 2, 20 Cm	2
			Dissecting. Forceps, Overholt, No. 4, 22 Cm	2
			Dissecting. Forceps, Overholt, No. 4, 28 Cm	2
			Dissecting. Forceps, Gemini, Straight. Curved, 23 Cm	2
			Dissecting Forceps, Gemini, Straight Curved., 28 Cm	2
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Tunsten carbide-Needleholder, Hegar, 20 Cm	2
			Tungsten carbide-Needleholder, De Bakey, 18 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 23 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 26.5 Cm	1
			Tungsten carbide-Needleholder, Stratte, Curved., 23 Cm	1
			Retractor, Roux, Set, No. 1-3, 17 Cm	1
			Retractor, Kocher, 61X25 Mm, 23 Cm	2
			Retractor., Volkmann, Semish., 4-Prongs., 22.5 Cm	2
			Retractor, Fritsch, 45X75 Mm, 25.5 Cm	2
			Retractor, Mikulicz, 125X50 Mm, 25 Cm	1
			Retractor, Kelly, 205X38 Mm, 27.5 Cm	1
			Abdominal. Spatula, Haberer, 37/45 Mm, 30 Cm	1
			Legueu Bladd Retractor; 27Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Retractor, Martin, 110X27 Mm, 26.5 Cm	1
			Retractor, Simon, 115X28 Mm, 28 Cm	1
			Vaginal Speculum, Kristeller, Set, No. 2	1
			Caspar Explorer Hook, Medium, 90°, 245Mm	1
			Hooklet, Cushing, 10 Mm, 20.5 Cm	1
			Emmet Fistula Hook, 1Prong, Sharp, 22Cm	2
			Atraumatic. Organ Seizing Forceps, 25 Cm	2
			Allis Atrauma Forceps, 8,4Mm, 22Cm	2
			Atraumatic Tissue Forceps, Allis, 24.5 Cm	2
			Penis Clamp, Stockmann, 8 Cm	1
			Catheter Guide, 46Cm	1
			Atraumatic Uro-Tangential Fcps., No. 1, 25 Cm	1
			Probe, Button End, Ø 2.0/2.0 Mm, 30 Cm	1
			Needle Case, Round, Perf., F. 55-309-65	1
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			Tungsten carbide-Scissors, Metzenbaum-Thorek, 23 Cm	1
			Guide Needle, Angled., Knife Shape, 10 Ch	1
			Guide Needle, Angled, Knife Shape, 12 Ch	1
			sterilization box, 60X30X16 Cm,	1
			mesh Tray, 480X255X33 Mm	1
			mesh Tray, 480X255X73 Mm	1
LOT 3-2	KIDNEY SET	1		
			Forceps, Gross-Maier, Curved, 26.5 Cm	2
			Towel Forceps, Backhaus, Sharp, 11 Cm	6
			Towel Forceps For. Paper Drapes, 11.5 Cm	6
			Scalpel Handle, No. 4, 13.5 Cm	1
			Scalpel Handle, No. 3, 12 Cm	1
			Scalpel Handle, No. 4L, Long, 20.5 Cm	1
			Scalpel Handle, No. 3L, Long, 21.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 18 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 20.5 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Tungsten carbide-Dissecting Scissors, Curved, 23 Cm	1
			Tungsten carbide-Dissecting Scissors, Curved., 26 Cm	1
			Tungsten carbide-Dissecting Scissors, Curved., Serrated., 18 Cm	1
			Tungsten carbide-Dissecting Scissors, Curved, Serrated, 23 Cm	1
			Tungsten carbide-Dissecting Scissors, Mayo-Lexer, Curved, 16 Cm	1
			Scissors, Potts, Angled Upward, 19.5 Cm	1
			Tungsten carbide-Dissecting Scissors, De Bakey, 45°, 23 Cm	1
			Operating Scissors, Sharp/Blabe, Straight., 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth., Slim, 14.5 Cm	2
			Tissue Forceps, 1X2 Teeth., Slim, 20.5 Cm	2
			Tissue Forceps, 1X2 Teeth., Slim, 25 Cm	2
			Atraumatic Forceps, De Bakey, 2 Mm, 16 Cm	2
			Atraumatic Forceps, De Bakey, 2 Mm, 20 Cm	2
			Atraumatic Forceps, De Bakey, 2 Mm, 25 Cm	2
			Dressing Forceps, insulated., with out Connection., 21 Cm	1
			Forceps, Kocher, 1X2 T., Straight., 14 Cm	10
			Haemostatic Forceps, Mosquito, Curved., 12 Cm	10
			Forceps, Mosquito, 1X2 Teeth., Straight., 18.5 Cm	2
			Forceps, Kocher, 1X2 Teeth., Straight., 20.5 Cm	2
			Forceps, Kocher, 1X2 Teeth, Straight, 24 Cm	2
			Forceps, Gross-Maier, Straight, 26.5 Cm	4
			Peritoneum Forceps, Mikulicz, Heavy, 20 Cm	6
			Dissecting Forceps, Overholt, No. 2, 20 Cm	2
			Dissecting Forceps, Overholt, No. 4, 22 Cm	2
			Forceps, Mixter, Angled, 22.5 Cm	2
			Dissecting. Forceps, Overholt, No. 4, 28 Cm	2
			Diss. Forceps, Gemini, Straight Curved, 23 Cm	2
			Dissecting Forceps, O'Shaugnessy, 23	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Cm	
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Tungsten carbide-Needleholder, Hegar, 20 Cm	2
			Tungsten carbide-Needleholder, De Bakey, 18 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 23 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 26.5 Cm	1
			Tungsten carbide-Needleholder, Stratte, Curved, 23 Cm	1
			Retractor, Doublel., Farabeuf, Set, 15.5 Cm	1
			Retractor, Volkman, Semish., 4-Pr., 22.5 Cm	2
			Retractor, Fritsch, 45X75 Mm, 25.5 Cm	2
			Retractor, Mikulicz, 125X50 Mm, 25 Cm	1
			Retractor, Mikulicz, 160X50 Mm, 25 Cm	1
			Abdominal Spatula, Haberer, 37/45 Mm, 30 Cm	1
			Caspar Hook, Medium, 90°, 245Mm	1
			Hooklet, Cushing, 10 Mm, 20.5 Cm	1
			Atraumatic. Kidney Pedical Forceps, Guyon, 24 Cm	1
			Atraumatic. Kidney Pedical. Forceps, Guyon, 23 Cm	1
			Atraumatic. Tangential Forceps, Satinsky, 22 Cm	1
			Atraumatic. Tangential Forceps, Satinsky, 26 Cm	1
			Atraumatic. Forceps, Potts, Curved., 26 Cm	1
			Atraumatic. Ligature Forceps, De Bakey, 24 Cm	1
			Atraumatic Organ Seizing Forceps, 25 Cm	1
			Allis Atrauma Forceps, 8,4Mm, 22Cm	2
			Atraumati. Tissue Forceps, Allis, 24.5 Cm	2
			Kidney Stone Forceps., Randall, No. 3, 19 Cm	1
			Kidney StoneForceps., Randall, No. 1, 23 Cm	1
			Kidney Stone Forceps, Randall, No. 2, 21 Cm	1
			Kidney Stone Forceps, Randall, No. 6, 19 Cm	1
			Probe, Button End, Ø 2.0/2.0 Mm, 30 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Bile Duct Dilator, Bakes, 1 Mm, 32 Cm	1
			Gallstone Scoop, No. 000, 2.7 Mm, 32 Cm	1
			Gallstone Scoop, No. 0, 4.3 Mm, 32 Cm	1
			Needle Case, Round, Perforated., F. 55-309-65	1
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			Kidney Dish, 250X140X40 Mm	1
			Guide Needle, Angled, Knife Shape, 10 Ch	1
			Guide Needle, Angled, Knife Shape, 12 Ch	1
			sterile box, 60X30X16 Cm,	1
			mesh tray, 480X255X33 Mm	1
			mesh tray, 480X255X73 Mm	1
LOT 3-3	SUPPLEMENT FOR VASCULAR SURGERY			
			Atraumatic Tangential Forceps, Satinsky, 26 Cm	1
			Atraumatic Forceps, Potts, Curved, 26 Cm	1
			Atraumatic Tangential Forceps, Satinsky, 27.5 Cm	1
			Atraumatic Tangential Forceps, Satinsky, 28.5 Cm	1
			Atraumatic Forceps, Potts, Curved, 55 Mm, 21.5 Cm	2
			Atraumatic Forceps, Potts, Straight, 23.5 Cm	2
			Atraumatic Forceps, Potts, Angled, 55 Mm, 22 Cm	2
			Atraumatic Forceps, Mosquito, Straight, 15 Cm	2
			Atraumatic Forceps, Mosquito, Curved., 15 Cm	2
			Atraumatic Forceps, De Bakey, Straight, 13 Cm	1
			Atraumatic Forceps, De Bakey, Angled, 12.5 Cm	1
			Atraumatic Forceps, De Bakey, Curved, 13 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 31 Cm	1
			sterilization box, 47X30X14 Cm.	1
			Mesh tray, 410X255X73 Mm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
LOT 3-4	SUPPLEMENT FOR THORACOTOMY	1		
			Rib Raspatory, Doyen, Left, Adult, 17 Cm	1
			Rib Raspatory, Doyen, Right, Adult, 17 Cm	1
			Raspatory, Lambotte, 15 Mm, 21.5 Cm	1
			Raspatory, Semb, No. 2, 12 Mm, 22 Cm	1
			Raspatory, Semb, No. 3, 13 Mm, 19 Cm	1
			Bone Hold. Forceps, Semb, Curved., 19.5 Cm	1
			Bone Cut. Forceps, Ruskin, Curved., 18.5 Cm	1
			Bone Rongeur, Stille-Ruskin, 23.5 Cm	1
			Rib Shears, Brunner, Right Hand, 32 Cm	1
			Rib Spreader, De Bakey, Large, Complete	1
			Sterilization box, 47X30X14 Cm, mesh Tray 410X255X73 Mm	1
LOT 3-5	URETHRA SET	1		
			Forceps, Gross-Maier, Curved., 26.5 Cm	2
			Towel Forceps, Backhaus, Sharp, 11 Cm	6
			Towel Forceps For Paper Drapes, 11.5 Cm	4
			Scalpel Handle, No. 3, 12 Cm	1
			Scalpel Handle, No. 4, 13.5 Cm	1
			Tungsten carbide-Diss. Scissors, Fine, Curved, 14.5 Cm	1
			Dissecting Scissors, Kilner, Curved., 15 Cm	1
			Scissors, Potts, Angled Upwards., 19.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 18 Cm	1
			Tungsten carbide-Scissors, Mayo-Lexer, Curved, 16 Cm	1
			Operating Scissors, Sharp/Blunt, Straight, 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth, Slim, 14.5 Cm	2
			Tissue Forceps, 1X2 Teeth., Slim, 20.5 Cm	2
			Atraumatic Forceps, De Bakey, 2 Mm, 16 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Atraumatic. Forceps, De Bakey, 2 Mm, 20 Cm	2
			Haemostatic Forceps, Mosquito, Curved, 12 Cm	6
			Forceps, Kocher, 1X2 Teeth, Straight, 14 Cm	2
			Dissecting Forceps, Baby-Mixter, Curved, 18.5Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Tungsten carbide-Needleholder, Mayo-Hegar, 20 Cm	1
			Hooklet, Sharp, 2-Prong., 16.5 Cm	2
			Hooklet, Desmarres, 8 Mm, 16 Cm	2
			Hooklet, Desmarres, 12 Mm, 16 Cm	2
			Retractor, Kocher, 61X25 Mm, 23 Cm	2
			Skin Hooklet, Gillies, No. 1, 18 Cm	2
			Nerve Hook, Cushing, No. 1, 19 Cm	1
			Anastomosis Forceps, Derra, No. 3, 17.5 Cm	1
			Urethral Bougie, Van Buren, 10 Ch, 27 Cm	1
			Urethral Bougie, Van Buren, 14 Ch, 27 Cm	1
			Urethral Bougie, Van Buren, 18 Ch, 27 Cm	1
			Urethral Bougie, Van Buren, 22 Ch, 27 Cm	1
			Urethral Bougie, Van Buren, 26 Ch, 27 Cm	1
			Grooved Director, Nelaton, Curved, 16 Cm	1
			Probe, Button End, Ø 1.5/1.5 Mm, 14.5 Cm	1
			Probe, Bowman No. 00/0	1
			Needle Case, Round, Perforated.	1
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			Kidney Dish, 250X140X40 Mm	1
			sterilization box, 60X30X14 Cm.	1
			mesh Tray , 480X255X73 Mm	1
LOT 3-6	SUPPLEMENT MICRO URETRHAL	1		
			Scalpel Handle for Microblade, 13.5 Cm	1
			Micro Scissors, Bayon., Curved., 20 Cm	1
			Yasargil Forceps, Tips 0,9Mm, 20Cm	1
			Tissue Forceps, Bayon., 1X2 Teeth,	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			18.5 Cm	
			Dressing Forceps, Potts-Smith, 21 Cm	2
			Micro Needleholder, Bayonet curved 23 Cm	1
			Jacobson Twin Probe, 18,5Cm	1
			Yasargil Suture Guide/Probe, Curved, 18,5Cm	1
			Sterilization box, 30X30X14 Cm.	1
			mesh Tray 243X255X73 Mm	1
			Silicone Mat, 234X244 Mm	1
LOT 3-7	GENITAL SET	1		
			Forceps, Gross-Maier, Curved, 26.5 Cm	2
			Towel Forceps, Backhaus, Sharp, 11 Cm	6
			Towel Forceps for Paper Drapes, 11.5 Cm	4
			Scalpel Handle, No. 3, 12 Cm	1
			Scalpel Handle, No. 4, 13.5 Cm	1
			Iris Scissors, Sharp/Sharp, Curved, 11.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 14.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 18 Cm	1
			Tungsten carbide-Dissecting, Mayo-Lexer, Curved, 16 Cm	1
			Operating Scissors, Sharp/Blunt, Straight, 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth, Slim, 14.5 Cm	2
			Tissue Forceps, 1X2 Teeth, Slim, 20.5 Cm	2
			Atraumatic. Forceps, De Bakey, 2 Mm, 16 Cm	2
			Atraumatic. Forceps, De Bakey, 2 Mm, 20 Cm	2
			Forceps, Kocher, 1X2 Teeth, Straight, 14 Cm	4
			Forceps, Mosquito, 1X2 Teeth, Curved, 12.5 Cm	6
			Haemostatic Forceps, Mosquito, Curved, 12 Cm	6
			Forceps, Kocher, 1X2 Teeth, Straight, 20.5 Cm	2
			Forceps, Gross-Maier, Straight, 26.5 Cm	2
			Peritoneum Forceps, Mikulicz, Heavy, 20 Cm	4
			Forceps, Mixter-Baby, Curved, 14 Cm	1
			Dissecting Forceps, Baby-Mixter, Curved, 18.5Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Dissecting Forceps, Overholt, No. 2, 20 Cm	1
			Dissecting Forceps, Overholt, No. 3, 21.5 Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Tungsten carbide-Needleholder, Mayo-Hegar, 20 Cm	2
			Tungsten carbide-Needleholder, De Bakey, 18 Cm	1
			Retractor, Roux, Set, No. 1-3, 17 Cm	2
			Retractor, Volkman, Semisharp, 4-Prong, 22.5 Cm	2
			Retractor, Mikulicz, 90X35 Mm, 25 Cm	2
			Retractor, Martin, 110X27 Mm, 26.5 Cm	1
			Retractor, Kader, 30 Mm Wide, 28 Cm	1
			Woundspreader, Sharp, 3X4 Teeth., 16 Cm	1
			Atraumatic. Tissue Forceps, Allis, 15.5 Cm	2
			Grooved Director, Nelaton, Curved, 16 Cm	1
			Probe, Button End, Ø 1.5/1.5 Mm, 14.5 Cm	1
			Needle Case, Round, Perforated.	1
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			Kidney Dish, 250X140X40 Mm	1
			sterilization box 60X30X14 Cm,	1
			Mesh Tray, 480X255X73 Mm	1
LOT 3-8	CUT DOWN SET	1		
			Forceps, Gross-Maier, Curved, 26.5 Cm	2
			Towel Forceps, Backhaus, Sharp, 11 Cm	4
			Scalpel Handle, No. 3, 12 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 14.5 Cm	1
			Iris Scissors, Sharp/Sharp, Straight, 11.5 Cm	1
			Strabismus Scissors, Blunt/Blunt, Curved, 11.5 Cm	1
			Operating Scissors, Sharp/Blunt, Straight., 14.5 Cm	1
			Dressing Forceps, Semken, 12.5 Cm	1
			Atraumatic Forceps, De Bakey, 2 Mm, 16 Cm	1
			Tissue Forceps, Semken, 1X2 Teeth.,	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			12.5 Cm	
			Tissue Forceps, 1X2 Teeth., Slim, 14.5 Cm	1
			Forceps, Mosquito, 1X2 Teeth., Curved., 12.5 Cm	2
			Haemostatic Forceps, Mosquito, Curved, 12 Cm	2
			Forceps, Pean, Delicate, Straight., 14.5 Cm	2
			Forceps, Mixter-Baby, Slightly Curved, 14 Cm	1
			Tunsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Retractor, Delicate., Blunt, 2-Prongs., 16.5 Cm	2
			Hooklet, Desmarres, 12 Mm, 16 Cm	2
			Woundspreader, Alm, Sharp, 4X4 Teeth, 10 Cm	1
			Needle Case, Round, Perforated,	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			sterilization box, 30X30X14 Cm,	1
			mesh tray, 243X255X73 Mm	1
LOT 3-9	SUTURE SET	1		
			Scalpel Handle, No. 3, 12 Cm	1
			Tissue Forceps, 1X2 Teeth., Slim, 14.5 Cm	2
			Dressing Forceps, Medium Wide, 14.5 Cm	1
			Forceps Micro-Mosquito, Curved., 12 Cm	2
			Forceps, Gross-Maier, Curved., 20.5 Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Bowl, Metal, H = 19, Ø 40 Mm, 0.02 L	1
			Operating Scissors, Sharp/Blunt, Curved., 14.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Cvd., 14.5 Cm	1
			sterilization box 310X189X90Mm	1
			Mesh tray, 277X171X54 Mm	1
LOT 3-10	SUTURE REMOVING SET	1		
			Kidney Dish, 250X140X40 Mm	1
			Operating Scissors, Sharp/Blunt, Curved., 14.5 Cm	1
			Dressing Forceps, Medium Wide, 14.5 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Tissue Forceps, 1X2 Toothed., Slim, 14.5 Cm	1
			Iris Scissors, Sharp/Sharp, Straight., 11.5 Cm	1
LOT 3-11	WOUND DRESSING SET 1	1		
			Scalpel Handle, No. 3, 12 Cm	1
			Operating Scissors, Sharp/Blunt, Curved., 14.5 Cm	1
			Dissect. Scissors, Blunt/Blunt, Curved, 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth., 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth., Slim, 14.5 Cm	1
			Dressing Forceps, Delicate, 14.5 Cm	1
			Splinter Forceps, Feilchenfeld, 9 Cm	1
			Towel Forceps, Tohoku, Blunt, 10.5 Cm	2
			Haemostatic Forceps, Mosquito, Curved, 12 Cm	2
			Forceps, Pean, Delicate, Curved., 16.5 Cm	1
			Forceps, Kocher, 1X2 Teeth, Curved, 16 Cm	1
			Forceps, Gross-Maier, Straight, 22.5 Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Retractor, Delicate, Sharp, 2-Prong., 16.5 Cm	2
			Woundspreader, Blunt, 3X4 Teeth., 13.5 Cm	1
			Bowl, Metal, H = 30, Ø 61 Mm, 0.07 L	1
			sterilization box, 30X30X14 Cm,	1
			mesh tray, 243X255X73 Mm	1
LOT 3-12	WOUND DRESSING SET 2	1		
			Scalpel Handle, No. 4, 13.5 Cm	2
			Scalpel Handle, No. 3, 12 Cm	2
			Tungsten carbide-Ligature Scissors., Curved., Serrated, 14,5 Cm	1
			Tungsten carbide-Dissecting. Scissors, Fine, Curved., 18 Cm	1
			Tungsten carbide-Dissecting. Scissors, Fine, Curved, 20.5 Cm	1
			Tungsten carbide-Dissecting. Scissors, Lahey, Curved., 14.5 Cm	1
			Tungsten carbide-Iris Scissors, Sharp/Sharp, Straight., 11.5 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Dressing Forceps, 20 Cm	1
			Tungsten carbide-Forceps, Micro-Adson, 1X2 Teeth., 12 Cm	2
			Tissue Forceps, 1X2 Teeth., 20.5 Cm	1
			Dissecting. Forceps, Gillies, 1X2 Teeth., 15 Cm	2
			Forceps, Potts-Smith, 1X2 Teeth., 18 Cm	2
			Haemostatic Forceps, Mosquito, Curved., 12 Cm	8
			Forceps, Mosquito, 1X2 Teeth., Curved., 12.5 Cm	8
			Haemostatic Forceps, Mosquito, Curved, 18 Cm	4
			Forceps, Martin-Fuchsig, Curved., 20.5 Cm	6
			Forceps., Kocher-Nippon. 1X2 Teeth., Straight., 14.5 Cm	2
			Haemostatic Forceps, Pean, Straight., 22.5 Cm	2
			Dissecting. Forceps, Overholt, No. 2, 20 Cm	3
			Dissecting. Forceps, Gemini, Straight. Curved., 23 Cm	2
			Peritoneum Forceps, Mikulicz, 18.5 Cm	4
			Towel Forceps, Tohoku, Blunt, 10.5 Cm	6
			Forceps, Gross-Maier, Straight., 22.5 Cm	4
			Retractor, Delicate., Blunt, 4-Prongs., 16.5 Cm	2
			Hooklet, Malleable Shaft, 11 Mm, 24 Cm	2
			Retractor, Volkmann, Blunt., 4-Prongs., 22.5 Cm	2
			Retractor, Kocher-Langenbeck., 35X11 Mm, 21.5Cm	2
			Retractor., Kocher-Langenbeck., 35X11 Mm, 21.5Cm	2
			Retractor., Kocher-Langenbeck., 60X25 Mm, 21.5Cm	2
			Retractor, Double, Roux, No. 1, 14,5 Cm	2
			Retractor, Double, Roux, No. 2, 16 Cm	2
			Woundspreader, Blunt, 3X4 Teeth., 16 Cm	1
			Abdominal Retractor, Balfour-Baby, 12.5 Cm	1
			Probe, Button End, Ø 2.0/2.0 Mm, 14.5 Cm	1
			Grooved Director, Straight, 14.5 Cm	1
			Tungsten -carbide-Needleholder, Crile-Wood, 15 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Tungsten carbide-Needleholder, De Bakey, 18 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 20.5 Cm	1
			Tungsten carbide-Needleholder, Ryder-Vascular, 17.5 Cm	1
			Grooved Director, Koenig, No. 2, 20 Cm	1
			Atrumatic Forceps, De Bakey, 2 Mm, 16 Cm	2
			Atrumatic Forceps, De Bakey, 2 Mm, 20 Cm	2
			Anastomosis Forceps, Derra, No. 2, 17 Cm	1
			Tissue Forceps, Judd-Allis, 3X4 Teeth, 19 Cm	2
			Mucous Hooklet, Joseph, Sharp, 15.5 Cm	2
			Needle Case, Round, Perforated,	1
			Bowl, Metal, H = 30, Ø 61 Mm, 0.07 L	1
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			sterilization box, 60X30X16 Cm,	1
			mesh tray, 480X255X33 Mm	1
			mesh tray, 480X255X73 Mm	1
LOT 3-13	EPISPADIAS SET	1		
			Scalpel Handle, No. 3, 12 Cm	2
			Operating Scissors, Sharp/Blunt, Curved, 12 Cm	1
			Dissecting Scissors, Fine, Curved, 14.5 Cm	1
			Iris Scissors, Sharp/Sharp, Curved, 11.5 Cm	1
			Strabismus Scissors, Blunt/Blunt, Curved, 11.5 Cm	1
			Dressing Forceps, Delicate, 13 Cm	1
			Dressing Forceps, Adson, 12 Cm	2
			Tissue Forceps, Adson, 1X2 Teeth, 12 Cm	2
			Forceps Micro-Mosquito, Cvd., 12 Cm	6
			Forceps Micro Mosquito, 1X2 Teeth, Straight, 10 Cm	6
			Dissecting Forceps, Baby-Adson, Curved, 14.5 Cm	1
			Towel Forceps, Tohoku, Blunt, 10.5 Cm	6
			Forceps, Gross-Maier, Straight, 20.5 Cm	2
			Micro Hooklet, Graefe, Sharp, 15 Cm	2
			Retractor, Delicate, Sharp, 2-Prong., 16.5 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Hooklet, Double, Ragnell-Davis, 15 Cm	2
			Woundspreader, Alm, Sharp, 4X4 Teeth, 7 Cm	1
			Tungsten carbide-Needleholder, Derf, 12 Cm	1
			Tc-Needleholder, Crile-Wood, 15 Cm	1
			Tissue Forceps, Allis, 4X5 Teeth, 15.5 Cm	2
			sterilization box, 30X30X14 Cm,	1
			mesh tray, 243X255X73 Mm	1
LOT 3-14	PROSTATECTOMY, RADICAL SUPPLEMENTARY SET	1		
			Prostatectomy, Radical supplementary	1
			Dissecting Scissors, Curved, 23 Cm	1
			Forceps, Adlerkreutz, 4X5 Teeth., 25 Cm	1
			Forceps, Spencer-Wells, Straight, 20 Cm	6
			Forceps, Roberts, Curved, 22 Cm	4
			Peritoneal Forceps, Mikulicz, 18.5 Cm	2
			Peritoneum Forceps, Faure, Slightly Curved, 21 Cm	4
			Needleholder, Heany, Curved, 20.5 Cm	1
			Needleholder, Young, With Needle, No. 1	1
			Needle, Young, No. 2	1
			Needle, Young, No. 3	1
			Atraumatic Capsule Forceps, Millin, 24.5 Cm	1
			Atraumatic Capsule Forceps, Millin, 22.5 Cm	1
			Ligature Carrying Forceps, Millin, 24 Cm	1
			Vesical Neck Spreader, Millin, 29.5 Cm	1
			Bladder Retractor, Millin, Complete	1
			Microstop 30X30X13	1
			sterilization box, 30X30X14 Cm,	1
			Mesh tray, 243X255X73 Mm	1
LOT 3-15	HYPOSPADIAS SET	1		1
			Scalpel Handle, No. 3, 12 Cm	1
			Scissors, Deaver, Pediatric/Blunt, Straight, 14.5 Cm	1
			Dissecting. Scissors, Blunt/Blunt, Curved, 14.5 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Scissors, Reynolds, Curved, 15.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 18 Cm	1
			Tungsten carbide-Dissecting Scissors, Lahey, Curved, 14.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Toennis, Curved, 17.5 Cm	1
			Tungsten carbide-Iris Scissors, Short/Sharp, Straight, 11.5 Cm	1
			Tissue Forceps, 1X2 Teeth., Slim, 14.5 Cm	1
			Dressing Forceps, Micro-Adson, 12 Cm	2
			Forceps, Micro-Adson, 1X2 Teeth., 12 Cm	2
			Tissue Forceps, 1X2 Teeth, Straight, 10 Cm	2
			Splinter Forceps, Serrated, Straight, 12.5 Cm	2
			Forceps, Mixer-Baby, Slightly Curved, 14 Cm	2
			Forceps Micro-Mosquito, Curved, 12 Cm	10
			Forceps, Martin-Fuchsig, Curved, 20.5 Cm	2
			Forceps, Pean-Nippon, Straight, 18.5 Cm	1
			Haemostatic Forceps, Pean, Straight, 22.5 Cm	1
			Diss. Forceps, Baby-Adson, Curved, 14.5 Cm	2
			Hooklet, Guthrie, Sharp, 2-Prongs., 16 Cm	2
			Hooklet, Mini-Langenbeck, 18X6 Mm, 16 Cm	2
			Probe, Button End, Ø 2.0/2.0 Mm, 14.5 Cm	1
			Probe, Button End, Ø 1.0/1.0 Mm, 14.5 Cm	1
			Suction Tube, Poppen, Angled, 2.0 Mm, 18 Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Tungsten carbide-Needleholder, De Bakey, 18 Cm	1
			Atraumatic Forceps, De Bakey, 2 Mm, 16 Cm	1
			Skin Hooklet, Gillies, No. 2, 18 Cm	2
			Face-Lift Hooklet, Kaye, 4-Prongs., 13 Cm	2
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			sterilization box, 30X30X14 Cm,	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Mesh Tray, 243X255X73 Mm	1
LOT 3-16	CIRCUMCISIO N SET	1		
			Scalpel Handle, No. 3, 12 Cm	1
			Towel Forceps, Tohoku, Blunt, 10.5 Cm	4
			Dissecting Forceps, Semken, 1X2 Teeth, 12.5 Cm	2
			Tissue Forceps, 1X2 Teeth, Slim, 14.5 Cm	1
			Atraumatic Forceps, De Bakey, 1.5 Mm, 16 Cm	2
			Tungsten carbide-Dressing Forceps, Potts-Smith, 16 Cm	2
			Probe, Button End, Ø 2.0/2.0 Mm, 14.5 Cm	1
			Grooved Director, Straight, 14.5 Cm	1
			Haemostatic Forceps, Mosquito, Curved, 12 Cm	4
			Haemostatic Forceps, Mosquito, Straight, 12.5 Cm	4
			Tungsten carbide-Diss. Scissors, Lahey, Curved, 14.5 Cm	1
			Tungsten carbide-Iris Scissors, Short/Sharp, Straight, 11.5 Cm	1
			Tungsten carbide-Ligature Scissors, Curved, Serrated, 14,5 Cm	1
			Scissors, Deaver, Paediatric, Blunt, Straight, 14.5 Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Bowl, Metal, H = 30, Ø 61 Mm, 0.07 L	1
			sterilization box, 30X30X14 Cm,	1
			mesh tray, 243X255X73 Mm	1
LOT 3-17	MAJOR BASIC PAEDIATRIC SET	1		1
			Forceps, Gross-Maier, Curved., 26.5 Cm	2
			Towel Forceps, Backhaus, Sharp, 11 Cm	4
			Towel Forceps for Paper Drapes, 11.5 Cm	4
			Scalpel Handle, No. 3, 12 Cm	2
			Tungsten carbide-Dissecting Scissors, Curved., 11.5 Cm	1
			Tunsten carbide-Dissecting Scissors, Fine, Curved, 14.5 Cm	1
			Scissors, Jameson, Curved, 15.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Curved, Serrated, 14.5 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Operating Scissors, Sharp/Blunt, Straight, 14.5 Cm	1
			Tissue Forceps, 1X2 Teeth, Slim, 14.5 Cm	2
			Atraumatic. Forceps, De Bakey, 1.5 Mm, 16 Cm	2
			Dressing Forceps, Mini-Adson, 12 Cm	2
			Forceps, Mini-Adson, 1X2 Teeth, 12 Cm	2
			Haemostatic Forceps, Mosquito, Curved, 12 Cm	6
			Haemostatic Forceps, Mosquito, Curved, 14 Cm	6
			Forceps, Kocher, 1X2 Teeth, Straight, 14 Cm	2
			Forceps, Foerster, Serrated, Curved, 18 Cm	2
			Peritoneum Forceps, Baby-Mikulicz, 14.5 Cm	4
			Dissecting Forceps, Baby-Adson, Curved, 14.5 Cm	2
			Forceps, Mixer-Baby, Slightly Curved, 14 Cm	2
			Dissecting Forceps, Baby-Mixer, Curved, 18.5Cm	2
			Tungsten carbide-Needleholder, Halsey, 13 Cm	1
			Tungsten carbide-Needleholder, Crile-Wood, 15 Cm	1
			Tungsten carbide-Needleholder, Mayo-Hegar, 16 Cm	1
			Hooklet, Senn-Green, 10X6 Mm, 16 Cm	2
			Retractor, Langenbeck, 30X11 Mm, 22 Cm	2
			Retractor, Langenbeck, 40X11 Mm, 22 Cm	2
			Hooklet, Desmarres, 14 Mm, 16 Cm	2
			Retractor, Double, Baby-Roux, 12.5 Cm	2
			Retractor, Double, Roux, No. 1, 14.5 Cm	2
			Retractor, Fritsch, 33X40 Mm, 24 Cm	2
			Hooklet, Sharp, 2-Prongs, 16.5 Cm	2
			Retractor, Delicate, Sharp, 4-Prong, 16.5 Cm	2
			Retractor, Volkmann, Semisharp, 4-Prongs, 22.5 Cm	2
			Spatula, Martin, Malleable, 16 Mm, 20 Cm	1
			Spreader, Adson, Blunt, 3X4 Teeth, 13.5 Cm	1
			Abdominal Retractor, Balfour-Baby, 12.5 Cm	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Tissue Forceps, Allis-Baby, 4X5 Teeth, 13 Cm	1
			Atraumatic Tissue Forceps, Allis, 15.5 Cm	1
			Atraumatic Intestinal Forceps, Doyen-Baby, Curved, 13.5 Cm	2
			Atraumatic Intestinal Forceps, Doyen, Curved, 17 Cm	2
			Anastomosis Forceps, Derra, No. 2, 17 Cm	2
			Bone Curette, Volkmann., Oval, No. 000, 17 Cm	1
			Probe, Button End, Ø 1.0/1.0 Mm, 14.5 Cm	1
			Probe, Bowman, Cylindrical., Ns, No. 00/0	1
			Needle Case, Round, Perforated,	1
			Bowl, Metal, H = 40, Ø 80 Mm, 0.14 L	1
			Bowl, Metal, H = 55, Ø 128 Mm, 0.35 L	1
			Kidney Dish, 250X140X40 Mm	1
			Guide Needle, Angled, Knife Shape, 8 Ch	1
			Guide Needle, Angled, Knife Shape, 10 Ch	1
			sterilization box, 60X30X14 Cm,	1
			mesh tray, 480X255X73 Mm	1
LOT 3-18	PERFUSION SET	1		
			Scissors, Deaver, Straight, 14.5 Cm	1
			Scissors, Angled 60°, 18 Cm	1
			Coronary Scissors, 60°, 10 Mm, 18 Cm	1
			Iris Scissors, Sharp/Sharp, Flat, Straight, 10.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 14.5 Cm	1
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 18 Cm	1
			Tungsten carbide-Dressing Forceps, Cushing, 17.5 Cm	2
			Micro Forceps, Straight, 6.0X0.7 Mm, 18 Cm	1
			Dissecting Forceps, Baby-Adson, Curved, 14.5 Cm	1
			Dissecting Forceps, Gemini, Straight Curved, 21 Cm	1
			Towel Forceps, Tohoku, Blunt, 10.5 Cm	2
			Tube Clamp, Long Ratchet, 14 Cm	1
			Probe, Button End, Ø 2.0/2.0 Mm, 16 Cm	1
			Micro Needleholder, Straight, With	1

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Lock, 18 Cm	
			Tunsten carbide-Needleholder, Microvascular, 17.5 Cm	1
			Atraumatic Forceps, De Bakey, 1.5 Mm, 20 Cm	2
			Kidney Dish, 250X140X40 Mm	1
			sterilization box, 30X30X14 Cm,	1
			mesh tray, 243X255X73 Mm	1
LOT 3-19	VASCULAR CLAMPS	1		
			Atraumatic Bulldog Clamp, Straight, 14 Mm	2
			Atraumatic Bulldog Clamp, Curved, 14 Mm	2
			Bulldog Clamp, Glover, Curved, 6.5 Cm	2
			Bulldog Clamp, Glover, Curved, 9 Cm	2
			Atraumatic Forceps, Potts, Angled, 55 Mm, 22 Cm	4
			Atraumatic Forceps, Potts, Curved, 55 Mm, 21.5 Cm	2
			Atraumatic Forceps, Leland-Jones, Angled, 18 Cm	2
			Atraumatic Forceps, Leland-Jones, Angled, 19 Cm	2
			Atraumatic Vena Cava Forceps, Calne, 27 Cm	1
			Atraumatic Tangential Forceps, Satinsky, 22 Cm	2
			Atraumatic Tangential. Forceps, Satinsky, 28.5 Cm	2
			Atraumatic Anastomosis Forceps, Glover, 22 Cm	2
			Atraumatic Forceps, Potts, Straight, 27 Cm	2
			Atraumatic Forceps, De Bakey, Angled, 27.5 Cm	2
			Atraumatic Forceps, Cooley, Medium Angled, 16 Cm	2
			sterilization 47X30X14 Cm,	1
			Tray 3/4, 410X255X73 Mm	1
LOT 3-20	KIDNEY TRANSPLANT DONOR	1		
			SPONGE HOLDERS	
			sponge holding Forceps, Foerster, Slim, Straight., 25 Cm	8
			Ramplsey Sponge Forceps, Ramplsey, Straight., 24.5 Cm	8
			Scissors	

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Tungsten carbide -Dissecting Scissors, Fine, Curved., 28.5 Cm	4
			Dissecting-Scissors, Curved., 30 Cm	4
			Scissors, Mayo-Harrington, Curved., 23 Cm	4
			Tungsten carbide Scissors, Mayo, Curved., 17 Cm	4
			Tungsten carbide Scissors, Joseph, Sharp/Sharp, Straight, 14.5 Cm	4
			Scissors, Jameson, Cvd., 15.5 Cm	2
			Operating Scissors, Blunt/Blunt, Straight., 16.5Cm	4
			Haemostats	
			Forceps, Spencer-Wells, Straight., 18.5 Cm	12
			Forceps, Spencer-Wells, Curved, 18 Cm	12
			Haemostats. Forceps, Mosquito, Straight, 12.5 Cm	12
			Forceps, Mosquito artery, 1X2 Toothed., Straight, 12.5 Cm	12
			Forceps, Roberts, Straight., 22.5 Cm	6
			Haemostatic Forceps, Pean, Straight., 18.5 Cm	12
			Tissue Holding Forceps	
			Towel Forceps, Lane, Straight., 19.5 Cm	4
			Atraumatic. Tissue Forceps, Allis, 15.5 Cm	4
			Atraumatic Tangent. Forceps, Satinsky, 27.5 Cm	4
			Atraumatic. Tissue Forceps, Babcock, 21 Cm	4
			Tungsten carbideTissue Forceps, Duval, 20.5 Cm	4
			Intestinal. forceps., Mayo-Robs., Curved., 24.5 Cm	4
			Intestinal. forceps., Mayo-Robs., Straight., 25.5 Cm	4
			Intestinal Clamp, Payr-Baby, 15 Cm	4
			Scapel Holders	
			Scapel Handle, No. 3, Shape As No. 4	2
			Scapel Handle, No. 4, 13.5Cm	2
			Scapel Handle, No. 7K, Solid, Short	2
			Scapel Handle, No. 7, Solid, 16Cm	2
			Dissecting Forceps	
			Atraumatic. Forceps, De Bakey, 2 Mm, 20 Cm	2
			Atraumatic. Forceps, De Bakey, 2 Mm, 25 Cm	2
			Atraumatic. Forceps, De Bakey, 2.7 Mm, 25 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Atraumatic. Forceps, De Bakey, 2 Mm, 25 Cm	2
			Atraumatic. Forceps, De Bakey, 1.5 Mm, 20 Cm	2
			Atraumatic. Forceps, De Bakey, 1.5 Mm, 25 Cm	2
			Dressing Forceps, non toothed 20 Cm	2
			Dressing Forceps, non toothed 25 Cm	2
			Dressing Forceps, nontoothed 30.5 Cm	2
			Tissue Forceps, 1X2 Toothed., 20.5 Cm	2
			Tissue Forceps, 1X2 Toothed., 25 Cm	2
			Tissue Forceps, 1X2 Toothed., 30.5 Cm	2
			Dissecting. Forceps, Waugh, 1X2 Toothed., 20 Cm	2
			Tungsten carbide-Forceps, Bonney, 1X2 Toothed., 17.5 Cm	2
			Tissue Forceps, 2X3 Toothed., 20.5 Cm	2
			Dressing Forceps non toothed, Adson, 12 Cm	2
			Dressing Forceps nontoothed, Adson, 15 Cm	2
			Tissue Forceps, Adson, 1X2 Toothed., 12 Cm	2
			Tissue Forceps, Bonney, 1X2 Toothed., 17.5 Cm	2
			Dressing Forceps non toothed, Bonney, 17 Cm	2
			Dissecting Forceps, O'Shaugnessy, 23 Cm	2
			Dissecting Forceps, O'Shaugnessy, 26 Cm	2
			Needle Holders	
			Needleholder, Adson, Fenestrated., 18.5 Cm	2
			Tungsten carbide Needleholder, Crile-Wood, 15 Cm	2
			Tungsten carbide Needleholder, Mayo-Hegar, 16 Cm	2
			Tungsten carbide-Needleholder, Mayo-Hegar, 18.5 Cm	2
			Tungsten carbide-Needleholder, Mayo-Hegar, 20 Cm	2
			Tungsten carbide-Needleholder, Mayo-Hegar, 24 Cm	2
			Retractors	
			Retractor, Middeldorpf, 15X17 Mm, 22 Cm	2
			Retractor, Langenbeck, 30X11 Mm, 22 Cm	2
			Retractor, Langenbeck, 30X14 Mm, 22 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Cm	
			Retractor, Langenbeck, 30X15 Mm, 22 Cm	2
			Retractor, Langenbeck, 40X11 Mm, 22 Cm	2
			Retractor, Langenbeck, 50X11 Mm, 22 Cm	2
			Retractor, Fritsch, 45X63 Mm, 25 Cm	2
			Retractor, Fritsch, 45X75 Mm, 25.5 Cm	2
			Retractor., Brunner, Str., 100X25 Mm, 25.5 Cm	2
			Retractor, Brunner, Str., 140X30 Mm, 25.5 Cm	2
			Retractor, Brunner, Str., 180X30 Mm, 25.5 Cm	2
			Retractor, Deaver, 25 Mm Wide, 30.5 Cm	2
			Retractor, Deaver, 25 Mm Wide, 33.5 Cm	2
			Retractor, Deaver, 25 Mm Wide, 34.5 Cm	2
			Retractor, Deaver, 38 Mm Wide, 32 Cm	2
			Retractor, Deaver, 50 Mm Wide, 31.5 Cm	2
			Retractor, Deaver-Grip, 100 Mm, 32.5 Cm	2
			Retractor, Kelly, 205X38 Mm, 27.5 Cm	2
			Retractor, Kelly, 210X57 Mm, 28 Cm	2
			Abdominal Retractor, Collin, 20 Cm	2
			Abdominal Retractor, Collin, 20 Cm	2
			Rib Spreader, Finochietto, 40X45X150 Mm	2
			Rib Spreader, Finochietto, 45X65X165 Mm	2
			Vascular Clamps	
			Anastom. Forceps, Cooley-Derra, 17 Cm	2
			Bronchus Forceps, Price-Thomas, 22 Cm	2
			Bulldog Clamp, De Bakey, Straight., 8 Cm	2
			Bulldog Clamp, De Bakey, Straight., 9 Cm	2
			Bulldog Clamp, De Bakey, Straight., 10,5 Cm	2
			Bulldog Clamp, De Bakey, Straight., 12,5 Cm	2
			Bulldog Clamp, De Bakey, Curved., 8 Cm	2
			Bulldog Clamp, De Bakey, Curved., 9 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Bulldog Clamp, De Bakey, Curved., 10 Cm	2
			Bulldog Clamp, De Bakey, Curved., 11,5 Cm	2
			Atraumatic. Forceps, De Bakey, Curved., 13 Cm	2
			Atraumatic. Forceps, De Bakey, Straight., 13 Cm	2
			Ti-Forceps, DeBakey, Straight, 13 Cm	2
			Ti-Forceps, DeBakey, Curved., 12.5 Cm	2
			Ti-Forceps, DeBakey-Derra, 16.5 Cm	2
			Atraumatic. Vascular Forceps, Satinsky, 15.5 Cm	2
			Atraumatic. Kidney/Pancrease. Forceps, 40 Mm, 20 Cm	2
			Atraumatic. Kidney/Pancrease. Forceps, 50 Mm, 20 Cm	2
			Atraumatic. Kidney/Pancrease. Forceps, 60 Mm, 20 Cm	2
			Atraumatic. Tangential Forceps, Satinsky, 22 Cm	2
			Atraumatic. Tangent. Forceps, Satinsky, 28.5 Cm	2
			Anastomosis. Forceps, Cooley-Derra, 16.5 Cm	2
			Anastomosis. Forceps, Cooley-Derra, 17.5 Cm	2
			Atraumatic. Vascular Forceps, Cooley, 26.5 Cm	2
			Atraumatic. Forceps, Potts, Angled., 55 Mm, 22 Cm	2
			Dissecting. Forceps, Mixer, Straight. Curved., 23 Cm	2
			Intestinal Clamps	
			Intest. Forceps., Mayo-Robs., Straight, 25.5 Cm	2
			Intest. Forceps., Mayo-Robs., Curved., 24.5 Cm	2
			Intestinal Clamp, Payr-Baby, 15 Cm	2
			Suction	
			Suction Tube, Yankauer, Complete, 31 Cm	2
			Suction Tube, Poole, Str., diameter 10 Mm, 24 Cm	1
			Suction Tube, Poole, Angled., diameter 8 Mm, 25 Cm	8
			Steel Ruler 15Cm/6 Inches	1
			Towel Forceps, Lorna, Fine Serrated., 13 Cm	12
			Abdominal Spatula, Malleable, 30 Mm, 33 Cm	2
			Abdominal . Spatula, Malleable, 40	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Mm, 33 Cm	
			Abdominal Spatula, Malleable, 50 Mm, 33 Cm	2
			Spatula, Martin, Malleable., 25 Mm, 20 Cm	2
			Spatula, Martin, Malleable., 19 Mm, 20 Cm	2
			Sterilizing Pin With Button End, 14Cm	2
			Storage & Sterilization	
			sterilization Container box , 47X30X14Cm,	2
			Mesh tray, 3/4, 410X251X44Mm	1
			Meshtray, 3/4, 410X251X64Mm	1
			Identification Label Blue With Individual Engraving	1
LOT 3-21	KIDNEY TRANSPLANT SET-RECEPIENT	1		
			Sponge Holders	
			Forceps, Foerster, Slim, Straight., 25 Cm	8
			Sponge Forceps, Rampley, Straight, 24.5 Cm	8
			Scissors	
			Tungsten carbide-Dissecting Scissors, Fine, Curved, 28.5 Cm	4
			Aquila Dissecting-Scissors, Curved, 30 Cm	4
			Scissors, Mayo-Harrington, Curved, 23 Cm	4
			Tungsten carbide-Scissors, Mayo, Curved, 17 Cm	4
			Tungsten carbide-Scissors, Joseph, Sharp/Sharp, Straight, 14.5 Cm	4
			Scissors, Jameson, Curved, 15.5 Cm	2
			Operating Scissors, Blunt/Blunt, Straight, 16.5Cm	4
			Forceps, Spencer-Wells, Straight, 18.5 Cm	12
			Forceps, Spencer-Wells, Curved, 18 Cm	12
			Haemostats	
			Haemostatic. Forceps, Mosquito, Straight, 12.5 Cm	12
			Forceps, Mosquito, 1X2 Teeth, Straight, 12.5 Cm	12
			Forceps, Roberts, Straight, 22.5 Cm	6
			Haemostatic Forceps, Pean, Straight, 18.5 Cm	12

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Towel Forceps, Lane, Straight, 19.5 Cm	4
			Atraumatic Tissue Forceps, Allis, 15.5 Cm	4
			Atraumatic Tangential Forceps, Satinsky, 27.5 Cm	4
			Atraight Tissue Forceps, Babcock, 21 Cm	4
			Tungsten carbide-Tissue Forceps, Duval, 20.5 Cm	4
			Intestinal Forceps, Mayo-Robson, Curved, 24.5 Cm	4
			Intestinal Forceps, Mayo-Robsson, Straight, 25.5 Cm	4
			Intestinal Clamp, Payr-Baby, 15 Cm	4
			Scapel Holders	
			Scapel Handle, No. 3,	2
			Scapel Handle, No. 4, 13.5Cm	2
			Scapel Handle, No. 7K, Solid, Short	2
			Scapel Handle, No. 7, Solid, 16Cm	2
			Dissecting Forceps	
			Atraumatic Forceps, De Bakey, 2 Mm, 20 Cm	2
			Atraumatic Forceps, De Bakey, 2 Mm, 25 Cm	2
			Atraumatic Forceps, De Bakey, 2.7 Mm, 25 Cm	2
			Atraumatic Forceps, De Bakey, 2 Mm, 25 Cm	2
			Atraumatic Forceps, De Bakey, 1.5 Mm, 20 Cm	2
			Atraumatic Forceps, De Bakey, 1.5 Mm, 25 Cm	2
			Dressing Forceps non-toothed, 20 Cm	2
			Dressing Forceps, non-toothed 25 Cm	2
			Dressing Forceps, non-toothed 30.5 Cm	2
			Tissue Forceps, 1X2 Teeth, 20.5 Cm	2
			Tissue Forceps, 1X2 Teeth, 25 Cm	2
			Tissue Forceps, 1X2 Teeth, 30.5 Cm	2
			Dissecting Forceps, Waugh, 1X2 Teeth, 20 Cm	2
			Tunagten carbide-Forceps, Bonney, 1X2 Teeth, 17.5 Cm	2
			Tissue Forceps, 2X3 Teeth, 20.5 Cm	2
			Dressing Forceps, non-toothed Adson, 12 Cm	2
			Dressing Forceps, non-toothed Adson, 15 Cm	2
			Tissue Forceps, Adson, 1X2 Teeth, 12 Cm	2
			Tissue Forceps, Bonney, 1X2 Teeth,	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			17.5 Cm	
			Dressing Forceps, Bonney, 17 Cm	2
			Dressing Forceps, Bonney, 17 Cm	2
			Dissecting Forceps, O'Shaugnessy, 23 Cm	2
			Dissecting Forceps, O'Shaugnessy, 26 Cm	2
			Needle Holders	
			Needleholder, Adson, Fenestrated, 18.5 Cm	2
			Tangsten carbide-Needleholder, Crile-Wood, 15 Cm	2
			Tangsten carbide-Needleholder, Mayo-Hegar, 16 Cm	2
			Tangsten carbide-Needleholder, Mayo-Hegar, 18.5 Cm	2
			Tangsten carbide-Needleholder, Mayo-Hegar, 20 Cm	2
			Tangsten carbide-Needleholder, Mayo-Hegar, 24 Cm	2
			Retractors	
			Retractor, Middeldorpf, 15X17 Mm, 22 Cm	2
			Retractor, Langenbeck, 30X11 Mm, 22 Cm	2
			Retractor, Langenbeck, 30X14 Mm, 22 Cm	2
			Retractor, Langenbeck, 30X15 Mm, 22 Cm	2
			Retractor, Langenbeck, 40X11 Mm, 22 Cm	2
			Retractor, Langenbeck, 50X11 Mm, 22 Cm	2
			Retractor, Fritsch, 45X63 Mm, 25 Cm	2
			Retractor, Fritsch, 45X75 Mm, 25.5 Cm	2
			Retractor, Brunner, Straight, 100X25 Mm, 25.5 Cm	2
			Retractor, Brunner, Straight, 140X30 Mm, 25.5 Cm	2
			Retractor, Brunner, Straight, 180X30 Mm, 25.5 Cm	2
			Retractor, Deaver, 25 Mm Wide, 30.5 Cm	2
			Retractor, Deaver, 25 Mm Wide, 33.5 Cm	2
			Retractor, Deaver, 25 Mm Wide, 34.5 Cm	2
			Retractor, Deaver, 38 Mm Wide, 32 Cm	2
			Retractor, Deaver, 50 Mm Wide, 31.5 Cm	2
			Retractor, Deaver-Grip, 100 Mm, 32.5 Cm	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Retractor, Kelly, 205X38 Mm, 27.5 Cm	2
			Retractor, Kelly, 210X57 Mm, 28 Cm	2
			Abdominal Retractor, Collin, 20 Cm	2
			Abdominal Retractor, Collin, 20 Cm	2
			Rib Spreader, Finochietto, 40X45X150 Mm	2
			Rib Spreader, Finochietto, 45X65X165 Mm	2
			Vascular Clamps	
			Anastomosis Forceps, Cooley-Derra, 17 Cm	2
			Bronchus Forceps, Price-Thomas, 22 Cm	2
			Bulldog Clamp, De Bakey, Straight, 8 Cm	2
			Bulldog Clamp, De Bakey, Str., 9 Cm	2
			Bulldog Clamp, De Bakey, Straight, 10,5 Cm	2
			Bulldog Clamp, De Bakey, Straight, 12,5 Cm	2
			Bulldog Clamp, De Bakey, Curved, 8 Cm	2
			Bulldog Clamp, De Bakey, Curved, 9 Cm	2
			Bulldog Clamp, De Bakey, Curved, 10 Cm	2
			Bulldog Clamp, De Bakey, Curved, 11,5 Cm	2
			Atraumatic Forceps, De Bakey, Curved, 13 Cm	2
			Atraumatic Forceps, De Bakey, Straight, 13 Cm	2
			Titanium-Forceps, Debakey, Straight, 13 Cm	2
			Titanium-Forceps, Debakey, Curved, 12.5 Cm	2
			Titanium-Forceps, Debakey-Derra, 16.5 Cm	2
			Atraumatic Vascular Forceps, Satinsky, 15.5 Cm	2
			Atraumatic Kidney/Pancr. Forceps, 40 Mm, 20 Cm	2
			Atraumatic Kidney/Pancr. Forceps, 50 Mm, 20 Cm	2
			Atraumatic Kidney/Pancr. Forceps, 60 Mm, 20 Cm	2
			Atraumatic. Tangential Forceps, Satinsky, 22 Cm	2
			Atraumatic Tangent. Forceps, Satinsky, 28.5 Cm	2
			Anastom. Forceps, Cooley-Derra, 16.5 Cm	2
			Anastom. Forceps, Cooley-Derra, 17.5	2

LOT 3	EXPECTED EQUIPMENT	QTY	Specification	Qty per Set
			Cm	
			Atraumatic Vascular Forceps, Cooley, 26.5 Cm	2
			Atraumatic Forceps, Potts, Ang., 55 Mm, 22 Cm	2
			Dissecting Forceps, Mixer, Straight Curved, 23 Cm	2
			Intestinal Clamps	
			Intestinal Forceps, Mayo-Robson, Straight, 25.5 Cm	2
			Intestinal Forceps, Mayo-Robson, Curved., 24.5 Cm	2
			Intestinal Clamp, Payr-Baby, 15 Cm	2
			Suction	
			Suction Tube, Yankauer, 31 Cm	2
			Suction Tube, Poole, Straight, Ø 10 Mm, 24 Cm	1
			Suction Tube, Poole, Angled, Ø 8 Mm, 25 Cm	8
			Steel Ruler 15Cm/6 Inches No Medical Device	1
			Towel Forceps, Lorna, Fine Serrated, 13 Cm	12
			Spatula, Malleable, 6.5 Mm, 20 Cm	2
			Spatula, Malleable, 9.5 Mm, 20 Cm	2
			Spatula, Malleable, 13 Mm, 20 Cm	2
			Spatula, Malleable, 16 Mm, 20 Cm	2
			Storage & Sterilization	
			Sterilizing Pin With Button End, 14Cm	2
			mesh Tray, 410X251X44Mm	1
			sterile box, 47X30X14Cm,	2
			Filters for sterile box.	
			Mesh Tray, 410X251X44Mm	1
			Mesh Tray, 410X251X64Mm	1

Lot 3- 22. AV FISTULA SET

Item 22	Description	Qty.
06-2903	Scalpel Handle #3	2
06-2907	Scalpel Handle #7	1

10-1675	Medicine Cup 2oz., Graduated Measure	1
16-1510	Sklar Edge Mayo Dissecting Scissor Tungsten Carbide, Straight, 6 3/4"	1
16-1905	Sklar Edge Metzenbaum Lahey Scissor Tungsten Carbide, Delicate, Curved, 5 3/4"	1
17-1225	Micro-Mosquito Forceps Curved, Delicate, 4 3/4"	6
17-1450	Halsted Mosquito Forceps Straight, 5"	4
17-1550	Halsted Mosquito Forceps Curved, 5"	10
17-2262	Rochester-Pean Forceps Curved, 6 1/4"	4
17-2862	Rochester-Ochsner Forceps Straight, 1x2 Teeth, 6 1/4"	2
17-3155	Crile Forceps Curved, 5 1/2"	10
21-8001	TC Halsey Needle Holder Serrated, 5 1/4"	1
21-8006	TC Baby Crile-Wood Needle Holders Serrated, 6"	2
21-8040	TC Castroviejo Needle Holders Straight with Lock, 5 1/2"	2
21-8087	TC DeBaKey Cardiovascular Needle Holder 7"	1
22-8345	Weitlaner Retractor 2x3 Teeth, Blunt, 4 1/2"	1
22-9027	Alm Retractor 4x4 Teeth, Blunt, 2 3/4"	1
23-2521	Sklarlite XD Mixer Forceps Right Angle, 5 1/2"	2

36-2160	Allis Tissue Forceps 4x5 Teeth, 6"	2
36-2790	Rochester-Pean Forcep Curved, 9"	1
47-2572	Gillies Skin Hooks 4mm, 7"	2
47-2655	Blair-Rollet Retractors 4 Prong, Sharp, Delicate, 5 1/2"	2
47-2852	Lorna-Edna Towel Clamps 5 1/2"	2
50-2008	Frazier Suction Tube 8 French	1
50-3047	Adson Tissue Forceps 1x2 Teeth, 4 3/4"	2
50-3147	Adson Dressing Forceps Serrated, 4 3/4"	2
51-4370	TC Potts-Smith Dressing Forcep Serrated, 7"	1
52-5162	Debakey Atraumatic Forceps 2mm, 6 1/4"	2
52-6575	Bulldog DeBakey Atraumatic Forceps Straight, 5"	2
52-6577	Bulldog DeBakey Atraumatic Forceps Curved, 5"	2
52-6580	Bulldog DeBakey Atraumatic Forceps Ring Handle, 45° Angle, 5"	2
52-6670	Garrett Vascular Dilator Set 8 1/2", Set of 9	1
60-1085	US Army Retractor Set of 2, Double End, 8 1/4"	1
60-1676	Richardson Retractors SklarGrip Handle, Small, 9 1/2", 1" x 3/4"	2

60-6164	Senn Retractors Double End, Blunt, 3 Prongs, 6 1/4"	2
64-1342	Stevens Tenotomy Scissor Curved, Blunt/Blunt, 4 1/2"	1
64-3142	Westcott Tenotomy Scissor Right, Blunt, 5"	1
65-1842	Desmarres Lid Retractors 14mm	2
66-6852	Heparin Needle Luer Lock, 3mm, 2 1/2"	1
80-1410	Bozeman Forcep Double Curved, 10 1/4"	1
98-4108	Diethrich Bulldog Clamps Angled, 8mm	4
52-2802	DeBakey Vascular Scissor 45° Angle, 7"	1

LOT 4: LABORATORY(Molecular Laboratory, Microbiology Laboratory, Anatomic Laboratory, Intensive Care Unit LAB)

	Molecular Laboratory	Qty	UOI
1.	Third generation Sequencing Machine	1	Pcs
	Microbiology Laboratory		
2.	Identification and Antimicrobial Sensitivity Testing Machine for environmental isolates	1	Pcs
3.	Automated Blood Culture System	1	Pcs
	Anatomic Laboratory		
4.	Stereo (Dissecting) microscope	1	Pcs
5.	Whole Slide Scanner with fluorescent, bright field, dark field and polarized microscopy, with Capacity for multiplex and automated analysis	1	Pcs
	Intensive Care Unit LAB		
6.	Blood Gas Analyzers	2	Pcs
7.	Bidder to allow a Sum of Kenya Shillings Five Million (Kshs. 5,000,000) Provisional Sum for 5 no. of Officers (Project Electrical Engineer, Project Electrical Engineer, Project Biomedical Engineer, Project Coordinator & 2 No. of Employer's representative) for overseas factory inspection at the workshop approved by the Biomedical Engineer. The supplier to allow for local travel allowance within the country of travel as per the SRC guidelines, accommodation for 5 days and return air tickets.	1	

SPECIFICATIONS

LOT 4: LABORATORY (Molecular, Microbiology, Anatomic, Intensive Care Unit)

LOT 4-1: Third Generation Genomic Sequencing Machine

Item Code No.	Department	Section	Item Description
LOT 4 -1	Diagnostic Laboratories	Molecular/BTU/ICU/Clinical Chemistry Laboratory	Third Generation Sequencing Machine
<p>A genomic sequencer that can fit the following applications: Oncology, Infectious Disease Testing, Rare and Inherited diseases, Single-Cell Gene Expression, Whole-Exome Sequencing, Shotgun Metagenomics, Immune Repertoire Analysis, 16S Metagenomic Sequencing, Total RNA Sequencing, Targeted Gene Panels, Amplicon Sequencing</p>			
<p>1. 1. General Requirements</p> <ul style="list-style-type: none"> The sequencer must support third-generation sequencing technologies with the capability to sequence both short and long DNA/RNA fragments. The system should be able to provide both real-time sequencing and post-sequencing data analysis with minimal downtime. 			

Item Code No.	Department	Section	Item Description
LOT 4 -1	Diagnostic Laboratories	Molecular/BTU/ICU/Clinical Chemistry Laboratory	Third Generation Sequencing Machine
<ul style="list-style-type: none"> • The system should be compatible with a wide variety of sample types, including genomic DNA, RNA, and metagenomic samples. • The sequencer should offer scalability in terms of throughput and read length, allowing it to accommodate a broad range of sequencing projects from small targeted sequencing to whole-genome sequencing. • The instrument should provide seamless integration with data storage, analysis tools, and bioinformatics pipelines for easy transition from raw data to analysis. <p>2. 2. Sequencing Performance</p> <ul style="list-style-type: none"> • Read Length: <ul style="list-style-type: none"> ◦ The system should support long-read sequencing, with the capability to produce reads of up to 50 kb or more (for structural variant analysis, long-range genomic studies, and transcript sequencing) or short-read sequencing (typically 75-150 bp) for high-accuracy, high-throughput applications such as exome sequencing and RNA sequencing. • Read Accuracy: <ul style="list-style-type: none"> ◦ The system should provide high base call accuracy, supported by error correction or post-sequencing quality control methods. <p>3. 3. Sequencing Throughput</p> <ul style="list-style-type: none"> • Data Output: <ul style="list-style-type: none"> ◦ The sequencer should support high-throughput sequencing, capable of generating at least 100 Gb to 1 Tb per run (depending on the application) ◦ Per-run output must be scalable, offering the ability to adjust throughput for different projects, ranging from small-scale (targeted sequencing) to large-scale (whole-genome sequencing). • Real-Time Sequencing: <ul style="list-style-type: none"> ◦ The system should be capable of real-time sequencing for rapid analysis, allowing for immediate sequencing feedback, which is critical for applications like clinical diagnostics and field-based studies. <p>4. 4. Sample Flexibility and Applications</p> <ul style="list-style-type: none"> • The sequencer must support the following applications: <ul style="list-style-type: none"> ◦ Whole Genome Sequencing (WGS) for human and microbial genomes. ◦ Exome Sequencing (WES) and Targeted Sequencing. ◦ Transcriptome Sequencing (RNA-Seq), including full-length RNA sequencing. ◦ Metagenomics for sequencing mixed microbial populations and environments. ◦ Epigenetic Analysis, including DNA methylation and other modifications. 			

Item Code No.	Department	Section	Item Description
LOT 4 -1	Diagnostic Laboratories	Molecular/BTU/ICU/Clinical Chemistry Laboratory	Third Generation Sequencing Machine
<ul style="list-style-type: none"> o Human Identification 5. 5. Chemistry and Workflow <ul style="list-style-type: none"> • The system must be compatible with standard laboratory workflows and come with an easy-to-use interface for sample preparation, sequencing, and data collection. • The sequencer must be equipped with automatic sample loading capabilities and user-friendly setup to reduce labor time for routine operation. 6. 6. Data Processing and Analysis <ul style="list-style-type: none"> • Basecalling and Data Analysis: <ul style="list-style-type: none"> o The system should include basecalling software capable of processing raw data into high-quality nucleotide sequences. o Must support real-time data analysis with the ability to visualize sequencing progress during the run. o Should provide integration with industry-standard bioinformatics tools for downstream analysis such as alignment, assembly, variant calling, and RNA-Seq analysis. o Should include robust data quality control measures, including error correction and variant detection. 7. 7. Instrumentation and System Design <ul style="list-style-type: none"> • A Small benchtop footprint sequencer suitable for installation in a laboratory setting • The system must be scalable, capable of handling multiple sequencing runs concurrently, and adaptable to growing project demands. • It should be designed for ease of use, with intuitive software and minimal hands-on operation. • UPS- The system should be supplied with appropriate Uninterruptible Power Supply (UPS) 8. Operational Requirements <ul style="list-style-type: none"> • Run Time: The system should be able to complete sequencing runs in a reasonable time frame, ideally within a few hours • Maintenance: The system should be low-maintenance, with automatic calibration, cleaning, and diagnostic tools for routine upkeep. 9. Performance Metrics <ul style="list-style-type: none"> • The sequencer should have a minimum read yield per run: <ul style="list-style-type: none"> o Short reads: Minimum of 100 Gb per run. o Long reads: Minimum of 10-50 Gb of long reads per run, with read 			

Item Code No.	Department	Section	Item Description
LOT 4 -1	Diagnostic Laboratories	Molecular/BTU/ICU/Clinical Chemistry Laboratory	Third Generation Sequencing Machine
lengths up to 50 kb (or longer).			
10. Support and Service			
<ul style="list-style-type: none"> • Warranty: The vendor should provide a comprehensive warranty covering hardware and software issues for at least 24 months. • Training and Support: The vendor must provide installation, user training, and 24/7 technical support for system operation, troubleshooting, and data analysis. • Software Updates: The system should include free software updates for the duration of the warranty period. • Start-up kits: The system must be supplied with starter pack reagents and consumables for a full run operation. 			
11. Regulatory Compliance and Documentation			
<ul style="list-style-type: none"> • The platform should comply with international regulatory standards (e.g., ISO, CE, FDA) • The system should be accompanied by detailed user manuals, technical documentation, and compliance certifications. 			

MICROBIOLOGY LABORATORY

LOT 4 - 2: Microbial Identification and Antimicrobial Sensitivity Testing Machine

Item Code No.	Department	Section	Item Description
LOT 4-2	Diagnostic Laboratories	Microbiology	Fully automated machine for identification and susceptibility testing.
General Description			
TECHNICAL SPECIFICATIONS FOR AUTOMATED ID/AST SYSTEM			
	FEATURE	REQUIRED SPECIFICATION	

Item Code No.	Department	Section	Item Description
LOT 4-2	Diagnostic Laboratories	Microbiology	Fully automated machine for identification and susceptibility testing.
I	Description of Function	<ol style="list-style-type: none"> 1. Fully-automated system for ID/ST testing 2. Identification and susceptibility testing of Gram-positive bacteria, Gram negatives bacteria (including Neisseria) and yeasts 	
III	Specimen and results Management	<ol style="list-style-type: none"> 1. Closed disposable system-no aerosols, splattering or spills 2. Automatically customized comments and alerts when reporting critical results 3. 	
IV	Reagents Management and Handling	<ol style="list-style-type: none"> 1. Bar coded reagents and consumables from the manufacturer must be CE marked or FDA approved 2. 	
V	Maintenance and trouble-shooting	<ol style="list-style-type: none"> 1. Availability of remote diagnostics and proactive maintenance. 2. Availability of log of all maintenance performance including operator provided comments. 	
VI	Electricals/Water	<ol style="list-style-type: none"> 1. Electrical Requirements: 220-250 V. 2. Power backup – UPS for a minimum of 4 hours. 	
VII	Networking Integration	<ol style="list-style-type: none"> 1. LIS enabled. 2. Provision of Laboratory automation connectivity. 3. The system must provide bi-directional computer interface(s) which will be configured to transfer patient and test related data between the analyzer(s). 	
IX	Equipment Installation	<ol style="list-style-type: none"> 1. Should provide evidence of previous installations in the country. 	
X	General Accessories	<ol style="list-style-type: none"> 1. Printer 2. Pipettes 	
XI	Maintenance	<ol style="list-style-type: none"> 1. Periodic monitoring and evaluation of analysers every 6 months by the manufacturer /distributor 2. Provide PPM, equipment maintenance and monitoring schedules. 3. Up time of at least 98%. 4. Should give proof of local capacity to provide comprehensive maintenance and repair 	

Item Code No.	Department	Section	Item Description
LOT 4-2	Diagnostic Laboratories	Microbiology	Fully automated machine for identification and susceptibility testing.
		services.	

LOT 4-3 Automated blood Culture System

Item Code No.	Department	Section	Item Description
LOT 4-3	Diagnostic Laboratories	Microbiology and Parasitology	Automated blood Culture System

1. General Description

AUTOMATED BLOOD CULTURE SYSTEM

- 1.1. Fully automated system capable of culture of blood and sterile body fluids for bacteria (aerobes and anaerobes), fungi in the same system.
- 1.2. >100 cells upgradable to additional cells.
- 1.3. Growth detection by noninvasive colorimetric/non radiometric methods for biosafety of lab workers.
- 1.4. Both blood, Sterile body fluids for culture from all samples must be FDA/CE / Equivalent approved for the system
- 1.5. Should have built in calibration check/facilitate calibration.
- 1.6. Quality control measures should be clearly defined.
- 1.7. System should have specific algorithms for detection of growing microorganisms and should be capable of continuous monitoring of all samples for growth of microorganisms.**
- 1.8. System “should be having continuous agitation and incubation mechanism to provide optimal growth of microorganisms
- 1.9. The bottled media should be capable of neutralizing effect of antibiotics
- 1.10. System should be capable of processing both adult and pediatric samples.
- 1.11. System should have interface for lab information system
System should have an external computer/touch screen monitor and laser deskjet printer and barcode reader.
- 1.12. Should be capable of exporting data to drive for long term storage.
- 1.13. All electrical peripherals required for smooth functioning e.g. voltage stabilizer and UPS should be provided with the equipment.
- 1.14. Supplier must ensure local servicing agent and continuous supply of consumables.
- 1.15. Should be supplied with a starter kit/pack with QC material and calibrators
- 1.16. Must provide installation, training, testing and verification; the shall be done by the vendor.
- 1.17. Scheduled maintenance as indicated by the Manufacturer and a annual service up time above 98 %
- 1.18. Provide a fully filled itemized Excel sheet indicating what will be provided at no cost as well as all the cost items which the procuring entity will be buying through local purchase orders to sustain the operations).
- 1.19. Items omitted by the bidder at the time of evaluation will only be added at the cost of the bidder and not procuring entity.
- 1.20. At least 2 years warranty required. CMC for 5 years.

ANATOMIC LABORATORY**LOT 4-4 Stereo(Dissecting) Microscope**

Item Code No.	Department	Section	Item Description
LOT 4-4	Diagnostic Laboratories	Microbiology and Parasitology	Stereo (Dissecting) Microscope
<p>1. General Description Trinocular Stereo Research Microscope with suitable optics to maintain high resolution, high depth of field and depth of focus even at highest zooms. A Fully Apochromatic Advanced Stereo Microscope for Dissection.</p>			
<p>2. Technical Specifications</p> <p>2.1. Entire Microscope optics:-</p> <ul style="list-style-type: none"> • Apochromatically corrected & coded. Manual Zoom 18:1 or better - with Continuous zooms. <p>2.2. Objective Specifications:-</p> <ul style="list-style-type: none"> • 1X planapochromatic, 0.15 NA or better, 60 mm working distance or higher. • 10X /22 Eyepiece pair with Diopter adjustments. Total Magnification- 8x or lower to 180x or higher <p>2.3. Desirable Resolution: -</p> <ul style="list-style-type: none"> • Minimum 500 Line pairs/mm with 1x Apo Objective or better. Slim base unit without transmitted light module • Coded Focus drive with flexible arm to mount the microscope zoom body on it and move the same as per sample requirement. <p>2.4. Trinocular tube with possibility of 100% light to photography</p> <p>2.5. Dust covers suitable with flexible arm stand.</p> <p>2.6. High power LED for incident light with gooseneck and manual control over light level. LED service life ~20,000 HRS or more.</p> <p>2.7. LED type: Homogeneous Daylight with Colour Temperature of ~6500° K, free of UV</p> <p>2.8. Anti-mold design to ensure protection from contamination while working in hot and humid environments.</p>			

LOT 4-5 Whole Slide scanner with fluorescent, brightfield, darkfield and polarized microscopy, with capacity for multiplex and automated analysis.

Item Code No.	Department	Section	Item Description
LOT 4 -5	Diagnostic Laboratories	Anatomic Pathology	Whole Slide scanner with fluorescent, brightfield, darkfield and polarized microscopy, with capacity for multiplex and automated analysis
<p>1. General Description Whole Slide scanner with fluorescent, brightfield, darkfield and polarized microscopy</p>			
TECHNICAL SPECIFICATION OF SLIDE SCANNER			

Item Code No.	Department	Section	Item Description
LOT 4 -5	Diagnostic Laboratories	Anatomic Pathology	Whole Slide scanner with fluorescent, brightfield, darkfield and polarized microscopy, with capacity for multiplex and automated analysis
<p>1.1. General Specification Fully automated high performance whole sidewalk away scanner for histopathology glass slides.</p> <p>1.2. Slide Capacity Sample throughout with loading capacity of minimum 350 or more glass slides.</p> <p>1.3. Slide Dimension Should handle glass slides having dimensions of 25x75 mm with a thickness of 0.9-1.39 mm including the coverslip.</p> <p>1.4. Slide loader Should have an inbuilt automatic slide loader.</p> <p>1.5. Random Access Scanner should have capability to load slides while some of the sliders are being scanned without interrupting the ongoing scanning run-Random Access.</p> <p>1.6. Slide throughput Should be a high-speed scanner with minimum throughput of 50 slides per hour for 15x15mm tissue sample at 20X objective.</p> <p>1.7. Stat Access Ability to prioritize slide scan to support Stat workflow.</p> <p>1.8. Barcode reading Should read 1D and 2D barcode labels</p> <p>1.9. Z-stacking Should allow scanning of multiple planes.</p> <p>1.10. Image management Image management software should facilitate image acquisition, annotations, FOV capture, cell counts, customized reporting and synchronized viewing.</p> <p>1.11. Archival and Retrieval Should provide with a strong database support for image acquisition, archival and retrieval and slide sharing for Telepathology.</p> <p>1.12. Light Source</p>			

Item Code No.	Department	Section	Item Description
LOT 4 -5	Diagnostic Laboratories	Anatomic Pathology	Whole Slide scanner with fluorescent, brightfield, darkfield and polarized microscopy, with capacity for multiplex and automated analysis
<p>LED light source should be provided with due consideration to its longevity, less power consumption with preference to “automatic switch on” while scanning.</p> <p>1.13. Digital Slide Storage Format Slide storage format should be BIF, TIFF or JPEG 2000.</p> <p>1.14. Footprint Should be compact with minimal additional parts so as to reduce the occurrence of breakdowns of different units.</p> <p>1.15. Case Management Should allow complete case management right from patient history acquisition to customized reporting of the case.</p> <p>1.16. Image Analysis Algorithm</p> <ul style="list-style-type: none"> - Should have tune able algorithms for multiple parameters. - Should have US FDA approved Image Analysis algorithms for HER2 (4B5),PR (1E2), ER (SP1), p53 (DO-7) and Ki-67 (30-9). <p>1.17. Training and Service Support Well trained service and support team should be provided. Company should be well established and have a track record of expertise in the field.</p> <p>1.18. User Authorization Password protected, role-based security with limited access in accordance with the user hierarchy.</p> <p>1.19. Remote case management Image management (anytime, anywhere thin client image viewing) for case accessing through reporting.</p> <p>1.20. Software license Updated as and when new additions come without any recurrent cost.</p>			

INTENSIVE CARE UNIT LAB

LOT 4-6: BLOOD GAS ANALYZER

	CRITERIA	REQUIREMENTS
1	System Description	i. Automated Blood gas analyzer ii. Two (2) in number which are identical
2	Measurement mode /	i. Electrode or cartridge based

	analytical system	<ul style="list-style-type: none"> ii. If electrode based; maintenance free and upgradable for auto quality control iii. Reagent use life: Minimum of 28 days or maximum number of tests 																																																										
3	System Menu	<table border="1"> <thead> <tr> <th>Analyte</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td colspan="2">Reporting Range</td> </tr> <tr> <td>pH</td> <td></td> </tr> <tr> <td>6.500 - 7.800</td> <td></td> </tr> <tr> <td>Pleural pH</td> <td></td> </tr> <tr> <td>7.000 - 7.500</td> <td></td> </tr> <tr> <td>pO2</td> <td>kPa</td> </tr> <tr> <td>1.33 - 93.32</td> <td></td> </tr> <tr> <td>pCO2</td> <td>kPa</td> </tr> <tr> <td>0.66 - 26.66</td> <td></td> </tr> <tr> <td>Na+</td> <td>mmol/L</td> </tr> <tr> <td>100.0 - 200.0</td> <td></td> </tr> <tr> <td>K+</td> <td>mmol/L</td> </tr> <tr> <td>0.50 - 15.00</td> <td></td> </tr> <tr> <td>Cl-</td> <td>mmol/L</td> </tr> <tr> <td>65.0 - 140.0</td> <td></td> </tr> <tr> <td>Glucose</td> <td>mmol/L</td> </tr> <tr> <td>1.1 - 41.6</td> <td></td> </tr> <tr> <td>Lactate</td> <td>mmol/L</td> </tr> <tr> <td>0.18 - 30.00</td> <td></td> </tr> <tr> <td>tHb</td> <td>g/dL</td> </tr> <tr> <td>2.0 - 25</td> <td></td> </tr> <tr> <td>sO2</td> <td>%</td> </tr> <tr> <td>15.0 - 100.0</td> <td></td> </tr> <tr> <td>HCT</td> <td>%</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>Bae Excess</td> <td>mmol/L</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td colspan="2">Calculated parameters are essential</td> </tr> </tbody> </table>	Analyte	Units	Reporting Range		pH		6.500 - 7.800		Pleural pH		7.000 - 7.500		pO2	kPa	1.33 - 93.32		pCO2	kPa	0.66 - 26.66		Na+	mmol/L	100.0 - 200.0		K+	mmol/L	0.50 - 15.00		Cl-	mmol/L	65.0 - 140.0		Glucose	mmol/L	1.1 - 41.6		Lactate	mmol/L	0.18 - 30.00		tHb	g/dL	2.0 - 25		sO2	%	15.0 - 100.0		HCT	%	-		Bae Excess	mmol/L	-		Calculated parameters are essential	
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4	Sample Types	<ul style="list-style-type: none"> i. Syringe and capillary sampling mechanism ii. Whole blood (arterial, venous, mixed venous and capillary) iii. Pleural fluid iv. Dialysate 																																																										
5	Sample volume	<ul style="list-style-type: none"> i. Less than 200 µL ii. Automatic sample mixing iii. Automatic clot detection and abort run 																																																										

6	Time for result readiness and display	<ul style="list-style-type: none"> i. Inbuilt printer (Results printout) and LCD display ii. TFT not less than 10" with colour iii. Less than 150 seconds
7	Input Parameters and method	<ul style="list-style-type: none"> i. Patient Demographics and operator (<i>if possible</i>) ii. Numeric keypad or touch screen
9	Calibration cycles	<ul style="list-style-type: none"> i. 1-point calibration every 2 hours(if possible); 2-point calibration every 8 or more hours; ii. Adaptable calibration cycles if possible
11	Quality Control requirements	<ul style="list-style-type: none"> i. Automatic Quality Control (AQC) cartridge: three levels of independent Quality control solutions ii. To provide expected standard ranges for the analytes iii. Customizable QC schedule and graphical representation (e.g Levy-Jenings Chart) iv. Manual QC method possible
12	Data Capacity	<ul style="list-style-type: none"> i. Patient samples: at least 2000 ii. Calibration results: At least 1000 iii. QC results: at least 1000 iv. Operator and system-based messages: at least 3500
13	Operating System and Communication	<ul style="list-style-type: none"> i. Capable of laboratory Information System (LIS) integration ii. MICROSOFT WINDOWS 10 or higher iii. 128 MB RAM, Hard disk 40 GB, CD/RW/DVD drive iv. Spectrometer of more than 100 -wavelength measurement
14	Quality Assurance	Capable of enrollment into external quality assessment (EQA) Programme
15	Environmental requirements	<ul style="list-style-type: none"> i. Warm-up time Cold start: Less than 30 minutes typical. Warm start: less than 10 minutes ii. Ambient temperature 15-32 °C iii. Relative humidity 20-80 % iv. Capability to thermostat pH , blood gases and electrolyte during measurements v. Cold chain reagent storage capability(On board cooling of reagents) vi. Laboratory reagents storage refrigerator (not less than 200 Litres) will be essential.
16	Integrated and External Barcode Scanner (Optional)	<ul style="list-style-type: none"> i. For patient ID ii. Operator ID iii. Ampouled QC
17	Data Security	<ul style="list-style-type: none"> i. Patient data encryption

		<ul style="list-style-type: none"> ii. Endpoint configuration iii. Two-step operator authentication iv. No hard-coded password v. USB on/off functionality
18	International Approvals	ISI / CE marked or FDA approved
19	Compliance to Safety Standards	Certificate of relevant IEC safety Standards and at least Class B
20	System Dimensions	<ul style="list-style-type: none"> i. Robust benchtop equipment ii. Display at highest position iii. Touchscreen (if possible) iv. Not less than 35 Kg
21	Power Requirements	<ul style="list-style-type: none"> i. Back-up UPS ii. Voltage: 100-240 VAC iii. Frequency: 48-62 Hz
22	Training and Maintenance	<ul style="list-style-type: none"> i. Resume of application Specialists ii. Resume of service engineering personnel iii. Analyzer uptime of over 98% iv. Training onsite for operational personnel v. Facilitation of training at source for at least two technical personnel vi. Onsite training for any new staff if requested by the laboratory supervisor as dictated by need. vii. Operators' manual in English viii. Maintenance schedules prepared as per Manufacturer's instructions
23	Initial stock supply	<ul style="list-style-type: none"> i. Supply of start-up kit that will be used for training and equipment verification
24	Reagents, Consumables and accessories Costing	<ul style="list-style-type: none"> i. A fully filled itemized Excel sheet indicating what will be provided at no cost as well as all the cost items <i>which the procuring entity will be buying through local purchase orders to sustain the operations)</i> ii. Items omitted by the bidder at the time of evaluation will only be added at the cost of the bidder and not procuring entity.

Lot 5: CYTOLOGY/ BTU Laboratory

Cytology			
1.	Automated Liquid Based Cytology system	1	Pcs
2.	Cytological Centrifuge	1	Pcs
3.	Refrigerator 2-8 ⁰ C	1	Pcs
4.	Staining workflow Systems	1	Pcs
5.	Microscope (Clinical light with polarization for cast analysis)	1	Pcs
BTU Laboratory			
6.	Leukoreduction filters	1	Pcs
7.	Irradiation machine	1	Pcs

LOT 5- 1: Automated Liquid Based Cytology workflow system

Item Code No.	Department	Section	Item Description
LOT 5-1	Diagnostic Laboratories	Cytology	Automated Liquid Based Cytology workflow system
1. General Description Liquid Cytology workflow system			
Fully Automated Equipment for Liquid Based Cytology (LBC) Specifications			
The equipment should meet the following specifications:			
<ol style="list-style-type: none"> 1.1. LBC System which is highly effective in greatly reducing false negative results and provides increased confidence in the detection of pre- neoplastic and invasive cancer, where present 1.2. Low Inadequate rates and consistently high PPV (Positive Predictive Values) resulting in the identification of 'true' disease 1.3. Should ensure that 100% of the collected sample is sent to the laboratory and provides standardization in the collection process and reduces need for repeat recall and processing. 1.4. The system should be able to work with various collection methods as spatulas, brushes etc. 1.5. The retention of the brush head in the container eliminates the risk of any abnormal cells being discarded with the sampling device 1.6. Should preferably use an ethanol-based preservative as the collection medium 1.7. Centrifugation process which effectively removes obscuring blood, mucus and polymorphs while still retaining the important diagnostic material. 1.8. Should process each specimen to produce up to 8-10 equally representative slides especially for additional testing. 1.9. Should be capable of handling a high throughput of 45-50 slides stained per hour. 1.10. Should be able to process multiple specimens at the same time for best laboratory efficiency. 1.11. Should be capable of running at regular electrical requirements. 1.12. The preservative fluid for collection of LBC samples must be non-hazardous 			

Item Code No.	Department	Section	Item Description
LOT 5-1	Diagnostic Laboratories	Cytology	Automated Liquid Based Cytology workflow system
<p>with easy storage and transport facility.</p> <p>1.13. Should be capable of preparing thin layered slide within a standardized smear diameter from the particular sample.</p> <p>1.14. For processing of both gynaecological and non-gynae samples</p> <p>1.15. Storage of samples at room temperature for about 4 weeks and in refrigerator for 6 months to allow performance of additional adjunctive tests such as HPV, if required</p> <p>1.16. Compatible with HPV Testing</p> <p>1.17. To provide the quotations for image analysis software and integrated image analysis system.</p> <p>1.18. Provisions for training of laboratory personnel using LBC.</p> <p>1.19. Hidden costs of all reagents and other items not included with the machine to be quoted separately in elaborate detail.</p> <p>1.20. All labelling is completed at the start of the process with barcoding of all samples and to include additional identification details such as Name, Date of Birth etc.</p> <p>1.21. All consumables and reagents are provided for sample collection and processing.</p> <p>1.22. Provision for power backup for minimum 2 hours in case of power failure.</p> <p>1.23. Staining to be included as an integral part of the system to ensure a high degree of standardization.</p>			

LOT 5- 2. CYTOLOGICAL CENTRIFUGE

Item Code No.	Department	Section	Item Description
LOT 5-2	Diagnostic Laboratories	Microbiology/ Cytology/ Anatomical Laboratory	Cytological Centrifuge
General Description			
1.General Description: Cytocentrifuge concentrates cells in fluid specimen into a thin layer preparation to be stained and examined under a microscope.			
1.1 Process 12 specimens at one time			
1.2 Should have a lid release mechanism.			
1.3 To have removal Program Card			
1.4 Should have Protected program Memory which stores up to 23 routines.			
1.5 A Control Panel to Control power, time and monitor Speed.			
1.6 Should have a specimen Safety Alarm			
1.7 Should have a polycarbonate window			
1.8 Should operate only when the lid is locked and remain locked during rotation.			
1.9 Multiple Application in Cytology, Microbiology,hematology/ Oncology and Research.			
1.10 Power requirements: 100-240 V- 50/60Hz			

LOT 5-3 Refrigerator (2 to 8 deg)

Item Code No.	Department	Section	Item Description
Lot 5-3	Diagnostic Laboratory	Cytology	Refrigerator
1. General Description			
Refrigerator			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Material	Insulated galvanized steel	
3.1.2.	Type	Compressor, electrical	
3.1.3.	Door	Double door, glass type	
3.1.4.	Temperatures range	2 to 8°C stable \pm 0.5°C	
3.1.5.	Ambient temperature	10 ° C to 35°C	
3.1.6.	Blood storage capacity	more than 300Litres	

Item Code No.	Department	Section	Item Description
Lot 5-3	Diagnostic Laboratory	Cytology	Refrigerator
3.1.7.	Shelves	Provided, adjustable and extractable with dividers	
3.1.8.	Temperature monitor	Digital display with temperature record history	
3.1.9.	Control	Electronic, Microprocessor based	
3.1.10.	Refrigerant	CFC free	
3.1.11.	Alarm	Provided, audible and visible	
3.1.12.	Power	240V, 50 Hz, a.c	
3.1.13.	Quality standards		
3.1.14.	Manufacturing standards	ISO 9001, ISO 13485, ISO 14001	
3.1.15.	Conformity to standards	CE and FDA marked.	
3.1.16.	Delivery point		
3.1.17.	See Schedule	For inspection and testing	
3.1.18.	Nil		
3.1.19.	Warranty		
3.1.20.	Equipment	Minimum of Two (2) years after commissioning on all parts.	
3.1.21.	Equipment System	Nil	
3.1.22.	Accessories		
3.1.23.	Automatic Voltage Regulator (AVR)		
3.1.24.	Capacity	Over VA of the main Unit	
3.1.25.	Input	Ac 240V, 50Hz, Single phase \pm 15%	
3.1.26.	Output	Ac 240V, 50Hz, Single Phase \pm 2.5 %	

LOT 5-4 Staining workflows

Item Code No.	Department	Section	Item Description
LOT 5-4	Laboratory	Histopathology	Staining workflows
1. General Description			

Item Code No.	Department	Section	Item Description
LOT 5-4	Laboratory	Histopathology	Staining workflows
2. Composition			
a. Main unit			
3. Description of the medical supply unit design type			
<p>Specifications for Automatic Slide Stainer</p> <ol style="list-style-type: none"> 3.1 The Instrument should be compact, equipped with robotic arm for X-Y-Z directional movement, space saving with continuous washing of slides with fresh water. 3.2 High slide throughput up to 400 slides/hour depending on the program selected. 3.3 The machine should be programmable, so that multiple racks (at least 11 slide racks together if necessary, each rack accommodating 30-40 slides) can be run simultaneously at different stages of staining. The racks should be made of corrosion resistant hard plastic and two sets of racks should be provided with machine at no extra cost. 3.4 Should be programmable for routine H & E & other special stains, in multiple batches to continuous loading, with parallel processing. 3.5 Minimum 25 reagent stations of at least 400ml capacity including wash stations. 3.6 Programmable for up to 15 programs or more, of up to at least 25 steps with incubation time setting from 0 sec to 99 min or more. 3.7 Continuous loading and unloading of slides via Rack entry and exit of machine. [For parallel processing] 3.8 Gentle vibration to slide rack during lifting to reduce carryover contamination 3.9 Provision of interrupting an automatic process for reloading or removing cassettes before the end of a run must be there. 3.10 Easy-to-clean and resistant surfaces made out of polyester epoxy resin or stainless steel. 3.11 LCD Screen display of time, date and cycles with touch controls and menu. 3.12 Audible remote alarm to signal possible problems, errors and reagent change etc. 3.13 A fume hood completely covering the slide plates to prevent hazardous fumes from entering the lab area and an activated charcoal filter to minimize solvent vapors should be provided. 3.14 Can be connected with any make automatic cover-slipper. 3.15 Suitable UPS with maintenance free batteries for minimum 1-hour back-up should be supplied with the system at no extra cost. 3.16 A portable tool set should be supplied with each machine for minor technical need at no extra cost. 3.17 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%. 3.18 Power input to be 220-240VAC, 50Hz fitted with BS Plug. Compatible external adaptor and battery unit should be supplied with the instrument with attached hospital BS plugs. 3.19 Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001. applicable to manufacturers and service providers that perform their own design activities. 			

Item Code No.	Department	Section	Item Description
LOT 5-4	Laboratory	Histopathology	Staining workflows
3.20	Should be compliant with IEC 61010-1: covering safety requirements for electrical equipment for measurement control and laboratory use.		
3.21	Should be FDA or European CE approved product.		
3.22	Comprehensive training for lab staff and support services till familiarity with the system.		
3.23	Certificate of calibration and inspection from factory.		
3.24	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue.		
3.25	User/Technical/Maintenance manuals to be supplied.		
3.26	Warranty 2 years.		
3.27	CMC 5 years.		
3.28	this section requires additions		
3.29	1. tissue processing equipment		
3.30	cryostat and frozen section		
3.31	printers on blockers		
3.32	microtome		
3.33	embedding ststions		
3.34	filling system of tissue blocks and slides		

LOT 5 -5: MICROSCOPE (CLINICAL LIGHT WITH POLARIZATION FOR CAST ANALYSIS)

Item Code No.	Department	Section	Item Description
LOT 5-5	Diagnostic Laboratories	Molecular/BTU/ICU/ Clinical Chemistry Laboratory	Microscope (Clinical Light with Polarization for Cast Analysis)

General Description: Clinical compound microscope which can enhance the contrast and image quality on specimen using a polarizer and analyzer filters to enhance cast analysis.

1.1 Optical System: NIS60 Infinite Optical System.

1.2 Observation Method: Bright Field, Polarizing, Phase Contrast, Fluorescence and DIC.

1.3 Main Body: BH Manual Body with Halogen Illumination and an auto Nosepiece, auto Condenser and an auto Brightness adjustment.

1.4 Head: Ergo Tilting Trinocular Head, Inclination 0°~35° with an interpupillary Distance 47- 78mm and a 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100.

1.5 Eyepiece: To be provided with the eyepieces below:

Item Code No.	Department	Section	Item Description
LOT 5-5	Diagnostic Laboratories	Molecular/BTU/ICU/ Clinical Chemistry Laboratory	Microscope (Clinical Light with Polarization for Cast Analysis)
<p>SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm</p> <p>SW10x/22mm, With Scale Cross, With Locating Pin, For Polarizing</p> <p>SW10x/22mm, With Cross Hair, With Locating Pin, For Polarizing</p> <p>SW10x/22mm, With Grid Plate, With Locating Pin, For Polarizing</p> <p>EW12.5x/16mm, High Eyepoint.</p> <p>WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm</p> <p>WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm</p> <p>1.6 Nosepiece: Manual Nosepiece, Quintuple, Backward, Center Adjustable with Slot for Polarizing Compensator Slider Or DIC Slider and a Protect Cover For Nosepiece Holes.</p> <p>1.7 The microscope should come with at least the NIS60 Strain-Free Semi-APO Infinity Plan Objectives below:</p> <p>5x/0.15, W.D.20mm, Semi-APO, PL.</p> <p>10x/0.3, W.D.11mm, Semi-APO, PL.</p> <p>20x/0.45, W.D.3.0mm, Semi-APO, PL.</p> <p>50x/0.8, W.D.1.0mm, Semi-APO, PL.</p> <p>100x/0.9, W.D.1.0mm, Semi-APO, PL.</p> <p>1.8 The working Stage for the microscope should be high-precision, Pre-Adjusted Revolving Round Stage, Diameter 190mm, Center Adjustable, 360° Scale, Minimum Division 1°, Minimum Reading 6´ by Means of Vernier Scale, 45° Click Stop Knob.</p> <p>1.9 Condenser: Swing-Out Condenser NA0.9/0.25</p> <p>1.10 Focusing: Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right.</p>			

Item Code No.	Department	Section	Item Description
LOT 5-5	Diagnostic Laboratories	Molecular/BTU/ICU/ Clinical Chemistry Laboratory	Microscope (Clinical Light with Polarization for Cast Analysis)
<p>1.11 Transmit Light Source: Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House with an ECO Function Support auto Power Off.</p> <p>1.12 The microscope should be able to house at least 3 Filters.</p> <p>1.13 The transmit Polarizer should be attached to Condenser Bottom, 360° Rotatable.</p> <p>1.14 The polarizing attachment should be capable of reflecting Polarizer Slide, Insert in Slot of Reflect Light Source.</p> <p>1.15 It should reflect/Transmit Analyzer Slide, 360° Dial Rotate, Minimum Scale Reading 0.1°. Bertrand Lens Intermediate Unit, With Slot for Compensator Slide, λ Compensator Slide, $\lambda/4$ Compensator Slide, quartz Wedge Slide and a blank Slide.</p> <p>1.16 Reflect Polarizing Light Source: Reflect Epi Polarizing Illuminator, Turret Disc With 6 Positions for Filter Block, Kohler Illumination, 12V100W Halogen Lamp Housing, BF1 View Block, BF2 View Block and a circularly Polarized Light Block.</p> <p>1.17 Adapter: Eyepiece Adapter Dia.23.2mm.</p> <p>1.1 Manufacturing Standards: ISO 9001, ISO 13485, ISO 14001</p> <p>1.2 Conformity to Standards: CE or FDA Mark</p>			

BTU Laboratory

LOT 5-6: LEUKOREDUCTION FILTERS

Leukocyte Reduction Filters (LRFs) trap leukocytes, while allowing the desired blood product to pass through during leucoreduction process.

1. Ability to reduce the adverse reaction and pathogen transmission in blood transfusion.
2. Precisely capture WBCs and yield a better result on the desired blood components
3. Speed Filtration; an average of 30% in filtration timesaving
4. Leukocytes reduction rate (WBCs removal); >99.99%
5. RBCs recovery rate; > 95%

6. Minimal volume loss; <30ml
7. Be able to process aged unit
8. Should have low failure rate
9. Easy to use and go along with all the blood bag brands in the market
10. Capacity : 1~2 unit blood (1 unit = 250mL)
11. Flow rate; approximately 50ml/min.
12. Application: Hospital bedside, direct transfusion.

LOT 5-7: IRRADIATION MACHINE

Gamma Irradiation Chambers used in hospitals and blood banks for irradiation of blood and blood products/components, for clinical purposes. GIC unit mainly houses either 60Co or 137Cs radiation sources with typical radioactivity ranging from tens to hundreds of TBq.

Technical Specifications

1. Primary Use; Blood
2. Energy; 155-160 kV
3. Typical Dose Rates Dose Rates; delivers 25 Gy in 6 minutes to a 1.7L canister so it irradiates 3 red cell bags in 4 minutes.6.3 Gy/min
4. Key Features; standalone-self- contained cooling- plug and play, on wheels, -
5. FDA approved. 1-2 x-ray tube QUASTAR in center and canisters rotate around it.
6. Other Key Options; barcode scanner \$4K; syringe holders \$55, extra canisters\$1.5k, phantoms
7. External Radiation Field at max kVp and mA; <0.5 mR/hr at 5 sm off external surfaces and <0.1 mR/hr at 10 cm
8. Weight; 1309 lbs -2450 lbs
9. Initial Warranty Covered; 2 years.

LOT 6: BIOREPOSITORY LABORATORY/ Clinical Chemistry Laboratory

	Biorepository Laboratory		
1.	Cold room	1	Pcs
2.	Cabinets for Room Temperature Storage	2	Pcs
	Clinical Chemistry Laboratory		
3.	Kidney stones FT-IR Microscope	1	pcs

LOT 6-1 Cold Room

Item Code No.	Department	Section	Item Description
LOT 6-1	Diagnostic Laboratories	Clinical Chemistry and Immunology	Cold Room
1. General Description			
Walk in Cooler			
Clause	Description	Sub clause	Technical Particulars
1.	Description of Function and capacity	1.1.	Walk in Cold rooms are required to store for long term duration of large quantity of vaccines at a temperature between +2 deg to +8 deg C.
		1.2.	Typical gross internal volume should be 15 cum
2.	Operational Requirements	2.1.	To be constructed of prefabricated, modular complete with floor and ceiling panels, mounted on a flat, solid concrete base.
		2.2.	The cold room should be equipped with two completely independent refrigeration systems. One of these will remain as standby.
		2.3.	Each refrigeration system must be provided with it respective separate: <ul style="list-style-type: none"> a) condensing unit, b) evaporator unit, c) refrigeration unit, d) electronic controls, e) pipe work and f) other necessary control instrumentation, to ensure proper operation of each respective Refrigeration system.
		2.4.	Provide additional control which permits

Item Code No.	Department	Section	Item Description
LOT 6-1	Diagnostic Laboratories	Clinical Chemistry and Immunology	Cold Room
			simultaneous operation of both refrigeration systems in case of emergency.
		2.5.	There should be manual & automatic switchover to the standby system by thermostatic or electrical control.
		2.6.	There should be programmable automatic
			operational duty cycle for the switch over to the
			standby refrigeration system.

Lot 6-2 Cabinets for Room Temperature Storage

Lot 6-2	Characteristic Features	Specification Requirements	Bidders' Response in case the compliance page is to be mentioned
Technical Specifications			
	Temperature Control:	<ul style="list-style-type: none"> Maintains stable room temperature (18-25°C) with minimal fluctuations. 	
	Material:	<ul style="list-style-type: none"> High-quality stainless steel or reinforced polymer for durability and chemical resistance. 	
	Capacity:	<ul style="list-style-type: none"> Adjustable shelving to accommodate various specimen sizes. 	
	Security Features:	<ul style="list-style-type: none"> Lockable doors with access control options. 	
	Ventilation:	<ul style="list-style-type: none"> Passive or active air circulation to prevent humidity buildup. 	
	Labeling System:	<ul style="list-style-type: none"> Integrated barcode or RFID tracking for efficient inventory management. 	
	Power Supply:	<ul style="list-style-type: none"> Standard 110V/220V compatibility with backup power 	

Lot 6-2	Characteristic Features	Specification Requirements	Bidders' Response in case the compliance page is to be mentioned
		options.	
Procurement Requirements			
	Compliance:	<ul style="list-style-type: none"> • Must meet ISO 15189 or equivalent laboratory storage standards. 	
	Warranty:	<ul style="list-style-type: none"> • Minimum 2 years • 	
	Supplier Qualifications :	<ul style="list-style-type: none"> • Vendor must provide proof of previous supply contracts for similar equipment. • 	
	Delivery Timeline:	<ul style="list-style-type: none"> • Expected within 6-8 weeks from order confirmation. • 	
	Maintenance & Support:	<ul style="list-style-type: none"> • Availability of after-sales service and technical support. 	
		<ul style="list-style-type: none"> • Availability of both User and technical manuals (hard and soft copies) 	

LOT 6-3 Kidney stones FT-IR Microscope

Item Code No.	Department	Section	Item Description
LOT 6-3	Diagnostic Laboratories	Clinical Chemistry and Immunology	Kidney stones FT-IR Microscope
General Description	The FT-IR with Microscope, and micro-ATR for investigation, research applications & analysis of Pure and mixed kidney Stones.		
	Supplied microscope should be equipped with dedicated high sensitivity medium-band MCT detector, Liquid nitrogen cooled, automated stage control unit, FT-IR spectrometer, software including single user MultiSearch license image viewer software		
Spectrometer Design	The spectrometer should utilize a rotary interferometer providing inherent immunity to mirror tilt, shear, and require no scanning mirror dynamic alignment.		
	The system supplied should not be combined FTIR and Microscope		
	Instrument must offer a methane gas cell to provide accurate wavenumber calibration and line shape standardization to for additional instrument-to-instrument stability		
	The system should be a sealed and desiccated optical unit covering the range 8,330 - 350 cm ⁻¹ .		
	The system should offer a solid-state laser in the interferometer system for higher longevity and lower maintenance.		
	The system should have a software controlled desiccant status indicator to allow the user to accurately monitor the status of the desiccated area		
	The system must incorporate a vibration isolated baseplate		
	The system should incorporate kinematically mounted, zero alignment optics.		
	The mid -IR source should be pre-aligned and incorporate electronic stabilization. Stabilization should change the polarity through the source frequently to give the system higher sensitivity and increased performance		
	The source should be user replaceable to help maintain a lower cost of ownership		
	The source should be replaceable from outside the instrument with on-screen installation guidance		
	The system should include optional automated optical filter accessory containing traceable validation materials to allow instrument performance verification in the Mid spectral regions		
	The system should include a multi-layer potassium bromide beamsplitter for the Mid-IR spectral region		
	The system should include external sample windows, with ZnSe option for windows in very high humidity environments, with on-screen installation guidance		
	The system should be controllable via TCP/IP interface or wireless		

	configuration
System Performance	The system should have wavelength accuracy at least $\pm 0.1\text{cm}^{-1}$
	The system must include a temperature Stabilized, fast-recovery DTGS detectors; optimized for Mid-IR.
Accessories	The system should offer a large sample area providing plug-and-go capabilities for a wide range of Mid sampling accessories
	Instrument should have ability to use a wide variety of accessories either from the instrument manufacturer or a third part accessory vendor will provide maximum flexibility of the system
	The system should offer accessory options including a Diamond/ZnSe ATR crystal
	The UATR should be of sufficient intelligence as to become a truly integrated part of the instrument once installed
	Automatic recognition - as soon as the accessory is placed in the sample compartment
	Once locked into the sample compartment, the accessory must be ready to be used without any manual alignment necessary
	Supplied pressure sensor should record the amount of pressure applied to the sample and store this information as part of the data file
Microscope:	Operating modes: Transmission, Reflectance and ATR mode with the single point detector
	should supply Micro ATR objective as standard with the system
	Single point operation: High sensitivity 100x100u MB MCT detector
	Included automated apertures, focus, stage control, throughput correction, mode of operation and visible/IR switchover
	Switching between Visible and IR is achieved with zero mechanical movement
	Single point frequency range: 8300-600 cm^{-1} Resolution: better than 0.5 cm^{-1}
	Single point sensitivity: typically, better than 40000/1 for 2 min measurement at 4 cm^{-1} spectral resolution with Beer-Norton apodization
	Visible Illumination: Solid-state white light illumination provides more even and accurate color, better brightness and longer life. Built-in polarizer
	The instrument should be supplied with suitable branded and latest PC workstation, and UPS capacity 3KVA
Software	Should have spectral arithmetic calculations with custom Equations Editor
	PLS/PCR/Beer's Law predictions Beer's Law Quant method development
	Supplied software should enable multiSearch software for advanced multi-component search ID
	Software for additional image/map manipulation and analysis
Accessories kit	Micro sampling kit - one pin vise, one micro needle with tungsten alloy 0.0002-inch tip, one pair of very sharp stainless-steel tweezers, one cadmium-plated 4.5-inch-long dissecting forceps, one razor

	knife with roller end, one aluminum handle probe, and one straight stainless-steel micro probe.
	Gold mirror assembly, sample holder (3X 13 mm), rotatable cell holder, box of slides (72) and KBr windows\
Library	Instrument should be supplied with kidney stones library
Warranty	The instrument supplied should be new and Two (2) year warranty provided
Installation & training	Installation should be done by a certified Service Engineer; training certificate should be provided with document
OQPQ documentation	detailed documentation should be provided, Performance tests should be executed at customers site at installation for acceptance

LOT 7: RENAL HEMODIALYSIS

1.	Dialysis Machine complete with Portable Water Treatment Unit (WTU)	3	Pc s
2.	Pediatric dialysis machines	15	Pc s
3.	Dialysis Beds Complete with Overbed Tables	15	Pc s
4.	Led wall mounted double X-ray viewer	1	Pc s
5.	Automated Patient Hoist	3	Pc s
6.	Continuous Ambulatory Peritoneal Dialysis (CAPD)	1	Pc s
7.	Emergency/ Resuscitation Trolley	5	Pc s
8.	Portable Electrical Suction Machines	3	Pc s
9.	Blood sugar machine	2	Pc s
10.	Bioimpedance Analysis Machine	2	Pc s
11.	Weighing Scale with height meter	1	Pc s
12.	Weighing Chair Scale	1	Pc s
13.	Procedure Trolleys	5	Pc s
14.	Digital Thermometer	5	Pc s
15.	Fluid warmer	4	Pc s
16.	Patient trolley	7	Pc s

LOT 7-1 Dialysis Machine complete with Portable Water Treatment Unit (WTU)

Item Code No.	Department	Section	Item Description	
LOT 7-1	Renal/ Hemodialysis	Patient Area	Dialysis Machine complete with Portable Water Treatment Unit (WTU)	
General specification of Hemodialysis machine				
1. General Description				
Dialysis machine capable of providing hemodialysis, hemodiafiltration and hemofiltration services. The unit should be constructed from material easy to disinfect and should be mobile on castors and with backup internal batteries and complete with Portable Water Treatment Unit (WTU).				
2. Composition				
Technical information	Parameters	Specifications	Comply Yes/ No	Remarks
General parameters	Power Supply	230V ($\pm 10\%$)		
	Nominal Frequency	47 - 63 Hz		
	Current Consumption	Max 9 A		
	Inlet water pressure	1.5 - 6 bar max		
	Water temperature range	5°C to 30°C		
	Concentrate supplies	Canister / Cartridge / Bags		
Safety Standards	General requirement for safety, class 1, type B.	EN 60601-1: (IEC 601-1)		
	Requirements for safety of hemodialysis equipment	EN 60601-2-16: (IEC 601-2-16)		
	Electromagnetic compatibility	EN 60601-1-2: (IEC 601-1-2) CE certification		
Extracorporeal circuit	Arterial pressure range	- 300 mmHg to + 280 mmHg (wider range is acceptable)		
	Accuracy	± 10 mmHg		
	Venous pressure range	-60 mmHg to + 520 mmHg (wider range is acceptable)		
	Accuracy	± 10 mmHg		
	Transmembrane pressure	-60 mmhg to +520 mmHg (wider range is acceptable)		
	Accuracy	± 10 mmHg		
	Blood pump	Peristaltic pump		
	Blood flow range	15 to 600 ml/min in 8mm size tube		
	Accuracy	$\pm 10\%$		
	Air bubble detector	Ultrasound method, monitor the entire operating phase		
	Alarm Indicator	Traffic light to indicate the status		
Dialysis	Dialysis fluid flow range	0-300 - 500-700-		

Item Code No.	Department	Section	Item Description
LOT 7-1	Renal/ Hemodialysis	Patient Area	Dialysis Machine complete with Portable Water Treatment Unit (WTU)
Fluid system		800ml/min, selectable.	
	Dialysis fluid temperature	35°C to 39°C	
	Concentration of dialysate	12.8 to 15.7 mS/cm (25°C) (wider range is acceptable)	
	Accuracy	±0.2mS/cm	
	Blood leak detector	Optical detector, colour specific	
	Ultrafiltration		
	UF rate	0 to 4.00 l / hour (higher range is acceptable)	
	Accuracy	± 3%	
Dialysate fluid filter system	Endotoxin filter		
Disinfection and Cleaning program	Rinse, Hot cleaning and Hot disinfection cycles are required. Use recommended chemicals at a temperature of min 84°C.		
General Feature Required	Battery able to backup 20 mins to 30 mins during power failure		
Additional Features Required	Blood pressure monitor		
	Endotoxin filter		
	Real time Kt/V measurement		
Specification of Portable RO System [Online Water Treatment Unit (WTU)] Dialysis			
	<ol style="list-style-type: none"> 1. Should be of compact design on wheels for easy movement. 2. Should be able to produce 125 vs 200 Liters/Hour of permeate. 3. The system must be Microprocessor based. 4. In build capabilities to show on display for Permeate (Supply in liters/min, Temperature) & for Raw Water (Consumption in liters/min & Pressure) 5. Should have built in dual column softener with fully automated brine, fill and clean cycles, also have a brine tank incorporated in the system. 6. Should have built in cartridge type Charcoal Filter. 7. Should have fully automatic disinfection system in place. 8. Should have built in cartridge filter of 10 Micron and 5 Micron. 9. Should have programmable fully automated Rinse cycle for membranes 		

Item Code No.	Department	Section	Item Description
LOT 7-1	Renal/ Hemodialysis	Patient Area	Dialysis Machine complete with Portable Water Treatment Unit (WTU)
	<p>wash.</p> <p>10. There should be a provision of Off-line mode and ONLINE mode of Permeate Supply, In case permeate supply is to be used to run dialysis machines directly without collecting permeate to tank it should be possible.</p> <p>11. There should be a water saving system in place which adjusts the output to the number of machines in use and control yield accordingly.</p> <p>12. Should not have noise level more than 65 dB</p> <p>13. Should deliver the water quality as per AAMI standard.</p> <p>14. Yield setting should be between 50 to 70 %.</p> <p>15. Should have EC certification attached with tender document.</p> <p>16. Provision of U-V filter at the final treated water supply point.</p>		
Installation and Commissioning	Supply, Installation, testing and commissioning of the machine to the satisfaction of the user and complete user and technical training.		
Warranty	Minimum of two (2) years after commissioning on all parts. And assurance of Comprehensive Maintenance Contract (CMC) post warranty period at the amount quoted in the tender document for at least the next 3 years.		
Documentation	<ul style="list-style-type: none"> Provision of complete sets of Technical and user manuals in both soft and hard copies. Certificate of calibration and inspection. 		

LOT 7-2 Pediatric dialysis machines

Item Code No.	Department	Section	Item Description
LOT 7-2	Renal/Hemodialysis	Patient area	Pediatric dialysis machines
1. General Description			
<p>1. Main Compartment</p> <ul style="list-style-type: none"> The Machine should be mobile on castors with a braking system, ensuring easy mobility and stability during use. The machine should feature a robust and compact construction, designed for durability and reliability in a clinical setting. The machine must also be easy to clean, ensuring hygiene standards are met during daily use. <p>2. Approximate Dimensions</p> <ul style="list-style-type: none"> The approximate size of the machine should be W450-600 mm x D500-700 mm x H1700 mm, ensuring that the unit is suitable for space-constrained healthcare environments while being easy to maneuver and store in pediatric 			

Item Code No.	Department	Section	Item Description
LOT 7-2	Renal/Hemodialysis	Patient area	Pediatric dialysis machines
<p>dialysis settings.</p> <p>3. Operating Environment</p> <p>Power Requirement</p> <ul style="list-style-type: none"> o The machine should operate on a power input of 240 VAC, 50Hz, and should be fitted with a BS plug for easy connection in a standard electrical outlet. o The machine must be equipped with internal backup rechargeable batteries, providing emergency power during power interruptions and ensuring continuous operation. <p>Ambient Temperature</p> <ul style="list-style-type: none"> o The machine should be designed to operate effectively within an ambient temperature range of 10°C to 40°C, ensuring stable performance in various environmental conditions typically found in healthcare facilities. <p>Relative Humidity</p> <ul style="list-style-type: none"> o The machine should be capable of operating within a relative humidity range of 15% to 90%, ensuring reliable operation even in varying environmental humidity levels. <p>4. COMPOSITION</p> <ul style="list-style-type: none"> i. On-line Hemodiafiltration (HDF) Capability The machine must support On-line Hemodiafiltration (HDF) for effective dialysis, offering enhanced solute removal, especially important for pediatric patients requiring optimized treatment. ii. Double Blood Pump The machine should be equipped with double blood pumps, ensuring efficient blood flow management. iii. Weight Capacity ii. The machine should be capable of accommodating patients weighing up to 10 kg, ensuring safe and effective dialysis for very young or small pediatric patients. <ul style="list-style-type: none"> i. Bicarbonate Dialysis Facility The machine must be capable of bicarbonate dialysis, a commonly used technique to ensure safe dialysis for pediatric patients, balancing acid-base status during treatment. ii. Data Capture and Remote Diagnosis The machine should be able to capture at least the last 20 treatments, storing patient data securely, with the option to send this data via email for remote diagnosis and patient monitoring. iii. Inbuilt Dialysis Adequacy Measurement The machine should feature inbuilt measurement systems for assessing the adequacy of dialysis to ensure optimal treatment effectiveness, especially for pediatric patients with varying needs. iv. Battery Backup The machine should have a battery backup capable of running the machine for at least 25 minutes, providing emergency support during power interruptions. v. Sodium, Bicarbonate, Temperature, and Ultrafiltration Profiling 			

Item Code No.	Department	Section	Item Description
LOT 7-2	Renal/Hemodialysis	Patient area	Pediatric dialysis machines
<p>The machine should include profiling for Sodium, Bicarbonate, Temperature, and Ultrafiltration, enabling personalized treatment protocols for pediatric patients.</p> <ul style="list-style-type: none"> <li>vi. Selectable Dialysate Temperature The machine should allow dialysate temperature selection between 33°C and 40°C, ensuring safe and comfortable treatment conditions for pediatric patients. <li>vii. Variable Conductivity Range The machine must support variable conductivity, adjustable between 12 - 16 mS/cm. <li>viii. Dialysate Flow Rate The machine must offer a dialysate flow rate ranging from 300 - 800 ml/min, providing the flexibility to meet pediatric treatment needs with varying fluid requirements. <li>ix. Heparin Pump The machine should include a heparin pump for syringes from 10 to 30 mL, with programmable infusion rates from 0 - 10 ml/hr, ensuring safe anticoagulation management in pediatric dialysis. <li>x. Single-Needle Dialysis Option The machine should provide an option for single-needle dialysis, ideal for pediatric patients, reducing discomfort and optimizing treatment efficacy. <li>xi. Automated Ultrafiltration (UF) Only Dialysis The machine should allow for automated UF-only dialysis, a key feature for managing fluid removal. <li>xii. Ultrafiltration (UF) Rate Range The machine must offer a minimum UF rate of 50 ml/hr and a maximum UF rate of 2,000 ml/hr. <li>xiii. Integrated Heat and Chemical Disinfection The machine must include integrated heat and chemical disinfection modes, offering programmable cleaning and disinfection for both chemical and heat-based methods. The system must be validated for bactericidal, fungicidal, tuberculocidal, and virucidal inactivation, including HBV, HCV, and HIV. <li>xiv. Treatment Parameter Display The machine must display treatment parameters digitally and/or graphically on the screen, allowing healthcare providers to monitor treatment in real-time, ensuring pediatric-specific adjustments can be made as needed. <li>xv. Accurate Feedback Control Conductivity Mixing The machine must utilize feedback control conductivity mixing technology, ensuring precise and consistent dialysate conductivity. <li>xvi. Drain Facility The machine should have a drain facility for waste management, ensuring safe disposal of used dialysate. <li>xvii. Accurate Volume Control by Flow Measurement The machine must have accurate volume control through flow measurement techniques, ensuring precise fluid management during pediatric dialysis. <li>xviii. Automated Blood Pressure Measurement (ABPM) The machine should include automated non-invasive blood pressure measurement (ABPM) via the oscillometric method, with adjustable measurement cycles for small, medium, and large cuffs, ensuring pediatric-appropriate blood pressure monitoring. 			

Item Code No.	Department	Section	Item Description
LOT 7-2	Renal/Hemodialysis	Patient area	Pediatric dialysis machines
			<p>xix. Additional Facilities The machine should have extra facilities like a blood volume sensor and bicarbonate selection technique, offering further customization for pediatric dialysis needs.</p> <p>xx. Preset Data for Convenience All essential data should be preset within the machine, enabling it to be used without requiring manual data entry for every treatment, making it easier to manage pediatric patients.</p> <p>xxi. Automatic Safety Test Before Patient Connection The machine must conduct an automatic safety test before the patient connection to ensure proper functionality and patient safety during pediatric dialysis.</p> <p>xxii. Auto On-Off Facility The machine should feature an auto on-off facility, allowing for seamless operation and ensuring user-friendly operation, particularly in busy pediatric care environments.</p> <p>xxiii. Rotatable Touch Screen The machine must have a rotatable touch screen for easy operation and optimal visibility from various angles, making it ideal for pediatric dialysis settings.</p> <p>xxiv. Integrated Technical Service Mode The machine should include an integrated technical service mode, facilitating easy maintenance, calibration, and troubleshooting, ensuring long-term reliability.</p> <p>xxv. Computer Connectivity for Data Transfer and Calibration The machine should be capable of connecting to a computer for transferring treatment data, troubleshooting, and calibration, allowing easy access for maintenance and support.</p> <p>xxvi. Blood Pump Rate The blood pump rate should be adjustable between 50 and 600 ml/hr, accommodating the lower flow requirements of pediatric patients.</p> <p>xxvii. Ultrasound-Based Safety Air Detector The machine should be equipped with an ultrasound-based safety air detector, ensuring that air embolism is detected and prevented.</p> <p>xxviii. Audio-Visual Alarms for Safety Monitoring The machine should feature audio-visual alarms for a range of safety conditions, including conductivity violations, disinfection issues, bypass alarms, blood pump stop alarms, and reverse UF detection.</p> <p>xxix. Dialysate Sampling Ports The machine should have dialysate sampling ports for easy collection and analysis of dialysate, providing real-time monitoring and ensuring pediatric dialysis quality.</p> <p>xxx. Pyrogen Pre-Filters/Ultra-Filters The machine should include 2 pyrogen prefilters/ultra-filters to ensure ultra-pure dialysis, preventing contamination and ensuring patient safety.</p>
1.1.	Quality Standards		
2. Description of the medical supply unit design type			
Quality standards to ensure safety, performance, and regulatory compliance:			

Item Code No.	Department	Section	Item Description
LOT 7-2	Renal/Hemodialysis	Patient area	Pediatric dialysis machines
<ol style="list-style-type: none"> 1. IEC 60601-1 - General Requirements for Safety <ul style="list-style-type: none"> o The machine should conform to IEC 60601-1, which sets the general requirements for the safety of medical electrical equipment (class 1, type B). 2. IEC 60601-2-16 - Particular Requirements for Hemodialysis Safety <ul style="list-style-type: none"> o The machine must meet the specific safety requirements for hemodialysis equipment as outlined in IEC 60601-2-16, ensuring safe operation during dialysis treatment. 3. IEC 60601-1-1 - Safety Requirements for Medical Electrical Equipment <ul style="list-style-type: none"> o The machine must comply with IEC 60601-1-1, ensuring the electrical safety of medical equipment used in patient care, including protection from electrical hazards. 4. IEC 60601-1-2 - Electromagnetic Compatibility <ul style="list-style-type: none"> o The machine should adhere to IEC 60601-1-2, ensuring electromagnetic compatibility (EMC) and minimizing any interference with other medical equipment or devices in the healthcare facility. 5. Conformity to AAM Specifications <ul style="list-style-type: none"> o The machine must conform to AAM (American Association of Medical Equipment) specifications, ensuring compliance with internationally recognized standards for medical equipment. 6. CE and FDA Conformance <ul style="list-style-type: none"> o The B. Braun Dialog IQ Pediatric Hemodialysis Machine should bear the CE mark and be approved by the FDA, ensuring it meets European and U.S. regulatory standards for medical devices. 			

LOT 7-3 Dialysis Beds Complete with Overbed Tables

Item Code No.	Department	Section	Item Description
LOT 7-3	Renal/Hemodialysis	Patient Area	Dialysis Beds complete with Overbed Tables.
1. General Description			
Dialysis bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, and waterproof mattress, Electrical type			
2. Composition			
2.1	Main unit		
3. Physical Specifications			
3.1	Main Unit		
3.1.1	Type		Electrical Dialysis bed
3.1.2	Material of main unit		Mild steel epoxy coated, antistatic
3.1.3	Movement		Backrest, Knee rest, trendelenberg, reverse trendelenberg, fowler and vascular position, cardiac chair position, and shock position, all electric operated

Item Code No.	Department	Section	Item Description
LOT 7-3	Renal/Hemodialysis	Patient Area	Dialysis Beds complete with Overbed Tables.
3.1.4	Height	Adjustable, electric operated	
3.1.5	Back rest	Retracting, X-Ray translucent and cassette carrier	
3.1.6	Leg section	Retracting	
3.1.7	Head rest/ knee rest	Removable	
3.1.8	Side rails	Drop down type	
3.1.9	Mattress	Provided, high density covered with leather or Vitapruf material	
3.1.10	IV pole	Provided, stainless steel and adjustable	
3.1.11	Castors	Four antistatic castors with central locking position and bidirectional locks	
3.1.12	Control	Microprocessor based, with patient handheld control, and Nurse control panel	
		Programmable positions buttons for ease of adjusting patient positions	
3.1.13	Power	240 V, 50Hz single phase with back up sealed battery	
3.1.14	Overall Dimensions (mm)	About 2100 L X 980 W X 380- 800H	
3.1.15	Weight to handle	200 kg	
4	Quality Standards		
4.1	Manufacturing standards	ISO 9001, 60601, ISO 13485	
4.2	Conformity to standards	CE and FDA marked and, IP X4 electrical protection standard	
5	Delivery point		
5.1	See Schedule	Delivery point	
6	Warranty		
6.1	Equipment	Minimum of two year after delivery	
6.2	Equipment System	Nil	

LOT7-4 LED wall mounted double X-ray viewer

Item Code No.	Department	Section	Item Description
LOT 7-4	Renal/Hemodialysis	Patient area	X-ray Viewer
1. General Description			
X-RAY-VIEW BOX (LED Light)			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			

Item Code No.	Department	Section	Item Description
LOT 7-4	Renal/Hemodialysis	Patient area	X-ray Viewer
D) Product & Manufacturer Quality Standards: <ol style="list-style-type: none"> 3.1. Should be FDA/ CE approved product. 3.2. Manufacturer and Supplier should have ISO 13485 certification for quality standards. 			
E) TECHNICAL CHARACTERISTICS <ol style="list-style-type: none"> 3.3. Should be ultra-thin X ray film illuminator using LED light 3.4. It should have a thickness of 30 mm 3.5. It should be suitable for viewing 14''x17' film. 3.6. Should have position to insert 8 films in 2 rows. 3.7. The LED light must have a life span of more than 50,000 hours. 3.8. It should have easy insertion & removal of the film. 3.9. It should have homogeneous illumination more than 95% and maximum intensity of over 10,000 lux. 3.10. It should have an on-off switch along with digital feather touch dimmer and a button to set the intensity 3.11. It should have fully electronic continuous brightness control, with adjustment range of approximately 90%. 3.12. It should be directly connected to power supply without any external adapters. 3.13. It should have flicker free high frequency light for reduction of eye strain. 3.14. It should have external fuses for protection against power surge. 3.15. 10 step Digital dimmer facility with step up/step down intensity of 500 lux or less. 3.16. Should have automatic film sensor 3.17. Should have facility to switch on only the section where the film needs to be viewed. 			
F) Power supply: <ol style="list-style-type: none"> 3.18. 240V, AC, 50Hz. Single phase 			

LOT 7-5 Automated Patient Hoist

Item Code No.	Department	Section	Item Description
LOT 7-5	Renal/Hemodialysis	Patient area	Automated Patient Hoist
1. General Description Mobile patient lift up to 300kg maximum carrying capacity			
This specification establishes the requirements, supply, delivery, end user training, demonstration; commissioning and installation of Electrically Operated Patient Lift incorporating the latest technology and must be suitable for all surgical and medical procedures required for lifting and lowering of patients of which the design of must be user friendly.			
2. Composition			
2.1.	Main unit		
3. Detailed specifications: The lift must be light weight and easily maneuverable by one person. The slings, spreader bar and accessories must be of such a design that the patient has a feeling of safety and security, whilst attached to the lift. The patient's correct body posture must be maintained during the lift in order to avoid injury. The lift must be designed to perform the following minimum basic functions safely and with the least effort by the operator: <ul style="list-style-type: none"> • Lifting a patient from the floor. 			

Item Code No.	Department	Section	Item Description
LOT 7-5	Renal/Hemodialysis	Patient area	Automated Patient Hoist
<ul style="list-style-type: none"> • Lifting/lowering a patient on to a bed. • Lifting/lowering a patient onto an easy chair. • Lifting/lowering a patient into a wheelchair. • Lifting/lowering a patient onto a toilet. 			
<p>3.1. The safe lifting capacity must not be less than 150Kg.</p> <p>3.2. The frame of the lift must be manufactured from:</p> <ul style="list-style-type: none"> • Steel (chromium plated) or • Steel (epoxy powder coated). <p>3.3. Base must be adjustable in width to enable access around different size chairs and obstacles. Operations by either manual or electro assist.</p> <p>3.4. The lift must be fitted with 100 to 160mm swivel castors with a mechanical brake lock on the rear castors.</p> <p>3.5. The mass of the lift must not exceed 60Kg.</p> <p>3.6. The lift must be able to pass through a normal door with a patient attached to it.</p> <p>3.7. The lifting and lowering mechanism must operate off a D.C. supply (battery) driving a hydraulic motor and pump. Please describe in detail the type of drive offered as well as the mechanical I electrical configuration.</p> <p>3.8. The lift must be operated from a control handset connected to the lift. The control handset must incorporate the lifting and lowering control switches. An emergency lowering switch must be fitted to the chassis of the lift.</p> <p>3.9. An emergency stop switch must be provided to immediately stop any powered movement.</p> <p>3.10. To ensure that the lift is always ready for use a fully charged battery must be available. The final bid price must include the supply of an additional battery and if where required, also an additional charger. If an additional charger is not required, please state this in your comments.</p> <p>3.11. The following, visual battery condition and other indication must be provided:</p> <ul style="list-style-type: none"> 3.11.1. Mains on charger. 3.11.2. Battery charging. 3.11.3. Battery faulty. 3.11.4. Voltage in battery too low for recharging. 3.11.5. Charging faulty. 3.11.6. Battery condition I battery low indication when the battery is fitted to the lift. <p>3.12. Please state battery recharging time/approximately hours from 50% capacity to 100% capacity.</p> <p>3.13. Please state battery life. The battery must not have less than 500 charge cycles from 50% capacity.</p> <p>3.14. Please state the type of battery its voltage and ampere hour capacity.</p> <p>3.15. UPGRADABILITY</p> <ul style="list-style-type: none"> 3.15.1. All future upgrades (hardware and software), where applicable, involving patient safety must be supplied at no additional cost. 3.15.2. All future upgrades removing software viruses from existing software, where applicable, must be supplied at no additional cost. 3.15.3. Any software upgrade, where applicable, before or after installation of the equipment must be brought to the attention of the Management. <p>3.16. MANUALS</p> <p>3.16.1. The bidder must include in their offer at no extra cost to the final bid price:</p> <ul style="list-style-type: none"> a. Complete user Operation/Maintenance Manual x 2 (two) Book/File; CD; DVD copies in English Language b. Complete ORIGINAL Service/Repair Manual x 2 (two) Book/File; CD; DVD copies in English Language which MUST include the following information: 			

Item Code No.	Department	Section	Item Description
LOT 7-5	Renal/Hemodialysis	Patient area	Automated Patient Hoist
<p>(i) Fault Finding Guide (ii) Circuit Diagrams/Schematics (iii) Circuit Descriptions (iv) PCB Layouts (v) Calibration Guide (vi) Part numbers and exploded diagram of mechanical parts/panels.</p> <p>3.16.2. The offer submitted must be supported by descriptive literature, colour pamphlets, colour brochures and technical data sheets applicable to the offer.</p> <p>3.16.3. FAILURE TO SUBMIT THE ABOVE WILL RESULT IN THE BID BEING DISQUALIFIED.</p> <p>3.17. Guarantee Warranty 3.17.1. The bidder must provide a minimum of Two (2) year warranty period for the unit offered.</p> <p>3.18. Maintenance and Service Agreement 3.18.1. The bidder must provide a fully- costed Preventative Maintenance and Service Agreement for a period of 5 years to commence upon termination of the warranty period with an option to enter into a renewable agreement.</p>			

LOT 7-6 Continuous Ambulatory Peritoneal Dialysis (CAPD)

Item Code No.	Department	Section	Item Description
LOT 7-6	Renal/Hemodialysis	Patient area	Continuous Ambulatory Peritoneal Dialysis (CAPD) warmers
3. General Description			
<p>1. Required Therapy a. CCPD/PD b. Hi-Dose CCPD c. Tidal d. Hi-Dose Tidal</p> <p>2. Automatic Calculation of Number of Cycles and Dwell time</p> <p>3. Use Disposable cassette assembly for therapy</p> <p>4. Built in fluid warmer: 35 to 37 Degree C</p> <p>5. Maximum Total Programmable Volume : 80L</p> <p>6. Therapy time : 0 to 48 Hrs</p> <p>7. Standard and Low fill Modes a) Low fill Mode fill volume : 60 to 1000ml b) Standard Mode fill volume : 200 to 3000 ml</p> <p>8. Self Correcting, Continuous and system Error Alarms for maximized Patient safety</p> <p>9. Use Pneumatic pump to exert pressure for fill/drain the patient</p> <p>10. Built in Event Log & Therapy Log</p> <p>11. Built in Nurses & Service Menu</p> <p>12. Protective system Preventing Overfill</p> <p>13. Program Lock</p> <p>14. Last fill with Same or Different Dextrose</p> <p>15. Mode of operation : Continuous</p> <p>16. Volumetric Accuracy reported : Greater of 1% or +/- 10ml</p> <p>17. Operating Voltage : 220Vac</p>			

Item Code No.	Department	Section	Item Description
LOT 7-6	Renal/Hemodialysis	Patient area	Continuous Ambulatory Peritoneal Dialysis (CAPD) warmers
18. Air detection capability : Bubbles exceeding 3CC 19. Battery backup for Program : Up to 2 Hours			

LOT 7-7 Emergency/ Resuscitation Trolley

Item Code No.	Department	Section	Item Description
LOT 7-7	Renal Dialysis	Dialysis area	Resuscitation trolley
4. General Description			
Resuscitation trolley for use in ICU. Epoxy coated mild steel, with drawers, protection perimeter and defibrillator holder. The Unit should be mobile on four castors , 2 lockable			
5. Composition			
5.1.	Main unit,		
6. Performance Specifications			
6.1. Main Unit			
6.1.1. Should be durable with Ergonomic handle and should have easy grip			
6.1.2. Height should be 40-45”			
6.1.3. Should have 6-8 drawers of sizes 3x3”,2x6”,1x9”			
6.1.4. Should have interchangeable 3”,6”,9” drawers which run smoothly on good quality channels			
6.1.5. Should have provision of side storage which allows storage of variety accessories like can, storage bins, glove storage, sharp container set			
6.1.6. An over bridge can with baskets, shelves and bins to keep important things			
6.1.7. Should have AMS top surface & advance polymer material which is easy to clean. It should not dent, chip flake or corrode			
6.1.8. Should be easily rolling and has toe brakes			
6.1.9. Should have I.V. pole with clamps ach 3” drawer should have provision for 25-30 compartments			
6.1.10. Should have twin swivel castors & central lock			
6.1.11. Should be CE and ISO 9001/2000 and FDA approved			
6.1.12. Should have CPR board & O2 cylinder holder			

LOT 7-8 Portable Electrical Suction Machines

Item Code No.	Department	Section	Item Description
LOT 7-8	Renal Dialysis	Dialysis area	Electrical Suction Machines
16. General Description			
Suction machine suitable for use in theatre, for both adult and pediatric use. Should be constructed from coated non-corrosive, extreme heat resistance material and electrically insulated and mobile on antistatic castors ϕ 60 mm, 2 No. lockable, with high level push handle.			
17. Composition			
17.1.	Main unit		
18. Performance Specifications			
18.1.	Main Unit		
18.1.1.	High flow rate	40 litres per minute.	
18.1.2.	Suction vacuum	Maximum 700mmHg	
18.1.3.	Suction pump	oil free	
18.1.4.	Jars	2 X 2 liter polycarbonate autoclavable and unbreakable complete with overflow devices and valves.	
18.1.5.	Vacuum gauge	Graduated in mmHg and kPa.	
18.1.6.	Vacuum control	Adjustable at the front panel	
18.1.7.	Switch	Main on front panel and foot switch (water proof type)	
18.1.8.	Cable towage	On back with reversible cleats	
18.1.9.	Anti-bacterial filters	Available preferable autoclavable	
18.1.10.	Suction tubing connection	Antistatic neoprene or silicone	
18.1.11.	Safety	Overflow pump protection	
18.1.12.	Handle	High level push handle type	
18.1.13.	Movements	Mobile on four antistatic castors 2 No. lockable.	
19.	Physical characteristics		
19.1.	Main unit	Mobile on castors with push handle	
20. Operating environment			
20.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug BS standard, 3m long cord with PE	
20.2.	Ambient temperature	10°C to 40°C	
20.3.	Relative	20% to 90%	

Item Code No.	Department	Section	Item Description
LOT 7-8	Renal Dialysis	Dialysis area	Electrical Suction Machines
	humidity		
21.	Accessories	The following accessories will be provided as startup kits.	
21.1.	Sterilizable, silicone tubing	5 Set	
21.2.	Bacterial filters	1 Box	
21.3.	Foot switch	1 No.	
21.4.	Cannula with handle for general purpose	4 Sets	
22.	Quality standards		
22.1.	Manufacturing standards	EN 10079-1, IEC 60601-1, ISO 9001, ISO 13485	
	Conformity to standards	CE and FDA marked	
23.	Local back up service		
23.1.	Available	Should be available locally	
23.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
24.	Delivery point		
24.1.	See Schedule	For inspection and testing	
24.2.	Nil		
25.	Pre installation requirements		
	Nil		
26.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
27.	Training		
27.1.	User Training	On site user training on operation and daily up keep	
27.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
28.	Technical documentations		
28.1.	User manuals	2 Sets	

Item Code No.	Department	Section	Item Description
LOT 7-8	Renal Dialysis	Dialysis area	Electrical Suction Machines
28.2.	Service Manual	1 Set	
28.3.	Drawings	Nil	
29.	Commissioning		
29.1.	Testing and commissioning of the machine to the satisfaction of the user.		
30.	Warranty		
30.1.	Equipment	Minimum of two (2) year after commissioning on all parts.	
30.2.	Equipment System	Nil	

LOT 7-9 Blood sugar machine

Item Code No.	Department	Section	Item Description
LOT 7-9	Renal/Hemodialysis	Patient Area	Blood Sugar Machines
1. General Description			
2. Composition			
2.1.	Main unit		
GLUCOMETER WITH			
STRIPS Product Eligibility Criteria:			
<ul style="list-style-type: none"> • Product should be CE as per IVD (Invitro Diagnostic Device) or USFDA Certified. • Manufacturer should be ISO 13485 certified for quality standards. • Test strips should be certified by the Kenya Laboratory Technologists and Technicians Board. 			
3. Technical Specifications			
3.1. Small, portable and user-friendly device is required. Blood should not go into the Glucometer while measurement.			
3.2. It should be able to measure whole blood in capillary mode.			
3.3. Measurement range: 30 to 600 in mg/dl.			
3.4. Accuracy should be as per International Standard ISO 15197: 2013 (Requirements for Blood-glucose monitoring systems for self-testing in managing diabetes mellitus). Supporting certificate or test reports from the National Institutes of Biologicals (NIB) must be furnished of last 2years with the technical bid.			
3.5. Reproducibility/Precision: $\pm 5\%$			
3.6. Display should be 40mm ± 5 mm or better measured diagonally.			
3.7. It should be battery operated electronic system and the battery life should be for at least 500 tests.			
3.8. Self-life of strips: Minimum 6 months at the time of delivery to consignee.			
3.9. Packing of strips should not be more than 50 strips in a pack.			
3.10. Strips should work for minimum 3 months after opening of strips pack.			
3.11. Operating temperature for both device and test strip should be 100C to 400C.			
3.12. Control solution for checking reliability of strips will be supplied free of cost as & when required.			
3.13. Ready availability of reagent test strips, battery & other consumables across BIHAR for at least 5 years.			

Item Code No.	Department	Section	Item Description
LOT 7-9	Renal/Hemodialysis	Patient Area	Blood Sugar Machines
<p>3.14. A complete user operational guide shall have to be supplied along with each machine, printed in Hindi and English language.</p> <p>3.15. A lancet applicator/ lancet holder shall have to be supplied along with each machine.</p> <p>Scope of supply:</p> <p>a) Glucometer: 1no. b) Standard batteries: 1Set c) Carrying case: 1no. d) Control solution/Control Strips e) Glucose test strips: As per Order f) Auto disables lancets: As per order g) A lancet applicator/ lancet holder</p>			

LOT 7-10 Bioimpedance Analysis Machine

Lot 7-10	Characteristic Features	• Specification Requirements
Technical Specifications		
	Measurement Method:	<ul style="list-style-type: none"> Multi-frequency bioelectrical impedance analysis (BIA).
	Electrode Type:	<ul style="list-style-type: none"> Standard ECG sensor pad electrodes for wrist and ankle connections.
	Parameters Measured:	<ul style="list-style-type: none"> Body Fat Percentage Fat-Free Mass Total Body Water (TBW) Intracellular & Extracellular Water Basal Metabolic Rate (BMR) Phase Angle & Reactance
	Display:	<ul style="list-style-type: none"> Digital touchscreen interface with real-time data visualization.
	Data Output:	<ul style="list-style-type: none"> USB, wireless, or built-in thermal printer for result documentation.
	Power Supply:	<ul style="list-style-type: none"> Rechargeable battery or AC adapter compatibility.
	Portability:	<ul style="list-style-type: none"> Compact design with carrying case for mobility.
Procurement Requirements		
	Compliance:	<ul style="list-style-type: none"> Must meet ISO 13485 or equivalent medical device standards.
	Warranty:	<ul style="list-style-type: none"> Minimum 2-year warranty.
	Supplier Qualifications:	<ul style="list-style-type: none"> Vendor must provide proof of previous supply contracts for similar equipment.
	Delivery Timeline:	<ul style="list-style-type: none"> Expected within 6-8 weeks from order confirmation.
	Maintenance & Support:	<ul style="list-style-type: none"> Availability of after-sales service and technical support. Availability of both User and technical manuals (hard and soft copies)

Lot 7-11 Weighing Scale with Height Meter

Item Code No.	Department	Section	Item Description		
LOT 7-11	Outpatient	Consulting Room	Weighing Scale		
1. General Description					
2. Composition					
2.1.	Main unit				
3. Description of the medical supply unit design type					
<ul style="list-style-type: none"> 3.1. Mobile Weighing Scale with height meter 3.2. Capacity approx. 0-200kg 3.3. With circular scale/readout 3.4. With mechanical height rod able to measure between 70cm-2000cm 3.5. With BMI display 3.6. Easy to clean platform with reset to zero function 3.7. With flat tread area platform approximately 360mm (W) X 630mm (D) 3.8. Height approx. 1000mm 3.9. With mechanical column scale 3.10. Digital Display weight with BMI function 3.11. Graduation approximately 500g. 3.12. Warranty 2 years 3.13. With Calibration Certificate 3.14. FDA/ CE Marked 3.15. With heavy duty transport castors 3.16. Operator and service manuals to be provided 					

LOT 7-12 Weighing Chair Scale

Item Code No.	Department	Section	Item Description
LOT 7-12	Inpatient	Wards	Weighing Chair Scale
1. General Description			
2. Composition			
2.1	Main unit		
3. Description of the medical supply unit design type			
3.1. Mobile Weighing Chair Scale 3.2. Capacity approx. 0-160kg 3.3. With Digital scale/readout 3.4. With BMI display 3.5. Easy to clean platform with reset to zero function 3.6. Displays weight with BMI function 3.7. Warranty 2 years 3.8. With Calibration Certificate 3.9. FDA/ CE Marked 3.10. With heavy duty transport castors 3.11. Operator and service manuals to be provided			

LOT 7-13 Procedure Trolleys

Item Code No.	Department	Section	Item Description
LOT 7-13	Renal/Hemodialysis	Patient area	Procedure Trolley
1. General Description			
Procedure/Dressing Trolley			
2. Composition			
2.1	Main unit		
3. Description of the medical supply unit design type			
3.1. Overall approx. Size: 780mmL x 500mmW x 900mmH 3.2. Approximate shelf dimension 750mmL x 500mmW. 3.3. Tubular CRC frame mounted on four castors of minimum 100mm dia and should be pre-treated and epoxy coated finish. 3.4. Two S.S. of 304 grade shelves with protective railings on three sides. 3.5. Should have provision for holding bowel and bucket. 3.6. Warranty: 2 years			

LOT 7-14 Digital Thermometer

Item Code No.	Department	Section	Item Description
LOT 7-14	Renal/Hemodialysis	Patient Area	Thermometer
4. General Description			
Digital Thermometer			
5. Composition			
5.1.	Main unit		
6. Description of the medical supply unit design type			
6.1. Range of temperature measurement 32 °C- 42°C (89.60F-109.40F) 6.2. Can be calibrated in both centigrade and Fahrenheit, but if only one option is available, then Centigrade is preferable. 6.3. Buzzer signal function. 6.4. Takes 10-15 seconds to measure temperature. 6.5. Can be used in the armpit/axilla, orally and rectally. 6.6. Accuracy of temperature ± 0.1 0C and ± 0.2 F. 6.7. User's interface: LCD display 6.8. Manufacturer should be ISO13485 approved 6.9. Product should be FDA/CE approved			

LOT 7-15 Fluid warmer

Item Code No.	Department	Section	Item Description
LOT 7-15	Renal/Hemodialysis	Patient Area	Blood/Fluid Warmers
1. General Description			
1.1. Delivers blood and intravenous fluid to the patient at norm thermic temperature at wide range of flow rates from gravity flow rates to 50-5,000 ml/hr.			
2. Composition			
2.1.	Main unit		
2.1.1. Should be able to warm fluid/blood to a temperature range of 37-40 degree C 2.1.2. Should be able to maintain or warm fluid/blood at a flow rate of 2.5 L/min 2.1.3. Should have a digital temperature display of fluid 2.1.4. Should have inbuilt water tank/ dry in line heating system to warm the infused fluid/blood 2.1.5. Should have a warm water column or heated sleeve up to the patient end to maintain the temperature up to the point of entry into the vein 2.1.6. Alarms for disconnections, less water and over temperature 2.1.7. At least 350 disposable tubing sets for fluid/blood along with each unit, the cost of which should be included in the financial bid 2.1.8. Should be useful for both in adult and Pediatric patients 2.2. Operational Requirements: 2.2.1. The Blood Warming and Infusion Set should be user friendly, safe to use			

Item Code No.	Department	Section	Item Description
LOT 7-15	Renal/Hemodialysis	Patient Area	Blood/Fluid Warmers
<p>2.3. Standards, Safety and Training:</p> <p>2.3.1. Should be FDA or CE approved product.</p> <p>2.3.2. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements. (or equivalent Standard)</p> <p>2.3.3. Manufacturer/Supplier should have ISO certification for quality standards.</p> <p>2.3.4. Certified for meeting IEC60601-2-24: Particular requirements for the safety of infusion pumps and controllers</p> <p>2.3.5. Should meet IEC 529 Level 3 and 4 (IP3X)(spraying and splashing water) for enclosure protection, water ingress.</p> <p>2.3.6. Electrical Safety Classification Class I/II, Type CF and Internally powered equipment.</p> <p>2.4. Power Supply:</p> <p>2.4.1. Power input to be 220-240VAC, 50Hz fitted with UK BS plug</p> <p>2.5. Documentation:</p> <p>2.5.1. User Manual and Service manual in English must be provided, both soft and hard copies.</p> <p>2.6. Installation, Commissioning and Testing,</p> <p>2.6.1. The equipment and all accessories should be transported, installed, tested and commissioned at EAKI project site.</p> <p>2.7. Warranty and After Sales Service:</p> <p>2.7.1. The Equipment including all accessories including bought out items should be under WARRANTY for a period of at least TWO YEARS (2) after successful commissioning.</p> <p>2.7.2. Comprehensive maintenance contract rates for 5 YEARS after warranty must be quoted separately and these would be taken into consideration while comparing price bids.</p> <p>2.7.3. All spare parts and consumables should be available with supplier or principals for a period of at least 10 years.</p> <p>2.7.4. Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.</p> <p>2.8. Other tender conditions</p> <p>2.8.1. Suppliers should have been in the market for at least 3 years and should have a satisfied userbase for this equipment.</p> <p>2.8.2. All Essential Spare parts / Consumables rates to be given separately which may be frozen for next 10 Years.</p> <p>2.8.3. Suppliers should have made a large number of installations, within the last five years, in the country in reputed institutions and preferably in Government Hospitals with a proven track record of excellent after sales support for this system.</p> <p>2.8.4. List of references to be enclosed.</p>			

LOT 7-16 Patient trolley

Item Code No.	Department	Section	Item Description
LOT 7-16	Renal/ Hemodialysis	Patient Area	Patient Trolley
1. General Description			
General purpose trolley constructed from epoxy coated mild steel frame, with side rails. The Unit should be mobile on four castors , all lockable			
2. Composition			
2.1.	Main unit,		
3. Performance Specifications			
3.1.	Main Unit	Mobile type	
3.1.1.	Material	Epoxy coated mild steel	
	Shelves	Two stainless Steel shelves with three guard rails on each	
3.1.2.	Top	Stainless steel tray with three guard rails	
3.1.3.	Castors	Provided, heavy duty, 2 with brakes	
3.1.4.	Push/Pull handle	Provided	
4.	Quality standards		
4.1.	Manufacturing standards	ISO 9001	
4.2.	Conformity to standards	CE approved	
5.	Delivery point		
5.1.	See Schedule	For inspection, installation and testing	
5.2.	Nil		

LOT 8: OPERATION THEATRES

General Surgery Rooms			
1.	Anaesthetic machines	5	Pcs
2.	Operation tables (with kidney Bridge)	5	Pcs
3.	Electrosurgical units (with bipolar resection capability)	6	Pcs
4.	Digital X-Ray Viewer	7	Pcs
Theatre Recovery			
5.	Fluid warmer	2	Pcs
6.	Hush Slush System (For cooling and warming during transplant)	2	Pcs
7.	Table flash Autoclave	2	Pcs
8.	Patient Trolleys	20	Pcs
9.	Defibrillator	3	Pcs
10.	Gas Plasma sterilizer	1	Pcs
11.	Syringe pumps	10	Pcs
12.	Infusion pumps	5	Pcs
13.	Operation Microscope (Transplant Procedures)	2	Pcs

LOT 8-1 Anaesthetic machines

Item Code No.	Department	Section	Item Description
LOT 8-1	Operations Theatre	General Surgery	Anaesthetic machine with ventilator
1. General Description			
Inhalation anaesthetic machine with inbuilt electronic ventilator complete with all accessories for low and high flow anaesthesia, adult, paediatric and infant application. It should include a patient monitor unit.			
2. Composition			
1.1.	Main unit	1 Unit	
	Electronic Ventilator	1 Unit	
	Patient Monitor	1 Unit	
	Accessories complete start-up kit	1 Set	
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Anesthetic trolley with minimum 3 drawers and a tabletop, with yokes for Oxygen (O ₂) Medical air (MA) and Nitrous Oxide (N ₂ O) portable cylinder and support for circle systems including hoses and absorbers and support for central pipeline gas system with support for Vacuum and AGSS. The offered brand and Model Should be under current production		
3.1.2.	Anesthetic trolley	With minimum of 3 drawers	

Item Code No.	Department	Section	Item Description
LOT 8-1	Operations Theatre	General Surgery	Anaesthetic machine with ventilator
3.1.3.	Wheels		With castors, two with brakes
3.1.4.	Gas delivery system		3 gas delivery system (O ₂ , N ₂ O and Air) with both inlets for central gas pipeline system, and separate portable cylinders.
3.1.5.	Yokes		To support portable Oxygen (O ₂) Medical air (MA), and Nitrous Oxide (N ₂ O) cylinders, 11 liters each
3.1.6.	Portable Oxygen (O ₂) Cylinder connection		Pin Index type
3.1.7.	Portable Nitrous Oxide (N ₂ O) cylinder connection		Pin Index type
3.1.8.	Pressure regulators safety release valves and gauges for O ₂ , N ₂ O, MA and Vac.		Intergraded in the trolley
3.1.9.	Central gas pipeline system		Standard BS connections and colour codes for O ₂ , N ₂ O, Air and Vacuum.
3.2.	Flow meter		Separate flow meter for O ₂ , Air, N ₂ O and VAC
3.2.1.	Breathing Circle System		Capable of performing Open, Semi-Open, Semi-Closed and Closed system
3.2.2.	All patient connecting hoses		Corrugated, Transparent, autoclavable (134°C), φ 22 mm, with ISO connectors
3.2.3.	CO ₂ absorber		Integrated, complete with Soda lime and switch for Magill's circuit.
3.2.4.	Accessories: To be provided as startup kits.		
3.2.5.	Adult Breathing circuit for ventilator		2 Unit
3.2.6.	Paediatric Breathing circuit for ventilator		2 Unit
3.2.7.	Face Mask, Adult, Sizes 1, 2, 3 transparent type		2 Sets
3.2.8.	Face Mask, Paeds, Sizes 1, 2, 3 transparent type		2 Sets
3.2.9.	Breathing Bag Adult (2 L)		2 Sets
3.2.10.	Breathing Bag Paeds (1L)		2 Sets
3.2.11.	Breathing Bag Baby (0.5L)		2 Sets
3.2.12.	Magill's circuit complete with adult mask		2 Sets
3.2.13.	Ayres Paed circuit		2 Sets
3.2.14.	CO ₂ absorber gas outlet		

Item Code No.	Department	Section	Item Description
LOT 8-1	Operations Theatre	General Surgery	Anaesthetic machine with ventilator
3.3.	Vaporizer		Minimum Sevoflurane and Isoflurane
3.3.1.	Compensation		Temperature, pressure, and flow compensated
3.3.2.	Range		About 0.2% to 4%
3.3.3.	Accuracy		± 0.15%
3.3.4.	Keyed filler according to ISO standards		agent specific
3.3.5.	Adjustment		Large hand wheel with Zero Lock
3.3.6.	Ambient Temperature		15°C to 35°C at Normal pressure
3.3.7.	Maintenance		Service free for a minimum period of 5 years of usage
3.4.	Safety controls		
3.4.1.	O ₂ supply failure		audible alarm with reset
3.4.2.	Hypoxyguard		Minimum O ₂ 25%: Shut off supply
3.4.3.			N ₂ O Shut off
3.4.4.	O ₂ Flush Gas Supply		Above 30 L/ Min 2-6 bars
3.4.5.	AGSS system provision		Provided for in the system
3.4.6.	Pressure limiting valves		Incorporated into patient circuits at minimum.
3.5.	Ventilator		
3.5.1.	Type		Microprocessor controlled and electrical/gas driven and be integral part of the workstation.
3.5.2.	Application		Suitable for adult, paediatric and infant application without changing parts between patient types
3.5.3.			Ventilation with ambient air possible
3.5.4.	Modes		Minimal manual, spontaneous, IPPV, PCV, SIMV +PS, Facility to deliver sigh breaths.
3.5.5.			It should have in built protection to patients against Volutrauma and Barotrauma.
3.5.6.	Ventilator Parameter		
	Tidal Volume: IPPV		10 ml- 1600ml
	P max (PEEP + 10)		Up to 70hPa

Item Code No.	Department	Section	Item Description
LOT 8-1	Operations Theatre	General Surgery	Anaesthetic machine with ventilator
	PEEP		about 0 to 20mbar
	Frequency:		about 3 to 60/min
	Insp flow		Max 150l/min
	Pinsp (PEEP + 5)		Up to 70kPa
	I: E ratio		5:1 to 1:5
	In case of failure		Switch to room air automatically
3.5.7.	Minimum Monitored parameters:		
	a. Expired Tidal Volume		
	b. Minute Volume		
	c. Peak Inspiratory Pressure		
	d. Plateau Pressure		
	e. PEEP		
	f. Mean airway Pressure		
	g. Respiratory Rate		
3.6.	Display		colour display minimum 6”
3.6.1.	Minimum Display parameters		Minute Volume
			Tidal Volume
			Rate
			Pressure Peak Response, PEEP, FiO ₂
			Graphic Trends
			Anaesthetic agent Concentration
3.7.	Patient monitor		To be mounted on the anesthetic machine
3.7.1.	Parameters		Pulse rate
			SpO ₂
			Temperature: 2 probes
			Blood pressure (NIBP and IBP)
			ECG 5 leads
			Peripheral nerve stimulator
			S_T segment display

Item Code No.	Department	Section	Item Description
LOT 8-1	Operations Theatre	General Surgery	Anaesthetic machine with ventilator
			Respiratory rate
			Perfusion index
3.7.2.	Display		Colour Display minimum 12”
			5 Parameter display
3.7.3.	Accessories: To be provided as startup kits.		
	SpO ₂ , Adult Sensor, Reusable	2 Pieces	
	SpO ₂ , Paediatric Sensor, Reusable	2 Pieces	
	SpO ₂ , Infant Sensor, Reusable	2 Pieces	
	Temperature	2 Probes	
	BP cuff, Large adult, reusable	2 Piece	
	BP cuff, adult, reusable	2 Piece	
	BP cuff, Small adult, reusable	2 Piece	
	BP cuff, Paed, reusable	2 Piece	
	BP cuff, Thigh, reusable	2 Piece	
	ECG 5 Leads	5 Piece	
	Soda lime	3 containers of 5-litre each	
		100 Pcs. CO2 sampling line	
		3 Piece PNS	
4.	Physical characteristics		
4.1	Main unit	mobile on casters	
	Outer dimensions	Compact design	
5.	Operating environment		
5.1	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin UK Plug, 5m long power cord with PE	
	Ambient temperature	10° C to 40° C	
	Relative humidity	20% to 90%	
6.	Backup Power supply		
1.2.	Internal battery	Internal battery	
7.	Quality standards		

Item Code No.	Department	Section	Item Description		
LOT 8-1	Operations Theatre	General Surgery	Anaesthetic machine with ventilator		
1.3.	Manufacturing standards	ISO 13485, ISO 9001			
	Product conformity standards	EU-93/42/EEC, IEC 60601-1, EN 740 CE and FDA approved			
8.	Delivery point				
1.4.	See Schedule of equipment of equipment delivery				
9.	Installation and testing				
9.1.	Complete installation and set-up of the machine at the hospital as per manufacturer's instructions				
10.	Training				
10.1.	User Training	On site user training on operation and daily upkeep			
10.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
11.	Technical documentations				
11.1.	User manuals	2 printed Sets and electronic copy			
11.2.	Service Manual	1 Set (Hard and Soft copy)			
12.	Commissioning				
12.1.	Testing and commissioning of the machine to the satisfaction of the user.				
13.	Warranty and After Sales Service:				
13.1.	The Equipment including all accessories including bought out items should be under WARRANTY for a period of at least TWO (2) YEARS after successful installation and commissioning.				
13.2.	Comprehensive maintenance contract rates for 5 YEARS after warranty must be quoted separately and these would be taken into consideration while comparing price bids.				
13.3.	All spare parts and consumables should be available with supplier or principals for a period of at least 10 years.				
13.4.	Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.				
14.	Other tender conditions				
14.1.	Suppliers should have been in the market for at least 3 years and should have a satisfied userbase for this equipment.				
14.2.	All Essential Spare parts / Consumables rates to be given separately which may be frozen during the equipment life.				
14.3.	Suppliers should have made a large number of installations, within the last five years, in the country in reputed institutions and preferably in Government Hospitals with a proven track record of excellent after sales support for this system.				
14.4.	List of references to be enclosed.				

LOT 8-2 Operation tables (with kidney Bridge)

Item Code No.	Department	Section	Item Description
LOT 8-2	Main Theatre	Operating theatres	Operating Theatre Table
1. General Description			
Operating table suitable for use in theatre for major operations. It should be capable of performing lateral tilt, up-down movement, trendelenburg and reverse trendelenburg position, back section refraction and kidney bridge. The movement should be electrohydraulic with manual option control system			
2. Composition			
2.1.	Main unit		
3. Physical Specifications			
3.1.	Main Unit		
3.1.1.	Tabletop	Approx. Length 2000 X width 600 mm	
3.1.2.		X-ray Permeable	
3.2.	Head rest	Detachable	
3.3.	Leg rests	Detachable/separable	
3.4.	Material of main unit	Made of scratch resistant, hard wearing and easy to clean material	
3.5.	Height of table top	Adjustable, mechanical operated, 600mm to 1100mm	
3.6.	Table top movements		
3.6.1.	Trendelenburg	Forward: 25°, Reverse: 25°	
3.6.2.	Lateral – tilt	~20° both to the left and right	
3.6.3.	Back- section refraction	90°	
3.6.4.	Tabletop turn	180°	
3.6.5.	Main unit movements	Mobile with antistatic castors with braking mechanism	
3.7.	Maximum load weight	250 Kg	
4.	Accessories	To be provided as startup kits.	
4.1.	Mattress	High density type easy to clean, 3” thickness with 4 sections, breathable, waterproof that does not stick to the table	
4.2.	Arm board with mattress	2 pieces	
4.3.	Shoulder	2 pieces	

Item Code No.	Department	Section	Item Description
LOT 8-2	Main Theatre	Operating theatres	Operating Theatre Table
	support with pads		
4.4.	Foot board	1 set	
4.5.	Knee crutches	2 pieces	
4.6.	Kidney bridge	1 piece	
4.7.	Screen frame	1 piece	
4.8.	Body support with pads	2 pieces	
5.	I. V. pole, adjustable height	1piece	
	Orthopedic attachment	1 piece	
5.1.	Manufacturing standards	ISO 13485, ISO 9001	
5.2.	Product conformity standards	EU-93/42/EEC, CE and FDA approved	
6.	Delivery point		
6.1.	See hospital schedule	For Delivery, inspection and commissioning	
7.	Warranty and After Sales Service:		
	The Equipment including all accessories including bought out items should be under WARRANTY for a period of at least TWO (2) YEARS after successful installation and commissioning.		
	Comprehensive maintenance contract rates for 5 YEARS after warranty must be quoted separately and these would be taken into consideration while comparing price bids.		
	All spare parts and consumables should be available with supplier or principals for a period of at least 10 years.		
	Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.		
8.	Other tender conditions		
	Suppliers should have been in the market for at least 3 years and should have a satisfied userbase for this equipment.		
	All Essential Spare parts / Consumables rates to be given separately which may be frozen during the equipment life.		
	Suppliers should have made a large number of installations, within the last five years, in the country in reputed institutions and preferably in Government Hospitals with a proven track record of excellent after sales support for this system.		

Item Code No.	Department	Section	Item Description
LOT 8-2	Main Theatre	Operating theatres	Operating Theatre Table
	List of references to be enclosed.		

LOT 8-3 Electrosurgical units (with bipolar resection capability)

Item Code No.	Department	Section	Item Description
LOT 8-3	Operations Theatre	General Surgery	Electrosurgical Unit
1. General Description			
High frequency electro surgical (diathermy) machine suitable for general surgery. The unit should be microprocessor based and capable of performing cutting, coagulation and blend functions at varying power output and complete with foot switch, electrodes and a cart (trolley).			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Output power	Nominal high frequency output of about 300W adjustable up and down with touch button keys or convenient controls. With automatic output regulation against excess impedance (TUR)	
3.1.2.	Cutting:	Monopolar, bipolar and blend functions	
		Activation by finger-switch and/or foot switch	
3.1.3.	Coagulation	Monopolar, bipolar, low forced and spray	
		Activation by finger switch and / or foot switch	
3.1.4.	Bipolar	Very low voltage	
3.1.5.	Wave form	Modulated pulse or Hemostatic or equivalent	
3.1.6.	Display	Digital Read out	
3.1.7.	Active patient electrode	Active patient electrode with standard electrode handle, with finger switch and connecting cable, reusable and autoclavable at 134°C	
3.1.8.	Patient plate	Patient (in different) plate, reusable rubber With connecting cable, autoclavable at 134°C	
3.1.9.	Foot Switch	Two pedal foot switch for cut and coagulation waterproof, explosion proof, cable length about 5 m.	
3.1.10.	Safety/ alarm devices		

Item Code No.	Department	Section	Item Description
LOT 8-3	Operations Theatre	General Surgery	Electrosurgical Unit
	Dosage rate control	Audible and visual alarm	
	Leakage current	Audible and visual alarm	
	Patient plate split	Audible and visual alarm	
	Short circuit	Audible and visual alarm	
4.	Physical characteristics		
4.1.	Main unit	Mounted on mobile cart	
5.	Operating environment		
5.1.	Power Requirements	240V, A/C 50 Hz, Single phase, 3 Pin Plug, 3m long cord with PE	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6.	Accessories: To be provided as startup kits.		
6.1.	Standard urology specific electrode handle, with finger switch and connecting cable, reusable	3 Pcs (long electrodes for deep dissection)	
6.2.	Monopolar standard surgical electrode set consisting of stainless-steel container or plastic container complete with standard electrode set (blades, lancet, knives, needles, wire loops, balls and plates).	2 Sets (long electrodes for deep dissection)	
6.3.	Bipolar forceps with connecting cable, reusable	3 Pcs	
6.4.	Standard Urology specific assorted sizes of bipolar forceps, reusable	1 Set (long electrodes for deep dissection)	
6.5.	Patient (in different) plate, reusable rubber With connecting cable	4 Pcs (2 pieces Adult and 2 pieces Paediatrics)	

Item Code No.	Department	Section	Item Description		
LOT 8-3	Operations Theatre	General Surgery	Electrosurgical Unit		
6.6.	Foot Switch-Monopolar	1 Pc			
6.7.	Foot Switch-Bipolar				
6.8.	Bipolar Cable	2 Pcs			
6.9.	Active Patient Electrode	2 Set			
7.	Quality standards				
7.1.	Manufacturing standards	ISO 13485, ISO9001			
7.2.	Product conformity standards	EU-93/42/EEC, IEC 60601-1, EN 740 CE and FDA approved			
8.	Delivery point				
8.1.	See attached schedule on delivery				
9.	Installation and testing				
9.1.	Complete installation and set-up of the machine at the delivery sites as per the schedule				
10.	Training				
10.1.	User Training	On site user training on operation and daily upkeep			
10.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
11.	Technical documentations				
11.1.	User manuals	2 Sets (Hard and Soft copy)			
11.2.	Service Manual	2 Sets (Hard and Soft copy)			
12.	Commissioning				
12.1.	Testing and commissioning of the machine as per the contract.				
13.	Warranty and After Sales Service:				
13.1.	The Equipment including all accessories including bought out items should be under WARRANTY for a period of at least TWO YEARS after successful installation and commissioning.				
13.2.	Comprehensive maintenance contract rates for 5 YEARS after warranty must be quoted separately and these would be taken into consideration while comparing price bids.				
13.3.	All spare parts and consumables should be available with supplier or principals for a period of at least 10 years.				
13.4.	Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as				

Item Code No.	Department	Section	Item Description
LOT 8-3	Operations Theatre	General Surgery	Electrosurgical Unit
	per guidelines provided in the service/maintenance manual.		
14.	Other tender conditions		
14.1.	Suppliers should have been in the market for at least 3 years and should have a satisfied userbase for this equipment.		
14.2.	All Essential Spare parts / Consumables rates to be given separately which may be frozen during the equipment life.		
14.3.	Suppliers should have made a large number of installations, within the last five years, in the country in reputed institutions and preferably in Government Hospitals with a proven track record of excellent after sales support for this system.		
14.4.	List of references to be enclosed.		

LOT 8-4 LED X-Ray Viewer

Item Code No.	Department	Section	Item Description
LOT 8-4	Operation Theatre	General Surgery	Digital X-Ray Viewer
1. General Description			
X-RAY-VIEW BOX (LED Light)			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
A) Product & Manufacturer Quality Standards:			
3.1. Should be FDA/ CE approved product.			
3.2. Manufacturer and Supplier should have ISO 13485 certification for quality standards.			
B) TECHNICAL CHARACTERISTICS			
3.3. Should be ultra-thin X ray film illuminator using LED light			
3.4. It should have a thickness of 30 mm			
3.5. It should be suitable for viewing 14''x17' film.			
3.6. Should have position to insert 8 films in 2 rows.			
3.7. The LED light must have a life span of more than 50,000 hours.			
3.8. It should have easy insertion & removal of the film.			
3.9. It should have homogeneous illumination more than 95% and maximum intensity of over 10,000 lux.			
3.10. It should have an on-off switch along with digital feather touch dimmer and a button to set the intensity			
3.11. It should have fully electronic continuous brightness control, with adjustment range of			

Item Code No.	Department	Section	Item Description
LOT 8-4	Operation Theatre	General Surgery	Digital X-Ray Viewer
<p>approximately 90%.</p> <p>3.12. It should be directly connected to power supply without any external adapters.</p> <p>3.13. It should have flicker free high frequency light for reduction of eye strain.</p> <p>3.14. It should have external fuses for protection against power surge.</p> <p>3.15. 10 step Digital dimmer facility with step up/step down intensity of 500 lux or less.</p> <p>3.16. Should have automatic film sensor</p> <p>3.17. Should have facility to switch on only the section where the film needs to be viewed.</p> <p>C) Power supply:</p> <p>3.18. 240V, AC, 50Hz. Single phase</p>			
Warranty and After Sales Service:			
The Equipment including all accessories including bought out items should be under WARRANTY for a period of at least TWO (2) YEARS after successful installation and commissioning.			
Comprehensive maintenance contract rates for 5 YEARS after warranty must be quoted separately and these would be taken into consideration while comparing price bids.			
All spare parts and consumables should be available with supplier or principals for a period of at least 10 years.			
Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.			
Other tender conditions			
Suppliers should have been in the market for at least 3 years and should have a satisfied userbase for this equipment.			
All Essential Spare parts / Consumables rates to be given separately which may be frozen during the equipment life.			
Suppliers should have made a large number of installations, within the last five years, in the country in reputed institutions and preferably in Government Hospitals with a proven track record of excellent after sales support for this system.			
List of references to be enclosed.			

THEATRE RECOVERY

LOT 8-5 Fluid warmer

Item Code No.	Department	Section	Item Description
LOT 8-5	Operation Theatre	General Use	Blood/Fluid Warmers
3. General Description			
3.1. Delivers blood and intravenous fluid to the patient at norm thermic temperature at wide range of flow rates from gravity flow rates to 50-5,000 ml/hr.			

Item Code No.	Department	Section	Item Description
LOT 8-5	Operation Theatre	General Use	Blood/Fluid Warmers
4. Composition			
4.1.	Main unit		
<p>4.1.1. Should be able to warm fluid/blood to a temperature range of 37-40 degree C</p> <p>4.1.2. Should be able to maintain or warm fluid/blood at a flow rate of 2.5 L/min</p> <p>4.1.3. Should have a digital temperature display of fluid</p> <p>4.1.4. Should have inbuilt water tank/ dry in line heating system to warm the infused fluid/blood</p> <p>4.1.5. Should have a warm water column or heated sleeve up to the patient end to maintain the temperature up to the point of entry into the vein</p> <p>4.1.6. Alarms for disconnections, less water and over temperature</p> <p>4.1.7. At least 350 disposable tubing sets for fluid/blood along with each unit, the cost of which should be included in the financial bid</p> <p>4.1.8. Should be useful for both in adult and Pediatric patients</p> <p>4.2. Operational Requirements:</p> <p>4.2.1. The Blood Warming and Infusion Set should be user friendly, safe to use</p> <p>4.3. Standards, Safety and Training:</p> <p>4.3.1. Should be FDA or CE approved product.</p> <p>4.3.2. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements. (or equivalent Standard)</p> <p>4.3.3. Manufacturer/Supplier should have ISO certification for quality standards.</p> <p>4.3.4. Certified for meting IEC60601-2-24: Particular requirements for the safety of infusion pumps and controllers</p> <p>4.3.5. Should meet IEC 529 Level 3 and 4 (IP3X)(spraying and splashing water) for enclosure protection, water ingress.</p> <p>4.3.6. Electrical Safety Classification Class I/II, Type CF and Internally powered equipment.</p> <p>4.4. Power Supply:</p> <p>4.4.1. Power input to be 220-240VAC, 50Hz fitted with UK BS plug</p> <p>4.5. Documentation:</p> <p>4.5.1. User Manual and Service manual in English must be provided, both soft and hard copies.</p> <p>4.6. Installation, Commissioning and Testing,</p> <p>4.6.1. The equipment and all accessories should be transported, installed, tested and commissioned at EAKI project site.</p> <p>4.7. Warranty and After Sales Service:</p> <p>4.7.1. The Equipment including all accessories including bought out items should be under WARRANTY for a period of at least TWO YEARS after successful commissioning.</p> <p>4.7.2. Comprehensive maintenance contract rates for 5 YEARS after warranty must be quoted separately and these would be taken into consideration while comparing price bids.</p> <p>4.7.3. All spare parts and consumables should be available with supplier or principals for a period of at least 10 years.</p> <p>4.7.4. Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to</p>			

Item Code No.	Department	Section	Item Description
LOT 8-5	Operation Theatre	General Use	Blood/Fluid Warmers
<p>carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.</p> <p>4.8. Other tender conditions</p> <p>4.8.1. Suppliers should have been in the market for at least 3 years and should have a satisfied userbase for this equipment.</p> <p>4.8.2. All Essential Spare parts / Consumables rates to be given separately which may be frozen for next 10 Years.</p> <p>4.8.3. Suppliers should have made a large number of installations, within the last five years, in the country in reputed institutions and preferably in Government Hospitals with a proven track record of excellent after sales support for this system.</p> <p>4.8.4. List of references to be enclosed.</p>			

LOT8-6 Hush Slush System (For cooling and warming during transplant)

Lot 8-6	Characteristic Features	• Specification Requirements
Technical Specifications		
	Cooling System:	<ul style="list-style-type: none"> • Auto-Stir™ technology for velvet-soft surgical slush, preventing sharp edges that could damage delicate tissues.
	Temperature Range:	<ul style="list-style-type: none"> • Adjustable cooling from -1°C to 0°C and warming up to 49°C.
	Capacity:	<ul style="list-style-type: none"> • 7.5-liter round basin for slush preparation.
	Power Supply:	<ul style="list-style-type: none"> • 220-240V AC, 50/60 Hz, with integrated safety fuse.
	Control System:	<ul style="list-style-type: none"> • Digital interface for precise temperature regulation.
	Mobility:	<ul style="list-style-type: none"> • Caster wheels for easy transport and locking mechanism for stability.
	Quiet Operation:	<ul style="list-style-type: none"> • Designed for minimal disruption in the operating room.
Procurement Requirements		
	Compliance:	<ul style="list-style-type: none"> • Must meet EN IEC 60601-1 medical equipment standards. •
	Warranty:	<ul style="list-style-type: none"> • Minimum 2-year warranty.
	Supplier Qualifications:	<ul style="list-style-type: none"> • Vendor must provide proof of previous supply contracts for similar equipment.
	Delivery Timeline:	<ul style="list-style-type: none"> • Expected within 6-8 weeks from order confirmation.
	Maintenance & Support:	<ul style="list-style-type: none"> • Availability of after-sales service and technical support. • Availability of both User and technical manuals

(hard and soft copies)

LOT 8-7 Table flash Autoclave

Item Code No.	Department	Section	Item Description
LOT 8-7	Operation Theatre	General Surgery	Table Flash Autoclave
1. General Description			
RAPID STERILIZER (FLASH AUTOCLAVE) TABLETOP STERILIZER WITH ACCESSORIES			
2. Composition			
2.1.	Main unit		
3. Specification Details			
<p>3.1. Table-Top, Rapid, Front-Loading Autoclave</p> <ul style="list-style-type: none"> ● Fully automatic microprocessor controls ● The control system should have Digital input/output controls, analog measuring inputs & COM ports for printer & PC connectivity, also with Alpha numeric Wide Graphic Display to indicate process status & to set the protocol with soft keypad. It should have Visual indicator provided by the same Wide Graphic Display to indicate process status. ● Accurate pressure control switch (1.2Kg/121 0C & 2Kg/1340C) ● Digital timer for Wet & Dry heat ● Alarm for completion of total command ● Auto drain out of water and condensation of steam, with external Wastewater tank ● Sterilization chamber made of strong deep drawn stainless steel S.S-304 ● Sheet to stand high Pressure <p>3.2. Should meet European Medical Device Directive 93/42EEC and Pressure Equipment directive 97/23EEC</p> <p>3.3. Should be CE/FDA Approved</p> <p>3.4. Capacity 45L</p> <p>3.5. For wrapped load.</p>			

LOT 8-8 Patient Trolleys

Item Code No.	Department	Section	Item Description
LOT 8-8	Operations Theatre	General Surgery	Patient Trolley
6. General Description			
General purpose trolley constructed from epoxy coated mild steel frame, with side rails. The Unit should be mobile on four castors , all lockable			
7. Composition			
7.1.	Main unit,		
8. Performance Specifications			
8.1.	Main Unit	Mobile type	
8.1.1.	Material	Epoxy coated mild steel	

Item Code No.	Department	Section	Item Description
LOT 8-8	Operations Theatre	General Surgery	Patient Trolley
	Shelves	Two stainless Steel shelves with three guard rails on each	
8.1.2.	Top	Stainless steel tray with three guard rails	
8.1.3.	Castors	Provided, heavy duty, 2 with brakes	
8.1.4.	Push/Pull handle	Provided	
9.	Quality standards		
9.1.	Manufacturing standards	ISO 9001	
9.2.	Conformity to standards	CE approved	
10.	Delivery point		
10.1.	See Schedule	For inspection, installation and testing	
10.2.	Nil		

LOT 8-9 Defibrillator

Item Code No.	Department	Section	Item Description
LOT 8-9	Operations Theatre	Theatre Recovery and (Common Use)	Defibrillator
1. General Description			
Defibrillator suitable for cardiac care complete with ECG monitoring, SPO ₂ monitoring and NIBP			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	The defibrillator should have biphasic technology having energy selection of maximum 200 joules.		
3.2.	The machine should have facility for ECG monitoring, defibrillation, external pacing, synch & recorder.		
3.3.	Machine should have more than 8" TFT Screen.		
3.4.	Machine must be with sweep rate 25mm/sec, 50mm/sec.		
3.5.	Machine should have 72hour trend storage facility.		
3.6.	Should have 5 leads and capable of monitoring 12 lead configuration ECG through ECG Cables, electrodes & paddles.		
3.7.	The machine should have defibrillation facility for adult & pediatric patients.		
3.8.	The machine should have ECG waveform display on bright screen along with other vital		

Item Code No.	Department	Section	Item Description
LOT 8-9	Operations Theatre	Theatre Recovery and (Common Use)	Defibrillator
3.9.	numeric information. The machine should be compact, portable with built in rechargeable battery & light weight.		
3.10.	The machine should have inbuilt auto & manual recorder for printing ECG trace & stored information.		
3.11.	The machine should have user selectable alarm setting.		
3.12.	The machine should work on mains (without battery) and on battery as well.		
3.13.	The machine should have AED feature as inbuilt with manual override for manual operations.		
3.14.	Machine must be with carry bag & Accessory bag.		
3.15.	The machine must be supplied with all the essential accessories in 2 set & moveable trolley.		
3.16.	The Defibrillator should have an ECG display and a three lead ECG cable.		
3.17.	The Defibrillator should have SPO2 and must have Non Invasive Pacing.		
4.	Physical characteristics		
4.1.	Main unit	Portable	
4.2.			
4.3.	Dimensions		
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug (BS), 3m long cord with PE	
5.2.	Back up supply	Internal rechargeable batteries (SLA), to last at least five hours	
5.3.	Ambient temperature	10° C to 40° C	
5.4.	Relative humidity	20% to 90%	
6.	Consumables		
6.1.	Start-up Kits must be provided including ECG electrode, Gel and Recording paper		
7.	Quality standards		
7.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	

Item Code No.	Department	Section	Item Description		
LOT 8-9	Operations Theatre	Theatre Recovery and (Common Use)	Defibrillator		
7.2.	Conformity to standards	CE and FDA marked			
8.	Local back up service				
8.1.	Available	Should be available locally			
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff			
9.	Delivery point				
9.1.	See Schedule	For inspection and testing			
9.2.	Nil				
10.	Pre installation requirements				
	Nil				
11.	Installation and testing				
	Complete installation and setup of the machine as per manufacturer's instructions				
12.	Training				
12.1.	User Training	On site user training on operation and daily upkeep			
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
13.	Technical documentations				
13.1.	User manuals	2 Sets			
13.2.	Service Manual	2 Set			
13.3.	Drawings	Nil			
14.	Commissioning				
14.1.	Testing and commissioning of the machine to the satisfaction of the user.				
15.	Warranty				

Item Code No.	Department	Section	Item Description
LOT 8-9	Operations Theatre	Theatre Recovery and (Common Use)	Defibrillator
15.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
15.2.	Equipment System	Nil	

LOT 8-10 Gas Plasma sterilizer

Item Code No.	Department	Section	Item Description
LOT 8-10	Operation Theatre	Sterilization Area	Gas Plasma Sterilizer
1. General Description			
Temperature based H2O2 Gas plasma sterilizer,			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1.	Should provide simple & fast sterilization of surgical instruments at low temperature using H2O2 Gas Plasma technology for effective removal of H2O2 from sterilized items and to compliment the process.		
3.2.	Should be suitable for sterilization of medical items like rigid endoscopes, lumen & non lumen, metal , non-metal, heat & moisture sensitive instruments		
3.3.	Chamber should have usable volume of around 50 liters		
3.4.	The sterilization temperature inside the chamber should be less than 55°C		
3.5.	Cycle time should be 35 to 60 mins		
3.6.	The sterilant should be in a cassette/ bottle with H2O2 concentration more than 55%		
3.7.	Should be endorsed by leading instruments and scopes makers like Karl Storz, Olympus, Stryker, Medtronic and Johnson & Johnson		
3.8.	The system should use minimum quantity of sterilant which should be less than 6-8 ml per injection to deliver dry terminal sterilization to ensure safety of Instruments against corrosion.		
3.9.	The unit should be equipped with all the safety features		
3.10.	Sterilizer should have storage of cycle records data.		
3.11.	Should be environment friendly and have no toxic products or harmful residues in the sterilized items in the chamber.		
3.12.	Sterilizer should be approved by USFDA and CE		
3.13.	Please specify list and cost of consumables/ consumable spares (i.e spares need to be replaced at regular intervals, may be quarterly/half yearly/ yearly such as annual maintenance kit etc.) if any.		
3.14.	Please specify pre installation requirements (electrical, HVAC etc.)		
3.15.	Please specify footprint size & its weight.		
3.16.	Demo of the quoted model will be mandatory at the cost of bidder if so desired by the user, after the opening of the technical bid and prior to opening of financial bid. This is for technical evaluation.		

LOT 8-11 Syringe pumps

Item Code No.	Department	Section	Item Description
LOT 8-11	Operation Theatre	Theatre Recovery and (Common Use)	Syringe Pump
1. General Description			
Syringe pump			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
3.1.1. Should be easy to use and nurse friendly.			
3.1.2. Should have automatic syringe size and model detection			
3.1.3. System should be front loading			
3.1.4. Should have large format LCD/TFT display.			
3.1.5. Should have a minimum flow rate range from 0.1 – 1200 ml/hr. for 50ml syringe, 0.1 – 100 ml/hr. for 20ml syringe and 0.1 – 60 ml/hr. for 10ml syringe.			
3.1.6. Syringe range from 20-50/60 ml.			
3.1.7. Should have a flow rate accuracy of $\pm 2\%$			
3.1.8. Should have a bolus rate up to 1000ml/hr. for 50 ml syringe.			
3.1.9. Should have automatic and manual bolus.			
3.1.10. Should have at least 3 levels of programmable occlusion pressure.			
3.1.11. Should have automatic bolus reduction system to avoid accidental bolus delivery after occlusion incident.			
3.1.12. Should have a rechargeable battery with back up time of minimum 3 hours.			
3.1.13. System should have a docking station			
3.1.14. Pump must trigger following alarms with visual indication:-			
i. Occlusion Pressure Alarm			
ii. KVO or 3 min pre- alarm			
iii. Syringe empty and volume infused alarm			
iv. Internal malfunction and Battery Charge Low Alarm			
v. Syringe disengaged and incorrectly placed alarm			
vi. Alarm loudness control.			
vii. No mains			
viii. Line disconnected (rapid pressure drop).			
3.1.15. Should work with input 200 to 240Vac 50 Hz supply.			
3.1.16. Should be CE and FDA marked.			
3.1.17. Copy of the certificate / test report shall be produced along with the technical bid			

LOT 8-12 Infusion pumps

Item Code No.	Department	Section	Item Description
LOT 8-12	Operation Theatre	Theatre Recovery and (Common Use)	Infusion Pump
1. General Description			
1.1. Infusion pump			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
3.1.1. Should be operated on drip rate Peristaltic finger pump method.			
3.1.2. Should be compatible with most of the IV set (macro/micro drip sets).			
3.1.3. Should have the following flow rates.			
3.1.4. IV Set ml/hr. drops/min			
- 15 drops/ml 3~450ml/hr. 1~100drops/min			
- 20 drops/ml 3~450ml/hr. 1~100drops/min			
- 60 drops/ml 1~100ml/hr. 1~100drops/min			
3.1.5. Should have a flow rate accuracy of $\pm 10\%$ and drip rate accuracy of $\pm 2\%$.			
3.1.6. Should have a volume infused display from 0 to 999.9ml.			
3.1.7. Should have a purge and KVO facility.			
3.1.8. Should have an audible and visual alarm for occlusion pressure, air alarm, door open, empty, low battery.			
3.1.9. Should have a LCD display with backlight and graphical display of infusion.			
3.1.10. Should have a minimum 2hr battery back up at highest delivery rate.			
3.1.11. Should work with input 240Vac 50 Hz supply.			
3.1.12. Should be CE and FDA marked			
3.1.13. Copy of the certificate / test report shall be produced along with the technical			

LOT 8-13 Operation Microscope (Transplant Procedures)

Item Code No.	Department	Section	Item Description
LOT 8-13	Operation Theatre	General Surgery	Operation Microscope
1. General Description			
1.1. SPECIFICATIONS FOR OPERATING MICROSCOPE			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
3.1. CLASSIFICATION: CLASS 1			
3.2. MAGNIFICATION: 6:1 motorized zoom activated through hand control ,foot switch control panel			
3.3. WORKING DISTANCE :motorized focus +manual override			
3.4. FOCUSING: min 224 or less – max 470 mm or more.			

Item Code No.	Department	Section	Item Description
LOT 8-13	Operation Theatre	General Surgery	Operation Microscope
<p>3.5. EYE PIECE : wide field eye piece for eyeglass wearers dioptr setting -5 d or less to + 5 d or more with adjustable eyecup interpupillar distance 55-75 mm</p> <p>3.6. OBJECTIVE : multifocal length min 224 or less max 470 mm or more motorized focus with manual over ride</p> <p>3.7. MAIN ILLUMINATION :should be 300 w xenon arc – indirect type illumination with stand by xenon with changeover facility</p> <p>3.8. FIELD DIAMETER :17-143 mm /10 x eyepiece</p> <p>3.9. MAGNIFICATION RANGE: 1.5-1.2 x or more /10 x eyepiece.</p> <p>3.10. CONTROL UNIT: graphic LED/LCD display having facility for adjusting speed of zoom and focus.</p> <p>3.11. TYPE /STAND SYSTEM : floor stand with electromagnetic brakes modular/ integrated (compact design) configuration for each application</p> <p>3.12. HAND GRIPS: controls for zoom focusing, recording, light intensity, adjustment, joy stick control preferable for finer adjustments of the microscope.</p> <p>3.13. A sepsis for all controls: sterilize/disposable protective glass encasement for objective sterilization components for all drive knobs /drapes.</p> <p>3.14. OBSERVER: coordinated stereo co observation .stereo –co observation system for cranial procedures with additional observer unit at 180* for final procedures</p> <p>3.15. CONFORMITY: should comply with CE/FDA standard to assure quality and safety of the system.</p> <p>3.16. ACCESSORIES : should have camera with integrated HD recording system –DVD digital recording system ,DVD burning ,USB storage device ,video format dvi, DICOM COMPATIBILITY, FIRE WIRE INPUT/OUTPUT, video compression MPEG 4 still image JPEG/ TIFF/ BMPO/ GIFF</p> <p>3.17. POWER SUPPLY : 220-240 vac +/- 10% 50 Hz</p> <p>3.18. FEATURES : automated illumination brightness ,auto zoom synchronized illumination</p> <p>3.19. VASCULAR FLUORESCENCE: should have vascular fluorescence (ICG). Rate to be quoted separately and the rate offered will be taken for evaluation</p> <p>3.20. should be upgradable to :</p> <p>3.20.1. Neuro-navigation compatibility. The details of additional hardware required for up gradation shall be provided with technical bid. Rate to be quoted separately. The rate offered will not be taken for evaluation</p> <p>3.20.2. Image injection facility and tumour fluorescence if available shall be quoted separately. This rate will not be taken for evaluation</p> <p>3.21. Shall supply 32” or above LCD/LED monitor.</p>			

LOT 9: SUPER SPECIALTY EQUIPMENT

1.	Holmium YAG Laser 160W (For lithotripsy)	1	Pcs
2.	Complete Laparoscopic towers with 4K image quality (Either on pendant or trolley)	2	Unit
3.	Brachytherapy after loader	1	Unit
4.	4 K with 3D Endovision System Complete Visualization Tower	1	Unit
5.	Extracorporeal Shockwave Lithotripsy With Compatible C-Arm Specifications (Electro Hydraulic Technology)	1	Unit
6.	Treadmill Stress Test Machine	1	Unit
7.	Urodynamic	1	Unit

LOT 9-1 Holmium YAG Laser 160 W (For lithotripsy)

LOT 9-1- Holmium YAG Laser 160W (For lithotripsy)

Item Code No.	Department	Section	Item Description
LOT 9-1	Operation Theatre	General Surgery	Holmium YAG Laser 160W (For lithotripsy)
1. General Description			
<p>A high-power Holmium:YAG laser system designed for Urology and soft-tissue applications. Suitable for Lithotripsy, BPH (HoLEP/HoLAP), tumor resection, strictures, condyloma ablation, and minimally invasive procedures.</p>			
<p>Laser shall be a Holmium:YAG surgical laser system, 160 W class, Laser shall be a Holmium:YAG surgical laser system, 160 W class, must be solid-state Ho:YAG, pulsed, operating at 2100 nm. The Unit shall be new, unused, not refurbished, and all components must be from same OEM. Tenderer shall provide OEM authorization and ISO 13485</p>			
a)	Main unit		
2. FIBRE COMPATIBILITY & DELIVERY			
<p><input type="checkbox"/> Compatible Laser Fibers</p> <ul style="list-style-type: none"> • Automatic fibre detection/recognition • Fibre port with safety interlock 			

<ul style="list-style-type: none"> • Supply minimum 6 fibres • Supports reusable and disposable fibres <p>Compatible Laser Fibers</p> <ul style="list-style-type: none"> • It should have Standard fibers • It should have Ball-tip fibers • It should have Performance fibers • It should have Gastro fibers <p>Fiber Technical Data:</p> <ul style="list-style-type: none"> • Core Sizes: 200µm–1000µm • Numerical Aperture: 0.12, 0.22, 0.28 • Cladding Diameter: 25µm–2000µm • Operating Temperature: -190°C to +350°C • Minimum Bending Radius: 50× (short-term); 150× (high-power) •
<p>COOLING SYSTEM</p> <ul style="list-style-type: none"> • Integrated closed-loop water-to-air cooling system • External chiller NOT accepted • Over-temperature, over-current protection • Multi-point temperature sensors
<p>4. ELECTRICAL REQUIREMENTS</p> <ul style="list-style-type: none"> • Power supply: 230 V ±10%, 50/60 Hz • Maximum current draw: ≤32 A • Compatible with UPS support (≥5 kVA) • Automatic startup self-diagnostics
<p>5. USER INTERFACE & CONTROL</p> <ul style="list-style-type: none"> • Touchscreen GUI ≥10-inch medical-grade • Full-color touchscreen display • Intuitive graphical user interface • Preset clinical modes • Real-time energy and frequency monitoring • Standby/Ready safety modes

Item Code No.	Department	Section	Item Description
LOT 9-1	Operation Theatre	General Surgery	Holmium YAG Laser 160W (For lithotripsy)
<ul style="list-style-type: none"> • Clinical presets: HoLEP, Dusting, Fragmentation • Real-time laser monitoring and warnings <ul style="list-style-type: none"> • Footswitch: Dual-pedal (mode toggle / activation) • Integrated standby/activation safety system • System memory: logs, service history, treatment data. 			
<p>6. SAFETY & REGULATORY</p> <ul style="list-style-type: none"> • Touchscreen GUI ≥10-inch medical-grade • Clinical presets: HoLEP, Dusting, Fragmentation • Real-time laser monitoring and warnings • Footswitch: Dual-pedal (mode toggle / activation) • System memory: logs, service history, treatment data • Safety features: Key switch, Emergency Stop, Fibre Interlock • Standards: IEC 60601-1, IEC 60601-2-22, IEC 60825-1 • Provide 4 pairs OD ≥5 safety goggles (2100 nm) • Door interlock port • Class 4 surgical laser, Meets international medical and laser safety standards • Emergency stop switch • Fiber recognition • Overheat protection • Password/key security • Audible & visual indicators 			
<p>7.MECHANICAL & BUILD REQUIREMENTS</p> <ul style="list-style-type: none"> • Mobile theatre-suitable cart with cable management • Maximum system weight: ≤200 kg • Metal chassis, medical-grade 			

<ul style="list-style-type: none"> • Smooth mobility with lockable castors
<p>8. CLINICAL PERFORMANCE REQUIREMENTS</p> <ul style="list-style-type: none"> • Laser lithotripsy • HoLEP / HoLAP : long-pulse mode mandatory • Strictures • Bladder tumors • Bladder neck incisions • Condyloma ablation • High-speed dusting capability • Fragmentation for hard calculi • Soft-tissue ablation with controlled coagulation • tumor resection, • minimally invasive procedures. •
<ul style="list-style-type: none"> • Laser Power & Performance • Laser Type: Holmium:YAG • Maximum Output Power: 160 Watts • Wavelength: 2100 nm • Output stable for ≥60-minute continuous procedures
<p>9. Energy & Frequency Specifications</p> <ul style="list-style-type: none"> • Energy Range: 0.1 – 8.0 Joules • Frequency Range: Up to 120 Hz • Pulse Duration: Adjustable (multi-EXPERT mode) • Pulse Modes: Fragmentation, Dusting, Popcorning, Hemostatic modes
<p>10 . System Design & Mobility</p> <ul style="list-style-type: none"> - Trolley-based design - Medical-grade wheels - Side handles - Enhanced cooling and ventilation

11. ACCESSORIES & CONSUMABLES

- 11.1. Dual-pedal footswitch**
- 11.2. Minimum 6 fibres (per 3.4)**
- 11.3. Fibre prepping tools (stripping, cleaving)**
- 11.4. 4 × Laser safety eyewear**

Item Code No.	Department	Section	Item Description
LOT 9-1	Operation Theatre	General Surgery	Holmium YAG Laser 160W (For lithotripsy)
<ul style="list-style-type: none"> • User, service, and technical manuals • Power cable, accessories kit 			
10. TRAINING REQUIREMENTS			
<ul style="list-style-type: none"> • On-site clinical training (min 5 days) • On-site biomedical engineer training • Training certificates for participants 			
11. WARRANTY & AFTER-SALES SUPPORT			
<ul style="list-style-type: none"> • Minimum 2-year warranty • OEM-authorized service center in region • Maximum 24-hour technical response time • Spare parts availability ≥7 years 			

LOT 9-2 Complete Laparoscopic towers with 4K image quality (Either on pendant or trolley)

Item Code No.	Department	Section	Item Description
LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
1. General Description			
2. Composition			
a)	Main unit		
1.1 Arthroscopy Tower A complete arthroscopic tower with the following items: <ul style="list-style-type: none"> i. Camera box endoscopic camera system -1 ii. Camera head -1 iii. Light source, LED -1 iv. Light guide cable - 1 v. Surgical monitor, UHD 4K, 32 inches - 1 			

Item Code No.	Department	Section	Item Description
LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
<ul style="list-style-type: none"> vi. 30° arthroscope, 4mm - 2 vii. 30° arthroscope 2.7mm - 1 viii. 70° arthroscope 4mm - 1 ix. 70° arthroscope 0.27mm - 1 x. Sheath/cannula for 4mm scope with inflow/out flow - 2 xi. Sheath/cannula for 2.7mm scope with inflow/out flow -2 xii. Conical obturator/trocar compatible with Inflow/outflow sheaths -1 for 4mm and 1 for 2.7mm xiii. Shaver/resection system/consol -1 xiv. Shaver hand pieces - 2 xv. Arthroscopy pump -1 xvi. Arthroscopic RF system -1 xvii. A video cart to accommodate the camera box, light source shaver system, RF system and arthroscopy pump - 1 xviii. All Items must be compatible with one another xix. Backup Power UPS: <ul style="list-style-type: none"> ● Input -220-240V (ac) 50/60Hz ● Output- 220-240V (ac) 2500VA xx. Manuals <ul style="list-style-type: none"> a. User manuals (both hard and soft copy) b. Technical manual (both hard and soft copy) xxi. Installation <ul style="list-style-type: none"> a. Supplier to Supply, Install, test and Commission, Provide user and technical training of the equipment xxii. Warranty – at least two (2) years. After the warranty period is over, five (5) years {annual comprehensive maintenance contract (CMC) will have to be entered. The bidder to provide the price for CMC for the 5 years as a guide in analysis but will not be factored in the current price. The successful bidder has to ensure that all the required spares and services are available during the period of CMC and three (10) years after that period. xxiii. User & Technical Training: <ul style="list-style-type: none"> cc. supplier to train users on site dd. Factory training 2 officers xxiv. The supplier to provide evidence of local capacity to service equipment 			
1.2 GENERAL SURGERY LAPAROSCOPIC EQUIPMENT			
1.2.1 General System			
<ul style="list-style-type: none"> 1.2.1.1 The system must be a high-definition universal endoscopy camera system capable of accepting a wide range of camera heads and video- scopes 			
<ul style="list-style-type: none"> 1.2.1.2 The system should display full HD images in both 1080/50P and 1080/50i formats to an LCD display to produce an HD image 			
<ul style="list-style-type: none"> 1.2.1.3 Camera Control Unit (Processor) and Camera Heads: <ul style="list-style-type: none"> a. Processor - 1 b. Camera Head - 1 			
<ul style="list-style-type: none"> 1.2.1.4 The camera system must be suitable for a wide range of endoscopic disciplines, and be capable of connecting to a range of high definition and standard 			

Item Code No.	Department	Section	Item Description
LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
<p>definition surgical camera heads and video-laparoscopes</p> <p>1.2.1.5 The camera Control Unit/ Processor must be capable of processing an advanced imaging system that applies optic digital methods to enhance endoscopic images and improves visualization of the mucosal surface architecture and microvascular pattern. A 3CCD HD Autoclavable camera head should be available</p> <p>1.2.1.6 Control of the image capture and video recording devices must be possible from buttons on the camera head or videoscopes and these buttons must also be programmable to control other commonly required functions of the camera system, e.g. Automatic white balance adjustment white.</p> <p>1.2.1.7 Camera head must have power focus buttons as well as power zoom buttons, independent of the 3 programmable buttons. Camera head must be less than 400g by weight.</p> <p>1.2.1.8 Three-Chip FULL HD Camera Head, max. resolution 1920x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15 - 31 mm (2x), 2 freely programmable camera head buttons.</p> <p>1.2.1.9 Camera control unit, for use with three chip Full HD Camera Heads, resolution 1920 x 1080 pixels.</p> <p>1.2.1.10 Power supply 200 - 240 VAC, 50/60 Hz.</p> <p>1.2.2 Light Source : Qty 1</p> <p>1.2.2.1 In order to allow the enhancement of tissue structures the light source must be capable of providing an optically filtered light output as well as white light for routine diagnostic imaging.</p> <p>1.2.2.2 The Light Source must be capable of providing the natural optical light enhancement technology.</p> <p>1.2.2.3 The light source and camera processor should be linked to enable the camera control unit to automatically control the output of the light source to achieve optimal light distribution.</p> <p>1.2.2.4 The light source must operate on a long life LED lighting source minimum 20,000 hours and light intensity minimum 3,000,000 lux</p> <p>1.2.2.5 Cold Light Fountain Power Light source, high-performance, power supply 240 VAC, 50/60 Hz</p> <p>1.2.3 Video Recording: Qty 1</p> <p>1.2.3.1 The system must come with a video recorder- either DVD or USB or both</p> <p>1.2.4 Insufflator: Qty 1</p> <p>1.2.4.1 The laparoscopic insufflator should be high-flow (≥ 50 litres/minute), with adjustable automatic smoke/ mist evacuation that removes the smoke/mist whilst maintaining the pneumoperitoneum.</p> <p>1.2.4.2 The insufflator should have a large digital display with a choice of display mode settings, which show the preset levels and actual readings of intra-abdominal pressure and flow rates, and also displays the total gas volume delivered. It should have audible and visible alarms that differentiate between excessive pressure and tube obstruction and have two types of protection against gas</p>			

Item Code No.	Department	Section	Item Description
LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
<p>embolism: automatic suction and automatic overpressure relief.</p> <p>1.2.4.3 The insufflator should have normal and small cavity modes to allow for the use in paediatrics.</p> <p>1.2.5 Monitor: Qty 2</p> <p>1.2.5.1 At least 26 Inch full HD LCD Monitor</p> <p>1.2.5.2 Aspect Ration 16:10</p> <p>1.2.5.3 Should have Advanced Image Multiple Enhancer for accurate image rendition</p> <p>1.2.5.4 Should have Various inputs and outputs, including 3G/HD/SD SDI, DVI, HD15 Y/C and VIDEO</p> <p>1.2.6 Workstation/ Trolley: Qty 2</p> <p>1.2.6.1 The workstation should be supplied with an isolation transformer which complies with BS-EN 60601-1 and have anti-static castors.</p> <p>1.2.6.2 The workstation should have an articulating arm with both horizontal and vertical movement to allow the monitor to be positioned at the optimal height and position.</p> <p>1.2.6.3 Should be complete with brackets for holding gas cylinders.</p> <p>1.2.7 Surgical Tissue Management System: Qty 1</p> <p>1.2.7.1 Must have a full range of bipolar and monopolar modes</p> <p>1.2.7.2 Must be able to perform Resection in saline*</p> <p>1.2.7.3 Must have a tissue adaptive response, and apply optional required energy for fast effective precise cutting</p> <p>1.2.7.4 input power should be not less than 1500 VA</p> <p>1.2.7.5 High frequency functions include Monopolar / Bipolar functions</p> <p>1.2.7.6 High frequency should be 430 kHz \pm 20%</p> <p>1.2.7.7 Maximum high frequency power should not be greater than 320 W</p> <p>1.2.7.8 Protection class according to IEC60601-1CF, Class I</p> <p>1.2.7.9 Classification according toMDD93/42/EEC IIb</p> <p>1.2.7.10 Sockets present should include</p> <p>MONOPOLAR</p> <ul style="list-style-type: none"> ● x 3-pin (\varnothing 4 mm), International standard ● 1 x 1-pin (\varnothing 8 mm) ● 1 x coaxial (\varnothing inner 5 mm / \varnothing outer 9 mm) <p>BIPOLAR</p> <ul style="list-style-type: none"> ● 1 x 2-pin (\varnothing 4 mm, pin spacing 28.8 mm), International standard ● 1 x coaxial (\varnothing inner 4 mm / \varnothing outer 8 mm) <p>UNIVERSAL</p> <ul style="list-style-type: none"> ● 1 x 7-pin ● Neutral electrode ● 2-pin standard, single or split <p>1.2.7.11 Unit must have communication capability with insufflator for automatic smoke</p>			

Item Code No.	Department	Section	Item Description
LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
evacuation 1.2.7.12 Unit must be supplied with a footswitch. 1.2.7.13 System should be supplied with compatible Ultrasonic Generator to perform single Bipolar/ Ultrasonic sealing and cutting functions with a single hand piece 1.2.7.14 Ultrasonic generator unit must be compatible with diathermy unit and Insufflator for Automatic Smoke evacuation 1.2.7.15 Generator must be able to deliver both ultrasonic and bipolar energy for reliable vessel sealing and fast tissue cutting from a single hand piece. 1.2.7.16 Must have a graphical user interface, for ease of use 1.2.7.17 Must recognize instruments automatically, and automatic application of default settings, on plug in of instrument 1.2.7.18 Must come with a suitable trolley for mounting the system 1.2.7.19 Must be complete with transducer			
1.2.8 LAPAROSCOPY INSTRUMENTS (RE - USEABLE)			
1.2.8.1 Reusable Trocar and Cannula 11mm with Gas Tap - Qty – 2 1.2.8.2 Reusable Threaded Trocar and Cannula 5.5mm with Gas Tap - Qty – 2 1.2.8.3 Reusable Trocar and Cannula 5.5mm without Gas Tap - Qty – 2 1.2.8.4 11mm Trocar Caps - Qty – 20 1.2.8.5 11mm Cannula Flaps - Qty-20 1.2.8.6 5.5mm Trocar Caps - Qty-20 1.2.8.7 5.5mm Cannula Valves - Qty- 20 1.2.8.8 Insulated Reduction Tube 10mm to 5mm - Qty-1 1.2.8.9 Reduction Tubes 13/11mm to 5.5mm - Qty -2 1.2.8.10 Veress Needle 120mm - Qty-2 1.2.8.11 Fascial Closure Needle, 250mm Lgth - Qty -1 1.2.8.12 Straight Needle Holder - Qty -1 1.2.8.13 Self-alignment Needle Holder - Qty-2 1.2.8.14 Knot Pusher - Qty-1 1.2.8.15 Monopolar Needle - Qty-2 1.2.8.16 Monopolar Hook - Qty-2 1.2.8.17 Monopolar HF Cord - Qty-2 1.2.8.18 Metzenbaum 5mm Laparoscopic Scissors, Length 330mm(33cm) - Qty-2 1.2.8.19 5mm Hooked Scissors, single action jaws, Length 330mm (33cm) - Qty-1 1.2.8.20 5mm Straight Scissors, Length 330mm (33cm) - Qty-1 1.2.8.21 Maryland 5mm Dissector with Monopolar Connection - Qty-1 1.2.8.22 Traumatic 5mm Grasping Forceps - Qty-1 1.2.8.23 Grasping Forceps, rotating, dismantlable, insulated with Monopolar connection, Atraumatic, Fenestrated - Qty-1 1.2.8.24 Fine Maryland Cross Tooth Dissector, 5mm Length 330mm - Qty-1 1.2.8.25 Bipolar 5mm Johann Grasping Forceps Length 330mm - Qty-1 1.2.8.26 Bipolar 5mm Maryland Dissecting Forceps Length 330mm - Qty-1 1.2.8.27 Bipolar HF Cable - Qty-2 1.2.8.28 Lymph Node Grasping Forceps, Atraumatic 5mm, 330mm Length - Qty-1 1.2.8.29 Babcock Forceps, 5mm, Length 330mm - Qty-1 1.2.8.30 Claw Forceps, 2*3 Teeth Short 5mm, Length 330mm - Qty-1 1.2.8.31 5mm Johann Grasping Forceps, non-single action, Length 330mm - Qty-1 1.2.8.32 Suction and Irrigation Handle with pistol grip and clamping Valve - ty-1			

Item Code No.	Department	Section	Item Description
LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
<p>1.2.8.33 Suction Irrigation Cannula 5mm, with lateral holes - QTY-1</p> <p>1.2.9 Backup Power UPS:</p> <p>1.2.9.1 Input -220-240V (ac) 50/60Hz</p> <p>1.2.9.2 Output- 220-240V (ac) 2500VA</p> <p>1.2.10 MANDATORY REQUIREMENTS</p> <p>1.2.10.1 Manuals</p> <ul style="list-style-type: none"> - User manuals (Both hard copy and soft copy) - Technical Manuals (Both hard and soft copy) 			
<p>1.3 GYNAECOLOGY LAPAROSCOPY TOWER</p> <p>1.3.1 GENERAL SYSTEM</p> <p>This is highly specialized equipment for use in gynecological surgeries. The system must be a high-definition universal endoscopy camera system capable of accepting a wide range of camera heads and video-scopes.</p> <p>The components to include:</p> <p>1.3.2 IMAGING AND CART –(Quantity - 1)</p> <p>1.3.2.1 Equipment Cart, wide, high, rides on 4 antistatic dual wheels equipped with locking brakes, mains switch on cover, central beam with integrated electrical sub distributors with 12 sockets, grounding plugs, Dimensions in mm (w x h x d): Equipment cart: 830 x 1474 x 730, Shelf: 630 x 25 x 510, Caster diameter: 150 mm consisting of: Base Module, equipment cart wide Cover, equipment cart wide Beam Package, equipment cart high 3x Shelf, wide Drawer Unit with Lock, wide 2x Equipment Rail long, Camera Holder</p> <p>1.3.2.2 Monitor Holder, height adjustable, swiveling and tilting, swivel range approx. 360°, and loading capacity max. 18 kg, with monitor mount VESA 75/100 - (Quantity-1)</p> <p>1.3.2.3 27" FULL HD Monitor, with VESA 100 adaption, color systems PAL/NTSC, max. screen resolution 1920 x 1080, image format 16:9, Video inputs: DVI, 3G-SDI, VGA, S-Video, Composite, Video outputs: DVI, 3G-SDI, Composite, power supply 100 - 240VAC, 50/60 Hz, 5 V DC output (1 A) including: External 24 VDC Power Supply Mains Cord and a slave monitor of the same specification mounted on cart with same specifications-(Quantity-1)</p> <p>1.3.2.4 IMAGE 1 H3-Z SPIES Three-Chip FULL HD Camera Head, SPIES compatible, progressive scan, soakable in gluteraldehyde, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15 - 31 mm (2x), 3 freely programmable camera head buttons for use with IMAGE 1 SPIES and IMAGE 1 HUB HD/HD. The system must come with video recording DVD/USB/both. Camera head must be less than 400g-(Quantity-1)</p> <p>1.3.2.5 Full HD CONNECT module (Processor), for use with up to 3 link modules, resolution 1920 x 1080 pixels or better, with integrated Communication and digital Image Processing Module, power supply 100- 240 VAC, 50/60 Hz consisting of: Mains Cord, length 300 cm, DVI Signal Cable, length 300 cm, Digital Communication Connecting Cable, length 100 cm and USB Flash Drive, at least 128 GB-(Quantity-1)</p> <p>1.3.2.6 Camera link module, for use with FULL HD three-chip camera heads, power</p>			

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supply 100 - 240 VAC, 50/60 Hz including: Mains Cord, length 300 cm, Link Cable, length 20 cm-(Quantity-1)			
1.3.3 LIGHT SOURCE:			
1.3.3.1 Cold Light Fountain Power LED with integrated Communication module, high-performance LED and one light outlet, power supply 110 - 240 VAC, 50/60 Hz consisting of: Cold Light Fountain Power LED , Mains power Cord and Communication Connecting Cable. To come with 2 spare lumps. - (Quantity-1)			
1.3.3.2 Insufflator -40-45Litres			
1.3.3.3 INSUFFLATOR Set, with integrated communication module (touch screen indicating intra-abdominal pressure, flow rate, gas consumption, status of cylinder and in-built alarm), power supply 100 - 240 VAC, 50/60 Hz consisting of: 40Litres Insufflator, Communication Connecting Cable length 100 cm, Universal Wrench, Insufflation Tubing Set with gas filter, sterile, single use package of 10, smoke evacuator-(Quantity-1)			
1.3.3.4 Insufflation Tube, sterilizable, inner diameter 9 cm, length 250 mm, for use with Insufflator 40 Litre Set-(Quantity-1) High Pressure CO2 Hose, American/Pin-Index-(Quantity-1)			
1.3.4 ELECTROSURGICAL GENERATOR			
1.3.4.1 Electrosurgical Generator 400Watt, High-End, power supply 220 - 240 VAC, 50/60 Hz, including mains cord, HF connecting sockets			
1.3.4.2 unipolar: 2x 3-pin US type 5 mm connector, 2x 4 mm connector (via footswitch) (via footswitch) bipolar: 2x 2-pin US type (28.58) 3x, Neutral electrode 2-pol. System must have bipolar hysteroscopy resection functionality and TURP-(Quantity-1)			
1.3.4.3 One-Pedal Footswitch, with button for swtichover function, for use with generators-(Quantity-1) Neutral Electrode-(Quantity-1)			
1.3.4.4 Connecting Cable , for Neutral Electrodes, Length 300 cm-(Quantity-1)			
1.3.5 IRRIGATION AND SUCTION UNIT			
1.3.5.1 Endoscopic Automatic System for Irrigation and Suction, with integrated Communication module, suction, and irrigation pump for gynecology with pre-programmed procedures, incl. power cord, power supply 100 - 240 VAC, 50/60 Hz, -(Quantity-1)			
1.3.5.2 Single-use SUCTION tubing set. Sterile, 10 per pack-(Quantity-5)			
1.3.5.3 Single-use IRRIGATION tubing set with two puncture needles, Sterile, 10 per pack-(Quantity-5)			
1.3.6 INTRAUTERINE SHAVER SYSTEM			
1.3.6.1 Wide-Angle Straight Forward Rod Lens Telescope 6°, with parallel eyepiece, length 20 cm, autoclavable, fiber optic light transmission incorporated with working channel, with LUER-Lock connection for inflow, Colour Coded.- (Quantity-1)			
1.3.6.2 Operating Sheath, 24 Fr., rotating, for continuous irrigation and passive outflow, with LUER-Lock stopcock, Colour coded-(Quantity-1)			
1.3.6.3 Hollow obturator for Operating Sheath-(Quantity-1) DrillCut XII shaver			

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1.3.6.4	handpiece-(Quantity-1) Handle, adjustable, for use with shaver handpiece-(Quantity-1)		Shaver Blade-(Quantity-5)
1.3.7	GYNAECOLOGY MOTOR SYSTEM		
1.3.7.1	Gynecology motor system set, with Integrated Communication Module, power supply 100 -120/230 - 240 VAC, 50/60 Hz consisting of: GYN Motor unit, Power Mains Cord, One-Pedal Footswitch, two-stage, with proportional function and pump switch function, Communication Connecting Cable length 100 cm-(Quantity-1)		
1.3.7.2	Control Cable, length 100 cm, for transmission of foot switch control signal between Gynecology Motor System and Endoscopic Automatic Suction and Irrigation System-(Quantity-1)		
1.3.8	HAND INSTRUMENTS SCHEDULE ITEM DESCRIPTION & NO.		
1.3.8.1	Fiber Optic Light Cable, with straight connector, extremely heat-resistant, safety lock, diameter 4.8 mm, length 250 cm : 2		
1.3.8.2	Forward-Oblique Rod Lens Telescope 30°, enlarged view, diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission : 2		
1.3.8.3	Pneumoperitoneum Needle with spring loaded blunt stylet, LUER-lock, length 13 cm and 20cm:1		
1.3.8.4	Trocar, size 11 mm, color coded consisting of: Trocar only, with pyramidal tip, Cannula without valve, with insufflation stop- cock, length 10.5 cm and Multifunctional Valve:5		
1.3.8.5	Trocar, size 6 mm, consisting of: Trocar only, with pyramidal tip, Cannula without valve, with insufflation stop- cock, length 10.5 cm and Multifunctional Valve:5		
1.3.8.6	6mm trocar seals 100		
1.3.8.7	11mm trocar seals		
1.3.8.8	Sleeve Reducer 11/5mm: 1		
1.3.8.9	Flip-on Reducer 11/5 mm 2		
1.3.8.10	3 piece modular Bowel Grasping Forceps, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, atraumatic, fenestrated, single action jaws, consisting of: Plastic Handle, with ratchet, with larger contact area, Outer Tube, insulated and Forceps Insert:3		
1.3.8.11	3 piece modular Grasping Forceps, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, "Tiger-jaw", 2 x 4 teeth, single action jaws, consisting of: Plastic Handle, with ratchet, with larger contact area, Outer Tube, insulated, and Forceps Insert:3		
1.3.8.12	3 piece modular Dissecting and Grasping Forcep rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, long, double action jaws, consisting of: Plastic Handle, without ratchet with larger contact area, Outer Tube, insulated and Forceps Insert:3		
1.3.8.13	3 piece modular Scissors, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, curved, serrated, spoon blades, length of blades 17 mm, double action jaws:3		
1.3.8.14	Rotating Bipolar Grasping Forceps, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, fenestrated, with especially fine		

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			<p>atraumatic serration, size 5 mm, length 36 cm :3</p> <p>1.3.8.15 Claw Forceps (Crocodile), rotating, size 10 mm, length 36 cm, 2x3 teeth, single action jaws:1</p> <p>1.3.8.16 Coagulating and Dissecting Electrode, L-shaped, with connector pin for unipolar coagulation, size 5 mm, working length 36 cm:1</p> <p>1.3.8.17 Suction and Irrigation Tube, anti-reflex surface with two-way stopcock, for single hand control, size 5 mm, length 36 cm:5</p> <p>1.3.8.18 Needle Holder, ergonomic axial handle with disengage-able ratchet, ratchet release on the right side, straight jaws, with tungsten carbide insert ø 5 mm, length 33 cm:2</p> <p>1.3.8.19 Needle Holder, ergonomic axial handle with disengage-able ratchet, ratchet release on the right side, Left Curved jaws, with tungsten carbide insert ø 5 mm, length 33 cm:2</p> <p>1.3.8.20 Knot Tier for extracorporeal knotting, with L-shaped windowing at the distal end, for security adaption of the basic knot, size 5mm, length 36 cm :1</p> <p>1.3.8.21 Injection Needle, LUER-lock, diameter 1.2 mm, size 5 mm, length 36 cm.:1</p> <p>1.3.8.22 3 piece modular grasping forceps :2</p> <p>1.3.8.23 High Frequency Needle, for splitting and coagulation, insulated with connector pin for unipolar coagulation, size 5 mm, length 31 cm:1</p> <p>1.3.8.24 Uterine Cannula, with 1 large and 1 small cone, spring-loaded fixation for use with Uterine tenaculum forceps, with LUER-lock adaptor for cleaning:1</p> <p>1.3.8.25 Unipolar High Frequency Cord, with 5 mm plug for HF unit, length 300 cm:1</p> <p>1.3.8.26 Bipolar High Frequency Cord, length 300 cm:1</p> <p>1.3.8.27 3 piece modular Ovarian Grasping Forceps:1</p> <p>1.3.8.28 Uterine Manipulator, consisting of; Handle, with fixation screw, Manipulator Rod, Sealing Cylinder, Silicone Seal, package of 3 (3 sizes), Sheath, Working Insert, conical, with thread, medium, Working Insert, atraumatic, diameter 7 mm, length 50 mm, Working Insert, with connector for chromoperturbation, atraumatic, diameter 4 mm, length 40 mm, Anatomical Blade, short, diameter 36 mm, length 48 mm, Cleaning Adaptor:1</p> <p>1.3.8.29 Plastic Container for sterilization and storage. With separated rack for storage of up to 12 instruments with diameter 2,5 to 10mm and separated insert tray for up to 6 trocars. Perforated, with transparent lid. external dimensions (w x d x h): 532 x 254 x 165 mm:2</p> <p>1.3.8.30 30 degree 10mm telescope and 30degree 5mm telescope:2</p>
			<p>1.3.9 HYSTEROSCOPY SETS SCHEDULE ITEM DESCRIPTION & NO.</p> <p>1.3.9.1 2.9mm 30degree hysteroscope,5.5mm diagnostic/operative sheath with 5fr channel, 5fr hysteroscopy scissors(4), 5fr hysteroscopy forceps(4) must be compatible with sheath, light cable 3m:2</p> <p>1.3.9.2 Bipolar resectoscope for hysteroresection kit(1); Bipolar working element, outer sheath, Inner sheath to work with outer sheath, bipolar HF cable compatible with generator, bipolar cutting loops, bipolar roller ball and collins knife, 12 degree hysteroscope compatible with resectoscope:2</p> <p>1.3.9.3 5mm myoma spiral:1</p> <p>1.3.9.4 A brochure should be provided for technical evaluation</p>

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<p>1.3.10 Manuals</p> <p>1.3.10.1 User manuals (both hard copy and soft copy)</p> <p>1.3.10.2 Technical Manual (both hard copy and soft copy)</p> <p>1.3.11 Installation</p> <p>1.3.11.1 Supplier to Supply, install, test, commission and offer training for the equipment</p> <p>1.3.12 Warranty- at least 2-Years.</p> <p>After the warranty period is over, five years annual Comprehensive Maintenance Contract (CMC) will have to be entered into with the terms and conditions mentioned in the tender specification. The Bidder will prude the CMC cost that will be applicable after expiry of the warranty. The price will be for reference purposes but will not be part of the bid. The successful bidder has to ensure that all the required spares and services are available during the period of CMC and has to be guaranteed for at least 10 years after from the time of equipment installation.</p> <p>1.3.13 User training</p> <p>1.3.13.1 Supplier to train users on site</p> <p>1.3.13.2 Technical Training for at least two officers</p> <p>Supplier to train at least one(1) biomedical Engineer and one(1) nurse at the factory</p> <p>1.3.13.3 The supplier should provide references of previous Supplier of similar equipment in Kenya</p> <p>1.3.13.4 The supplier to provide evidence of local capacity to service equipment.</p> <p>1.3.13.5 The supplier must provide Manufacturers authorization</p>			
<p>1.3.14 GYNAECOLOGY TELESCOPES</p> <p>1.3.14.1 Laparoscopy Forward-Oblique Rod Lens Telescope 30°, enlarged view, diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission incorporated, color coded -(Quantity 1)</p> <p>1.3.14.2 Hysteroscopy Shaver Wide-Angle Rod lens Straight Forward Telescope 6°, with parallel eyepiece, length 20 cm, autoclavable, fiber optic light transmission incorporated with working channel, with LUER-Lock connection for inflow, color coded-(Quantity 1)</p> <p>1.3.14.3 Hysteroscopy Forward-Oblique Rod Lens Telescope 30°, ø 2.9 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated, color coded-(Quantity 1)</p> <p>1.3.14.4 Hysteroscopy Resection Forward-Oblique Rod lens Telescope 12°, enlarged view, diameter 4 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated, color coded. -(Quantity 1)</p>			
<p>1.4 LAPAROSCOPIC EQUIPMENT FOR UROLOGY</p> <p>1.4.1 General System</p> <p>1.4.1.1 The system must be a high definition universal endoscopy camera system capable of accepting a wide range of camera heads and video-scopes</p> <p>1.4.1.2 The system should display full HD images in both 1080/50P and 1080/50i formats to an LCD display to produce an HD image</p> <p>1.4.2 Camera Control Unit (Processor) and Camera Heads : Qty 1 Processor, 1</p>			

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<p>a. Camera Head</p> <ul style="list-style-type: none"> i. The camera system must be suitable for a wide range of endoscopic disciplines, and be capable of connecting to a range of high definition and standard definition surgical camera heads and video-laparoscopes ii. The camera Control Unit/ Processor must be capable of processing an advanced imaging system that applies optic digital methods to enhance endoscopic images and improves visualization of the mucosal surface architecture and microvascular pattern iii. A 3CCD HD Autoclavable camera head should be available iv. Control of the image capture and video recording devices must be possible from buttons on the camera head or videoscopes and these buttons must also be programmable to control other commonly required functions of the camera system, e.g. white balance. v. Camera head must have power focus buttons as well as power zoom buttons, independent of the 3 programmable buttons. vi. Camera head must be less than 400g by weight for ease of management. vii. Three-Chip FULL HD Camera Head, max. resolution 1920x 1080 pixels or better, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15 - 31 mm (2x), 2 freely programmable camera head buttons. viii. Camera control unit, for use with three chip Full HD Camera Heads, resolution 1920 x 1080 pixels or better. ix. Power supply 100 - 240 VAC, 50/60 Hz. <p>1.4.3 Light Source : Qty 1</p> <ul style="list-style-type: none"> 1.4.3.1 In order to allow the enhancement of tissue structures the light source must be capable of providing an optically filtered narrow- band light output as well as white light for routine diagnostic imaging. 1.4.3.2 The Light Source must be capable of processing an advanced imaging system that applies optic digital methods to enhance endoscopic images and improves visualization of the mucosal surface architecture and microvascular pattern 1.4.3.3 The light source and camera processor should be linked to enable the camera control unit to automatically control the output of the light source to achieve optimal light distribution. 1.4.3.4 The light source must operate on a LED technology source. 1.4.3.5 Cold Light Fountain Power Light source, high-performance, power supply 240 VAC, 50/60 Hz <p>1.4.4 Video Recording: Qty 1</p> <ul style="list-style-type: none"> 1.4.4.1 The system must come with a video recorder- either DVD or USB or both <p>1.4.5 Insufflator : Qty 1</p> <ul style="list-style-type: none"> 1.4.5.1 The laparoscopic insufflator should be high-flow (50 litres/minute), with adjustable automatic smoke/ mist evacuation that removes the smoke/mist whilst maintaining the pneumoperitoneum. 1.4.5.2 The insufflator should have a large digital display with a choice of display mode settings, which show the preset levels and actual readings of intra-abdominal 			

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<p>pressure and flow rates, and also displays the total gas volume delivered. It should have audible and visible alarms that differentiate between excessive pressure and tube obstruction and have two types of protection against gas embolism: automatic suction and automatic overpressure relief.</p> <p>1.4.5.3 The insufflator should have normal and small cavity modes to allow for the use in paediatrics.</p> <p>1.4.6 Monitor : Qty 2 – at least 26 Inch full HD LCD Monitor</p> <p>1.4.6.1 Aspect Ration 16:10</p> <p>1.4.6.2 Should have Advanced Image Multiple Enhancer for accurate image rendition</p> <p>1.4.6.3 Should have Various inputs and outputs, including 3G/HDMI/SD SDI, DVI, HD15 Y/C and VIDEO</p> <p>1.4.7 Workstation/ Trolley : Qty 2</p> <p>1.4.7.1 The workstation should be supplied with an isolation transformer which complies with BS-EN 60601-1 and have antistatic castors’</p> <p>1.4.7.2 The workstation should have an articulating arm with both horizontal and vertical movement to allow the monitor to be positioned at the optimal height and position.</p> <p>1.4.7.3 Should be complete with brackets for holding gas cylinders.</p> <p>1.4.8 Surgical Tissue Management System: Qty 1</p> <p>1.4.8.1 Must have a full range of bipolar and monopolar modes</p> <p>1.4.8.2 Must be able to perform Resection in saline</p> <p>1.4.8.3 Must have a tissue adaptive response, and apply optional required energy for fast effective precise cutting</p> <p>1.4.8.4 Power supply Voltage range should be 220- 240 V~ with a Frequency 50 / 60 Hz and maximum input power should be not less than 1500 VA</p> <p>1.4.8.5 High frequency functions include Monopolar / Bipolar functions</p> <p>1.4.8.6 High frequency should be 430 kHz \pm 20%</p> <p>1.4.8.7 Maximum high frequency power should not be greater than 320 W</p> <p>1.4.8.8 Protection class according to IEC60601-1CF, Class I</p> <p>1.4.8.9 Classification according to MDD93/42/EEC I Ib</p> <p>1.4.8.10 Sockets present should include</p> <ul style="list-style-type: none"> ● MONOPOLAR <ul style="list-style-type: none"> i. 2 x 3-pin (\varnothing 4 mm), International standard ii. 1 x 1-pin (\varnothing 8 mm) iii. 1 x coaxial (\varnothing inner 5 mm / \varnothing outer 9 mm) ● BIPOLAR <ul style="list-style-type: none"> i. 1 x 2-pin (\varnothing 4 mm, pin spacing 28.8 mm), International standard ii. 1 x coaxial (\varnothing inner 4 mm / \varnothing outer 8 mm) ● UNIVERSAL <ul style="list-style-type: none"> i. 1 x 7-pin ii. Neutral electrode 			

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<p>iii. 2-pin standard, single or split</p> <p>1.4.8.11 Unit must have communication capability with insufflator for automatic smoke evacuation</p> <p>1.4.8.12 Unit must be supplied with a footswitch.</p> <p>1.4.8.13 System should be supplied with compatible Ultrasonic Generator to perform single Bipolar/ Ultrasonic sealing and cutting functions with a single hand piece</p> <p>1.4.8.14 Ultrasonic generator unit must be compatible with diathermy unit and Insufflator for Automatic Smoke evacuation</p> <p>1.4.8.15 Generator must be able to deliver both ultrasonic and bipolar energy for reliable vessel sealing and fast tissue cutting from a single hand piece.</p> <p>1.4.8.16 Must have a graphical user interface, for ease of use</p> <p>1.4.8.17 Must recognize instruments automatically, and automatic application of default settings, on plug in of instrument</p> <p>1.4.8.18 Must come with a suitable trolley for mounting the system</p> <p>1.4.8.19 Must be complete with transducer</p> <p>1.4.9 Bipolar Resectoscope Set: Qty 1</p> <p>1.4.9.1 System must be Bipolar, with Plasma Vaporization functionality</p> <p>1.4.9.2 System should be continuous flow and rotatable</p> <p>1.4.9.3 Must be compatible to variety of loops including Bipolar 12 Deg Loops, Plasma Vaporization Button Electrodes, Bipolar Roller Balls etc.</p> <p>1.4.9.4 System should comprise of:</p> <ul style="list-style-type: none"> ● 1 X 12 Deg 4mm Telescope ● 1 X Light Guide Cable compatible with 4mm Telescope ● 1 X 26Fr Rotatable Outer Sheath with 2 stopcocks ● 1 X Inner Sheath for 26Fr Outer Sheath ● 1 X Active Working Element for Bipolar Resection ● 1 X Cable for Bipolar resection, compatible with Diathermy Machine above ● 1 X Ellik Evacuator with glass bulb, rubber bulb and adaptor ● X Visual Obturator <p>1.4.10 Backup Power UPS:</p> <p>1.4.10.1 Input -220-240V (ac) 50/60Hz</p> <p>1.4.10.2 Output- 220-240V (ac) 2500VA</p>			
<p>1.4.11 UROLOGY REQUIREMENT FOR LAPAROSCOPIC TOWERS</p> <p>1.4.11.1 Lower Tract Set</p> <p>a. Telescopes</p> <ol style="list-style-type: none"> i. Telescope 4mm 0 Degrees-1 ii. Telescope 4mm 12 Degrees-2 iii. Telescope 4mm 30 Degrees – 2 iv. Telescope 4mm 70 Degrees -1 v. Telescope 4mm 110 Degrees -1 <p>b. Cystoscopy Sheaths & Attachments</p> <ol style="list-style-type: none"> i. Cystoscopy Sheath 19.8Fr with Obturator - 1 ii. Optical Obturator for 19.8 Fr Cystoscopy Sheath iii. Cystoscopy Sheath 21Fr with Obturator 			

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<ul style="list-style-type: none"> iv. Optical Obturator for 21 Fr Cystoscope Sheath v. Cystoscopy Sheath 22Fr with Obturator vi. Optical Obturator for 22 Fr Cystoscope Sheath vii. Cystoscopy Bridge One way - 2 viii. Cystoscopy Bridge Two Way - 2 vi. Albaraan with Bridge c. Monopolar 26Fr Rotatable Continuous Flow System consisting of <ul style="list-style-type: none"> i. Active Monopolar Working Element- Qty 1 ii. Inner Sheath Qty-1 iii. Outer Sheath Qty-1 iv. Monopolar Cable- Qty - 2 v. Monopolar Loop Electrode – Qty - 12 vi. Monopolar Roller Ball- Qty - 12 vii. Ellik Evaluator Plastic - Qty - 1 d. TURIS Bipolar 26Fr Rotatable Continuous Flow System consisting of: <ul style="list-style-type: none"> i. Active Working Element- Qty 1 ii. Inner Sheath - Qty 1 iii. Outer Sheath - Qty 1 iv. Bipolar Cable - Qty 2 v. Bipolar Loop Electrodes- Qty 12 vi. Bipolar Vaporization Electrode (Mushroom) - Qty 12 vii. Bipolar Roller Ball - Qty 12 viii. Plastic Ellik Evacuator- Qty 1 e. DVU Kit Consisting of: <ul style="list-style-type: none"> i. 22Fr Sheath- Qty 1 ii. 26Fr Outer Sheath - Qty 1 iii. Insertion Sleeve For Balloon Catheter- Qty 1 iv. Working Element - Qty 1 v. Knife, Lancet Type, Straight- Qty 5 vi. Knife Serrated- Qty 5 vii. Knife Semi Circular- Qty 5 f. Bladder Stone crushing forceps Qty 1 			
1.4.12 Upper Tract Set			
<ul style="list-style-type: none"> i. Semi-rigid Ureteroscope QTY 2 <ul style="list-style-type: none"> ● Angled Ocular ● Single Channel, ● 7° Direction Of View, ● 6.4/7.8FRx430mm ● 4.2Fr Channel ii. Video Ureteroscope - QTY 1 <ul style="list-style-type: none"> ● 8.2Fr Slim Videoscope compatible with Video processor & Light 			

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<p style="text-align: center;">Source</p> <ul style="list-style-type: none"> ● Forward Viewing ● Working Length 670mm ● Channel 3.6FR ● Up Angulation 275° ● Down Angulation 275° ● Fibreoptic Flexible Ureteroscope <p>iii. Field of view 90°, QTY 1</p> <ul style="list-style-type: none"> ● Forward Viewing, ● Evolution Tip 4.5Fr, ● Working Length 670mm <p>iv. Nephroscope- Qty 1</p> <ul style="list-style-type: none"> ● 4mm 30Deg OP Nephrosocpe ● Outer Sheath 25Fr (Rotatable) Sheath ● Sheath Acc For Amplatz <p>v. Stopcock Rotatable - Qty 2</p> <ul style="list-style-type: none"> ● 11Fr 7Deg OP Nephroscope ● Outer Sheath Fixed, 15.9Fr ● Guiding Tube ● Guiding Tube for Second Guide wire <p>vi. Bougie Dilator Tubes 9-28Fr - Qty 5</p> <p>vii. Nephroscope Graspers-1</p> <ul style="list-style-type: none"> ● 1.Toothed Grasper 3.25x400mm ● 1Grasper With Lumen 3.25x400mm ● Fine Toothed Grasper 3.25x400mm ● Grasping Forceps 5Fr X 340mm <p>viii. Bugbee Electrode with Monopolar HF Cable - Qty – 2</p>			
<p>1.4.13 ANCILLARY EQUIPMENT</p> <p>a. Ultrasonic Lithotripsy QTY-1</p> <ul style="list-style-type: none"> ● Advanced Dual Action Lithotripsy ● Plug and Play ● Hand Activated ● Large Single Lumen Probes for Quick Drilling And Continuous Fragment Removal ● Complete with suitable probes for immediate use <p>b. 30 Watt Holmium Laser- 1 Quantity</p> <p>Descriptions:</p> <ol style="list-style-type: none"> i. A 30-watt holmium laser for lithotripsy on stones of all types and sizes with high energy per pulse of 5J and repetition rate of 25Hz. ii. The multipurpose, multi-specialty holmium wavelength ideal for fragmenting stones and for precision surgery, including the ablation and vaporization of soft tissue with minimal bleeding. 			

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<p>a. FEATURES:</p> <ol style="list-style-type: none"> i. High-resolution screen multi-touch interface screen. ii. Should be able to recognize fiber size. iii. Green aiming beam iv. Save the laser setting for at least last ten treatments used. v. Should be on castors/ on a trolley. <p>b. System Includes:</p> <ul style="list-style-type: none"> ● 1 Single Foot Pedal ● 1 20A Inlet 3 wire cable ● 1 UK Power cable, ● 1 Operator Manual CD ● 1 Debris Shields ● 1 English Laser Warning Sign <p>c. Accessories.</p> <ul style="list-style-type: none"> ● 200µm reusable laser fiber ● 365µm reusable laser fiber ● 550µm reusable laser fiber ● 2 Laser Safety Goggles ● 1 ceramic scissor ● 1 Fiber Inspection Scope ● 3 Steam Sterilization Tray <p>d. SYSTEM SPECIFICATIONS:</p> <ul style="list-style-type: none"> ● Average Power: 30 Watts ● Laser Source: Holmium: YAG ● Wavelengths: 2.1 µm <p>e. Energy per:</p> <ul style="list-style-type: none"> ● Pulse: 0.2-5 Joules ● Repetition Rate: 3-25 Hertz ● Pulse Duration: 650 µsec ± 20% (full width) ● Aiming Beam: Green, with 5 intensity settings ● Display: at least 7” Touch screen color display ● Delivery Systems: Compatible with reusable and disposable fibers. ● Cooling: Internal water-to-air heat exchanger ● Utilities: 50/60 Hz, 220-240 V <p>1.4.14 A brochure should be provided for reference</p> <p>1.4.15 Manuals</p> <ol style="list-style-type: none"> i. User manuals (both hard copy and soft copy) <p>1.4.16 Technical Manual (both hard copy and soft copy)</p> <p>1.4.17 Installation</p> <ol style="list-style-type: none"> 1.4.17.1 Supplier to Supply, install, test, commission and offer training for the equipment <p>1.4.18 Warranty-2-Years.</p> <ol style="list-style-type: none"> 1.4.18.1 After the warranty period is over, five years annual Comprehensive Maintenance Contract (CMC) will have to be entered into with the terms and 			

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LOT 9-2	Operation Theatre	General Surgery	Laparoscopic towers
<p>conditions mentioned in the tender specification. The Bidder will provide the CMC cost that will be applicable after expiry of the warranty. The price will be for reference purposes but will not be part of the bid. The successful bidder has to ensure that all the required spares and services are available during the period of CMC and has to be guaranteed for at least 10 years after from the time of equipment installation.</p> <p>1.4.19 User training</p> <p>1.4.19.1 Supplier to train users on site</p> <p>1.4.19.2 Technical Training</p> <p>1.4.19.3 Supplier to train at least one biomedical technician and one nurse at the onsite</p> <p>1.4.20 The supplier should provide references of previous Supplier of similar equipment in Kenya</p> <p>1.4.21 The supplier to provide evidence of local capacity to service equipment.</p> <p>1.4.22 The supplier must provide Manufacturers authorization</p>			

LOT 9-3 Brachytherapy after loader**LOT 5: 4 HIGH-DOSE-RATE (HDR) BRACHYTHERAPY SYSTEM**

Item Code No.	Department	Section	Item Description
LOT 9-3	Operation Theatre	General Surgery	HIGH-DOSE-RATE (HDR) BRACHYTHERAPY SYSTEM
10. General Description			
11. Composition			
a.	Main unit		
1. GENERAL INFORMATION			
Complete HDR brachytherapy system including after loader, TPS, applicators, QA tools, commissioning, training, maintenance			
Must use Iridium-192 (Ir-192) HDR radioactive source			
System must be new, not refurbished or reconditioned			
All equipment must be from a single OEM and/or OEM-approved ecosystem			
Must comply with IEC 60601, IEC 60825-1, ISO 13485, KNRA requirements			

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LOT 9-3	Operation Theatre	General Surgery	HIGH-DOSE-RATE (HDR) BRACHYTHERAPY SYSTEM

System must include full installation, commissioning, room layout, shielding, acceptance testing

1. HDR REMOTE AFTERLOADER

High-Dose-Rate (HDR) **remote after loader**, automated

Multichannel of Minimum **25 independent channels**

Source type: **Ir-192** miniature wire source or equivalent source which is approved by AERB and readily available

Source step accuracy: **±1.0 mm or better**

Programmable dwell step size: **1-10 mm**

Source maximum activity: **≥ 370 GBq (10 Ci)**

Automatic emergency **mechanical** source retraction

Full internal **tungsten shielding** ensuring radiation safety

Automatic verification of source position, cable drive, and dwell times

Push-button and software-controlled load/unload of source

Integrated catheter length check system

Real-time monitoring of source status and safety status

Interlocks for room door, applicator connection, and after loader drawer

2. TREATMENT PLANNING SYSTEM (TPS)

Full **3D HDR brachytherapy planning system**

Must support: **DICOM-CT, DICOM-MR**, and PET fusion

Must include **inverse planning algorithms (IPSA or equivalent)**

Manual dwell time & position editing

Automatic dwell time optimization

Full applicator library for: GYN (T&O, T&R), interstitial, prostate, breast

DVH capability for all structures

Complete set of isodose line visualizations

Exportable PDF planning report with: DVH curves, doses, isodoses, dwell positions

Automatic transfer of plan to after loader

Online plan revision & re-optimization

Supports applicator reconstruction: manual, semi-auto, and auto

Supports dose calculation protocol

3. APPLICATORS & ACCESSORIES (FULL GYN + INTERSTITIAL)

Item Code No.	Department	Section	Item Description
LOT 9-3	Operation Theatre	General Surgery	HIGH-DOSE-RATE (HDR) BRACHYTHERAPY SYSTEM
No.			
4.1	Full GYN applicator set: Tandem & Ovoid, Tandem & Ring		
4.2	Multi-channel vaginal cylinder set (multiple diameters)		
4.3	Interstitial template sets for: GYN, perineal, prostate		
4.4	Stainless steel or MR-compatible applicators		
4.5	Sterilizable, autoclavable components		
4.6	Full range of transfer tubes, connectors, and channel adapters		
4.7	Applicator library must match TPS library		
4. QUALITY ASSURANCE (QA) & COMMISSIONING			
Well-type ionization chamber for HDR Electrometer (calibrated)			
Daily source check device			
Independent dwell position			
verification tool			
Full c HDR commissioning phantom			
ommissioning test kit for: dosimetry, dwell accuracy, applicator validation Vendor must perform full commissioning with medical physicist			
5. INSTALLATION			
& INFRASTRUCTURE			
Vendor must supply full room layout & shielding calculations			
Vendor must design system per KNRA regulations UPS/back-up power mandatory with source-safe shutdown Operating environmental conditions per manufacturer Radiation safety signage and warning lights			
6. TRAINING & CAPACITY BUILDING			
Training for: medical physicists, oncologists, radiographers Training must include: TPS planning, after loader operation, QA Vendor must provide certified training materials			

Hands-on dry-run
sessions Supervised
initial clinical cases

Item Code No.	Department	Section	Item Description
LOT 9-3	Operation Theatre	General Surgery	HIGH-DOSE-RATE (HDR) BRACHYTHERAPY SYSTEM
7. REGULATORY & COMPLIANCE			
KNRA licensing support (equipment and operators' registration)			
CE certification for medical devices			
IEC compliance documents			
Safety manuals & emergency procedures			
8. WARRANTY & MAINTENANCE			
Minimum 2-Year warranty			
Comprehensive Maintenance Contract (CMC) proposal			
Spare parts availability ≥10 years			
Source replacement program with delivery lead time stated			
Local support response time ≤48 hours			
9. DELIVERY, TESTING & ACCEPTANCE			
Delivery to MoH-designated radiotherapy Centre			
Site Acceptance Testing (SAT)			
Commissioning acceptance report			
Final handover after medical physics certification			

LOT 9-5 4 K with 3D Endovision System Complete Visualization Tower(Endoscopic Tower)

Item Code No.	Department	Section	Item Description
LOT 9-4	Super specialties	Surgery	Endoscopic Tower
1. General Description			
S. No	Specifications		
1.1.	Processor		
1.1.1.	<p>1.1.2. Processor for following should be quoted:-</p> <p>a) 2- Dimensional endoscopic video camera in 4K resolution (3840*2160)</p> <p>b) 3-Dimensional endoscopic video camera in 4K resolution (3840 *2160)</p> <p>c) Slot for Video Scopes (Digital Scopes/Chip on tip) like Video URS, Choledochoscope and GI Scopes.</p> <p>1.1.3. System should have facility for Optical Contrast Differentiation System, and it Should have special filter for observation of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions.</p> <p>1.1.4. System Should be capable of Near Infrared fluorescence Imaging (ICG application) with below features</p> <p>a) Overlay:</p> <p>1.1.5. White light image with superimposed display of NIR/ICG fluorescence.</p> <p>1.1.6. Possible to select the preferred color for NIR/ICG imaging: Either blue or green.</p> <p>a) Monochromatic:</p> <p>1.1.7. NIR/ICG fluorescence signal in white. Background in black for maximum contrast.</p> <p>a) Intensity Map:</p> <p>1.1.8. White light image with superimposed display of NIR/ICG fluorescence. NIR/ICG signal display will appear in different colors depending on the strength of the detected NIR signal.</p> <p>1.1.9. Picture in Picture of visualization modes with Standard and Optical Contrast Differentiation.</p> <p>1.1.10. Automatic adjustment of light intensity of light source and controlled from Camera head.</p> <p>1.1.11. Outputs: All Compatible outputs should be there (12GSDI,D.P) for 4K resolution and DVI for HD resolution.</p>		
1.2.	32 and 55-Inch Monitor 1 each		
	<p>1.1.12. ALL in one Medical Grade Monitor capable of displaying:</p> <p>a) 3D in 4K resolution</p> <p>b) 2D in 4K resolution</p> <p>c) 2D in Full HD resolution</p> <p>d) 3D in Full HD resolution</p> <p>1.1.13. Should be supplied with 3D glasses – 10 Nos</p> <p>1.1.14. Certified to: ANSI/AAMI ES60601-1:2005, UL 60601-1, CAN/CSA C22.2</p>		

Item Code No.	Department	Section	Item Description
LOT 9-4	Super specialties	Surgery	Endoscopic Tower
	NO.60601-1:14 and EN 60601-1. 1.1.15. CE label according to MDD, class I.		
1.3.	LED Light source with Fiber optic cable		
	1.1.16. Should have Lumen >2000 1.1.17. Lamp life of approx. 30,000 hrs. and above 1.1.18. 4.8mm Fiber Optic Cable and 300cm Long 1.1.19. Should have touch display which provides an intuitive & user-friendly interface that directly displays relevant data 1.1.20. Lamp type: a) High-performance LEDs, white light LED and near infrared LED, which are active individually or simultaneously. 1.1.21. Certified To: - IEC 601-1 & UL 544 CE According to MDD, protection class 1/CF		
1.4.	IMAGE/VIDEO RECORDING, DATA ARCHIVING, SIGNAL MANAGEMENT & STREAMING		
	Recording: 1.1.22. Medical grade documentation unit with CE. 1.1.23. Controllable via Touch screen of size 10” or more. 1.1.24. Capture video & images in 4K, UHD, Full HD, 3D & audio files. 1.1.25. Internal storage of 2TB & more. 1.1.26. Should have minimum of 8 inputs and 8 outputs. 1.1.27. All inputs and outputs should be capable of routing 4K,3D and Full HD signals in native resolution. 1.1.28. USB support for storage on USB drives. 1.1.29. Supports network storage on file servers. 1.1.30. Offer two channel simultaneous recording for still images & videos. 1.1.31. Shall have HL7 connectivity. 1.1.32. Shall have DICOM connectivity. 1.1.33. WHO certified Patient Safety Checklist. Streaming: 1.1.34. Surgical video & image unicast streaming in Full High Definition (1920 X 10290) over local area network to multiple participants. 1.1.35. Offer Bi-directional video transmission & bi-directional audio transmission over LAN. 1.1.36. Streaming picture with telestration and controllable to all participants.		
1.5.	4K Camera Head		
	Technical Specifications: 1.1.37. Pixels: 3840 X 2160 Pixels 1.1.38. AGC: Microprocessor controlled 1.1.39. Lens: Integrated Zoom Lens f = 19 mm 1.1.40. Color Space: BT.2020 emulation 1.1.41. Control buttons: 3 (2 of them freely programmable).		

Item Code No.	Department	Section	Item Description
LOT 9-4	Super specialties	Surgery	Endoscopic Tower
	Camera Head Should be able to perform both White light and Near Infrared application.		
1.6.	TELESCOPES for 2D		
	<p>1.1.42. Telescopes with the 4K system should be provided with Dimensions as below for White light and Near Infrared application.</p> <p>a) 10mm 0 Degree and 30 Degree with 300cm or more working Length – Each 1 QTY.</p> <p>b) 5mm 0 Degree and 30 Degree with 290cm or more working Length – Each 1 QTY.</p>		
1.7.	Telescopes for 3D in 4K resolution with integrated camera head		
	<p>1.1.43. 3D imaging via two distal 4K sensors</p> <p>1.1.44. Camera and Telescopes should be one piece</p> <p>1.1.45. 10mm 0 degree and 30 degrees (1 each)</p> <p>1.1.46. Switching of 3D to 2D can be done</p> <p>1.1.47. Free from Focus and Depth of Field should be 30-200mm</p> <p>1.1.48. Should be autoclavable.</p> <p>1.1.49. Sterilization tray for the scope should be provided.</p> <p>3D Should be able to perform both White light and Near Infrared application.</p>		
1.8.	1.8.1. 50 Litre Insufflator with external heating element with 50 tubes		
1.9.	1.9.1. High Flow Trocar with HI cap connection to be used with 50 litre Insufflator.		
1.10.	1.10.1. 400 Watt Electro Surgical Unit with Smoke Evacuation system.		
1.11.	1.11.1. Equipment Cart from Same manufacturer Should be Quoted for all the above Items.		
	1.11.2. All Equipment's Should be Quoted from Same manufacturer.		
	Suction Irrigation unit Compact		
1.12.	<p>1.12.1. It shall be a combination of suction/irrigation pump for use in gynaecological, laparoscopic and Urology interventions. The adaptation to the correct mode of surgery intended should happen automatically and Manually when the correct type of tubing is used. The insertion of pressure lines into the unit should be simplified for ease of use. The unit should be equipped with electronic, safety circuits that cut the suction/irrigation operation if the unit departs consistently from the present values.</p> <p>The suction/irrigation unit should have the following features:</p> <p>1.12.2. Easy to user bundle controls for the control of all</p>		1 (one)

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LOT 9-4	Super specialties	Surgery	Endoscopic Tower
	<p>functionalities.</p> <p>1.12.3. Touch controls and digital displays ensure safe and precise adjustment of the set values.</p> <p>1.12.4. During power – up, all system go through and automatic self- test and are only released after a positive result</p> <p>1.12.5. Safety functions that control any departure from operator settings.</p> <p>1.12.6. Automatic recognition of type of procedure intended, when tubing is inserted.</p> <p>1.12.7. Audible alarms in case of malfunction.</p> <p>1.12.8. Suction rate preselect are saved in memory.</p> <p>1.12.9. Should have a suction mode that automatically maintains irrigation pressure and flow constant.</p>		
	<p>The suction/ Irrigation unit should have the following technical specifications:</p> <p>1.12.10. Power Supply voltage : 100-240 VAC</p> <p>1.12.11. Power frequency: 50-60 Hz</p> <p>1.12.12. Operating conditions: +10⁰c to +40⁰c</p> <p>Irrigation:</p> <p>1.12.13. Pressure:- Selectable Mode 0.200&0.400 mmHg</p> <p>1.12.14. Flow Rate:- Selectable Mode 0-500 &0-1000ml/min</p> <p>1.12.15. Pressure indicator:- Digital Display</p> <p>1.12.16. Flow indicator:- Digital Display</p> <p>1.12.17. Certified to IEC 60601.1, CAN/CSA 22.2 No. 601.1-M90:</p> <p>1.12.18. Type of protection against electrical shocks shocks: protection class1</p> <p>1.12.19. US FDA/ European CE (Issued by a notified body) approved Model should be offered.</p>		
2. LAPAROSCOPY HAND INSTRUEMNTS			
2.1.	<p>2.1.1. Veres needle 120mm including luer lock tube part</p> <p style="text-align: center;">OR</p> <p>2.1.2. Veres needle 150mm including luer lock tube part</p>		1 (one)
2.2.	<p>2.2.1. Trocar Cannula 10-11 mm diameter with thread and rotating insufflations should have multifunctional valve to prevent damage of sharp instruments and tip lens while passing through the cannula valve. It should have stopcock for C02 insufflation. The working length of the cannula should be 100mm</p>		1 (one)
	<p>2.2.2. Trocar Cannula 10- 11 mm diameter: should have multifunctional valve to prevent damage of sharp</p>		1 (one)

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LOT 9-4	Super specialties	Surgery	Endoscopic Tower
			instruments and tip lens while passing through the cannula valve. It should have stopcock for CO2 gas. The working length of the cannula should be 100mm
2.3.	<ul style="list-style-type: none"> Trocar Cannula 5-5.5 diameter with thread and rotating insufflations. Should have multifunctional valve to prevent damage of sharp instruments and tip lens while passing through the cannula valve. it should have stopcock for CO2 insufflation. The working length of the cannula should be 100mm 		1 (one))
2.4.	<ul style="list-style-type: none"> Trocar Cannula 5-5.5 mm diameter: should have multifunctional valve to prevent damage of sharp instruments and tip lens while passing through the cannula valve. It should have stopcock for CO2 insufflation. Trocar should have pyramidal tip with pin holes near the tip for safety outlet of CO2 gas. The working length of the cannula should be 100mm 		1 (one)
2.5.	<ul style="list-style-type: none"> Trocar, pyramidal tip, diam. 10 mm working length 100 mm compatible to cannula 		1 (one)
2.6.	<ul style="list-style-type: none"> Trocar with blunt tip, diam. 10 mm working length 100 mm compatible to cannula 		1 (one)
2.7.	<ul style="list-style-type: none"> Trocar, pyramidal tip tip5 mm, length 100 mm compatible to cannula 		1 (one)
2.8.	<ul style="list-style-type: none"> Trocar with blunt tip, diam. 5 mm working length 100 mm compatible to cannula 		1 (one)
2.9.	<ul style="list-style-type: none"> Reducer, diam.11mm to 5,5mm 		1 (one)
2.10.	<ul style="list-style-type: none"> Three piece laparoscopic autoclavable Maryland dissecting and Grasping Forceps. 360degree rotational sheath, with connector pin for unipolar coagulation size 5 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button. 		1 (one)
2.11.	<ul style="list-style-type: none"> Three piece laparoscopic atraumatic autoclavable double window curved Grasping forceps360 degree rotational sheath, size 5mm length 33-36cm. single action jaws ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores can be dismantled with the press of button. 		1 (one)
2.12.	<ul style="list-style-type: none"> Three piece laparoscopic atraumatic autoclavable Grasping forceps Debakey360 degree rotational sheath, size 5mm length 33-36cm. curved double action jaws ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores can be dismantled with the press of button. 		1 (one)
2.13.	<ul style="list-style-type: none"> Three piece laparoscopic autoclavable Bowel Gasping forceps double action jaws, fenestrated, 360degree rotational sheath, size 5mm length 33-3 6cm. double action jaws, ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button. 		1 (one)
2.14.	<ul style="list-style-type: none"> Three piece laparoscopic autoclavable Right angled Dissection 		1 (one)

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LOT 9-4	Super specialties	Surgery	Endoscopic Tower
			and Grasping Forceps, double action jaws fenestrated, 360degree rotational sheath, size 5 mm, length 33-36 cm long double action jaws. Ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.15.			• Three piece laparoscopic autoclavable Right angled Dissection and Grasping Forceps, double action jaws fenestrated, 360degree rotational sheath, size 10 mm, length 33-36 cm long double action jaws. Ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.16.			• Three piece laparoscopic autoclavable claw Grasping forceps with ratchet 2x3 teeth, 360degree rotational sheath size 10mm length 36 cm long single action jaws, with ergonomic plastic handle can be dismantled with the press of a button
2.17.			• Three piece automatic laparoscopic autoclavable Babcock Grasping forceps, double action jaws, fenestrated, 360degree rotational sheath, size 5 mm length 33-36 cm, long double action jaws, ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores can be dismantled with the press of a button.
2.18.			• Three piece automatic laparoscopic autoclavable fenestrated Grasping forceps, double action jaws, fenestrated, 360degree rotational sheath, size 5 mm length 33-36 cm, long double action jaws, ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores can be dismantled with the press of a button.
2.19.			• Three piece laparoscopic autoclavable Bowel Gasping forceps double action jaws, fenestrated, 360degree rotational sheath, size 5mm length 33-36cm double action jaws, ergonomic plastic handle with plastic finger rings with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button.
2.20.			• Three piece laparoscopic autoclavable curved METZENBAUM scissors, 360degree rotational sheath with connector pin for unipolar coagulation m size 5mm length 33-36cm long double action jaws with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores can be dismantled with the press of a button
2.21.			• Three piece laparoscopic autoclavable Hook scissors, 360degree rotational sheath, with connector pin for unipolar coagulation size 5mm length 33-36 cm long double action jaws with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.22.			• Three piece laparoscopic atraumatic autoclavable dissecting and Grasping forceps with dolphin nose 360degree rotational sheath

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			with connector pin for unipolar coagulation size 5 mm length 36 cm, double action jaws, ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores can be dismantled with the press of a button.
2.23.			• Three piece laparoscopic atraumatic grasping forceps jaw throat with wavy tooth edge 36degree rotational sheath, with connector pin for unipolar coagulation size 5 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.24.			• Three piece laparoscopic autoclavable Maryland bipolar dissecting and Grasping Forceps. 360degree rotational sheath, with connector pin for unipolar coagulation size 5 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.25.			• Three piece laparoscopic autoclavable Universal grasping forceps pyramid shaped and cross cutting toothing 360degree rotational sheath, with connector pin for unipolar coagulation size 5 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.26.			• Grasping forceps atraumatic clamp axial grooves with fine horizontal serrations, double jaw action, (without HF) diameter 5 mm, WL 31-33cm, springy branches, cpl. consisting of: Handle, sheath tube Insert
2.27.			• Three piece laparoscopic autoclavable mister grasping and dissection forceps, angled, fine pyramid shaped tooth, 360degree rotational sheath, with connector pin for unipolar coagulation size 5 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.28.			• Three piece laparoscopic autoclavable spoon forceps, 360degree rotational sheath, without connector pin for unipolar coagulation size 10 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.29.			• Three piece laparoscopic autoclavable grasping and preparation forceps fine horizontal serrations, fenestrated, 360degree rotational sheath, with connector pin for unipolar coagulation size 5 mm. length 33-36 cm double action jaws, with ergonomic plastic handle with larger contact area at the finger ring to avoid pressure sores, can be dismantled with the press of a button
2.30.			• High frequency monopolar cord
2.31.			• High frequency bipolar cord

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LOT 9-4	Super specialties	Surgery	Endoscopic Tower
2.32.	<ul style="list-style-type: none"> L-shaped hook electrode with unipolar HF connection 		1 (one)
2.33.	<ul style="list-style-type: none"> Spatula / Blunt dissector with unipolar HF connection 		1 (one)
2.34.	<ul style="list-style-type: none"> Needle electrode with unipolar HF connection 		1 (one)
2.35.	<ul style="list-style-type: none"> Grasping forceps spoon shaped 10 mm, WL 31-33cm 		1 (one)
2.36.	<ul style="list-style-type: none"> Three piece laparoscopic Bipolar coagulating Grasping Forceps, fenestrated type with overload tissue protection, , wide jaws with connector pin for bipolar coagulation 360degree rotational sheath size 5mm length 36cm long, single action jaws ergonomic plastic handle with larger contact area can be dismantled with the press of a button 		1 (one)
2.37.	<ul style="list-style-type: none"> Three piece laparoscopic Bipolar coagulating Grasping Forceps, dolphin nose with overload tissue protection, , wide jaws with connector pin for bipolar coagulation 360degree rotational sheath size 5mm length 36cm long, single action jaws ergonomic plastic handle with larger contact area can be dismantled with the press of a button 		1 (one)
2.38.	<p>Needle holder jaws straight dismantling in to three part namely outer tube handle and inserts,</p> <p>ergonomic pistol handle with disengage able ratchet jaw curved to left size 5mm length 33cm</p>		1 (one)
2.39.	<p>Needle holder with tungsten carbide insert jaws curved to right dismantling in to three part</p> <p>namely outer tube handle and inserts, ergonomic pistol handle with disengageable ratchet jaw curved to left size 5mm length 33cm</p>		1 (one)
2.40.	<p>Macro needle holder with tungsten carbide insert jaws curved to left dismantling in to three parts</p> <p>namely outer tube handle and inserts, ergonomic pistol handle with disengageable ratchet jaw curved to left size 5mm length 33cm</p>		1 (one)
2.41.	<p>Fascial Closure Instrument for subcutaneous ligature of trocar incisions, size 2.0 mm,</p>		1 (one)
2.42.	<p>Injection & puncture cannula 5 mm, WL 31-33cm length with luer lock</p>		1 (one)
2.43.	<p>Retrieval of foreign body/stones forceps, 10 mm without ratchet length 31-33cm, dismountable</p> <p>into handle, insert & outer tube</p>		1 (one)
2.44.	<p>Fan shaped retractor-Rotating, 5mm, WL 31-33cm, dismantling facility</p>		1 (one)

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2.45.	Suction-irrigation tube,5mm with maintenance-free two-way stopcock, thumb control for irrigation and suction w/ 27-29cm		1 (one)
2.46.	Combination suction and irrigation tube with stop valves,5mm mm 5 mm w/ 33 cm		1 (one)
2.47.	Medium Large clip applicator dismantlable rotating size 100mm, length 36cm, for Titanium clips with ratchet to lock the jaw holding the clip.		1 (one)
2.48.	Medium Large Hem-O-Lokclip applicator,		1 (one)
2.49.	Extra Large Hem-O-Lokclip applicator,		1 (one)
2.50.	All above items should be USFDA/European CE		
2.51.	trolley standard quality		1 (one)
2.52.	Cap Washers- for 5 & 10 mm each for cannula and reducers		50 nos
2.53.	Ring Washers- for 5 & 10 mm each for trocar cannula		50 nos
2.54.	Container System: Metal & Plastic- For Sterilization and storage of telescopes, hand instruments and other accessories, Different sizes, CE approved		2(two)
2.55.	Formalin Chamber size: 2” x” x” (L x B x H) with three trays, CE approved		2(two)
2.56.	Suitable autoclavable plastic tray double tray for sterilization, CE approved		2(two)
2.57.	UPS 10 KVA, with UK BS Fittings		1 (one)
2.58.	Cleaning Brush		10 nos
2.59.	Camera Cover		100 nos
2.60.	Silicon Spray		25 nos
2.61.	Co2 Cylinder 7-9 KG BOC		2(two)
2.62.	Clips (Hem-O-Lok)		2(Box)
2.63.	LT=300 Clips 300		10(Box)
2.64.	LT=300 Clips 400		5(Box)
2.65.	ITEM NO 50 TO 63 SHOULD BE UK BS & CE COMPATIBLE TO ALL ABOVE ITEMS		

LOT 9-5 Extracorporeal Shockwave Lithotripsy With Compatible C-Arm Specifications (Electro Hydraulic Technology)

Item Code No.	Department	Section	Item Description
LOT 9-5	Super specialties	Surgery	Extracorporeal Shockwave Lithotripsy with Compatible C-Arm Specifications (Electro Hydraulic Technology)
1. Description			
Lithotripsy Shocks:			
<p>Specification for Extracorporeal Shockwave Variable shocks (µm) 60/75/90.</p> <ul style="list-style-type: none"> Performed as on outpatient procedure. Non invasive <p>KV Range: 01 KV to 24 KV (effective from 14 KV to 24 KV) in 1 KV/step.</p> <p>Control Panel:</p> <p>A very compact, soft touch control panel having following function & indications required Machine On/Off (with key switch)</p> <ul style="list-style-type: none"> Digital display of KV and shocks KV increase and decrease switches. Shocks selection switch with indicators Shock display reset switch. Mode Selection (Normal and ECG) Shocks start stop switch. Motorized water filling, storage and drain switch. <p>Shock Wave Generator/Parameter:</p> <p>Principle of Operation: Electro-hydraulic technology/under water spark gap discharge.</p> <ul style="list-style-type: none"> Reflector Opening: 180 mm Spark Gaps: Long Life electrodes Water capacity: 8 litres Shock Wave coupling: Flexible latex membrane Pressure range at F2: 300 to 1200 bars Pre-determined Shocks: 100,500, 1000, 1500, 2000, 2500, 3000, 3500 Shocks/Pulses per minute: 60/75/90 pulses/minute <p>Selection</p> <ul style="list-style-type: none"> Focal Distance: 135 mm Focal Zone: Diameter 4 mm x 12 mm HV Tank: A very compact HV tank filled with high dielectric transformer oil Water storage: with pump. Water drain: with pump. Membrane Filling System: with pump. 			

Item Code No.	Department	Section	Item Description
LOT 9-5	Super specialties	Surgery	Extracorporeal Shockwave Lithotripsy with Compatible C-Arm Specifications (Electro Hydraulic Technology)
<ul style="list-style-type: none"> • Operating Temperature: 10° to 30° C <p>Treatment Table</p> <p>Remote controlled motorized three axis table with radiolucent table top having following movements.</p> <ul style="list-style-type: none"> • Up/Down Movement • Transverse movement • Longitudinal movement <p>Accessories</p> <ul style="list-style-type: none"> • Electrode:– 50 Nos. • Membrane:- 3 Nos. • Focusing & maintain tools:– 01 set. • Jelly:– 05 bottles (20 ml each) <p>Power Supply:</p> <ul style="list-style-type: none"> • Single Phase 230V AC $\pm 10\%$, 50 Hz with line resist less than 0.4 ohms. <p>Specification for High End C-Arm System</p> <ul style="list-style-type: none"> • C-Arm: High End C-arm with LCD panel & with 1Kx1K CCD or 1k x 1k CMOS Camera 9” Image Intensifier. • The unit should be based on digital technology for unparalleled reliability and ease of use. • The movements should be smooth having very simple positioning. <p>X-ray Generator</p> <ol style="list-style-type: none"> 1. High Frequency (40 KHz) X-ray generator with power output at least 5KW or more should be provided. 2. Following modes should be provided. <ul style="list-style-type: none"> • Radiography • Fluoroscopy 3. KV range (Rad./ Fluoro): 40 - 120 KV in 1KV/step. 4. Radiographic mA range: at least 100 mA. 5. Fluoroscopy mA output: Up to 3.5mA or more: Up to 15mA or more (High definition mode) 6. mAs output: 250mAs or more in steps. <p>X-ray Tube:</p> <ol style="list-style-type: none"> 1. Dual focus rotating/stationary anode x-ray tube should be provided with better focal spot at least 0.3 mm or less (small) and 0.6mm or less (Large) should be provided. 2. Iris collimator or equivalent collimator technology should be provided. <p>LCD Control Panel:</p>			

Item Code No.	Department	Section	Item Description
LOT 9-5	Super specialties	Surgery	Extracorporeal Shockwave Lithotripsy with Compatible C-Arm Specifications (Electro Hydraulic Technology)
<p>1. LCD Display for following parameters should be provided:</p> <ul style="list-style-type: none"> • Minimum 7” inch or more size large display with touch screen on which kV, radiography mAs, fluoro time, FmA II Zoom, error interlock display for KV, mA, thermal etc. are displayed. <p>2. Radiographic mode: Manual or APR mode or Auto mode.</p> <p>3. Timer (Fluoroscopic): Fluoroscopic cumulative timer.</p> <p>4. Sensor: X-ray tube head temperature sensor for thermal safely cut off.</p> <p>5. Switches: Mode selector switch.</p> <ul style="list-style-type: none"> • Collimator control switches. • 1.1 Zoom selection switches. • Exposure initiation switches for Fluoro/Radiography. <p>6. ABS Mode: Automatic Brightness system for fluoroscopy.</p> <p>7. Self-diagnostic: Various interlocks are displayed on Lock screen or various systems errors.</p> <p>Stand:</p> <ol style="list-style-type: none"> 1. Motorized Up/down movement: at least 400 mm or more. 2. Horizontal Movement: At least 200 mm. 3. Arc orbital: 90° +30° (120°) 4. Wig wag: ±12.5° (25°) 5. Rotation: ±180° or more. 6. Free space: 700 mm or more 7. Source to image distance: 940mm or more 8. Arc depth: 60 cm or more. 9. Locks: Locks for all the movements 10. Foot Lock: Control stand foot lock. 11. Steering wheel for easy steering & movement should be available. <p>Image Intensifier TV System:</p> <ol style="list-style-type: none"> 1. 9 inches, triple field image intensifier should be provided. 2. High resolution compact CCD camera or CMOS camera of 1K x 1K matrix. <p>Memory System</p> <p>PC based or embedded memory systems with more than 2000 images storages and the following features should be provided:</p> <ol style="list-style-type: none"> 1. Image processing software with real time image capturing, storage and display in 1K x 1K format in embedded system or PC based. 2. DICOM compatible 3.0 inbuilt with external/internal workstation. 3. Hard disk with storage facility 20000 images or more. 			

Item Code No.	Department	Section	Item Description
LOT 9-5	Super specialties	Surgery	Extracorporeal Shockwave Lithotripsy with Compatible C-Arm Specifications (Electro Hydraulic Technology)
<p>4. DICOM CD/DVD inbuilt or external.</p> <p>5. Zoom with pan</p> <p>6. Last image hold</p> <p>7. Image printing</p> <p>8. Flip</p> <p>9. Real time noise reduction recursive filter averaging up to 16 frames</p> <p>10. Connectivity with DICOM 3.0 PACS and HIS on internal or external workstation.</p> <p>11. Preprogramming for image setting for different operating modes.</p> <p>12. Image flipping, image rotation and reversal without radiation.</p> <p>13. WWW level adjustments</p> <p>14. Image inversion</p> <p>15. Patient directory</p> <p>16. Patient data entry</p> <p>Monitors</p> <p>1. 2 Nos. Medical display high brightness, high contrast, high resolution B/W at least 19” LCD monitors or 1 no. medical display high brightness, high contrast, high resolution colored 24” LCD monitors should be provided.</p> <p>2. High end monitor trolley with foldable arms for monitors and actuator driven height adjustment of monitors should be provided.</p> <p>Power supply requirements</p> <p>1. Single phase, 240 volts, AC, 15 amps, 50 Hz, ±10% regulation. Independent earthing required on the wall socket adjustment of monitors should be provided.</p> <p>Other requirements</p> <p>1. The company must be ISO certified.</p> <p>2. The unit should be approved by IAEA/KeNRA.</p> <p>Accessories</p> <p>1. Cassette Holder:- 1 no. should be provided</p> <p>2. Lead Aprons with all round protection:- 01</p> <p>3. Lead Aprons with front protection:- 01</p> <p>4. Thyroid shield:- 01.</p>			

LOT 9-6 Treadmill Stress Test Machine

Item Code No.	Department	Section	Item Description
LOT 9-6	Super specialties	Cardiology	Treadmill Stress Test Machine
1. General Specifications			
<ul style="list-style-type: none"> 1.1. System should be PC based 1.2. The system should be supplied with a compatible NIBP system 1.3. Should be capable of Integration with Gas Exchange equipment 1.4. Company should make spares available for the entire life of the system. 1.5. Quality certifications like ISO-9001:2008, ISO-13485:2012 or equivalent 1.6. Warranty for at least two(2) years and CMC for at least five(5) years post warranty. 			
<p>2. Specification for Acquisition / Stress Test Software</p> <ul style="list-style-type: none"> 2.1. Automatic Arrhythmia detection, print & capture : VBP and SVPB 2.2. Real time and retrospective J Point and isoelectric identification 2.3. User initiated and automatic capture of events 2.4. User defined Exercise Protocols 2.5. Real time Super imposition QRST Complex 2.6. Should acquire data from 12 Lead simultaneously 2.7. Should have notch filter around 50 Hz 2.8. Retrospective ECG & Arrhythmia analysis even during Test 2.9. Scroll back during the Test 2.10. Should be capable of displaying real-time or stored ECG tracings. 2.11. Should display and regularly update ECG 12 leads, 12 medians, 1 expanded median, HR, BP, METS, Stage time, test time, protocol name, stage name, speed and grade of treadmill. 2.12. Should have automatic stage print out facility at the end of each exercise 2.13. Should have capability to display real-time ST running trend. 2.14. Should have ability to display trend graph for HR, BP, ST level, ST slope and J amplitude 2.15. Should have automatic detection, display, storage and review of rhythm events 2.16. Should be able to display ECG in various formats like 3 Lead + 12 Median; 6 Lead + 12 Median; 12 Lead + 12 Median 2.17. Should have base line correction (BLC) for stable baseline during test 2.18. Should run various test protocols like Bruce, Modified Bruce, Balke, Ellested, Naughton and user defined protocols. 2.19. Acquisition and analysis softwares should be upgradable to latest version free of cost 2.20. Should have capability to import patient data from HIS and also manually edit/add data of patient 2.21. Raw data from software should be made available in standard formats for further analysis with softwares like MATLAB. 2.22. Should be able to print report in PDF format. 2.23. Should be able to print reports with standard Laser printers on A4 Plain sheets. 			
3. Specifications for treadmill			
<p>2. Treadmill should have:</p> <ul style="list-style-type: none"> a) Fully interfaced - controllable from software and Non interfaced – Independent mode with Programmable Controller b) Controllable speed of 0.1-20 Km/H c) Variable inclination (grade) from 0 – 25% 			

Item Code No.	Department	Section	Item Description
LOT 9-6	Super specialties	Cardiology	Treadmill Stress Test Machine
d) Adequate walking area ~ 1600 mm X 560 mm e) Controlled by optically isolated RS 232 or USB f) Heavy duty AC motor 4 HP (6 HP peak) drive g) Emergency stop feature h) Non -slip belt, minimum 50 cm width i) power requirement 240 V,50 Hz, 15 A			
4. Specification for computer System should be supplied with Trolley mounted branded all in one PC which should have: <ol style="list-style-type: none"> At least core i7 processor, 16GB RAM, 1TB Hard Disk, DVD Drive, ~19” LED display or higher configuration. Windows 8/10 (64 bit) Operating System. Color Laser Printer for printing on A4 Sheets. 1 KVA UPS for Computer. Should be supplied with required standard accessories including 500 piece of disposable ECG Electrodes. 			

LOT 9-8 Urodynamics

Item Code No.	Department	Section	Item Description
LOT 9-7	Super specialties	Urology	Urodynamics
1. General Specifications Advance Urodynamic Equipment with following specifications:			
Advance Integrated Video Urodynamic System <ol style="list-style-type: none"> 1.1. The system should have the facility to perform Uroflowmetry, Cytometer, Pressure Flow Studies, EMG Studies, EMG Biofeedback & Video Urodynamic studies 1.2. System should be fully upgradable with Technical advances in future 1.3. Should have minimum 5-8 Configurable channels and should be able to display up to at least 10 channels. Should have 3 regular channel & two spare channels for profile applications like UPP & Anorectal manometry. 1.4. Should be able to attach 3 Pressure Transducers, Radio frequency/ Bluetooth based weight flow channel. Colour coded labels and cable (Vesicle, Abdominal and Urethral channels). 1.5. Should have auto 80 -100 mmHg test/calibration button for checking the transducers. Fitted to bracket/clamp. Transducer should be reusable having pressure range (-50 to 25 cm H₂O) 1.6. Should have Automatic Air Pump for profile applications like UPP & ARM. Should have integrated infusion Sensor / Infusion transducer to check correct infused volume. 1.7. Should have infusion volume up to 1000ml and software-based calibration control. And should measure infusion volume through infusion Sensor / Infusion transducer and not through 			

Item Code No.	Department	Section	Item Description
LOT 9-7	Super specialties	Urology	Urodynamics
<p>rotation of pump.</p> <p>1.8. Should have infusion pump 4 roller or more, software control (start/stop & speed selection) Cystometry: Filling and Voiding</p> <ul style="list-style-type: none"> • Integrated filling pump and volume sensor • Infusion pump speed: flow speed 1ml/ minute -100 ml/minute or more • Compliance and pressure volume plot • ICS, Schaffer and Abrams-Griffith's pressure flow Nomo grams <p>1.9. Should have facility to attach 2 Uroflow transducers.</p> <p>1.10. Should be supplies with one wired and wireless RF/Bluetooth/JIGBEE/XBEE Based Weight uroflow transducer with flow range of 0 -50ml/sec, volume range up to 1000ml.</p> <p>1.11. Must have auto record and zero facility for uroflowmetry. Should have auto artifact detection. It should be supplied with height adjustable commode chair one and height adjustable uroflow stand one.</p> <p>1.12. Should be supplied with security cover for Flow transducers to protect from water spillage.</p> <p>1.13. Should be supplied with 1 channel wireless EMG, should be compatible with surface electrodes, needle electrodes.</p> <p>1.14. Should have Raw & Average EMG with sound. Should have facility to adjust sound, gain & Threshold.</p> <p>1.15. The system should be supplied with trolley to fit the complete UDS along with PC having waterproof keyboard & touch pad.</p> <p>1.16. Should be supplied with at least 22" -2 LED colour flat monitor for display mounted on a trolley.</p> <p>1.17. Should be adjustable in height and angle. Console should be completely inside the trolley to protect from water spillage.</p> <p>1.18. Should have all in one PC with optical mouse, microphone & Speaker for EMG. Should be supplied with UPS of suitable rating for minimum 15 Minute back up.</p> <p>1.19. Computer should run on Windows 10 or latest having at least 16GM RAM and 1TB GB SSD / HDD and 1 TB External HDD & 4GB Graphic Card. Should be supplied with Color Laser Printer & UPS of suitable ratings with Minimum 30 Min back up.</p> <p>1.20. Should be supplied with height adjustable micturition chair with folding arm rest for Urodynamic Studies.</p> <p>1.21. Should be supplied with Micturition stand-voiding studies, height adjustable, removable funnel</p> <p>1.22. Should be supplied with EMG biofeedback software with Wireless EMG module for pelvic floor training. Should have ICS standard games,</p> <p>1.23. Should be supplied with 3D bladder scanner for calculation of post void residual.</p> <p>1.24. Should be US FDA or European CE approved with 4-digit Certified body</p> <ul style="list-style-type: none"> • Should be supplied with Digital Videourodynamic software for doing Video Urodynamic studies. Should be able to capture images & make small videos & can be synchronized with Urodynamic traces • System should be supplied with Three motors carbon fiber top C-ARM compatible Chair for Top to Toe imaging. • Versatile eight positioning, controlled with remote to do Video Urodynamic studies in Sitting, Supine & Standing position. • Should allow patient to remain in one place for preparation, filling and voiding phase. • Avoid risk of catheters falling out or getting misplaced during transfer or ambulation. 			

Item Code No.	Department	Section	Item Description
LOT 9-7	Super specialties	Urology	Urodynamics
<ul style="list-style-type: none"> • Should have attachments for Uroflow & funnel. • Should have Arm rest, footrest, Leg rest & Cushion. • Should have four double wheel rolling caster to offer unencumbered manoeuvrability. • Weight capacity up to 250 Kg in standing position. Should be IPX6 rated for ‘Protection against water incursion’. • Should be European CE/EC with digit or US FDA approval. <p>1.25. Optional items - Prices to be quoted separately for following & will be freezed for 5 years.</p> <ol style="list-style-type: none"> i) 4 Channel Anorectal Manometry ii) Ambulatory Urodynamics with reusable catheter having Live streaming facility and Leak Point detection iii) Near Infrared spectroscopy (NIRS) to establish co-relation with Uds Findings during foinding Cystometry iv) Channel Oesophageal Manometry. Should be supplied with Urodynamic software with following facility v) UPP Puller with stand & software for doing Urethra pressure profilometry <ul style="list-style-type: none"> • Windows platform, unlimited number of templates • Standards and terminology as according to the ICS (International Continence society) monograms, PURR, Paediatric, Siroky, Abrams-Griffiths • Connectivity to Hospital information system and DICOM worklist & DICOM storage • Event markers-user Colorable toolbars, and event markers (icons and/or text) • Technology for Data recovery even when studies have not been saved. • Real time data processing and on-line storage • Back up manually or automatically to any location • Intelligent patient search • System should be operational on windows 10 or Latest • Should have 8GB RAM & 512GB SSD or 1TB HDD. • Waterproof Key board with optical mouse and DVD/CD re-writable drive. • 1-18 Points for test setting as per customer choice • Report in MS Word or in PDF Format • Post procedure editing in Word format of report • Playback facility of test after the procedure <p>1.26. Should be supplied with following:</p> <ul style="list-style-type: none"> • Dual Lumen Catheter for Cytometer 7/ 8 Fr. – 30 No • Dual Lumen Catheter for Cystometry 5/6 Fr. – 10 Nos • Pigtail Catheter, PVC, 5/6Fr and bladder filling – 10 Nos • Dual Lumen Abdominal Rectal Balloon catheter for Cystometry – 50 Nos • Pump Tubing – 50 Nos • Collection Beaker – 10 Nos • Reusable pressure Transducer – 5 Nos • EMG patch Electrodes – 200 Pcs • Connection/ Measurement Tubings – 50Nos • Domes for reusable pressure transducers – 25Nos <p>1.27. The Urodynamic System should have US FDA / European CE with digit certified body approval.</p> <p>1.28. Bidder should have experience of Establishing Video Urodynamic Lab at least at two premier institutions in the country and/or the region in the last three Years & supply order copy with</p>			

Item Code No.	Department	Section	Item Description
LOT 9-7	Super specialties	Urology	Urodynamics
<p>performance to be attached.</p> <p>1.29. System Should be supplied with at least two (2) years warranty.</p> <p>1.30. Firm should quote rates for CMC for 5 years after warranty period.</p> <p>1.31. Firm should quote rates of all consumables/spares/accessories & will be frozen for at least 5 years.</p>			

LOT 10: CRITICAL CARE UNIT

1.	Patient monitor	5	Pcs
2.	Ventilators	5	Pcs
3.	Neonatal Ventilators	2	Pcs
4.	Stethoscope	2	Pcs
5.	Autoclavable laryngoscopes	3	Pcs
6.	Bair Hugger	2	Pcs
7.	Blood Sugar Machines	2	Pcs
8.	Pace makers	1	Pcs
9.	Drug Fridges	1	Pcs
10.	Endoscopic laryngoscope	1	Pcs
11.	Plasma Sterilizer	1	Pcs
12.	Diagnostic set	2	Pcs
13.	Pneumatic Pumps	2	Pcs
14.	Defibrillator	1	Pcs
15.	Transport monitors	1	Pcs
16.	Transport ventilators	1	Pcs
17.	Syringe pumps	5	Pcs
18.	Infusion pumps	5	Pcs
19.	Feeding pumps	5	Pcs
20.	12 lead ECG machine	1	Pcs
21.	Mobile X-ray	1	Pcs
22.	Portable suction units	2	Pcs

23.	Central monitoring system (Set based on the total number of beds to be installed)	1	Pcs
24.	Emergency Trolley	1	Pcs
25.	Blood Gas Analyzer	1	Pcs

LOT 10-1 Patient monitor

Item Code No.	Department	Section	Item Description
LOT 10-1	Intensive Care Unit	Critical Care	Patient Monitor
1. General Description			
<p>Portable Bedside monitor suitable for use in ICU. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric.</p> <ul style="list-style-type: none"> • SpO₂ • Temperature • Blood pressure • ECG • Respiration • CO₂ • Pulse Rate 			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
Portable Bed side monitors			
Type	Roll stand Mounted type, complete with internal rechargeable battery		
Application	Can be used as a both bedside monitor and a transport monitor		
Parameter & waveforms	SpO ₂ , Pulse rate, ECG, NIBP, IBP, Respiration, CO ₂ and temperature		
SpO ₂ with reusable sensor	0 - 100% ± 3%		
Pulse Rate	30-300 bpm ± 1%		
Temperature	0-50°C ± 0.1%		
NIBP	Mean 10- 300mmHg ± 5 mmHg		

Item Code No.	Department	Section	Item Description
LOT 10-1	Intensive Care Unit	Critical Care	Patient Monitor
IBP X2		Mean 00 – 300mm Hg \pm 1 mmHg	
ECG		5 lead, standard configuration	
CO ₂		0 to 99 mmHg \pm 4 mmHg	
Display		Minimum 12.0 inches color touch screen/scroll type	
		6 to 8 waveforms with large font	
Networking		Wireless and wired connection to the central work station	
Storage		Capable of storing patient data and transferring to the central workstation for viewing or printing.	
Audio and visual alarm Printer		For all parameter. Inbuilt Thermal Printer	
Alarm setting limits		Adjustable by user	
Low battery indicator		Audio and visual alarm	
Power Requirement		Rechargeable internal battery, that can last at least 3 hours when fully charged	
Wireless networking		Latest technology.	
4.	Accessories	The following accessories will be provided as startup kits.	
4.1.	ECG connection lead and reusable electrodes	2 Set	
4.2.	SpO ₂ connection cable and sensor (finger probe), reusable	2 Sets	
4.3.	Adult cuff	3 Sets	
4.4.	Peadiatric cuff	2 Sets	
	Temperature connection cable and probe (reusable)	2 Sets	
4.5.	Recording paper	20 Boxes	
5.	Quality standards		
5.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
5.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA marked	
6.	Local back up service		
6.1.	Available	Should be available locally	

Item Code No.	Department	Section	Item Description
LOT 10-1	Intensive Care Unit	Critical Care	Patient Monitor
6.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, consumables and qualified and skilled technical staff	
7.	Delivery point		
7.1.	See Schedule	For inspection and testing	
7.2.	Nil		
8.	Pre installation requirements		
	Nil		
9.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
10.	Training		
10.1.	User Training	On site user training on operation and daily up keep	
10.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
11.	Technical documentations		
11.1.	User manuals	2 Sets	
11.2.	Service Manual	1 Set	
11.3.	Drawings	Nil	
12.	Commissioning		
12.1.	Testing and commissioning of the machine to the satisfaction of the user.		
13.	Warranty		
13.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
13.2.	Equipment System	Nil	

LOT 10-2 Ventilators

Item Code No.	Department	Section	Item Description
LOT 10-2	Intensive Care Unit	Critical Care Unit	Ventilators
1. General Description			
Advanced microprocessor-based ventilator for ICU, mobile on trolley, proof of model on current			

Item Code No.	Department	Section	Item Description
LOT 10-2	Intensive Care Unit	Critical Care Unit	Ventilators
production, for use in adult, paediatric, and neonates			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Ventilation mode	CMV, PEEP, CPAP, PSV, SIMV and NIV	
3.1.2.		Supports, invasive and non-invasive ventilation, Nasal CPAP, ASV	
3.1.3.	Ventilation rate CMV	up to 100 bpm	
3.1.4.	Inspiratory flow	5-80 lpm	
3.1.5.	Tidal Volume	5-2000 ml	
3.1.6.	I/E ratio	5:1- 1:5	
3.1.7.	Inspiration time	0.3-5.0 sec	
3.1.8.	Trigger sensitivity	Flow/pressure	
3.1.9.	PEEP/CPAP	1 to 40 cmH ₂ O	
3.1.10.	Oxygen Concentrations	21-100%	
3.1.11.	Alarms	Upper and lower airway pressure, Gas supply pressure, system error, (audio and visible)	
3.1.12.	Nebulizer	In CMV, SIMV mode	
3.1.13.	Display	LCD colour screen, Display respiratory parameters	
3.1.14.	Connectivity	Serial port RS 232, Ethernet, Wi-Fi, etc.	
3.1.15.	Batter back up	Provided, rechargeable	
3.1.16.	Back up time	4 hrs. approximately	
3.2.	Components		
3.2.1.	Trolley	Mobile on castors with brakes	
3.2.2.	Tubing support arm	1 pc	
3.2.3.	Breathing circuit set (reusable)	1 pc	
3.2.4.	Bacteria filter	2 sets	
3.2.5.	O ₂ pressure hose	1pc	
3.2.6.	Air pressure hose	1 pc	

Item Code No.	Department	Section	Item Description
LOT 10-2	Intensive Care Unit	Critical Care Unit	Ventilators
3.2.7.	Cylinder support	1 pc	
3.2.8.	Test bag	1 pc	
3.2.9.	Laryngeal mask	1 pc	
3.2.10.	Air way, 3 type	1 Set	
3.3.	Humidifier	Heated humidifier 1 pc	
3.4.	Trends	At least 24 hrs.	
3.5.	Medical air supply	Should have a Gas delivery system by soundless inbuilt compressor /external integrated compressor with the unit	
4.	Physical characteristics		
4.1.	Main unit	Mounted on mobile cart	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6.	Accessories		
6.1.	Automatic Voltage Regulator (AVR)		
6.1.1.	Capacity	Over VA of the main Unit	
6.1.2.	Input	Ac 240V, 50Hz, Single phase ± 15%	
6.1.3.	Output	Ac 240V, 50Hz, Single Phase ± 2.5 %	
7.	Consumables/Reagents		
7.1.	Nil		
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 9001 and ISO 13485	
8.2.	Conformity to standards	CE and FDA marked	
9.	Local back up service		
9.1.	Available	Should be available locally	
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
10.	Delivery point		
10.1.	See Schedule	For inspection, testing and installation	

Item Code No.	Department	Section	Item Description
LOT 10-2	Intensive Care Unit	Critical Care Unit	Ventilators
11.	Pre installation requirements		
	Nil		
12.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
13.	Training		
13.1.	User Training	On site user training on operation and daily upkeep	
13.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
14.	Technical documentations		
14.1.	User manuals	2 Sets	
14.2.	Service Manual	1 Set	
14.3.	Drawings	Nil	
15.	Commissioning		
15.1.	Testing and commissioning of the machine to the satisfaction of the user.		
16.	Warranty		
16.1.	Equipment	Minimum of two years after commissioning on all parts.	
16.2.	Equipment System	Nil	

LOT 10-3 Neonatal Ventilators

Item Code No.	Department	Section	Item Description
LOT 10-3	Intensive Care Unit	Critical Care Unit	Neonatal Ventilator
1. General Description			
Neonatal ventilator for neonate, mobile on trolley, model on current production			
2. Composition			
2.1.	Main unit UPS		
3. Performance Specifications			
3.1.	Main Unit	3.1.1. Advanced microprocessor based continuous flow – pressure limited time cycled ventilator for very low body weight infants (premature, newborn) up to maximum 15 kg.	

Item Code No.	Department	Section	Item Description
LOT 10-3	Intensive Care Unit	Critical Care Unit	Neonatal Ventilator
			<p>3.1.2. The neonatal ventilator should have the following ventilation modes: IMV, Assist Control, SIMV, CPAP, and PSV. Volume Guarantee should be possible in Assist Control and SIMV.</p> <p>3.1.3. Monitor with LCD/TFT (12" or higher size) graphical display for real time simultaneous display of two waveforms. Should display minimum 3 graphs and 2 loops and may not simultaneously.</p> <p>3.1.4. Should have settings for</p> <ol style="list-style-type: none"> Peak Inspiratory Pressure : 0 – 50 cmH₂O PEEP : 0 – 20 cmH₂O Fraction of inspired oxygen : 21 – 100% Inspiratory Time : 0.1 – 3 sec Expiratory Time : 0.2 – 25 sec Inspiratory flow : 1 – 30Lpm Base flow : 1 – 20 lpm Volume guarantee : 2 - 100ml Respiratory Rate : 0 - 100 bpm Tidal volume range : 2 - 100 ml <p>3.1.5. Should have real time monitoring for:</p> <ol style="list-style-type: none"> Pressure – Peak, Plateau, Mean, PEEP Expired Tidal Volume (Monitored), Expired Minute Volume, leakage in %. Frequency/Rate – Set (Inspiratory), Spontaneous MV in %, total, I:E ratio FiO₂, Pressure and Flow wave forms and loops <p>3.1.6. Should have an internal battery (maintenance free) with minimum one hour operating time for ventilator.</p> <p>3.1.7. Should have automatic compliance and leak compensation for circuits and ET tubes.</p> <p>3.1.8. Should have expiratory valve for easy sterilization.</p> <p>3.1.9. Should have automatic alarm settings.</p> <p>3.1.10. It should have trending of measured parameters – 12Hrs</p> <p>3.1.11. MV alarm can be manually adjusted along with audio and visual alarms for:</p> <ol style="list-style-type: none"> High/low pressure High/low Minute Volume/Tidal Volume Apnea alarm Compressor failure Failure of Sensor's Tube obstruction Power failure Ventilator failure <p>3.1.12. Standard accessories (for each equipment)</p> <ol style="list-style-type: none"> Modular corrosion free Original Trolley Silicon patient circuit with Y piece sensor for neonates – 2 Set start Servo controlled humidifier with heated wire type and reusable chamber.

Item Code No.	Department	Section	Item Description
LOT 10-3	Intensive Care Unit	Critical Care Unit	Neonatal Ventilator
			<p>d. Temperature probe & adaptor - 2 no's start</p> <p>e. Flow sensor - 10 no's start</p> <p>f. Inbuilt Nebulizer</p> <p>g. Original Hinged arm for rail (support for patient circuit)</p> <p>h. Test lung for each patient circuit. - 1 no</p> <p>i. Servo heated Humidifier with Temp Display - 1no</p> <p>j. Hose for O2 connection - 5 mts</p> <p>k. Hose for compressed air - 5 mts</p> <p>l. Hose plug for O2 and air - 2 on each</p> <p>m. Oxygen conversion kit with 5m Hose - 1no</p> <p>n. Nasal mask and prongs(three different size) -3 each</p> <p>o. Expiratory Valve per ventilator - 2 Nos. start</p> <p>3.1.13. Should have a Gas delivery system by soundless inbuilt compressor /external integrated compressor with the unit. In case of compressor failure it should also be operable with compressed air/oxygen supply of 45 to 60 psi.</p> <p>3.1.14. Replacement guarantee should be provided for flow sensors and oxygen sensor for the entire 3 years warranty period and also the rate offered for CMC should include the replacement guarantee for flow sensors and oxygen sensor.</p> <p>3.1.15. Trolley/ Cart mounting for easy transport.</p> <p>3.1.16. Should work with input 240Vac 50 Hz supply.</p> <p>3.1.17. Equipment should have inbuilt battery backup for at least 30 minutes backup.</p> <p>3.1.18. Should have safety certificate from a competent authority CE / FDA (US) Copy of the certificate / test report shall be produced along with the technical bid.</p> <p>Documentation</p> <p>3.1.19. Certificate of Calibration and inspection from the factory</p> <p>3.1.20. List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.</p> <p>3.1.21. List of important spare parts and accessories with their part number and costing</p> <p>3.1.22. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out</p> <p>3.1.23. Service manual in English</p> <p>3.1.24. User manual in English</p>

LOT 10-4 Stethoscope

Item Code No.	Department	Section	Item Description
LOT 10-4	Intensive Care Unit	Critical Care Unit	Cardiac stethoscope, adult
1. General Description			
Dual Stethoscope (Adult) : <ul style="list-style-type: none"> - Dual sided chest-piece. - Diaphragm for best auscultation. - Provided with Non-Chill retaining ring and bell ring. - Chrome plated internal spring binaural. It Should be CE marked.			

LOT 10-5 Autoclavable laryngoscopes

Item Code No.	Department	Section	Item Description
LOT 10-5	Intensive Care Unit	Critical Care Unit	Laryngoscope with blade, adult & Paediatric
1. General Description			
Laryngoscope with blade for adult & Paeds			
2. Composition			
2.1.	Main unit Handle with battery Blades Casing		
3. Performance Specifications			
3.1. Main Unit			
3.1.1. Should supply 4 different size standard blades and one handle for adult and paediatric separately and one short stubby handle			
3.1.2. Should be stainless Steel matt finished.			
3.1.3. Should provide curved blades for both adult and paediatric.			
3.1.4. An extra-large blade should be supplied along with each scope.			
3.1.5. Should be provided with battery			
3.1.6. Should provide spare bulb – 6 no's as part of start-up kit			
3.1.7. Should provide casing			
4.	Quality standards		
4.1.	Manufacturing standards	ISO 9001 , ISO 13485	
4.2.	Conformity to standards	CE and FDA marked	
5.	Delivery point		
5.1.	See Schedule	For inspection and testing	
5.2.	Nil		

6.	Warranty			
6.1.	Equipment	Minimum of two (2) years after commissioning on all parts.		
6.2.	Equipment System	Nil		

LOT 10-6 Bair Hugger

Item Code No.	Department	Section	Item Description															
LOT 10-6	Intensive Care Unit	Critical Care Unit	Bair Hugger															
1. General Description																		
2. Composition																		
3.	Main unit																	
<p>3.1. Should have the facility for Forced Air warming.</p> <p>3.2. Should have Two Air flow setting for the air flow 48cfm / 32cfm for adult and infant patient in same machine.</p> <p>3.3. Should have single Hose for all type/Size of Blankets.</p> <p>3.4. Should have at-least 3 temperature control sensor</p> <p>3.5. Should have over temperature sensor at the end of the Hose.</p> <p>3.6. Should have Digital Hour Meter</p> <p>3.7. Should have microprocessor control system to allow a multi-staged Heater.</p> <p>3.8. Three heater elements to eliminate flicker of OR lighting.</p> <p>3.9. Should have Temp. Range – Ambient to 43°C + 1.5°C Max.</p> <p>3.10. Should have High Efficiency Air Filter of 0.2 Micro size.</p> <p>3.11. The weight of Equipment should be less than 8.0 kg.</p> <p>3.12. Should distribute even temperature across the blankets and patient.</p> <p>3.13. Blanket should not be more than 160 gm. weight.</p> <p>3.14. Should have safe warming to void tissue damaging.</p> <p>3.15. Should have Facility to use Blood / Fluid and Patient warmer at the same time.</p> <p>3.16. Should ensure even temperature from head to toe.</p> <p>3.17. The equipment should have easy attachment to IV pole, Bedrail or Freestanding.</p> <p>3.18. Should have service facility locally.</p> <p>3.19. Meet Regulatory standard for leakage current.</p> <p>3.20. The products should be (F.D.A.) and/or CE approved.</p> <p>Blankets:</p> <table> <tr> <td>I.</td> <td>Adult Full Body Blankets:</td> <td>25</td> </tr> <tr> <td>II.</td> <td>Paediatric Full Body Blankets</td> <td>25</td> </tr> <tr> <td>III.</td> <td>Adult Under-Body Blanket</td> <td>25</td> </tr> <tr> <td>IV.</td> <td>Paediatric Under-Body Blankets</td> <td>25</td> </tr> <tr> <td>V.</td> <td>Large Paediatric Under-Body Blankets</td> <td>25</td> </tr> </table>				I.	Adult Full Body Blankets:	25	II.	Paediatric Full Body Blankets	25	III.	Adult Under-Body Blanket	25	IV.	Paediatric Under-Body Blankets	25	V.	Large Paediatric Under-Body Blankets	25
I.	Adult Full Body Blankets:	25																
II.	Paediatric Full Body Blankets	25																
III.	Adult Under-Body Blanket	25																
IV.	Paediatric Under-Body Blankets	25																
V.	Large Paediatric Under-Body Blankets	25																

LOT 10-7 Blood Sugar Machines

Item Code No.	Department	Section	Item Description
LOT 10-7	Intensive Care Unit	Critical Care Unit	Blood Sugar Machines
1. General Description			
2. Composition			
2.1.	Main unit		
<p>GLUCOMETER WITH</p> <p>STRIPS Product Eligibility Criteria:</p> <ul style="list-style-type: none"> • Product should be CE as per IVD (Invitro Diagnostic Device) or USFDA Certified. • Manufacturer should be ISO 13485 certified for quality standards. • Test strips should be certified by the Kenya Laboratory Technologists and Technicians Board. <p>3. Technical Specifications</p> <p>3.1. Small, portable and user-friendly device is required. Blood should not go into the Glucometer while measurement.</p> <p>3.2. It should be able to measure whole blood in capillary mode.</p> <p>3.3. Measurement range: 30 to 600 in mg/dl.</p> <p>3.4. Accuracy should be as per International Standard ISO 15197: 2013 (Requirements for Blood-glucose monitoring systems for self-testing in managing diabetes mellitus). Supporting certificate or test reports from the National Institutes of Biologicals (NIB) must be furnished of last 2years with the technical bid.</p> <p>3.5. Reproducibility/Precision: $\pm 5\%$</p> <p>3.6. Display should be 40mm ± 5 mm or better measured diagonally.</p> <p>3.7. It should be battery operated electronic system and the battery life should be for at least 500 tests.</p> <p>3.8. Self-life of strips: Minimum 6 months at the time of delivery to consignee.</p> <p>3.9. Packing of strips should not be more than 50 strips in a pack.</p> <p>3.10. Strips should work for minimum 3 months after opening of strips pack.</p> <p>3.11. Operating temperature for both device and test strip should be 100C to 400C.</p> <p>3.12. Control solution for checking reliability of strips will be supplied free of cost as & when required.</p> <p>3.13. Ready availability of reagent test strips, battery & other consumables across BIHAR for at least 5 years.</p> <p>3.14. A complete user operational guide shall have to be supplied along with each machine, printed in Hindi and English language.</p> <p>3.15. A lancet applicator/ lancet holder shall have to be supplied along with each machine.</p> <p>Scope of supply:</p> <p>a) Glucometer: 1no.</p> <p>b) Standard batteries: 1Set</p> <p>c) Carrying case: 1no.</p> <p>d) Control solution/Control Strips</p> <p>e) Glucose test strips: As per Order</p> <p>f) Auto disables lancets: As per order</p> <p>g) A lancet applicator/ lancet holder</p>			
4.			

LOT 10-8 Pace makers

Item Code No.	Department	Section	Item Description
LOT 10-8	Intensive Care Unit	Critical Care Unit	Pacemaker
1. General Description			
Temporary pace maker, externally type, Single chamber for synchronous and asynchronous pacing			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
3.1.1.	Should be a Single Chamber Pacemaker (Temporary) for bradycardia treatment before, during or after a surgery.		
3.1.2.	Stimulation burst and permanent stimulation should be available for high pacing rate.		
3.1.3.	Should be compact & easy-to-operate device, particularly suitable for emergency treatments.		
3.1.4.	Safety features, including automatic lead and battery check.		
3.1.5.	Should have continuous monitoring of the battery voltage.		
3.1.6.	Should have transparent cover for parameter protection.		
3.1.7.	Should have shock and water-resistant housing.		
3.1.8.	Should have back up pacing during battery change.		
3.1.9.	Should have Modes AOO, AAI, VOO, VVI		
3.1.10.	Should have pacing rate 40-180 ppm.		
3.1.11.	Should have fast pacing (Burst rate) of 80-200 ppm.		
3.1.12.	Should have Pulse Amplitude of 0.1-17V		
3.1.13.	Should have sensitivity 1.0-20mV		
3.1.14.	Should have minimum battery backup > 200 hours.		
3.1.15.	Should be supplied with at least 2 patient cables		
3.1.16.	Should have safety certificate from a competent authority CE and FDA marked with valid detailed electrical and functional safety test report		

LOT 10-9 Drug Fridges

Item Code No.	Department	Section	Item Description
LOT 10-9	Intensive Care Unit	Critical Care Unit	Refrigerator, Drug
1. General Description			
1.1.	Refrigerator, drug.		
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		

Item Code No.	Department	Section	Item Description
LOT 10-9	Intensive Care Unit	Critical Care Unit	Refrigerator, Drug
3.1.1.	Material	Insulated galvanized steel	
3.1.2.	Type	Compressor, electrical	
3.1.3.	Door	Single door, glass type	
3.1.4.	Total net capacity	350 litres	
3.1.5.	Temperatures range	+2°C to + 8°C stable	
3.1.6.	Ambient temperature	10 ° C to 35°C	
3.1.7.	Shelves	Provided, adjustable and extractable	
3.1.8.	Thermometer	Digital, external mounted, with temperature record history	
3.1.9.	Control	Electronic, Microprocessor based	
3.1.10.	Refrigerant	CFC free	
3.1.11.	Alarm	Provided, audible and visible	
3.1.12.	Power	240V, 50 Hz, a.c	
4.	Accessories		
4.1.	Nil		
5.	Quality standards		
5.1.	Manufacturing standards	ISO 9001, ISO 14001, ISO 13485	
5.2.	Conformity to standards	CE and FDA marked.	
6.	Delivery point		
6.1.	See Schedule	For inspection and testing	
6.2.	Nil		
7.	Warranty		
7.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
7.2.	Equipment System	Nil	
8.	Accessories		
8.1.	Automatic Voltage Regulator (AVR)		
8.1.1.	Capacity	Over VA of the main Unit	
8.1.2.	Input	Ac 240V, 50Hz, Single phase ± 15%	
8.1.3.	Output	Ac 240V, 50Hz, Single Phase ± 2.5 %	

LOT 10-10 Endoscopic laryngoscope

Item Code No.	Department	Section	Item Description
LOT 10-10	Intensive Care Unit	Critical Care Unit	Endoscopic Laryngoscope
1. General Description			
Diagnostic set			
2. Composition			
2.1.	ADULT LARYNGOSCOPES		
2.2.	PEDIATRIC LARYNGOSCOPES		
3. Description of the medical supply unit design type			
3.1. ADULT LARYNGOSCOPES			
3.1.1. Fiber optic bright white halogen for true tissue color			
3.1.2. Laryngoscope Handle Type C Battery Handle			
3.1.3. Single-piece type; lightweight			
3.1.4. Blades can be converted from lamp to fiber optic illumination			
3.1.5. Light pathways can be repaired; reduced proximal blade height			
3.1.6. With Macintosh Halogen Fiber Optic Blade 2			
3.1.7. With Macintosh Halogen Fiber Optic Blade 3			
3.1.8. With Macintosh Halogen Fiber Optic Blade 4			
3.1.9. With Miller Blade 2			
3.1.10. With Miller Blade 3			
3.1.11. With Miller Blade 4			
3.1.12. With laryngoscope case			
3.2. PEDIATRIC LARYNGOSCOPES			
3.2.1. Fiber optic bright white halogen for true tissue color			
3.2.2. Laryngoscope Handle Type C Battery Handle			
3.2.3. Single-piece type; lightweight			
3.2.4. Blades can be converted from lamp to fiber optic illumination			
3.2.5. Light pathways can be repaired; reduced proximal blade height			
3.2.6. With six (6) Miller Fiber Optic Blade 00			
3.2.7. With six (6) Miller Fiber Optic Blade 0			
3.2.8. With six (6) Miller Fiber Optic Blade 1			
3.2.9. With laryngoscope case			

LOT 10-11 Plasma Sterilizer

Item Code No.	Department	Section	Item Description
LOT 10-11	Intensive Care Unit	Critical Care Unit	Plasma Sterilizer
1. General Description			
Low Temperature based H2O2 Gas plasma sterilizer,			

Item Code No.	Department	Section	Item Description
LOT 10-11	Intensive Care Unit	Critical Care Unit	Plasma Sterilizer
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1.	Should provide simple & fast sterilization of surgical instruments at low temperature using H2O2 Gas Plasma technology for effective removal of H2O2 from sterilized items and to compliment the process.		
3.2.	Should be suitable for sterilization of medical items like rigid endoscopes, lumen & non lumen , metal , non-metal, heat & moisture sensitive instruments		
3.3.	Chamber should have usable volume of 50 litres		
3.4.	The sterilization temperature inside the chamber should be less than 55°C		
3.5.	Cycle time should be 35 to 60 mins		
3.6.	The sterilant should be in a cassette/ bottle with H2O2 concentration more than 55%		
3.7.	Should be endorsed by leading instruments and scopes makers like Karl Storz, Olympus, Stryker, Medtronic and Johnson & Johnson		
3.8.	The system should use minimum quantity of sterilant which should be less than 6-8 ml per injection to deliver dry terminal sterilization to ensure safety of Instruments against corrosion.		
3.9.	The unit should be equipped with all the safety features		
3.10.	Sterilizer should have storage of cycle records data.		
3.11.	Should be environment friendly and have no toxic products or harmful residues in the sterilized items in the chamber.		
3.12.	Sterilizer should be approved by USFDA and CE		
3.13.	Please specify list and cost of consumables/ consumable spares (i.e spares need to be replaced at regular intervals, may be quarterly/half yearly/ yearly such as annual maintenance kit etc.) if any.		
3.14.	Please specify pre installation requirements (electrical, HVAC etc.)		
3.15.	Please specify footprint size & its weight.		
3.16.	Demo of the quoted model will be mandatory at the cost of bidder if so desired by the user, after the opening of the technical bid and prior to opening of financial bid. This is for technical evaluation.		

LOT 10-12 Diagnostic set

Item Code No.	Department	Section	Item Description
LOT 10-12	Intensive Care Unit	Critical Care Unit	Diagnostic Sets
1. General Description			
Diagnostic set			
2. Composition			
2.1.	ADULT LARYNGOSCOPES		
2.2.	PEDIATRIC LARYNGOSCOPES		
3. Description of the medical supply unit design type			

Item Code No.	Department	Section	Item Description
LOT 10-12	Intensive Care Unit	Critical Care Unit	Diagnostic Sets
3.1. ADULT LARYNGOSCOPES <ul style="list-style-type: none"> 3.1.1. Fiber optic bright white halogen for true tissue color 3.1.2. Laryngoscope Handle Type C Battery Handle 3.1.3. Single-piece type; lightweight 3.1.4. Blades can be converted from lamp to fiber optic illumination 3.1.5. Light pathways can be repaired; reduced proximal blade height 3.1.6. With Macintosh Halogen Fiber Optic Blade 2 3.1.7. With Macintosh Halogen Fiber Optic Blade 3 3.1.8. With Macintosh Halogen Fiber Optic Blade 4 3.1.9. With Miller Blade 2 3.1.10. With Miller Blade 3 3.1.11. With Miller Blade 4 3.1.12. With laryngoscope case 			
3.2. PEDIATRIC LARYNGOSCOPES <ul style="list-style-type: none"> 3.2.1. Fiber optic bright white halogen for true tissue color 3.2.2. Laryngoscope Handle Type C Battery Handle 3.2.3. Single-piece type; lightweight 3.2.4. Blades can be converted from lamp to fiber optic illumination 3.2.5. Light pathways can be repaired; reduced proximal blade height 3.2.6. With six (6) Miller Fiber Optic Blade 00 3.2.7. With six (6) Miller Fiber Optic Blade 0 3.2.8. With six (6) Miller Fiber Optic Blade 1 3.2.9. With laryngoscope case 			

LOT 10-13 Pneumatic Pumps

Item Code No.	Department	Section	Item Description
LOT 10-13	Intensive Care Unit	Critical Care Unit	Pneumatic Pumps
1. General Description			
Intermittent Pneumatic Compression Device			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<ul style="list-style-type: none"> 3.1. It should be of portable size with handle. 3.2. It should be US FDA & CE approved. 3.3. It should weigh between 3 to 5 kgs. 3.4. It should have power input of 230 volts, 20-25 watts with power cord of length min. 3 meters. 3.5. Battery backup should last for minimum 3-4 hour after fully charged. 3.6. The pressure adjustable range of 40-65 mm Hg. 			

Item Code No.	Department	Section	Item Description
LOT 10-13	Intensive Care Unit	Critical Care Unit	Pneumatic Pumps
<p>3.7. LCD/LED with separate pressure display of both legs numeric & indicating the Inflated Leg. It should have timer sittings from 1to24 hour.</p> <p>3.8. Safety Standards: -</p> <ul style="list-style-type: none"> • Audio and visual Alarms For Leak, For Maximum Pressure: • Automatic shutdown if pressure exceeds the maximum limit. <p>3.9. Disposable Garments: -</p> <ul style="list-style-type: none"> • For Ankle to thigh level, • For Ankle to below knee & • For foot. <p>3.10. Garments should have inner cotton lining.</p> <p>3.11. Sizes Available Disposable Garments: - [a] Small [b] Medium [c] Large [d] XL [e] XXL</p>			

LOT 10-14 Defibrillator

Item Code No.	Department	Section	Item Description
LOT 10-14	Intensive Care Unit	Critical Care Unit	Defibrillator
1. General Description			
Defibrillator suitable for cardiac care complete with ECG monitoring, SPO ₂ monitoring and NIBP			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
<p>3.1. The defibrillator should have biphasic technology having energy selection of maximum 200 joules.</p> <p>3.2. The machine should have facility for ECG monitoring, defibrillation, external pacing & recorder.</p> <p>3.3. Machine should have more than 8” TFT Screen.</p> <p>3.4. Machine must be with sweep rate 25mm/sec, 50mm/sec.</p> <p>3.5. Machine should have 72 hour trend storage facility.</p> <p>3.6. Should have 5 leads and capable of monitoring 12 lead configuration ECG through ECG Cables, electrodes & paddles.</p> <p>3.7. The machine should have defibrillation facility for adult & pediatric patients.</p> <p>3.8. The machine should have ECG waveform display on bright screen along with other vital numeric information.</p> <p>3.9. The machine should be compact, portable with built in rechargeable battery & light weight.</p> <p>3.10. The machine should have inbuilt auto & manual recorder for printing ECG trace & stored information.</p> <p>3.11. The machine should have user selectable alarm setting.</p> <p>3.12. The machine should work on mains (without battery) and on battery as well.</p> <p>3.13. The machine should have AED feature as inbuilt with manual override for manual operations.</p> <p>3.14. Machine must be with carry bag & Accessory bag.</p> <p>3.15. The machine must be supplied with all the essential accessories in 2 set & moveable trolley.</p>			

Item Code No.	Department	Section	Item Description
LOT 10-14	Intensive Care Unit	Critical Care Unit	Defibrillator
3.16. The Defibrillator should have an ECG display and a three lead ECG cable.			
3.17. The Defibrillator should have SPO2 and must have Non Invasive Pacing.			
4.	Physical characteristics		
4.1.	Main unit	Portable	
4.2.	Dimensions		
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug (BS), 3m long cord with PE	
5.2.	Back up supply	Internal rechargeable batteries (SLA), to last at least five hours	
5.3.	Ambient temperature	10° C to 40° C	
5.4.	Relative humidity	20% to 90%	
6.	Consumables		
6.1.	Start-up Kits must be provided including ECG electrode, Gel and Recording paper		
7.	Quality standards		
7.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	CE and FDA marked	
8.	Local back up service		
8.1.	Available	Should be available locally	
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
9.	Delivery point		
9.1.	See Schedule	For inspection and testing	
9.2.	Nil		
10.	Pre installation requirements		
	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		

Item Code No.	Department	Section	Item Description		
LOT 10-14	Intensive Care Unit	Critical Care Unit	Defibrillator		
12.1.	User Training	On site user training on operation and daily up keep			
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
13.	Technical documentations				
13.1.	User manuals	2 Sets			
13.2.	Service Manual	2 Set			
13.3.	Drawings	Nil			
14.	Commissioning				
14.1.	Testing and commissioning of the machine to the satisfaction of the user.				
15.	Warranty				
15.1.	Equipment	Minimum of two (2) years after commissioning on all parts.			
15.2.	Equipment System	Nil			

LOT 10-15 Transport monitors

Item Code No.	Department	Section	Item Description		
LOT 10-15	Intensive Care Unit	Critical Care Unit	Transport Monitor		
1. General Description					
<p>Portable Bedside monitor suitable for use in ICU. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric.</p> <ul style="list-style-type: none"> • SpO₂ • Temperature • Blood pressure • ECG • Respiration • CO₂ • Pulse Rate 					
2. Composition					

Item Code No.	Department	Section	Item Description
LOT 10-15	Intensive Care Unit	Critical Care Unit	Transport Monitor
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
Portable Bed side monitors			
Type	Roll stand Mounted type, complete with internal rechargeable battery		
Application	Can be used as a both bedside monitor and a transport monitor		
Parameter & waveforms	SpO ₂ , Pulse rate, ECG, NIBP, IBP, Respiration, CO ₂ and temperature		
SpO ₂ with reusable sensor	0 - 100% ± 3%		
Pulse Rate	30-300 bpm ± 1%		
Temperature	0-50°C ± 0.1%		
NIBP	Mean 10- 300mmHg ± 5 mmHg		
IBP X2	Mean 00 – 300mm Hg ± 1 mmHg		
ECG	5 lead, standard configuration		
CO ₂	0 to 99 mmHg ± 4 mmHg		
Display	Minimum 12.0 inches color touch screen/scroll type		
	6 to 8 waveforms with large font		
Networking	Wireless and wired connection to the central work station		
Storage	Capable of storing patient data and transferring to the central workstation for viewing or printing.		
Audio and visual alarm Printer	For all parameter. Inbuilt Thermal Printer		
Alarm setting limits	Adjustable by user		
Low battery indicator	Audio and visual alarm		
Power Requirement	Rechargeable internal battery, that can last at least 3 hours when fully charged		
Wireless networking	Latest technology.		
4.	Accessories	The following accessories will be provided as startup kits.	
4.1.	ECG connection lead and reusable electrodes	2 Set	

Item Code No.	Department	Section	Item Description
LOT 10-15	Intensive Care Unit	Critical Care Unit	Transport Monitor
4.2.	SpO ₂ connection cable and sensor (finger probe), reusable	2 Sets	
4.3.	Adult cuff	3 Sets	
4.4.	Paediatric cuff	2 Sets	
4.5.	Temperature connection cable and probe (reusable)	2 Sets	
4.6.	Recording paper	20 Boxes	
5.	Quality standards		
5.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
5.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA marked	
6.	Local back up service		
6.1.	Available	Should be available locally	
6.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, consumables and qualified and skilled technical staff	
7.	Delivery point		
7.1.	See Schedule	For inspection and testing	
7.2.	Nil		
8.	Pre installation requirements		
	Nil		
9.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
10.	Training		
10.1.	User Training	On site user training on operation and daily up keep	
10.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
11.	Technical documentations		
11.1.	User manuals	2 Sets	
11.2.	Service Manual	1 Set	
11.3.	Drawings	Nil	
12.	Commissioning		
12.1.	Testing and commissioning of the machine to the satisfaction of the user.		

Item Code No.	Department	Section	Item Description
LOT 10-15	Intensive Care Unit	Critical Care Unit	Transport Monitor
13.	Warranty		
13.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
13.2.	Equipment System	Nil	

LOT 10-16 Transport ventilators

Item Code No.	Department	Section	Item Description
LOT 10-16	Intensive Care Unit	Critical Care Unit	Transport Ventilator
1. General Description			
Advanced microprocessor-based ventilator for ICU, mobile on trolley, proof of model on current production, for use in adult, paediatric, and neonates			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Ventilation mode	CMV, PEEP, CPAP ,PSV, SIMV and NIV	
3.1.2.		Supports, invasive and non-invasive ventilation, Nasal CPAP, ASV	
3.1.3.	Ventilation rate CMV	up to 100 bpm	
3.1.4.	Inspiratory flow	5-80 lpm	
3.1.5.	Tidal Volume	5-2000 ml	
3.1.6.	I/E ratio	5:1- 1:5	
3.1.7.	Inspiration time	0.3-5.0 sec	
3.1.8.	Trigger sensitivity	Flow/pressure	
3.1.9.	PEEP/CPAP	1 to 40 cmH ₂ O	
3.1.10.	Oxygen Concentrations	21-100%	
3.1.11.	Alarms	Upper and lower airway pressure, Gas supply pressure, system error, (audio and visible)	
3.1.12.	Nebulizer	In CMV, SIMV mode	
3.1.13.	Display	LCD colour screen, Display respiratory parameters	
3.1.14.	Connectivity	Serial port RS 232, Ethernet, Wi-Fi, etc.	

Item Code No.	Department	Section	Item Description
LOT 10-16	Intensive Care Unit	Critical Care Unit	Transport Ventilator
3.1.15.	Batter back up	Provided, rechargeable	
3.1.16.	Back up time	4 hrs. approximately	
3.2.	Components		
3.2.1.	Trolley	Mobile on castors with brakes	
3.2.2.	Tubing support arm	1 pc	
3.2.3.	Breathing circuit set (reusable)	1 pc	
3.2.4.	Bacteria filter	2 sets	
3.2.5.	O ₂ pressure hose	1pc	
3.2.6.	Air pressure hose	1 pc	
3.2.7.	Cylinder support	1 pc	
3.2.8.	Test bag	1 pc	
3.2.9.	Laryngeal mask	1 pc	
3.2.10.	Air way, 3 type	1 Set	
	Humidifier Trends	Heated humidifier 1 pc At least 24 hrs.	
3.3.	Medical air	Should have a Gas delivery system by soundless in built	
3.4.	Supply	compressor /external integrated compressor with the unit	
4.	Physical characteristics		
4.1.	Main unit	Mounted on mobile cart	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6.	Accessories		
6.1.	Automatic Voltage Regulator (AVR)		
6.1.1.	Capacity	Over VA of the main Unit	
6.1.2.	Input	Ac 240V, 50Hz, Single phase ± 15%	
6.1.3.	Output	Ac 240V, 50Hz, Single Phase ± 2.5 %	
7.	Consumables/Reagents		

Item Code No.	Department	Section	Item Description
LOT 10-16	Intensive Care Unit	Critical Care Unit	Transport Ventilator
7.1.	Nil		
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 9001 and ISO 13485	
	Conformity to standards	CE and FDA marked	
9.	Local back up service		
9.1.	Available	Should be available locally	
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
10.	Delivery point		
10.1.	See Schedule	For inspection, testing and installation	
11.	Pre installation requirements		
	Nil		
12.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
13.	Training		
13.1.	User Training	On site user training on operation and daily up keep	
13.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
14.	Technical documentations		
14.1.	User manuals	2 Sets	
14.2.	Service Manual	1 Set	
14.3.	Drawings	Nil	
15.	Commissioning		
15.1.	Testing and commissioning of the machine to the satisfaction of the user.		
16.	Warranty		
16.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
16.2.	Equipment System	Nil	

LOT 10-17 Syringe pumps

Item Code No.	Department	Section	Item Description
LOT 10-17	Intensive Care Unit	Critical Care Unit	Syringe Pump
1. General Description			
1.1. Syringe pump			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1. Main Unit			
3.1.1. Should be easy to use and nurse friendly.			
3.1.2. Should have automatic syringe size and model detection			
3.1.3. System should be front loading			
3.1.4. Should have large format LCD/TFT display.			
3.1.5. Should have a minimum flow rate range from 0.1 – 1200 ml/hr. for 50ml syringe, 0.1 – 100 ml/hr. for 20ml syringe and 0.1 – 60 ml/hr. for 10ml syringe.			
3.1.6. Syringe range from 20-50/60 ml.			
3.1.7. Should have a flow rate accuracy of $\pm 2\%$			
3.1.8. Should have a bolus rate up to 1000ml/hr. for 50 ml syringe.			
3.1.9. Should have automatic and manual bolus.			
3.1.10. Should have at least 3 levels of programmable occlusion pressure.			
3.1.11. Should have automatic bolus reduction system to avoid accidental bolus delivery after occlusion incident.			
3.1.12. Should have a rechargeable battery with back up time of minimum 3 hours.			
3.1.13. System should have a docking station			
3.1.14. Pump must trigger following alarms with visual indication:-			
i. Occlusion Pressure Alarm			
ii. KVO or 3 min pre- alarm			
iii. Syringe empty and volume infused alarm			
iv. Internal malfunction and Battery Charge Low Alarm			
v. Syringe disengaged and incorrectly placed alarm			
vi. Alarm loudness control.			
vii. No mains			
viii. Line disconnected (rapid pressure drop).			
3.1.15. Should work with input 200 to 240Vac 50 Hz supply.			
3.1.16. Should be CE and FDA marked.			
3.1.17. Copy of the certificate / test report shall be produced along with the technical bid			

LOT 10-18 Infusion pumps

Item Code No.	Department	Section	Item Description
LOT 10-18	Intensive Care Unit	Critical Care Unit	Infusion Pump
1. General Description			
1.1. Infusion pump			

2. Composition					
2.1.	Main unit				
3. Performance Specifications					
3.1. Main Unit					
<ul style="list-style-type: none"> a. Should be operated on drip rate Peristaltic finger pump method. b. Should be compatible with most of the IV set (macro/micro drip sets). c. Should have the following flow rates. d. IV Set ml/hr. drops/min <ul style="list-style-type: none"> • 15 drops/ml 3~450ml/hr. 1~100drops/min • 20 drops/ml 3~450ml/hr. 1~100drops/min • 60 drops/ml 1~100ml/hr. 1~100drops/min e. Should have a flow rate accuracy of $\pm 10\%$ and drip rate accuracy of $\pm 2\%$. f. Should have a volume infused display from 0 to 999.9ml. g. Should have a purge and KVO facility. h. Should have an audible and visual alarm for occlusion pressure, air alarm, door open, empty, low battery. i. Should have a LCD display with backlight and graphical display of infusion. j. Should have a minimum 2hr battery back up at highest delivery rate. k. Should work with input 240Vac 50 Hz supply. l. Should be CE and FDA marked m. Copy of the certificate / test report shall be produced along with the technical 					

LOT 10-19 Feeding pumps

ITEM	FUNCTION	MET SPECIFICATION YES/NO	COMMENT
1.	Solutions obtainable		
2.	Weight, kg (lb.) (DISPLAY) 0.5 (1.1)		
3.	The system should be Self-test enabled		
4.	Flow rate should be , ml/hr.		
5.	Precision		
6.	Should be fitted with Battery back up		
7.	The battery should give a backup of 20hrs off power or more		
8.	Power rated 120V/220V/240V		
9.	ALERTS (CONFIGURATION)		
10.	AUDIBLE (ALERTS)		
11.	Different alarms warnings levels		
12.	Intermittent, low battery;		
13.	deviation of selected rate;		
14.	permanent, incorrect rate selection;		
15.	Occlusion;		
16.	air-in-line;		
17.	end of batter;		
18.	open door;		

ITEM	FUNCTION	MET SPECIFICATION YES/NO	COMMENT
19.	end of infusion;		
20.	VISUAL (ALERTS);		
21.	Intermittent, low battery;		
22.	deviation of selected rate;		
23.	permanent, incorrect rate selection;		
24.	Occlusion;		
25.	air-in-line;		
26.	end of battery;		
27.	door open;		
28.	end of infusion.		
29.	STANDARDS		
30.	Should have safety certificate from a competent authority CE/FDA(US)		

LOT 10-20 12 lead ECG machine

Item Code No.	Department	Section	Item Description
LOT 10-20	Intensive Care Unit	Critical Care Unit	ECG Machine
1. General Description			
Description: should be able to record ECG signal in various configurations, 12 channels with interpretation software for recording and analyzing waveforms. Should have an external laser printer. Should have side arm ECG cable holder and dedicated trolley. The machine should meet the following			
2. Composition			

Item Code No.	Department	Section	Item Description
LOT 10-20	Intensive Care Unit	Critical Care Unit	ECG Machine
2.1.	Main unit		
2.1.1.	Be ergonomically designed with user friendly features		
2.1.2.	Have a standard 12 leads. With display for 6/3 channels		
2.1.3.	Have an inbuilt thermal printer with sweep speeds of 5, 10, 20 and 25mm/sec.		
2.1.4.	Have operating mode selection facility		
2.1.5.	Have a frequency response of upto150Hz		
2.1.6.	Have automatic adjustment of baseline for optimal recording		
2.1.7.	Have facility to enter patient information (name, age, sex height weight and BP)		
2.1.8.	Have facility to enter hospital and doctor's name		
2.1.9.	Have QRS and key beep ON/OFF facility		
2.1.10.	Have audible alarm and information for leads off, lack of paper, ECG signal overload and low battery.		
2.1.11.	Operate from mains 240V 50 Hz and rechargeable battery		
2.1.12.	The recorder to operate for a minimum of 5 hours on a fully charged battery.		
2.1.13.	Nave a memory for patient data storage of up to 100 patients.		
2.1.14.	Have external input/output interface, RS232, Ethernet connection and USB port.		
2.1.15.	Have interpretation software		
2.1.16.	Be mounted on a particular trolley.		
2.1.17.	Comply with IEC 61010 (equipment electrical policy) safety standards and have a CE mark.		
2.1.18.	The supplier to provide training to the user staff to a level that they can use the equipment effectively.		
2.1.19.	The supplier to provide training to the in-house maintenance staff. The training to be adequate that allows the in-house maintenance to service the equipment with minimal technical support.		
2.1.20.	The equipment to be supplied with complete set off accessories and user and service manuals.		
2.1.21.	The supplier to provide a warranty of two (2) years from the date of successful installation and commissioning.		
2.1.22.	The supplier to provide manufacturer's letter of authorization to sell their product.		
2.1.23.	Quality standards: IEC 60601-1, ISO 9001 and ISO 13485		
2.1.24.	Conformity standards: ANSI/AAMI EC11: 1991/(R)2001/(R)2007, CE and FDA marked		

LOT 10-21 Mobile X-ray

Item Code No.	Department	Section	Item Description
Lot 10-21	Intensive Care Unit	Critical Care Unit	Mobile X –Ray Unit
1. General Description			
<p>1.1. Compact, easily transportable with articulated/telescopic arm suitable for bedside X-ray with maximum positioning flexibility in any patient position. The angles in various planes to be specified by the manufacturer</p> <p>2. The unit should be a digital system with flat panel detector</p> <p>3. Power Line Connection:</p> <p>a. Should operate on single phase power supply with plug in facility to any standard wall outlet</p> <p>b. Automatic adaptation to line voltage 200 to 240 Volts, 15 Amp plug</p> <p>4. The Generator</p> <p>a. Must be microprocessor controlled high frequency, output 30 KW or above.</p> <p>b. It should have a digital display of mAs and kV and an electronic timer</p> <p>c. KV range: 40kV to 130kV or more</p> <p>d. Max. current: 300 mA or more</p> <p>e. Please specify mA and seconds separately and not mAs alone</p> <p>f. Shortest exposure time: should be 1ms or less</p> <p>g. The dose delivered per exposure must be displayed\</p> <p>5. X-Ray Tube</p> <p>a. Output should match the output of the generator</p> <p>b. It must have a rotating anode with 3000 rpm or more</p> <p>c. Focal spot size should be 0.6mm/1.2mm or better</p> <p>d. Mention the heat storage capacity of the anode</p> <p>6. Flat panel detector</p> <p>a. Should be Wireless</p> <p>b. The flat panel detector should be of the size 17 x 14 inch or more</p> <p>c. The detector pixel matrix sizes should be 2000X2000 or more</p> <p>d. The machine should have a detector storage compartment</p> <p>e. The image viewing time after exposure should not be more than 15 sec</p> <p>7. Battery</p> <p>a. The machine should be able to run on mains as well as on battery supply</p> <p>b. Please specify number of exposures which can be done on battery</p> <p>c. The battery should also provide power for the motor to more the machine</p> <p>d. The battery should be able to be charged from a normal 15A, 230V single phase socket in less than 6 hours</p> <p>8. Workstation</p> <p>a. The machine should have an integrated workstation with a touch screen</p> <p>b. The workstation should enable to viewing of the images, and provide post processing features, using touch screen monitor</p> <p>c. The post processing features should include, zoom, contrast and brightness adjustment, storage of images with a memory of at least 2000 images or better</p>			

Item Code No.	Department	Section	Item Description
Lot 10-21	Intensive Care Unit	Critical Care Unit	Mobile X –Ray Unit
	<p>d. The touch screen size should be at least 15 inches, LCD type</p> <p>9. Connectivity</p> <p>a. The machine should be fully network ready</p> <p>b. It should be possible to transfer images and patient data from and to hospital network using LAN connectivity and wireless LAN</p> <p>10. The tube stand must be fully counterbalanced with rotation in all directions</p> <p>11. The unit must have an effective braking system for parking, transport and emergency braking.</p> <p>12. All cables should be concealed in the arm system</p> <p>13. The exposure release switch should be detachable with a cord of at least 5 meters. Exposures with remote control should be provided.</p> <p>14. Two light weight ‘zero lead’ aprons should be provided</p> <p>15. A grid of 8:1 ratio of appropriate size should be provided</p> <p>16. It should have quality certification CE and FDA</p> <p>17. ISO certification for services of medical devices must be submitted.</p>		
18.	Delivery point		
18.1.	See Hospital Schedule.	For delivery, inspection and testing, installation and commissioning	
19.	Pre installation requirements		
	Nil	.	
20.	Installation and testing		
	Complete installation and setup of the Mobile X-Ray Machine as per manufacturer’s instructions		
21.	Training		
21.1.	User Training	On site user training on operation and daily up keep for 3 weeks	
21.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
22.	Technical documentations		
22.1.	User manuals	2 Sets	
22.2.	Service Manual	1 Set	
22.3.	Drawings	Nil	
23.	Commissioning		
23.1.	Testing and commissioning of the machine including calibration and radiation testing to the satisfaction of the user.		
24.	Warranty		
24.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
24.2.	Equipment System	Nil	

Item Code No.	Department	Section	Item Description
Lot 10-21	Intensive Care Unit	Critical Care Unit	Mobile X –Ray Unit
25.	Maintenance contract		
25.1.	Capacity to provide maintenance and repair service	Vendor/manufacturer shall have adequate facilities, spare parts, qualified and skilled technical staff to offer comprehensive maintenance contract for 10 years	
25.2.	Comprehensive preventive and repair service	Provision for a comprehensive preventive and repair maintenance service contract including parts and material for a period of 10 years from commissioning date (see attached annex for details)	

LOT 10-22 Portable suction units

Item Code No.	Department	Section	Item Description
LOT 10-22	Intensive Care Unit	Critical Care Unit	Portable Suction Unit
1. General Description			
Suction machine suitable for use in theatre, for both adult and pediatric use. Should be constructed from coated non-corrosive, extreme heat resistance material and electrically insulated and mobile on antistatic castors □ 60 mm, 2 No. lockable, with high level push handle.			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	High flow rate	40 litres per minute.	
3.1.2.	Suction vacuum	Maximum 700mmHg	
3.1.3.	Suction pump	oil free	
3.1.4.	Jars	2 X 2 liter polycarbonate autoclavable and unbreakable complete with overflow devices and valves.	
3.1.5.	Vacuum gauge	Graduated in mmHg and kPa.	
3.1.6.	Vacuum control	Adjustable at the front panel	
3.1.7.	Switch	Main on front panel and foot switch (water proof type)	
3.1.8.	Cable towage	On back with reversible cleats	
3.1.9.	Anti-bacterial filters	Available preferable autoclavable	
3.1.10.	Suction tubing	Antistatic neoprene or silicone	

Item Code No.	Department	Section	Item Description
LOT 10-22	Intensive Care Unit	Critical Care Unit	Portable Suction Unit
	connection		
3.1.11.	Safety	Overflow pump protection	
3.1.12.	Handle	High level push handle type	
3.1.13.	Movements	Mobile on four antistatic castors 2 No. lockable.	
4.	Physical characteristics		
4.1.	Main unit	Mobile on castors with push handle	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug BS standard, 3m long cord with PE	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6.	Accessories	The following accessories will be provided as startup kits.	
6.1.	Sterilizable, silicone tubing	5 Set	
6.2.	Bacterial filters	1 Box	
6.3.	Foot switch	1 No.	
6.4.	Cannula with handle for general purpose	4 Sets	
7.	Quality standards		
7.1.	Manufacturing standards	EN 10079-1, IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	CE and FDA marked	
8.	Local back up service		
8.1.	Available	Should be available locally	
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
9.	Delivery point		
9.1.	See Schedule	For inspection and testing	
9.2.	Nil		
10.	Pre installation requirements		
	Nil		

Item Code No.	Department	Section	Item Description		
LOT 10-22	Intensive Care Unit	Critical Care Unit	Portable Suction Unit		
11.	Installation and testing				
	Complete installation and setup of the machine as per manufacturer's instructions				
12.	Training				
12.1.	User Training	On site user training on operation and daily up keep			
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance			
13.	Technical documentations				
13.1.	User manuals	2 Sets			
13.2.	Service Manual	1 Set			
13.3.	Drawings	Nil			
14.	Commissioning				
14.1.	Testing and commissioning of the machine to the satisfaction of the user.				
15.	Warranty				
15.1.	Equipment	Minimum of two (2) years after commissioning on all parts.			
15.2.	Equipment System	Nil			

LOT 10-23 Central monitoring system (Set based on the total number of beds to be installed)

Item Code No.	Department	Section	Item Description		
LOT 10-23	Intensive Care Unit	Critical Care Unit	Central Monitoring System (Set based on the total number of beds to be installed)		
1. General Description					
Central monitoring system complete with 10 bedside monitors for ICU. Should be capable of monitoring the following parameters in adults, neonatal and pediatric.at both bedside and centrally					
<ul style="list-style-type: none"> • SpO₂ • Temperature • Blood pressure both NIBP and IBP • cardiac output • ECG • Respiration • CO₂ • Pulse Rate 					
2. Composition					
2.1.	Central workstation	1 pc			

Item Code No.	Department	Section	Item Description
LOT 10-23	Intensive Care Unit	Critical Care Unit	Central Monitoring System (Set based on the total number of beds to be installed)
	with CPU and software		
2.2.	Bedside monitor with docking station	10 pcs	
2.3.	Printer	1 pc	
2.4.	UPS (1.25 times POWER rating of the equipment)	1pc	
3. Performance Specifications			
3.1.	Central work station		
3.1.1.	The unit should be a model or type on current production composed of a CPU and display screen. Medical grade products		
3.1.2.	Display Screen		
3.1.3.	Size	Minimum 22” touch screen (2 No.)	
3.1.4.	Type	LCD, colour, with navigation rotary knob	
3.1.5.	Parameters	Capable of displaying all vital sign in graphic waveform and parameters emanating from at least Six remote bed side monitors,	
3.1.6.	Real time	Displays real time vital sign parameters	
3.1.7.	Alarm limit	Can be set on the screen	
3.2.	CPU		
3.2.1.	Size	Minimum 2TB	
3.2.2.	Performance	Complete with hardware and window-based software for networking and displaying vital sign from all the six monitors to the central monitor, by both wireless and wired technology	
3.2.3.	Software	Pre-installed in the CPU	
		Capable of analysis and displaying waveform and parameters from all the monitors connected	
		Capable of monitoring bedside monitors parameters through wired and wireless technology	
		Capable of displaying MRI, CT,, and X-Ray images in DICOM format	
		DICOM compatible, Can also access internet	
3.3.	Bed side monitors (10 No.)		
3.3.1.	Type	Wall Mounted type, complete with internal rechargeable battery	
3.3.2.	Parameter & waveforms	SpO2, Pulse rate, ECG, NIBP, IBP, cardiac output, Respiration, CO2 and temperature	

Item Code No.	Department	Section	Item Description
LOT 10-23	Intensive Care Unit	Critical Care Unit	Central Monitoring System (Set based on the total number of beds to be installed)
3.3.3.	SpO ₂ with reusable sensor	0 - 100% ± 3%	
3.3.4.	Pulse Rate	30-300 bpm ± 1%	
3.3.5.	Temperature	0-50°C ± 0.1%	
3.3.6.	NIBP	Mean 10- 300mmHg ± 5 mmHg	
3.3.7.	IBP X2	Mean 0 – 300mm Hg ± 1 mmHg	
3.3.8.	ECG	With standard lead and Derived 12 lead	
3.3.9.	CO ₂	0 to 99 mmHg ± 4 mmHg	
3.3.10.	Display	Minimum 12.0 inches /colour touch screen / scroll type	
3.3.11.		6 to 8 waveforms with large font	
3.3.12.	Networking	Wireless and wired connection to the central work station	
3.3.13.	Storage	Capable of storing patient data and transferring to the central workstation for viewing or printing.	
3.3.14.	Audio and visual alarm	For all parameter.	
3.3.15.	Alarm setting limits	Adjustable by user	
3.3.16.	Low battery indicator	Audio and visual alarm	
3.3.17.	Power Requirement	Rechargeable internal battery, that can last at least 3 hours when fully charged	
3.4.	Wireless networking	Latest technology.	
4.	Physical characteristics		
4.1.	Main unit		
4.2.	Central workstation	To be installed in the Nursing station	
4.3.	Bed side monitors	To be wall mounted. Should be capable of rotating.	
4.4.	Printer	Central printer, laser type, to print when necessary	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug, 3m long cord BS type with PE	
5.2.	Internal rechargeable battery	Maintenance free type, Up to 3 hours operating time	
5.3.	Ambient temperature	10° C to 40° C	
5.4.	Relative humidity	20% to 90%	
5.5.	UPS	True-On-Line Double conversion	

Item Code No.	Department	Section	Item Description
LOT 10-23	Intensive Care Unit	Critical Care Unit	Central Monitoring System (Set based on the total number of beds to be installed)
6.	Accessories	The following accessories will be provided as startup kits.	
6.1.	ECG connection lead and reusable electrodes	1 Set	
6.2.	SpO ₂ connection cable and sensor (finger probe), reusable	2 Sets	
6.3.	Adult cuff	3 Sets	
6.4.	Paediatric cuff	2 Sets	
6.5.	Temperature connection cable and probe (reusable)	2 Sets	
6.6.	Grounding lead	1 No.	
7.	Quality standards		
7.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA marked	
8.	Technical documentations		
8.1.	User manuals	2 Sets	
8.2.	Service Manual	1 Set	

LOT 10-24 Emergency Trolley

Item Code No.	Department	Section	Item Description
LOT 10-24	Intensive Care Unit	Critical Care Unit	Emergency Trolley
1. General Description			
Resuscitation trolley for use in ICU. Epoxy coated mild steel, with drawers, protection perimeter and defibrillator holder. The Unit should be mobile on four castors, 2 lockable			
2. Composition			
2.1.	Main unit,		
3. Performance Specifications			
3.1. Main Unit			
3.1.1. Should be durable with Ergonomic handle and should have easy grip			
3.1.2. Height should be 40-45”			

- 3.1.3. Should have 6-8 drawers of sizes 3x3”,2x6”,1x9”
- 3.1.4. Should have interchangeable 3”,6”,9” drawers which run smoothly on good quality channels
- 3.1.5. Should have provision of side storage which allows storage of variety accessories like can, storage bins, glove storage, sharp container set
- 3.1.6. An over bridge can with baskets, shelves and bins to keep important things
- 3.1.7. Should have AMS top surface & advance polymer material which is easy to clean. It should not dent, chip flake or corrode
- 3.1.8. Should be easily rolling and has toe brakes
- 3.1.9. Should have I.V. pole with clamps ach 3” drawer should have provision for 25-30 compartments
- 3.1.10. Should have twin swivel castors & central lock
- 3.1.11. Should be CE and ISO 9001/2000 and FDA approved
- 3.1.12. Should have CPR board & O2 cylinder holder

LOT 10-25 Blood Gas Analyzer

Item Code No.	Department	Section	Item Description
LOT 10-25	ICU	Critical Care Unit	Blood Gas Analyzer
A. Performance and safety requirement for the equipment to be placed			
1. General Description Blood gas analyzer, capable of measuring at minimum pCO ₂ , pO ₂ , pH, K ⁺ , Na ⁺ , Cl ⁻ , Ca ⁺⁺ and at least 15 calculated parameters in whole blood, serum and plasma. The unit should be automatic, with electronic digital read out, dilutor and in built printer.			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Measuring parameters	pCO ₂ , pO ₂ , pH, K ⁺ , Cl ⁻ , Ca ⁺⁺	
3.1.2.	Calculated parameters	At least 15 parameters	
3.1.3.	Sample volume	About 150µl	
3.1.4.	Measuring time	about 2-5 seconds	
3.1.5.	Temperature correction	Automatic	

Item Code No.	Department	Section	Item Description
LOT 10-25	ICU	Critical Care Unit	Blood Gas Analyzer
3.1.6.	Display	Large LCD display	
3.1.7.	Printer	In built	
3.1.8.	Key pad	Soft	
4.	Physical characteristics		
4.1.	Main unit	Bench top	
		Robust construction and easy to clean	
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase	
	Ambient temperature	10° C to 40° C	
	Relative humidity	20% to 90%	
6.	Accessories		
6.1.	True online UPS (1.25 X the power rating of equipment)		
7.	Quality standards		
7.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485 and UL 3101-1	
	Conformity to standards	IVD- Directive 98/79/EC (IEC 1010-1),CE and FDA marked	
8.	Delivery point		
8.1.	See Schedule		
9.	Installation, testing and commissioning		
	Complete installation and set-up of the machine as per manufacturer's instructions		
B: Reagents and consumable supply			
10. Start-up Kits Controls & calibrates must be provided for all the Tests			
D: Training of user and maintenance staff			

Item Code No.	Department	Section	Item Description
LOT 10-25	ICU	Critical Care Unit	Blood Gas Analyzer
11.	User Training	See Schedule on-site user training on operation and daily up keep for two years renewable	
11.1.	Maintenance training	Scheduled on-site maintenance training on preventive maintenance for two years renewable Availability of both User and technical manuals (hard and soft copies)	

LOT 11: INPATIENT SERVICES

S/No	Item Description	Qty	UOI
1.	Oxygen flow meters	20	Pcs
2.	Wall Suction Units	20	Pcs
3.	Ward bed complete with drip stand, Bedside locker and over-bed table	120	Pcs
4.	Drip stand (Portable)	5	Pcs
5.	Thermometers (Digital)	6	Pcs
6.	Blood pressure Machine (Aneroid)	6	Pcs
7.	Wheelchairs	6	Pcs
8.	Vital signs monitor	3	Pcs
9.	Diagnostic sets	3	Pcs
10.	Portable suction units	3	Pcs
11.	Nebulizers	5	Pcs
12.	Macerators	2	Pcs
13.	Commode chairs	5	Pcs
14.	LED X-ray viewer	3	Pcs
15.	Emergency Trolley	2	Pcs
16.	Drug Trolley	5	Pcs
17.	Procedure trolley	5	Pcs
18.	Patient Trolleys	5	Pcs
19.	Defibrillator	1	Pcs
20.	Baby cots	5	Pcs

21.	Reclining chairs	2	Pcs
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LOT 11-1 Oxygen flow meters

Item Code No.	Department	Section	Item Description
LOT 11-1	Inpatient	Wards	Oxygen Flow meters
1. General Description			
Oxygen Flow meter with Humidifier:			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Should be duly USFDA or CE marked by the European notified body 3.2. The Flowmeter should be fitted with BS standard Medical Oxygen Probe. 3.3. Back Pressure Compensated flow meter will be of accurate gas flow measurement with control within a range of 0 to 15 Lpm. 3.4. It should meet strict precision and durability standard. 3.5. The flow meter body should be made of brass chrome plated materials. 3.6. The flow tube and shroud components should be made of clear, impact resistant polycarbonate. 3.7. Flow Tube should have large and expanded 0 – 5 lpm range for improved readability at low flows. 3.8. Inlet filter of stainless-steel wire mesh to prevent entry of foreign particles. 3.9. The humidifier bottle should be made of unbreakable & Reusable of polycarbonate material and autoclavable at 134 degree centigrade.			

LOT 11-2 Wall Suction Units

Item Code No.	Department	Section	Item Description
LOT 11-2	Inpatient	Wards	Wall Suction Unit
1. General Description			
Ward Wall Vacuum Units:			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Should be duly USFDA or CE marked by the European notified body 3.2. Vacuum Unit should be wall mounted and should consists of Suction Controller/ Regulator &			

Item Code No.	Department	Section	Item Description
LOT 11-2	Inpatient	Wards	Wall Suction Unit
<p>Collection bottle of 1000ml. with mounting arrangement.</p> <p>3.3. The Vacuum unit should be fitted with BS standard Vacuum probe.</p> <p>3.4. The vacuum regulator should be step-less adjustable and have large vacuum gauge providing indication of the suction supplied by the regulator.</p> <p>3.5. Safety trap should be provided inside the jar to safeguard the regulator from overflowing.</p> <p>3.6. The unit should be consisting of reusable 1000ml. shatter resistant bottle, each made up of poly carbonate material and fully autoclavable at 1340C.</p>			

LOT 11-3 Ward bed complete with drip stand, Bedside locker and over-bed table

Item Code No.	Department	Section	Item Description
LOT 11-3	Inpatient Services	General Ward	Electrical Bed with mattresses, bed side locker and Over bed Table
1. General Description			
Four sections HDU bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, and water proof mattress			
2. Composition			
2.1.	Main unit		
<p>2.2. Physical Specifications</p> <p>2.2.1. Operational Requirements</p> <p>2.2.2. The system should be electrically and manually operated and adjustable for heights, trendelenburg etc. It should also be having radiotranslucent top for carrying out X-Ray at the bedside</p>			
3. Technical Specifications			
3.1. Should have four section mattress base			
3.2. Should be able to handle weight of up to 200Kg			
3.3. Should have X-Ray translucent back section made up of high-pressure laminate.			
3.4. Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed.			
3.5. Base frame & support frame should be made up of steel for long life & prevention from rusting.			
3.6. Should have stepless electrical adjustment for the following :-			
<ul style="list-style-type: none"> • Height : 450-840 mm • Back section : 0- 50 degrees • Leg Section : 0-30 degrees 			
4. Should have stepless pneumatic adjustment for Trendelenburg (20-25° approx.), reverse-trendelenburg (10-15° approx.)			
4.1. Should have a manual quick release mechanism for back section adjustment during emergency situation			
4.2. Should be equipped with four articulated half-length tuck away side rails			
4.3. Should be equipped with large castors (diameter 150 mm) with central braking and steering facility.			
4.4. Mattress of the Bed should be made up of high density foam with Anti-Microbial agent incorporated into all components that assists in Prohibiting growth of bacteria & fungi and easy to			

Item Code No.	Department	Section	Item Description
LOT 11-3	Inpatient Services	General Ward	Electrical Bed with mattresses, bed side locker and Over bed Table
<p>clean.</p> <p>4.5. Mattress should be fully Radiolucent for ease in performing portable X-Rays.</p> <p>4.6. Should have bumpers at all four corners and place for fixing accessories</p> <p>4.7. Dimensions of bed :</p> <ul style="list-style-type: none"> • Length : 2100 -2290 mm • Width : 850 -1020mm • Mattress Size : appropriate as per bed size <p>5. System Configuration Accessories, spares and consumables</p> <p>5.1. Bed Mainframe -01</p> <p>5.2. Bed Ends, detachable : 01 pair</p> <p>5.3. Articulated half-length tuck away side rails: 04 Nos.</p> <p>5.4. IV Rods: 01 No.</p> <p>5.5. Mattress 12 cm Thick: 01 No.</p> <p>6. Environmental factors</p> <p>6.1. Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.</p> <p>6.2. The unit shall be capable of being stored continuously in ambient temperature of 15 -50 0C and relative humidity of 15-90%</p> <p>6.3. The unit shall be capable of operating continuously in ambient temperature of 10 -40 0C and relative humidity of 15-90%</p> <p>7. Power Supply</p> <p>7.1. Power input to be 220-240VAC, 50Hz as appropriate fitted with BS plug</p> <p>7.2. Resettable overcurrent breaker shall be fitted for protection</p> <p>8. Standards, Safety and Training</p> <p>8.1. Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450</p> <p>8.2. Should be FDA and CE approved product</p> <p>8.3. Manufacturer should have ISO certification for quality standards.</p> <p>8.4. Electric Shock Protection level-Class-B</p> <p>8.5. Electric current Protection- Class -1</p> <p>8.6. Certified to be compliant with IEC 60601-2-38 Medical Electrical Equipment part 2-38 Particular requirements for safety of Electrically Operated Hospital Beds</p> <p>8.7. Service manual in English</p> <p>User manual in English</p>			

LOT 11-4 Drip stand (Portable)

Item Code No.	Department	Section	Item Description
LOT 11-4	Inpatient Services	General Ward	Drip stand (Portable)
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
TECHNICAL SPECIFICATIONS FOR DRIP STAND			

Item Code No.	Department	Section	Item Description
LOT 11-4	Inpatient Services	General Ward	Drip stand (Portable)
The drip stand must be made of stainless steel with the following features:			
3.1. Stable and strong stainless-steel structure			
3.2. Four (4) stainless steel hooks each with 1kg load capacity			
3.3. Adjustable height between approx. 150cm to 250cm			
3.4. Large, five (5) limb stainless base			
3.5. Five (5) castors with at least two brakes			

LOT 11-5 Thermometers (Digital)

Item Code No.	Department	Section	Item Description
LOT 11-5	Inpatient Services	wards	Thermometer (Digital)
1. General Description			
Digital Thermometer			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. The system should have minimum 4-digit display with 0.1 increment			
3.2. Should have degree Celsius and Fahrenheit display			
3.3. Measurement Accuracy: $\pm 0.1^{\circ}\text{C}$ (32.0 to 42.0 $^{\circ}\text{C}$), $\pm 0.2^{\circ}$ F (89.6 to 107.6 $^{\circ}$ F)			
3.4. Measurement Range: 32.0 to 42.0 $^{\circ}\text{C}$ (89.6 to 107.6 $^{\circ}\text{F}$)			
3.5. The sensing unit should be thermistor or equivalent			
3.6. Should work with a battery and lasts for a minimum measurement of 1000 readings (10 min operation each)			

LOT 11-6 Blood pressure Machine (Aneroid)

Item Code No.	Department	Section	Item Description
LOT 11-6	Inpatient	Wards	Blood Pressure Machine (Aneroid Type)
1. General Description			
Sphygmomanometer - Aneroid Type			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Should be aneroid type,			
3.2. Should have ISI mark.			
3.3. Should have a measuring range from 0 to 300 mmHg,			
3.4. Should be provided with adult arm cuffs of size medium & large and paediatric cuff.			
3.5. The dial mano meter markings and graduations should be permanent and clearly visible and filled with pigments, with diameter of minimum diameter of 160 mm.			
3.6. Body & Bezel – Aluminum die casted (Powder coated), screw type bezel			
3.7. Sensing-corrugated phosphorous bronze twin capsule bellows.			
3.8. Movement mechanism – Brass			
3.9. Connection: brass, nickel plated for 3-4 mm rubber hose.			
3.10. Dial – Aluminum			
3.11. Pointer – White coated, thin & sharp made of phosphorous Bronze			
3.12. Window lenses – Clear plastic.			
3.13. All plastic parts, if any used should not crack, flake, peel or disintegrate in normal use.			
3.14. The inflating rubber bag should be capable of withstanding an internal pressure of 450 mmHg without leaking.			

Item Code No.	Department	Section	Item Description
LOT 11-6	Inpatient	Wards	Blood Pressure Machine (Aneroid Type)
<p>3.15. The inflating bulb should be soft and should not have any joints or ridges.</p> <p>3.16. The fastening arrangements of the cuff should be of hook and loop type (Velcro)</p> <p>3.17. The threading and fastening arrangement of the cuff should show no sign of slip or failure when subjected to the maximum test conditions.</p> <p>3.18. The rubber tubes used should have an internal diameter of $3 \pm 0.5\text{mm}$ and the external diameter should not be less than 8mm.</p> <p>3.19. The tubes should be fitted with male and female leuc connectors.</p> <p>3.20. Should provide a carry bag to keep the whole system safe and sound. All parts should be replaceable in case of breakage.</p>			

LOT 11-7 Wheelchairs

Item Code No.	Department	Section	Item Description
LOT 11-7	Outpatient	Consulting Room	Wheelchairs
1. General Description			
Indoor / low-active basic folding chairs			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1. Detailed specification description of category: Indoor / low-active basic folding chairs. Basic folding frame, standard back height Size range:</p> <ul style="list-style-type: none"> • 51 cm (20") wide • 46 cm (18") wide • 43 cm (17") wide • 41 cm (16") wide • 38 cm (15") wide • 36 cm (14") wide • 30 cm (12") wide with 40 cm seat frame length • 30 cm (12") wide with 30 cm seat frame length • 25 cm (10") wide with 30 cm seat frame length • 25 cm (10") wide with 25 cm seat frame length <p>3.2. Basic folding frame, tall back height Size range:</p> <ul style="list-style-type: none"> • 51 cm (20") wide • 46 cm (18") wide • 43 cm (17") wide • 41 cm (16") wide • 38 cm (15") wide • 36 cm (14") wide • 30 cm (12") wide with 40 cm seat frame length • 30 cm (12") wide with 30 cm seat frame length 			

Item Code No.	Department	Section	Item Description
LOT 11-7	Outpatient	Consulting Room	Wheelchairs
<p>3.3. Basic folding frame, short back height Size range:</p> <ul style="list-style-type: none"> • 51 cm (20") wide • 46 cm (18") wide • 43 cm (17") wide • 41 cm (16") wide • 38 cm (15") wide • 36 cm (14") wide • 30 cm (12") wide with 40 cm seat frame length <p>3.4. Basic folding frame, standard back height attendant-propelled, non-institutional use Size range:</p> <ul style="list-style-type: none"> • 51 cm (20") wide • 46 cm (18") wide • 41 cm (16") wide • 38 cm (15") wide • 36 cm (14") wide • 30 cm (12") wide with 40 cm seat frame length <p>3.5. Backrest / Seat configuration:</p> <ul style="list-style-type: none"> • Seat tilt: 5 degree minimum and 8 degree maximum (Approx. minimum of 3.5 cm and maximum of 5.7 cm front and rear seat height differential on 40 cm seat length) • Back to seat angle not to exceed 90 degrees. • 8 - 10 degree bend in back post, except for short back and low slung short back categories <p>3.6. Seat length:</p> <ul style="list-style-type: none"> • Standard = 40 cm (allow + 1 cm) long on all chairs with 40 cm seat frame. Exception: 30 cm (allow + 1 cm) long on 30 cm (12") wide with 30 cm seat frame length; 25 cm (10") wide with 30 cm seat frame length; 25 cm (10") wide with 25 cm seat frame length Shorter length may be specified by end user. <p>3.7. Upholstery:</p> <ul style="list-style-type: none"> • Back upholstery: Nylon (600 D) or vinyl: Exception: Reinforced on all 20" or reinforced 18" and 16" chairs. Reinforcement by means of a single nylon strip, at least 4 cm wide stitched to outside of back upholstery. • Seat upholstery: Nylon (600 D) or vinyl (40 cm long or any shorter length as specified). • All back and seat upholstery to be reinforced with an inner PVC minimum spec of 500 g/m². The inner coated PVC to have a minimum tensile strength of 200 kg/50mm WMD and 160kg/50mm AMD and a minimum tear strength of 25kg both WMD and AMD. (Reinforced chairs as specified will therefore have a second, outer layer of PVC for additional reinforcement. Reinforcement by means of strips not acceptable.) <p>3.8. Armrests:</p> <ul style="list-style-type: none"> • Removable sport, full or desk with plastic skirt guard. Exception: Height adjustable full or desk with metal skirt guard only on 30 cm (12") wide with 30 cm seat frame length and 10" 			

Item Code No.	Department	Section	Item Description
LOT 11-7	Outpatient	Consulting Room	Wheelchairs
<p>wheelchairs</p> <ul style="list-style-type: none"> • Arm rest sockets to be on side of seat rail only. • Shape of arm rests may in no way impede the fitting of commercial rigid adjustable back systems onto back posts. <p>3.9. Castors and forks:</p> <ul style="list-style-type: none"> • 8x2" (20cm x 5 cm) castors with plastic hub, outer shore hardness of 65 – 70 and inner shore hardness of 33 – 70, with the inner value not exceeding the outer value. • Exception: 20" chair: 8x2" (20cm x 5 cm) castors with aluminium hub, and outer shore hardness of 65 – 70 and inner shore hardness of 33 – 70, with the inner value not exceeding the outer value. Alternative, 8x2" (20cm x 5 cm) rubber castors. • 8x1" (20cm x 2.5 cm) castors with plastic hub to be available as an option on request. • Forks to be minimum 0.4cm thick mild steel forks. Stem to be fastened to the fork with a thread and nut system to allow for re-fastening. <p>3.10. Rear wheels and axles:</p> <ul style="list-style-type: none"> • 24" x 1 3/8 mag (standard) or spoke (optional) wheel with one part semi-solid tyre as specified by end user. Exception, 12" chair with 30 cm seat rail length to use 22" x 1 3/8 mag (standard) or spoke (optional) wheel complete with semi-solid one-piece tyre • Axle 1.2cm thick <p>3.11. Footrest hangers:</p> <ul style="list-style-type: none"> • Extra-short (15 cm), short (20 cm), long (25 cm) or fully detachable 90 degree hangers with angle adjustable footplates as specified by end user. <p>3.12. Footrest:</p> <ul style="list-style-type: none"> • Footplate to be plastic, aluminum or mild steel; Height adjustable <p>3.13. Leg strap:</p> <ul style="list-style-type: none"> • Nylon strap (4cm to 5 cm wide) with Velcro. The leg strap should have Velcro fitted to its full length to allow maximum adjustability. <p>3.14. Frame:</p> <ul style="list-style-type: none"> • Basic, non-adjustable folding frame • Finish: Epoxy coated <p>3.15. Guarantee:</p> <ul style="list-style-type: none"> • Frame and crossbars guaranteed for a minimum of 2 years during appropriate use as stated per category. <p>3.16. Weight:</p> <ul style="list-style-type: none"> • Not to exceed 23 kg (complete). With rubber castors, allow +1 kg. • Not to exceed 16 kg for 8" & 10" wheelchair. With rubber castors allow +1 kg <p>3.17. Repair / tool kit:</p> <ul style="list-style-type: none"> • 4 rear wheel: bearings • 4 castor: axle bearings 			

Item Code No.	Department	Section	Item Description
LOT 11-7	Outpatient	Consulting Room	Wheelchairs
<ul style="list-style-type: none"> • 4 castor stem bearings • 4 seat guides (where applicable) • Adjustment tool <p>3.18. General requirement:</p> <ul style="list-style-type: none"> • Supplier must be able to provide chair with all of above-mentioned options for back and seat upholstery, armrests, rear wheels, footrest hangers, and footrests. The end user will specify the desired option at the time of ordering. The different options available within each specification description must be fully interchangeable and available at the same price. Where the end user does not specify options the chair will be issued as in the option given first for the categories with more than one option. • The successful tenderer must be able to supply all of the various models and sizes of items per the tender document. • No part or component may be changed / deviate from the specifications set out in this document. <p>3.19. Standards</p> <ul style="list-style-type: none"> • Durability of chair must be in accordance with SANS 1060:2003 specifications for the rolled bed and seat sag differential tests. Exception: Weight of test dummy to be 120 kg. This is the minimum required user weight specification. • Dimensions of chair for width, seat length and back rest height must adhere to the specifications set out in this tender: • Frame to be zinc phosphate rust protected prior to epoxy powder coating. • Back rest metal tubing wall thickness to be 0.16cm. • X-bars to be constructed of tubing with a minimum of 2.5 cm diameter and 0.2 cm wall thickness. • Forks to be a minimum of 0.4cm thick wall. • Forks to be attached to the castor stem by means of a thread and bolt system to allow for re-fastening of the stem. • Upholstery used = 600 D Nylon • All back and seat upholstery to be reinforced with inner PVC with a minimum specification of 500 g/m². (Re-enforced chairs as specified will therefore have a second, outer layer of PVC for additional reinforcement) • Mag wheels to be glass filled nylon. • Bearing spacer to be used in all bearing applications, i.e. rear wheel, front castor and castor stem. 			
<p>Summary Specs</p> <p>WHEEL CHAIR FOLDING</p> <ol style="list-style-type: none"> 1) Dimension should be 650mm W x 1120mm D x 920mm H.(Approx.) 2) Two solid rubber tyred bicycle wheels with break and self-propelling stainless steel hoops 3) Two swivel castors, 200mm dia in front. 4) Seat and back easily removable and replaceable 5) Fine and durable upholstery for seat and back 6) Nylon Handgrips and Padded arm rest 7) Should have polished stainless-steel construct 8) Aluminum leg rest – swing away type 			

Item Code No.	Department	Section	Item Description
LOT 11-7	Outpatient	Consulting Room	Wheelchairs
9) All the Stainless Steel should be 304 grade 10) Warranty: 2 years			

LOT 11-8 Vital Signs Monitor

Item Code No.	Department	Section	Item Description
LOT 11-8	Inpatient Services	General Ward	Vital Signs Monitor
1. General Description			
Vital signs Monitor suitable for use in operating theaters. Should be capable of continuous measuring/monitoring of the following parameters in adults, neonatal and pediatric. <ul style="list-style-type: none"> • SpO₂ • Temperature • Blood pressure • Pulse Rate • ECG 			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	The unit should be a model or type on current production capable of measuring/monitoring the following parameters		
3.1.2.	SpO ₂ , with reusable sensor	0 - 100% ± 3%	
3.1.3.	Pulse Rate	30-300 bpm ± 1%	
3.1.4.	Temperature	0-50°C ± 0.1%	
3.1.5.	NIBP	Mean 10- 300mmHg ± 5 mmHg	
3.1.6.	IBP	Mean 50 – 300mm Hg ± 1 mmHg	
3.2.	Display	At least 12 inches color touch screen type/rotary knob	
3.2.1.		6 to 8 waveforms mode with large font	
3.3.	Printer	Inbuilt, thermal array or equivalent	
3.3.1.		Two speed, selectable	
3.3.2.		Port for external printer	
3.4.	Networking	Port for networking with Ethernet or equivalent Or Serial Port RS 232	
3.5.	Input		
3.6.	Storage	Capable of storing patient data	

Item Code No.	Department	Section	Item Description
LOT 11-8	Inpatient Services	General Ward	Vital Signs Monitor
4.	Safety requirements		
4.1.	Audio and visual alarm	For all parameter.	
4.2.	Alarm setting limits	Adjustable by user	
4.3.	Low battery indicator	Audio and visual alarm	
4.4.	Internal battery	Provided, rechargeable, can operate for at least 3 hours	
5.	Physical characteristics		
5.1.	Main unit		
5.2.	Dimensions	Portable with a recharge dock or equivalent recharging unit	
6.	Operating environment		
6.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug, 3m long cord BS type with PE	
6.2.	Ambient temperature	10° C to 40° C	
6.3.	Relative humidity	20% to 90%	
7.	Accessories	The following accessories will be provided as startup kits.	
7.1.	SpO ₂ connection cable and sensor (finger probe), reusable	2 Sets	
7.2.	Adult cuff	2 Sets	
	Pediatric cuff	2 Sets	
7.3.	Temperature connection cable and probe (reusable)	2 Sets	
7.4.	Recording paper	2 sets of 5 rolls	
7.5.	ECG Cable	1 No.	
7.6.	Grounding lead	1 No.	
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
8.2.	Conformity to standards	Directive 2004 / 108 / EC, CE and FDA approved	
9.	Local back up service		
9.1.	Available	Should be available locally	
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, consumables and qualified and skilled technical staff	

Item Code No.	Department	Section	Item Description
LOT 11-8	Inpatient Services	General Ward	Vital Signs Monitor
10.	Delivery point		
10.1.	See Schedule	For inspection and testing	
10.2.	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		
12.1.	User Training	On site user training on operation and daily up keep	
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance	

LOT 11-9 Diagnostic Sets

Item Code No.	Department	Section	Item Description
LOT 11-9	Outpatient	Consulting Room	Diagnostic Sets
1. General Description			
Diagnostic set			
2. Composition			
2.1.	ADULT LARYNGOSCOPES		
2.2.	PEDIATRIC LARYNGOSCOPES		
3. Description of the medical supply unit design type			
3.1. ADULT LARYNGOSCOPES			
3.1.1. Fiber optic bright white halogen for true tissue color			
3.1.2. Laryngoscope Handle Type C Battery Handle			
3.1.3. Single-piece type; lightweight			
3.1.4. Blades can be converted from lamp to fiber optic illumination			
3.1.5. Light pathways can be repaired; reduced proximal blade height			
3.1.6. With Macintosh Halogen Fiber Optic Blade 2			
3.1.7. With Macintosh Halogen Fiber Optic Blade 3			
3.1.8. With Macintosh Halogen Fiber Optic Blade 4			
3.1.9. With Miller Blade 2			
3.1.10. With Miller Blade 3			
3.1.11. With Miller Blade 4			
3.1.12. With laryngoscope case			
3.2. PEDIATRIC LARYNGOSCOPES			
3.2.1. Fiber optic bright white halogen for true tissue color			
3.2.2. Laryngoscope Handle Type C Battery Handle			
3.2.3. Single-piece type; lightweight			
3.2.4. Blades can be converted from lamp to fiber optic illumination			
3.2.5. Light pathways can be repaired; reduced proximal blade height			
3.2.6. With six (6) Miller Fiber Optic Blade 00			
3.2.7. With six (6) Miller Fiber Optic Blade 0			
3.2.8. With six (6) Miller Fiber Optic Blade 1			
3.2.9. With laryngoscope case			

LOT 11-10 Portable Suction Units

Item Code No.	Department	Section	Item Description
LOT 11-10	Inpatient Services	General Ward	Portable Suction Units
1. General Description			
Suction machine suitable for use in theatre, for both adult and pediatric use. Should be constructed from coated non-corrosive, extreme heat resistance material and electrically insulated and mobile on antistatic castors □ 60 mm, 2 No. lockable, with high level push handle.			
2. Composition			

Item Code No.	Department	Section	Item Description
LOT 11-10	Inpatient Services	General Ward	Portable Suction Units
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	High flow rate	40 litres per minute.	
3.1.2.	Suction vacuum	Maximum 700mmHg	
3.1.3.	Suction pump	oil free	
3.1.4.	Jars	2 X 2 liter polycarbonate autoclavable and unbreakable complete with overflow devices and valves.	
3.1.5.	Vacuum gauge	Graduated in mmHg and kPa.	
3.1.6.	Vacuum control	Adjustable at the front panel	
3.1.7.	Switch	Main on front panel and foot switch (water proof type)	
3.1.8.	Cable towage	On back with reversible cleats	
3.1.9.	Anti-bacterial filters	Available preferable autoclavable	
3.1.10.	Suction tubing connection	Antistatic neoprene or silicone	
3.1.11.	Safety	Overflow pump protection	
3.1.12.	Handle	High level push handle type	
3.1.13.	Movements	Mobile on four antistatic castors 2 No. lockable.	
4. Physical characteristics			
4.1.	Main unit	Mobile on castors with push handle	
5. Operating environment			
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug BS standard, 3m long cord with PE	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6. Accessories			
6.1.	Sterilizable, silicone tubing	5 Set	
6.2.	Bacterial filters	1 Box	
6.3.	Foot switch	1 No.	
6.4.	Cannula with handle for general	4 Sets	

Item Code No.	Department	Section	Item Description
LOT 11-10	Inpatient Services	General Ward	Portable Suction Units
	purpose		
7.	Quality standards		
7.1.	Manufacturing standards	EN 10079-1, IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	CE and FDA marked	
8.	Local back up service		
8.1.	Available	Should be available locally	
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
9.	Delivery point		
9.1.	See Schedule	For inspection and testing	
9.2.	Nil		
10.	Pre installation requirements		
	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		
12.1.	User Training	On site user training on operation and daily up keep	
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
13.	Technical documentations		
13.1.	User manuals	2 Sets	
13.2.	Service Manual	1 Set	
13.3.	Drawings	Nil	
14.	Commissioning		
14.1.	Testing and commissioning of the machine to the satisfaction of the user.		
15.	Warranty		
15.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
15.2.	Equipment System	Nil	

LOT 11-11 Nebulizers

Item Code No.	Department	Section	Item Description
LOT 11-11	Inpatient Services	General Ward	Nebulizer
1. General Description			
Nebulizer , mounted on a mobile cart			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
3.1.	Main Unit		
3.1.1.	Type	Ultrasonic type	
3.1.2.	Nebulizing rate	4 ml/min	
3.1.3.	Mist particle	1 to 5 micron	
3.1.4.	Timer	1 to 30 Minute	
3.1.5.	Mist feed hose, adult	2 pcs	
3.1.6.	Mist feed hose, Pead	2 pcs	
3.1.7.	Inhalation mask, adult	10 pcs	
3.1.8.	Inhalation mask, pead	10 pcs	
3.1.9.	Mouth piece	10 pcs	
3.1.10.	Diaphragm	5 pcs	
3.1.11.	Water supply bottle (1L)	1 pc	
4.	Physical characteristics		
4.1.	Main unit	Mounted on mobile cart	
4.2.	Dimensions		
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase	
5.2.	Ambient temperature	10° C to 40° C	
5.3.	Relative humidity	20% to 90%	
6.	Accessories		
6.1.	Automatic Voltage Regulator (AVR)		
6.1.1.	Capacity	Over VA of the main Unit	
6.1.2.	Input	Ac 240V, 50Hz, Single phase ± 15%	

Item Code No.	Department	Section	Item Description
LOT 11-11	Inpatient Services	General Ward	Nebulizer
6.1.3.	Output	Ac 240V, 50Hz, Single Phase \pm 2.5 %	
7.	Startup kit		
7.1.	Air filter	10 pcs	
8.	Quality standards		
8.1.	Manufacturing standards	IEC 60601-1, ISO 9001 or any other internationally recognized standards	
8.2.	Conformity to standards	CE and FDA Approved	
9.	Local back up service		
9.1.	Available	Should be available locally	
9.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
10.	Delivery point		
10.1.	See Schedule	For inspection, installation and commissioning	
11.	Pre installation requirements		
11.1.	Nil		
12.	Installation and testing		
12.1.	Complete installation and setup of the machine as per manufacturer's instructions		
13.	Training		
13.1.	User Training	On site user training on operation and daily up keep	
13.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
14.	Technical documentations		
14.1.	User manuals	2 Sets	
14.2.	Service Manual	1 Set	
14.3.	Drawings	Nil	
15.	Commissioning		
15.1.	Testing and commissioning of the machine to the satisfaction of the user.		
16.	Warranty		
16.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
16.2.	Equipment System	Nil	

LOT 11-12 Macerators

Item Code No.	Department	Section	Item Description
LOT 11-12	Outpatient	Consulting Room	Macerators
1. General Description			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1. Capacity – Should dispose a minimum of four disposable.</p> <p>3.2. Dimension should be not more than;-length 525mm ,width 650mm and height 1050mm.</p> <p>3.3. Water requirement ;-</p> <p>3.3.1. Inlet supply with a flow at least 18l/min</p> <p>3.3.2. Nominal overall usage at least 30 liters/cycle</p> <p>3.4. Drainage must be connected below the machine so that it connects to the hospital drainage.</p> <p>3.5. Should have an overflow connection.</p> <p>3.6. Should be anchored to the floor due to vibration of the cutting motor system.</p> <p>3.7. The noise level during operation should be minimal</p> <p>3.8. Should be electronically controlled with ease of operation.</p> <p>Accessories, documentation and general</p> <p>3.9. The macerator must be supplied with 2 extra diaphragms complete with the spring for the drainage.</p> <p>3.10. Power requirement should be 220-240V /50Hz (thus the cutting motor is single phase)</p> <p>3.11. The macerator should have a warranty period of not less than two (2) years from the date of installation.</p> <p>3.12. The user and technical training shall be conducted before the machine is handed to the hospital.</p> <p>3.13. It shall be supplied with full set of operating, preventive maintenance and service documentation, both soft and hard copies.</p> <p>3.14. The macerator must comply with international safety standards and carry FDA/CE mark.</p>			

LOT 11-13 Commode Chairs

Item Code No.	Department	Section	Item Description
LOT 11-13	Inpatient	Wards	Commode Chairs
1. General Description			
Commode, basic			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
<p>3.1. Frame:</p> <p>3.1.1. Rigid frame, Mild steel, Galvanized, Epoxy coated; Constructed in such a way that it can be reversed over a standard toilet bowl</p> <p>3.1.2. Size: about Width 46 cm, Depth 40 cm</p> <p>3.1.3. Seat: Molded polyurethane seat; with a vinyl chair seat cover; Removable bucket system</p> <p>3.1.4. Backrest: Full length back support in vinyl or nylon; Height 40 cm</p> <p>3.1.5. Armrests: Completely removable, should not form part of the rigid frame</p>			

Item Code No.	Department	Section	Item Description
LOT 11-13	Inpatient	Wards	Commode Chairs
3.1.6. Footrests: Removable 3.1.7. Castors: 4 x Lockable, Minimum 5 cm diameter 3.1.8. Weight limit: Maximum of 130 kg			

LOT 11-14 LED X-Ray Viewer

Item Code No.	Department	Section	Item Description
LOT 11-14	Inpatient	Wards	X-ray Viewer
1. General Description			
X-RAY-VIEW BOX (LED Light)			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
A) Product & Manufacturer Quality Standards: 3.1. Should be FDA/ CE approved product. 3.2. Manufacturer and Supplier should have ISO 13485 certification for quality standards.			
B) TECHNICAL CHARACTERISTICS 3.3. Should be ultra-thin X ray film illuminator using LED light 3.4. It should have a thickness of 30 mm 3.5. It should be suitable for viewing 14''x17' film. 3.6. Should have position to insert 8 films in 2 rows. 3.7. The LED light must have a life span of more than 50,000 hours. 3.8. It should have easy insertion & removal of the film. 3.9. It should have homogeneous illumination more than 95% and maximum intensity of over 10,000 lux. 3.10. It should have an on-off switch along with digital feather touch dimmer and a button to set the intensity 3.11. It should have fully electronic continuous brightness control, with adjustment range of approximately 90%. 3.12. It should be directly connected to power supply without any external adapters. 3.13. It should have flicker free high frequency light for reduction of eye strain. 3.14. It should have external fuses for protection against power surge. 3.15. 10 step Digital dimmer facility with step up/step down intensity of 500 lux or less. 3.16. Should have automatic film sensor 3.17. Should have facility to switch on only the section where the film needs to be viewed.			
C) Power supply: 3.18. 240V, AC, 50Hz. Single phase			

LOT 11-15 Emergency Trolley

Item Code No.	Department	Section	Item Description
LOT 11-15	Inpatient Services	General Ward	Emergency Trolley
1. General Description			
Resuscitation trolley for use in ICU. Epoxy coated mild steel, with drawers, protection perimeter and defibrillator holder. The Unit should be mobile on four castors, 2 lockable			
2. Composition			
2.1.	Main unit,		
3. Performance Specifications			
3.1. Main Unit			
3.2. Should be durable with Ergonomic handle and should have easy grip			
3.3. Height should be 40-45"			
3.4. Should have 6-8 drawers of sizes 3x3",2x6",1x9"			
3.5. Should have interchangeable 3",6",9" drawers which run smoothly on good quality channels			
3.6. Should have provision of side storage which allows storage of variety accessories like can, storage bins, glove storage, sharp container set			
3.7. An over bridge can with baskets, shelves and bins to keep important things			
3.8. Should have AMS top surface & advance polymer material which is easy to clean. It should not dent, chip flake or corrode			
3.9. Should be easily rolling and has toe brakes			
3.10. Should have I.V. pole with clamps ach 3" drawer should have provision for 25-30 compartments			
3.11. Should have twin swivel castors & central lock			
3.12. Should be CE and ISO 9001/2000 and FDA approved			
3.13. Should have CPR board & O2 cylinder holder			

LOT 11-16 Drug Trolley

S/No.	Characteristic Features	Specification Requirements
Technical Specifications		
	Material:	<ul style="list-style-type: none"> High-quality stainless steel or aluminium for durability and easy cleaning.
	Drawers:	<ul style="list-style-type: none"> Minimum 4 lockable drawers for secure storage of medications.
	Shelving:	<ul style="list-style-type: none"> Adjustable compartments for organizing different drug types.
	Mobility:	<ul style="list-style-type: none"> Heavy-duty castors (two with brakes) for stability and smooth movement.
	Security Features:	<ul style="list-style-type: none"> Central locking system to prevent unauthorized access.
	Work Surface:	<ul style="list-style-type: none"> Non-slip, chemical-resistant top for medication preparation.

S/No.	Characteristic Features	Specification Requirements
	Additional Features:	<ul style="list-style-type: none"> • IV pole, waste bin, sharps container, and labelling system.
Procurement Requirements		
	Compliance:	<ul style="list-style-type: none"> • Must meet ISO 13485 or equivalent medical device standards.
	Warranty:	<ul style="list-style-type: none"> • Minimum 2-year warranty. •
	Supplier Qualifications:	<ul style="list-style-type: none"> • Vendor must provide proof of previous supply contracts for similar equipment.
	Delivery Timeline:	<ul style="list-style-type: none"> • Expected within 6-8 weeks from order confirmation.
	Maintenance & Support:	<ul style="list-style-type: none"> • Availability of after-sales service and technical support. • Availability of both User and technical manuals (hard and soft copies)

LOT 11-17 Procedure Trolley

Item Code No.	Department	Section	Item Description
LOT 11-17	Inpatient	Wards	Procedure Trolley
1. General Description			
Procedure/Dressing Trolley			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1. Overall approx. Size: 780mmL x 500mmW x 900mmH			
3.2. Approximate shelf dimension 750mmL x 500mmW.			
3.3. Tubular CRC frame mounted on four castors of minimum 100mm dia and should be pre-treated and epoxy coated finish.			
3.4. Two S.S. of 304 grade shelves with protective railings on three sides.			
3.5. Should have provision for holding bowel and bucket.			
3.6. Warranty: 2 years			

LOT 11-18 Patient Trolley

Item Code No.	Department	Section	Item Description
LOT 11-18	Inpatient Services	General Ward	Patient Trolley with side rails
1. General Description			
Resuscitation patient trolley with IV pole , Oxygen Cylinders and with adjustable sides, constructed from chrome plated mild steel and mobile on castors			

Item Code No.	Department	Section	Item Description
LOT 11-18	Inpatient Services	General Ward	Patient Trolley with side rails
2. Composition			
2.1.	Main unit		
3. Physical Specifications			
3.1.	Main Unit		
3.1.1.	Material of main unit	Tubular mild steel, chrome plated	
3.1.2.	Movements	Back rest, trendelenburg/reverse tendelenburg, up and down	
3.1.3.	Operation	By hydraulic mechanical system	
3.1.4.	Side guard rails	Foldable or drop down type	
3.1.5.	Mattress	High density, water proof and fire resistance	
3.1.6.	Mobile	On four antistatic castors diameter 150mm with brakes and central locking system	
3.1.7.	IV pole	Provided	
3.1.8.	Oxygen cylinder	Provided, Medium size 11kg (1.36m ²) mild steal	
3.1.9.	Resuscitation bags	Provided, adult and paed	
3.1.10.	Dimensions (Overall)	Approx. 2050 mm(L) X 780 mm (W) X 620 -900mm (H)	
3.1.11.	Weight to handle	approx. 200 kg	
4.	Quality Standards		
4.1.	Manufacturing standards	ISO 9001, ISO 13485	
4.2.	Conformity to standards	CE Standard	
5.	Delivery point		
5.1.	KCC	Delivery point	
6.	Warranty		
6.1.	Equipment	Minimum of two (2) years after delivery	

LOT 11-19 Defibrillator

Item Code No.	Department	Section	Item Description
LOT 11-19	Inpatient Services	General Wards	Defibrillator
1. General Description			
Defibrillator suitable for cardiac care complete with ECG monitoring, SPO ₂ monitoring and NIBP			
2. Composition			
2.1.	Main unit		
3. Performance Specifications			
<p>3.1. The defibrillator should have biphasic technology having energy selection of maximum 200 joules.</p> <p>3.2. The machine should have facility for ECG monitoring, defibrillation, external pacing & recorder.</p> <p>3.3. Machine should have more than 8" TFT Screen.</p> <p>3.4. Machine must be with sweep rate 25mm/sec, 50mm/sec.</p> <p>3.5. Machine should have 72-hour trend storage facility.</p> <p>3.6. Should have 5 leads and capable of monitoring 12 lead configuration ECG through ECG Cables, electrodes & paddles.</p> <p>3.7. The machine should have defibrillation facility for adult & pediatric patients.</p> <p>3.8. The machine should have ECG waveform display on bright screen along with other vital numeric information.</p> <p>3.9. The machine should be compact, portable with built in rechargeable battery & light weight.</p> <p>3.10. The machine should have inbuilt auto & manual recorder for printing ECG trace & stored information.</p> <p>3.11. The machine should have user selectable alarm setting.</p> <p>3.12. he machine should work on mains (without battery) and on battery as well.</p> <p>3.13. The machine should have AED feature as inbuilt with manual override for manual operations.</p> <p>3.14. Machine must be with carry bag & Accessory bag.</p> <p>3.15. The machine must be supplied with all the essential accessories in 2 set & moveable trolley.</p> <p>3.16. The Defibrillator should have an ECG display and a three lead ECG cable.</p> <p>3.17. The Defibrillator should have SPO₂ and must have Non Invasive Pacing.</p>			
4.	Physical characteristics		
4.1.	Main unit	Portable	
4.2.	Dimensions		
5.	Operating environment		
5.1.	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug (BS), 3m long cord with PE	
5.2.	Back up supply	Internal rechargeable batteries (SLA), to last at least five hours	
5.3.	Ambient temperature	10° C to 40° C	
5.4.	Relative humidity	20% to 90%	
6. .	Consumables		
6.1.	Start-up Kits must be		

Item Code No.	Department	Section	Item Description
LOT 11-19	Inpatient Services	General Wards	Defibrillator
	provided including ECG electrode, Gel and Recording paper		
7.	Quality standards		
7.1.	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485	
7.2.	Conformity to standards	CE and FDA marked	
8.	Local back up service		
8.1.	Available	Should be available locally	
8.2.	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff	
9.	Delivery point		
9.1.	See Schedule	For inspection and testing	
9.2.	Nil		
10.	Pre installation requirements		
	Nil		
11.	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
12.	Training		
12.1.	User Training	On site user training on operation and daily up keep	
12.2.	Maintenance training	Onsite maintenance training on preventive maintenance	
13.	Technical documentations		
13.1.	User manuals	2 Sets	
13.2.	Service Manual	2 Set	
13.3.	Drawings	Nil	
14.	Commissioning		
14.1.	Testing and commissioning of the machine to the satisfaction of the user.		
15.	Warranty		
15.1.	Equipment	Minimum of two (2) years after commissioning on all parts.	
15.2.	Equipment System	Nil	

LOT 11-20 Baby cots

Item Code No.	Department	Section	Item Description
LOT 11-20	Inpatient Services	General Wards	Baby Cot
1. General Description			
Baby Cot for use in ICU. <ul style="list-style-type: none"> • Dimensions L124.5 x W67.5 x H93cm • Mattress Size Required L120 x W60cm • Finish White • one-handed drop side mechanism • Designed with narrow bars on every side so baby can see out, while parents can easily see in. • Distressed nickel handles • Large under cot storage drawer • 3 position mattress base height • Sturdy all-stainless steel SS304 frame 			
2.	Quality standards		
2.1.	Manufacturing standards	ISO 9001 or any other internationally recognized standards	
2.2.	Conformity to standards	CE Approved	
3.	Delivery point		
3.1.	See Schedule	For inspection, installation and testing	
3.2.	Nil		

LOT 11-21 Reclining Chairs

S/No.	Characteristic Features	• Specification Requirements
		• Technical Specifications
	Material:	• High-quality stainless-steel frame with medical-grade upholstery for durability and easy cleaning.
	Reclining Mechanism:	• Manual or motorized reclining function with multiple adjustable positions.
	Padding:	• High-density foam cushioning for patient comfort.
	Armrests:	• Padded and adjustable for ergonomic support.
	Mobility:	• Heavy-duty castors with locking brakes for stability.
	Weight Capacity:	• Supports up to 150 kg.
	Additional Features:	• IV pole holder, side tray, and footrest for enhanced functionality.
		• Procurement Requirements
	Compliance:	• Must meet ISO 13485 or equivalent medical furniture standards.
	Warranty:	• Minimum 2-year warranty.
	Supplier Qualifications:	• Vendor must provide proof of previous supply contracts for similar equipment.
	Delivery Timeline:	• Expected within 6-8 weeks from order confirmation.
	Maintenance & Support:	• Availability of after-sales service and technical support. • Availability of both User and technical manuals (hard and soft copies)

LOT 12: Waste Management Unit

	Bidder to allow a sum of Kenya Shillings 1,250,000 for contingencies to be omitted or expended in whole or in part at the discretion of the Project Manager.		
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Lot 12-1 Medical Waste Treatment system (Microwave based)

S/No.	Characteristic Features	• Specification Requirements
Technical Specifications		
	Processing Capacity:	• Minimum 50–250 kg/hour , suitable for high-volume medical waste.
	Sterilization Method:	• Microwave-based core heating combined with shredding for effective microbial inactivation.
	Waste Compatibility:	• Handles infectious medical waste , including sharps, syringes, and contaminated materials.
	Emission Control:	• Zero emissions —no steam, water, radiation, or odour.
	Sterilization Efficiency:	• Achieves 8-log10 microbial inactivation .
	Power Supply:	• 400V, 3-phase , with specified power requirements.
	Safety Features:	• Fail-safe technology with alarms and automated monitoring.
	Automation:	• Continuous or batch processing with remote monitoring capabilities.
Procurement Requirements		
	Compliance:	• Must meet ISO 13485 or equivalent medical waste treatment standards.
	Warranty:	• Minimum 2-year warranty .
	Supplier Qualifications:	• Vendor must provide proof of previous supply contracts for similar equipment.
	Delivery Timeline:	• Expected within 6-8 weeks from order confirmation.
	Maintenance & Support:	• Availability of after-sales service and technical support. • Availability of both User and technical manuals (hard and soft copies)

4. Drawings

This bidding document includes *[insert “the following” or “no”]* drawings.

[If documents shall be included, insert the following List of Drawings]

List of Drawings		
Drawing Nr.	Drawing Name	Purpose

5. Inspections and Tests

The following inspections and tests shall be performed: *[insert list of inspections and tests]*



Part 3 - Contract

Section VIII - General Conditions of Contract

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Section VIII - General Conditions of Contract

- 1. Definitions** 1.1 The following words and expressions shall have the meanings hereby assigned to them:
- (a) “Bank” means the financing institution named in the Special Conditions of Contract (SCC).
 - (b) “Borrower” means the entity named as the Borrower in the SCC.
 - (c) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
 - (d) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto.
 - (e) “Contract Price” means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
 - (f) “Letter of Bid” means the document entitled letter of bid, which was completed by the Supplier and includes the signed offer to the Purchaser for the Goods.
 - (g) “Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Goods.
 - (h) “Drawings” means the drawings of the Goods, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Purchaser in accordance with the Contract.
 - (i) “Schedules” means the document(s) entitled schedules, completed by the Supplier and submitted with the Letter of Bid, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and

schedules of rates and/or prices.

- (j) “Bid” means the Letter of Bid and all other documents which the Supplier submitted with the Letter of Bid, as included in the Contract.
- (k) “Day” means calendar day.
- (l) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (m) “GCC” means the General Conditions of Contract.
- (n) “Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (o) “Purchaser’s Country” is the country specified in the **Special Conditions of Contract (SCC)**.
- (p) “Purchaser” means the entity purchasing the Goods and Related Services, as **specified in the SCC**.
- (q) “Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (r) “SCC” means the Special Conditions of Contract.
- (s) “Subcontractor” means any person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (t) “Supplier” means the person, private or government entity, or a combination of the above, whose Bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (u) “The Project Site,” where applicable, means

the place named in the **SCC**.

- (v) “Party” means the Purchaser or the Supplier as the context requires.
- (w) “Change Order” or “Change” is defined in Clause 33 [Change Orders and Contract Amendments.]
- (x) Bank Procurement Framework is defined as Procurement Framework for Goods, Works, Non-Consulting and Consulting Services under “Bank Financing” as defined under Procurement Policy for Bank Group funded operations.

2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Fraud and Corruption

3.1 The Bank requires compliance with the Integrity Framework comprising the African Development Bank Group’s Sanctions Procedures, the Bank’s Whistleblowing and Complaints Policy, the Bank’s Procurement Policy under the Procurement Framework and any other applicable Policies and Procedures including their updates, as set forth in Appendix 1 to the GCC.

3.2 The Purchaser requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

4. Interpretation

4.1 In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and vice-versa;
- (c) provisions including the word “agree”, “agreed” or “agreement” requires the

agreement to be recorded in writing;

- (d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- (e) the word “tender” is synonymous with bid and “tenderer” with “bidder” and the words “tender documents” with “bidding documents”;
- (f) The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

4.2 Incoterms

- (a) Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms **specified in the SCC**.
- (b) The terms EXW, CIP, FCA, CFR and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms specified in the **SCC** and published by the International Chamber of Commerce in Paris, France.

4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Nonwaiver

- (a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that

party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language specified in the **SCC**. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

6. Joint Venture, Consortium or Association, Subcontractors

- 6.1 Unless otherwise specified in SCC, if the Supplier is a joint venture, consortium, or association (JV), all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser. Any limit on the maximum number of members in the Joint Venture, Consortium or Association shall be as specified in SCC. Minimum Share of a Member of the JV shall be as specified in SCC.

7. Eligibility

- 7.1 The Supplier and its Subcontractors shall have the

nationality of an eligible country of the Bank in accordance with the Bank's Procurement Policy for the Bank Group Funded Operation described under the Bank's Procurement Framework, and as listed in Section V, Eligible Countries under Appendix 2 to General Conditions. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.

7.2 All Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in Eligible Countries of the Bank in accordance with the Bank's Procurement Policy for the Bank Group Funded Operation described under the Bank's Procurement Framework, and as listed in Section V, Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

8. Notices

8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC**. The term "in writing" means communicated in written form with proof of receipt.

8.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

9.10. Governing Law

9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Purchaser's Country, unless otherwise specified in the **SCC**.

9.2 Throughout the execution of the Contract, the Supplier shall comply with the import of goods and services prohibitions in the Purchaser's Country when

(a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or

9.2 (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods

from that country or any payments to any country, person, or entity in that country.

112. Settlement of Disputes

10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the **SCC**.

10.3 Notwithstanding any reference to arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) the Purchaser shall pay the Supplier any monies due the Supplier.

114. Inspections and Audit by the Bank

11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep, accurate and systematic accounts and records in respect of the Goods in such form and details as will clearly identify relevant time changes and costs.

11.2 Pursuant to paragraph 2.2 e. of Appendix 1 to the General Conditions the Supplier shall permit and shall cause its subcontractors and subconsultants to permit, the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors' and

subconsultants' attention is drawn to Sub-Clause 3.1 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

- 156.Scope of Supply** 12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.
- 178.Delivery and Documents** 13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the **SCC**.
- 190.Supplier's Responsibilities** 14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.
- 212.Contract Price** 15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its Bid, with the exception of any price adjustments authorized in the **SCC**.
- 234.Terms of Payment** 16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the **SCC**.
- 16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.
- 16.4 The currencies in which payments shall be made to the Supplier under this Contract shall be those

in which the Bid price is expressed.

16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the **SCC**, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the **SCC**, for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.

256. Taxes and Duties

17.1 For goods manufactured outside the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's Country.

17.2 For goods Manufactured within the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

17.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

278. Performance Security

18.1 If required as specified in the SCC, the Supplier shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the **SCC**.

18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 As specified in the SCC, the Performance Security, if required, shall be denominated in the currency(ies) of the Contract, or in a freely convertible currency acceptable to the Purchaser; and shall be in one of the format stipulated by the Purchaser in the SCC, or in another format acceptable to the Purchaser.

18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any

warranty obligations, unless specified otherwise in the **SCC**.

29.0. Copyright

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

**3B.2. Confidential
I
Information**

20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.

20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

- (a) the Purchaser or Supplier need to share with the Bank or other institutions participating in the financing of the Contract;
- (b) now or hereafter enters the public domain through no fault of that party;
- (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or

indirectly, from the other party; or

- (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

33.4. Subcontracting

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Bid. Such notification, in the original Bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

35.6. Specifications and Standards

22.1 Technical Specifications and Drawings

- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only

after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

378. Packing and Documents

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

23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Purchaser.

390. Insurance

24.1 Unless otherwise specified in the **SCC**, the Goods supplied under the Contract shall be fully insured—in a freely convertible currency from an eligible country—against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the **SCC**.

412. Transportation and Related Services

25.1 Unless otherwise specified in the **SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.

25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- (d) performance or supervision or maintenance

and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

- (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

25.3 Prices charged by the Supplier for related services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services

43.4. Inspections and Tests

26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the **SCC**.

26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as specified in the **SCC**. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the

Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

- 26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.
- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.

43.6. Liquidated Damages

- 27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those **SCC**. Once the maximum is reached, the Purchaser may

terminate the Contract pursuant to GCC Clause 35.

478. Warranty

- 28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 28.2 Subject to GCC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
- 28.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the **SCC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 28.5 Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **SCC**, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

450. Patent Indemnity

- 29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a

result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

29.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

29.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design,

trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

552. Limitation of Liability

30.1 Except in cases of criminal negligence or willful misconduct,

- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
- (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the Purchaser with respect to patent infringement

554. Change in Laws and Regulations

31.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of the Purchaser's Country where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

556. Force Majeure

32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination 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.

32.2 For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

32.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

**55.8. Change
Orders and
Contract
Amendmen
ts**

33.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipment or packing;
- (c) the place of delivery; and
- (d) the Related Services to be provided by the Supplier.

33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier’s performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier’s receipt of the Purchaser’s change order.

33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 Subject to the above, no variation in, or modification of, the terms of the Contract shall be made except by written agreement signed by the parties.

**550. Extensions
of Time**

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

**652. Terminatio
n**

35.1 Termination for Default

(a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

(i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;

(ii) if the Supplier fails to perform any other obligation under the Contract; or

(iii) if the Supplier, in the judgment of the Purchaser has engaged in Fraud and Corruption, as defined in paragraph 2.2 a

of the Appendix 1 to the GCC, in competing for or in executing the Contract.

- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or

(ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

35.4 Anytime the contract is terminated for any reason indicated under clause 35, the advance payments made, if any, on the undelivered Goods and Related Services, if not already recovered from the Supplier shall become payable to the Purchaser which the Supplier shall pay to the Purchaser within 15 days from the date of receipt of notice of such termination failing which the amount will be recovered as demand by calling the advance payment Bank Guarantee provided under the contract.

63. Assignment

36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

64.5. Export Restriction

37.1 Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/goods, systems or services, and which substantially impede the Supplier from meeting its obligations under the Contract, shall release the Supplier from the obligation to provide deliveries or services, always provided, however, that the Supplier can demonstrate to the satisfaction of the Purchaser and of the Bank that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Purchaser's convenience pursuant to Sub-Clause 35.3.

APPENDIX 1 TO GENERAL CONDITIONS

Fraud and Corruption

(Text in this Appendix shall not be modified)

1. Purpose

1.1 The Bank's Integrity Framework and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption¹.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party²;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party³ to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

¹ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

² For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution, including Bank staff and employees of other organizations taking or reviewing procurement decisions.

³ For the purpose of this sub-paragraph, "party" refers to a public official, including Bank staff and employees of other organizations taking or reviewing procurement decisions.; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution."

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Integrity Framework and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;⁴ (ii) to be a nominated⁵ sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect⁶

⁴ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

⁵ A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

⁶ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

APPENDIX 2 TO GENERAL CONDITIONS

Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank Group Financed Procurement

A. Provisions under Section 5 “Eligibility” of the Procurement Policy for Bank Group Funded Operations and Chapter A2 of the Operations Procurement Manual under Procurement Framework of the African Development Bank

1. The African Development Fund (ADF) permits firms and individuals from all countries to offer goods, works and services for ADF funded projects.

However, the proceeds of any Financing undertaken in the operations of the African Development Bank (ADB) and the Nigeria Trust Fund (NTF) shall be used for procurement of goods and works, including the related services, provided by bidders

from Eligible⁷ Countries.⁸ Any conditions for participation shall be limited to those that are essential to ensure the firm's capability to fulfill the contract in question. In the case of ADB and NTF, bidders from non-Member Countries offering goods, works and related services (including transportation and insurance) are not eligible even if they offer these from Eligible Member Countries. Any waiver to this rule will be in accordance with the Articles 17(1) (d) of the Agreement Establishing the African Development Bank and 4.1 of the Agreement Establishing the Nigeria Trust Fund.

B. Rules and Procedures for Procurement of Goods and Works

Overview

1. The eligibility criteria for participation in the supply of goods, works and related services, to be procured through the ADB and NTF Financing, derive from the requirements of the Agreement Establishing the African Development Bank, Article 17.1.d, and the Agreement Establishing the Nigeria Trust Fund, Article 4.1. The foregoing requirements basically prescribe two types of eligibility criteria:
 - i) The eligibility of the bidder;
 - ii) The eligibility of the goods, works and related services.

Eligibility of the Bidder Under the ADB & NTF Financing

2. The eligibility of the bidder shall be based on nationality, in accordance with the following rules:
 - (a) Natural Persons: A natural person is eligible if he or she is a national of a Member Country of the ADB. Where a person has more than one nationality, such a person shall be eligible if the nationality indicated in his or her bid is that of a Member Country of ADB.
 - (b) Corporations: A corporation is eligible if it satisfies the following criteria:
 - i) it is incorporated in a country that is a Member of the ADB;
 - ii) it is a national of a country that is a Member of the ADB, as determined by the law of its place of incorporation; and
 - iii) it has its principal place of business in a country that is a Member of the ADB.
 - (c) Joint Ventures and Associations: An unincorporated joint venture, partnership, or association, shall be eligible if more than 50% of the value of its works and/or services is executed by its members satisfying the eligibility requirements for individuals or corporations.

Eligibility of the Goods, Works and Related Services

3. In order to be eligible, the goods to be procured must have been mined, grown, or produced, in the form in which they are purchased, in an Eligible Member Country.

⁷ Refer to Bank Framework for additional information on Eligibility.

⁸ "Eligible Countries" shall mean: (a) in the case of the African Development Bank (ADB) and the Nigeria Trust Fund (NTF), the Member Countries of the ADB; and (b) in the case of the African Development Fund, any country.

4. For works contracts, which may include civil works, plant construction, or turnkey contracts, the contractor must satisfy the nationality criteria of eligibility, either as a natural person, or corporation, or joint venture and association. Labour, equipment, and materials needed for carrying out the works contract, shall be supplied from Eligible Member Countries.
5. For contracts, which have been awarded on the basis of Cost, Insurance and Freight (CIF), or Carriage and Insurance Paid (CIP), bidders shall be free to arrange for ocean and other transportation, and the related insurance, from any Eligible Member Country. On the other hand, where goods are shipped on FOB basis, and the Bank has agreed to finance transportation and insurance separately, which are arranged by the purchaser, under a separate contract, the Bank shall be satisfied that the services are supplied from Eligible Member Countries.

List of Eligible Countries

6. List of Eligible countries can be found in African Development Bank's website:

<https://www.afdb.org/en/about-us/corporate-information/members/>

Ineligible Countries in reference to ITB 4.8 and ITB 5.1

7. In reference to ITB 4.8 and ITB 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8(a) and ITB 5.1: **none**.

Under ITB 4.8(b) and ITB 5.1: **none**.

Section IX - Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

[The Purchaser shall select insert the appropriate wording using the samples below or other acceptable wording, and delete the text in italics]

GCC 1.1 (a)	The Financing Institution is African Development Fund (ADF) .
GCC 1.1 (b)	The Borrower is Republic of Kenya .
GCC 1.1(o)	The Purchaser's Country is: Republic of Kenya
GCC 1.1(p)	The Purchaser is: The Principal Secretary ,State Department for Medical Services
GCC 1.1 (u)	The Project Site(s)/Final Destination(s) is/are: EAST AFRICA Centres of Excellence (EACE) COMPLEX, AT KENYATTA NATIONAL HOSPITAL GROUNDS OFF NGONG ROAD.
GCC 4.2 (a)	The meaning of the trade terms shall be as prescribed by Incoterms. If the meaning of any trade term and the rights and obligations of the parties thereunder shall not be as prescribed by Incoterm.
GCC 4.2 (b)	The version edition of Incoterms shall be "Incoterms 2020", as published by The International Chamber of Commerce
GCC 5.1	The language shall be: English .
GCC 6.1	N/A
GCC 6.1	Maximum numbers of members in the Joint Venture, Consortium or Association (JV) shall not exceed Three (3)
GCC 6.1	Minimum share of a member of Joint Venture, Consortium or Association (JV) in the contract shall not be less than 50% of the total value of the contract

GCC 8.1	<p>For notices, the Purchaser's address shall be:</p> <p>Attention: <i>The Principal Secretary, State Department for Medical Services</i></p> <p>Street Address: <i>Cathedral Road</i></p> <p>Floor/ Room number: <i>N/A</i></p> <p>City: <i>Nairobi</i></p> <p>ZIP Code: <i>Not Applicable</i></p> <p>Country: <i>Kenya</i></p> <p>Electronic mail address: <i>procurement@health.go.ke</i></p>
GCC 9.1	The governing law shall be the law of: <i>Republic of Kenya</i>
GCC 10.2	<p>The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows:</p> <p><i>[The bidding document should contain one clause to be retained in the event of a Contract with a foreign Supplier and one clause to be retained in the event of a Contract with a Supplier who is a national of the Purchaser's Country. At the time of finalizing the Contract, the respective applicable clause should be retained in the Contract. The following explanatory note should therefore be inserted as a header to GCC 10.2 in the bidding document.</i></p> <p><i>"Clause 10.2 (a) shall be retained in the case of a Contract with a foreign Supplier and clause 10.2 (b) shall be retained in the case of a Contract with a national of the Purchaser's Country."</i></p> <p>(a) Contract with foreign Supplier:</p> <p><i>"the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC)"</i></p> <p>GCC 10.2 (a)—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.</p> <p>(b) Contracts with Supplier national of the Purchaser's Country:</p> <p>In the case of a dispute between the Purchaser and a Supplier who is a national of the Purchaser's Country, the dispute shall be referred to adjudication or arbitration in accordance with</p>

	the laws of the Purchaser's Country.
GCC 13.1	<p>Details of Shipping and other Documents to be furnished by the Supplier are: <i>negotiable bill of lading, a non-negotiable sea way bill, an airway bill, a railway consignment note, a road consignment note, insurance certificate, Manufacturer's or Supplier's warranty certificate, inspection certificate issued by nominated inspection agency, Supplier's factory shipping details etc.</i></p> <p>The above documents shall be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.</p>
GCC 15.1	The prices charged for the Goods supplied and the related Services performed <i>shall not</i> be adjustable.
GCC 16.1	<p>GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p>Payment for Goods supplied from abroad:</p> <p>100% of goods delivered to the site, inspected, tested and accepted upon submission of claim supported by the acceptance certificate issued by the purchaser declaring that the goods have been delivered and that all other contracted services have been performed.</p>
GCC 16.5	<p>The payment-delay period after which the Purchaser shall pay interest to the supplier shall be <i>Sixty (60) days</i></p> <p>The interest rate that shall be applied is <i>0.5%</i></p>
GCC 18.1	<p>A Performance Security <i>shall be required.</i></p> <p><i>Performance Security shall be: 10% of the Contract Price</i></p>
GCC 18.3	<p>If required, the Performance Security shall be in the form of: <i>a Performance Bond.</i></p> <p>If required, the Performance security shall be denominated in <i>a freely convertible currency acceptable to the Purchaser</i> or <i>the currencies of payment of the Contract, in accordance with their portions of the Contract Price.</i></p>
GCC 18.4	Discharge of the Performance Security shall take place: <i>not later than 28 days following the completion of the Supplier's performance obligations.</i>

GCC 23.2	<p>The packing, marking and documentation within and outside the packages shall be:</p> <p>GOVERNMENT OF KENYA (GOK) PURCHASER: MINISTRY OF HEALTH. BID NO: MOH/EAKIP/ ICB /001/2021-2022 SUPPLIER: GROSS WEIGHT: PACKAGE NO:</p>
GCC 24.1	<p>The insurance coverage shall be as specified in the Incoterms.</p>
GCC 25.1	<p>Responsibility for transportation of the Goods shall be as specified in the Incoterms.</p>
GCC 25.2	<p>Related services to be provided are:</p> <ul style="list-style-type: none"> a) Performance or supervision of on-site assembly and/or start-up the supplied goods; b) Furnishing of tools required for assembly and/or maintenance of the supplied goods; c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods; d) Performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this Contract; and e) Training of the Purchaser's personnel, at the Supplier's plant and/or on site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods as well as all specifications requirements.
GCC 26.1	<p>The inspections and tests shall be:</p> <p>(i) Certificate of Origin (ii) Inspection Certificate by the Government Agent Goods received in good order</p>
GCC 26.2	<p>The Inspections and tests shall be conducted at: the Point of Delivery EAKI COMPLEX Building Located at Kenyatta National Hospital Grounds.</p>
GCC 27.1	<p>The liquidated damage shall be: 0.5% per week of delay.</p>
GCC 27.1	<p>The maximum amount of liquidated damages shall be: 10% of the contract amount.</p>
GCC 28.3	<p>The period of validity of the Warranty shall be: as specified in each of the items in the specifications Seven thirty (730)</p>

	<p><i>days.</i></p> <p>For purposes of the Warranty, the place(s) of final destination(s) shall be: EAKI COMPLEX Building Located at Kenyatta National Hospital Grounds Along Ngong Road.</p> <p>GCC 28.3—In partial modification of the provisions, the warranty period shall Two (2) years from date of acceptance of the Goods. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the Contract. If, for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall, pay liquidated damages to the Purchaser with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be 0.5% per week of delay.</p>
GCC 28.5	The period for repair or replacement shall be: 21 days.

Section X - Contract Forms

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Notification of Intention to Award

[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid.]

[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]

For the attention of Bidder's Authorized Representative

Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]*

Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to Bidders. The Notification must be sent to all Bidders simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: *[email/fax]* on *[date]* (local time)

Notification of Intention to Award

Purchaser: *[insert the name of the Purchaser]*

Project: *[insert name of project]*

Contract title: *[insert the name of the contract]*

Country: *[insert country where IFB is issued]*

Loan No. /Credit No. / Grant No.: *[insert reference number for loan/credit/grant]*

OCBI / LCB No: *[insert OCBI reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Bidder

Name:	<i>[insert name of successful Bidder]</i>
Address:	<i>[insert address of the successful Bidder]</i>
Contract price:	<i>[insert contract price of the successful Bid]</i>

2. Other Bidders *[INSTRUCTIONS: insert names of all Bidders that submitted a Bid. If the Bid's price was evaluated include the evaluated price as well as the Bid price as read out.]*

Name of Bidder	Bid price	Evaluated Bid price (if applicable)
<i>[insert name]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated price]</i>
<i>[insert name]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated price]</i>
<i>[insert name]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated price]</i>
<i>[insert name]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated price]</i>
<i>[insert name]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated price]</i>

3. Reason/s why your Bid was unsuccessful

[INSTRUCTIONS: State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]

4. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on *[insert date]* (local time).

You may request a debriefing in relation to the results of the evaluation of your Bid. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Bidder, contact details; and address the request for debriefing as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: [*insert name of Purchaser*]

Email address: [*insert email address*]

Fax number: [*insert fax number*] ***delete if not used***

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

5. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [*insert date*] (local time).

Provide the contract name, reference number, name of the Bidder, contact details; and address the Procurement-related Complaint as follows:

Attention: [*insert full name of person, if applicable*]

Title/position: [*insert title/position*]

Agency: [*insert name of Purchaser*]

Email address: [*insert email address*]

Fax number: [*insert fax number*] ***delete if not used***

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

Further information:

For more information see the Bank's Procurement Framework

In summary, there are four essential requirements:

1. You must be an 'interested party'. In this case, that means a Bidder who submitted a Bid in this bidding process, and is the recipient of a Notification of Intention to Award.

- 2. The complaint can only challenge the decision to award the contract.
- 3. You must submit the complaint within the period stated above.
- 4. You must include, in your complaint, all of the information required by the Procurement Framework.

6. Standstill Period

DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us.

On behalf of the Purchaser:

Signature: _____

Name: _____

Title/position:

Telephone: _____

Email: _____

Beneficial Ownership Disclosure Form

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful Bidder. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- directly or indirectly holding 25% or more of the shares*
- directly or indirectly holding 25% or more of the voting rights*
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder*

OCBI / LCB No.: *[insert number of bidding process.]*

Invitation for Bid No.: *[insert identification]*

To: ***[insert complete name of Purchaser]***

In response to your request in the Letter of Acceptance *dated [insert date of letter of Acceptance]* to furnish additional information on beneficial ownership: *[select one option as applicable and delete the options that are not applicable]*

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Bidder (Yes / No)

<p><i>[include full name (last, middle, first), nationality, country of residence]</i></p>				
--	--	--	--	--

OR

(ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions:*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder

OR

(iii) *We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]"

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]* _____

Date signed *[insert date of signing]* **day of** *[insert month], [insert year]*

* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to "Bidder" in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

** Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Letter of Acceptance

[use letterhead paper of the Purchaser]

[date]

To: *[name and address of the Supplier]*

Subject: **Notification of Award Contract No.**

This is to notify you that your Bid dated ***[insert date]*** for execution of the ***[insert name of the contract and identification number, as given in the SCC]*** for the Accepted Contract Amount of ***[insert amount in numbers and words and name of currency]***, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish (i) the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms and (ii) the additional information on beneficial ownership in accordance with BDS ITB 45.1 within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in Section X, - Contract Forms, of the Bidding Document.

Authorized Signature: _____
Name and Title of Signatory: _____
Name of Agency: _____

Attachment: Contract Agreement

Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made the *[insert: **number**]* day of *[insert: **month**]*, *[insert: **year**]*.

BETWEEN

- (1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of of the Government of {insert name of Country of Purchaser}, or corporation incorporated under the laws of {insert name of Country of Purchaser}]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called "the Purchaser"), of the one part, and
- (2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier"), of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
 - (a) the Letter of Acceptance
 - (b) the Letter of Bid
 - (c) the Addenda Nos. _____ (if any)
 - (d) Special Conditions of Contract
 - (e) General Conditions of Contract
 - (f) the Specification (including Schedule of Requirements and Technical Specifications)
 - (g) the drawings
 - (h) the completed Schedules (including Price Schedules)
 - (i) any other document listed in GCC as forming part of the Contract

- 3. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]*

_____ in the capacity of *[insert title or other appropriate designation]*

In the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]* _____

in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert identification of official witness]*

Performance Security

Option 1: (Bank Guarantee)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _ *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the supply of _ *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant to issue this guarantee, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*,¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

¹ The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency (ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

² Insert the date twenty-eight days after the expected completion date as described in GC Clause 18.4. The Purchaser should note that in the event of an extension of this date for completion of the Contract, the Purchaser would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Option 2: Performance Bond

By this Bond [*insert name of Principal*] as Principal (hereinafter called "the Supplier") and [*insert name of Surety*] as Surety (hereinafter called "the Surety"), are held and firmly bound unto [*insert name of Purchaser*] as Obligee (hereinafter called "the Purchaser") in the amount of [*insert amount in words and figures*]*specified as the penal sum of this Bond*, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Supplier and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Supplier has entered into a written Agreement with the Purchaser dated the _____ day of _____, 20 __, for [*name of contract and brief description of Goods and related Services*] in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Supplier shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Supplier shall be, and declared by the Purchaser to be, in default under the Contract, the Purchaser having performed the Purchaser's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or Bids from qualified Bidders for submission to the Purchaser for completing the Contract in accordance with its terms and conditions, and upon determination by the Purchaser and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Purchaser and make available as supply progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the specified penal sum set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Purchaser to Supplier under the Contract, less the amount properly paid by Purchaser to the Supplier; or
- (3) pay the Purchaser the amount required by Purchaser to complete the Contract in accordance with its terms and conditions up to a total not exceeding the specified penal sum of this Bond.

The Surety shall not be liable for a greater sum than the specified penal sum of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of completion of the contract.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Purchaser named herein or the heirs, executors, administrators, successors, and assigns of the Purchaser.

In testimony whereof, the Supplier has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this _____ day of ____ 20 _____.

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

Advance Payment Security Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant to issue this guarantee, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (____) *[insert amount in words]*¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than toward delivery of Goods; or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant's bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This

¹ ¹The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Purchaser.

guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.