

Dow University of Health Sciences



Bidding Documents

Single Stage – Two Envelope Procedure
As per Rule 46 (2) of SPPR, 2010 (Amended 2019)

IFB / NIT No. DUHS/DP/2022/182 Dated 04 April 2022

**Procurement of Laboratory Equipment /
Instruments for IBBPS, Microbiology DDRRL
and Histopathology DDRRL at Dow University
of Health Sciences**

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Instructions to Bidders

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Instructions to Bidders

A. Introduction

1. Source of Funds

- 1.1 The Procuring agency has allocated funds / received / applied for loan / grant / federal / provincial / local government funds from the source(s) indicated in the bidding data in various currencies towards the cost of the project / schemes specified in the bidding data and it is intended that part of the proceeds of this loan / grant / funds / will be applied to eligible payments under the contract for which these bidding documents are issued.
- 1.2 Payment by the Fund will be made by procuring agency from university funds or only at the request of the Procuring agency and upon approval by the Government of Sindh., and in case of a project will be subject in all respect to the terms and conditions of the agreement. The Project Agreement prohibits a withdrawal from the allocated fund account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Federal Government / Sindh Government, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Procuring agency shall derive any rights from the Project Agreement or have any claim to the allocated fund proceeds.

2. Eligible Bidders

- 2.1 This Invitation for Bids is open to all suppliers from eligible source as defined in the SPP Rules, 2010 (Amended 2019) and its Bidding Documents except as provided hereinafter.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring agency to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 2.3 Government-owned enterprises in the Province of Sindh may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Government of Sindh.
- 2.4 Bidder intend to enter into an agreement or under an existing agreement in the form of a Joint Venture (JV) or Consortium shall not be eligible, unless otherwise specified in the Bid Data Sheet.
- 2.5 Bidders shall not be eligible to bid if they are under a declaration of ineligibility for corrupt and fraudulent practices issued by the any government organization in accordance with sub clause 34.1.

3. Eligible Goods and Services

- 3.1 All goods and related services to be supplied under the contract shall have their origin in eligible source countries, defined in the SPP Rules, 2010 (Amended 2019) and its Bidding Documents, and all expenditures made under the contract will be limited to such goods and services.

- 3.2 For purposes of this clause, “origin” means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services is distinct from the nationality of the Bidder.

4. Cost of Bidding

- 4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring agency named in the Bid Data Sheet, hereinafter referred to as “the Procuring agency,” will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

5. Content of Bidding Documents

5.1 the bidding documents include:

- (a) Instructions to Bidders (ITB)
- (b) Bid Data Sheet
- (c) General Conditions of Contract (GCC)
- (d) Special Conditions of Contract (SCC)
- (e) Schedule of Requirements
- (f) Technical Specifications
- (g) Bid Form and Price Schedules
- (h) Bid Security Form
- (i) Contract Form
- (j) Performance Security Form
- (k) Manufacturer’s Authorization Form

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

6. Clarification of Bidding Documents

- 6.1 An interested Bidder requiring any clarification of the bidding documents may notify the Procuring agency in writing. The Procuring agency will respond in writing to any request for clarification of the bidding documents which it receives no later than five working days prior to the deadline for the submission of bids prescribed in the Bid Data Sheet. Written copies of the Procuring agency’s response (including an explanation of the query but without identifying the source of inquiry) will be sent to all interested bidders that have received the bidding documents.

7. Amendment of Bidding Documents

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

- 7.2 All interested bidders that have received the bidding documents will be notified of the amendment in writing, and will be binding on them.
- 7.3 In order to allow interested bidders reasonable time in which to take the amendment into account in preparing their bids, the Procuring agency, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid

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

9. Documents Comprising the Bid

- 9.1 The bid prepared by the Bidder shall comprise the following components:
- a) a Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11, and 12;
 - b) documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
 - c) documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
 - d) bid security furnished in accordance with ITB Clause 15.

10. Bid Form

- 10.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

11. Bid Prices

- 11.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the goods it proposes to supply under the contract.
- 11.2 **For goods offered within the purchaser's country**, prices indicated on the relevant Price Schedule shall be on delivered duty paid (DDP) and/or **For goods offered from outside the purchaser's country**, prices indicated on the relevant Price Schedule shall be on CFR / CNF / C&F / CPT – Karachi basis. The price of other (incidental) services, if any, listed in the Bid Data Sheet will be entered separately
- 11.3 The Bidder's separation of price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Procuring agency and will not in any way limit the Procuring agency's right to contract on any of the terms offered.

11.4 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 Bid Data Sheet. A bid submitted with an adjustable price quotation will be treated as nonresponsive and will be rejected, pursuant to ITB Clause 24. If, however, in accordance with the Bid Data Sheet, prices quoted by the Bidder shall be subject to adjustment during the performance of the contract, a bid submitted with a fixed price quotation will not be rejected, but the price adjustment would be treated as zero.

12. Bid Currencies

12.1 Prices shall be quoted in Pak Rupees unless otherwise specified in the Bid Data Sheet.

13. Documents Establishing Bidder's Eligibility and Qualification

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

13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Procuring agency's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 2.

13.3 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Procuring agency's satisfaction:

- (a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to supply the goods in the Procuring agency's country;
- (b) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
- (c) that, in the case of a Bidder not doing business within the Procuring agency's country, the Bidder is or will be (if awarded the contract) represented by an Agent in that 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
- (d) that the Bidder meets the qualification criteria listed in the Bid Data Sheet.

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

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

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

- 14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings, and data, and shall consist of:
- a. a detailed description of the essential technical and performance characteristics of the goods;
 - b. 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 for a period to be specified in the Bid Data Sheet, following commencement of the use of the goods by the Procuring agency; and
 - c. an item-by-item commentary on the Procuring agency's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- 14.4 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procuring agency in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its bid, provided that it demonstrates to the Procuring agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15 Bid Security

- 15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security in the amount specified in the Bid Data Sheet.
- 15.2 The bid security is required to protect the Procuring agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.
- 15.3 The bid security shall be in Pak. Rupees and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring agency's country, in the form provided in the bidding documents or another form acceptable to the Procuring agency and valid for thirty (30) days beyond the validity of the bid; or
 - (b) irrevocable encashable on-demand Bank call-deposit.
- 15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 will be rejected by the Procuring agency as nonresponsive, pursuant to ITB Clause 24.
- 15.5 Unsuccessful bidders' bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Procuring agency pursuant to ITB Clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 32, and furnishing the performance security, pursuant to ITB Clause 33.

- 15.7 The bid security may be forfeited:
- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
 - (b) in the case of a successful Bidder, if the Bidder fails:
 - (i) to sign the contract in accordance with ITB Clause 32;
 - or**
 - (ii) to furnish performance security in accordance with ITB Clause 33.

16 Period of Validity of Bids

- 16.1 Bids shall remain valid for the period specified in the Bid Data Sheet after the date of bid opening prescribed by the Procuring agency, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Procuring agency as nonresponsive.
- 16.2 In exceptional circumstances, the Procuring agency may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB Clause 15 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in the bidding document.

17 Format and Signing of Bid

- 17.1 The Bidder shall prepare an original and the number of copies of the bid indicated in the Bid Data Sheet, clearly marking each "ORIGINAL BID" and "COPY OF BID," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original and the copy or copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.
- 17.3 Any interlineations, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.
- 17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

18 Sealing and Marking of Bids

- 18.1 The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.
- 18.2 The inner and outer envelopes shall:
- (a) be addressed to the Procuring agency at the address given in the Bid Data Sheet; and
 - (b) bear the Project name indicated in the Bid Data Sheet, the Invitation for Bids

(IFB) title and number indicated in the Bid Data Sheet, and a statement: “DO NOT OPEN BEFORE,” to be completed with the time and the date specified in the Bid Data Sheet, pursuant to ITB Clause 2.2.

18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared “late”.

18.4 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Procuring agency will assume no responsibility for the bid’s misplacement or premature opening.

19 Deadline for Submission of Bids

19.1 Bids must be received by the Procuring agency at the address specified under ITB Clause 18.2 no later than the time and date specified in the Bid Data Sheet.

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

20 Late Bids

20.1 Any bid received by the Procuring agency after the deadline for submission of bids prescribed by the Procuring agency pursuant to ITB Clause 19 will be rejected and returned unopened to the Bidder.

21 Modification and Withdrawal of Bids

21.1 The Bidder may modify or withdraw its bid after the bid’s submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Procuring agency prior to the deadline prescribed for submission of bids.

21.2 The Bidder’s modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clause 18. by a signed confirmation copy, postmarked not later than the deadline for submission of bids.

21.3 No bid may be modified after the deadline for submission of bids.

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

E. Opening and Evaluation of Bids

22 Opening of Bids by the Procuring agency

22.1 The Procuring agency will open all bids in the presence of bidders’ representatives who choose to attend, at the time, on the date, and at the place specified in the Bid Data Sheet. The bidders’ representatives who are present shall sign a register evidencing their attendance.

22.2 The bidders’ names, bid modifications or withdrawals, bid prices, discounts, and

the presence or absence of requisite bid security and such other details as the Procuring agency, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.

22.3 Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances. Withdrawn bids will be returned unopened to the bidders.

22.4 The Procuring agency will prepare minutes of the bid opening.

23 Clarification of Bids

23.1 During evaluation of the bids, the Procuring agency may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

24 Preliminary Examination

24.1 The Procuring agency will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

24.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail.

24.3 The Procuring agency may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

24.4 Prior to the detailed evaluation, pursuant to ITB Clause 25 the Procuring agency will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, **such as** those concerning Bid Security (ITB Clause 15), Applicable Law (GCC Clause 30), and Taxes and Duties (GCC Clause 32), will be deemed to be a material deviation. The Procuring agency's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

24.5 If a bid is not substantially responsive, it will be rejected by the Procuring agency and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

25 Evaluation and Comparison of Bids

25.1 The Procuring agency will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24.

25.2 The Procuring agency's evaluation of a bid will be on delivered duty paid (DDP)

price inclusive of prevailing taxes and duties and/or on CFR / CNF / C&F / CPT – Karachi basis and will exclude any allowance for price adjustment during the period of execution of the contract, if provided in the bid.

25.3 The Procuring agency’s evaluation of a bid will take into account, in addition to the bid price quoted in accordance with ITB Clause 11.2, one or more of the following factors as specified in the Bid Data Sheet, and quantified in ITB Clause 25.4:

- (a) incidental costs
- (b) delivery schedule offered in the bid;
- (c) deviations in payment schedule from that specified in the Special Conditions of Contract;
- (d) the cost of components, mandatory spare parts, and service;
- (e) the availability Procuring agency of spare parts and after- sales services for the equipment offered in the bid;
- (f) the projected operating and maintenance costs during the life of the equipment;
- (g) the performance and productivity of the equipment offered; and/or
- (h) other specific criteria indicated in the Bid Data Sheet and/or in the Technical Specifications.

25.4 For factors retained in the Bid Data Sheet pursuant to ITB 25.3, one or more of the following quantification methods will be applied, as detailed in the Bid Data Sheet:

(a) Incidental costs provided by the bidder will be added by Procuring agency to the delivered duty paid (DDP) price at the final destination.

(b) *Delivery schedule.*

(i) The Procuring agency requires that the goods under the Invitation for Bids shall be delivered at the time specified in the Schedule of Requirements which will be treated as the base, a delivery “adjustment” will be calculated for bids by applying a percentage, specified in the Bid Data Sheet, of the DDP price for each week of delay beyond the base, and this will be added to the bid price for evaluation. No credit shall be given to early delivery.

or

(ii) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. Within this acceptable range, an adjustment per week, as specified in the Bid Data Sheet, will be added for evaluation to the bid price of bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.

or

(iii) The goods covered under this invitation are required to be delivered in partial shipments, as specified in the Schedule of Requirements. Bids offering deliveries earlier or later than the specified deliveries will be adjusted in the evaluation by adding to the bid price a factor equal to a percentage, specified in the Bid Data Sheet, of DDP price per week of variation from the specified delivery schedule.

(c) *Deviation in payment schedule.*

- (i) Bidders shall state their bid price for the payment schedule outlined in the SCC. Bids will 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 Procuring agency may consider the alternative payment schedule offered by the selected Bidder.

or

- (ii) The SCC stipulates the payment schedule offered by the Procuring agency. If a bid deviates from the schedule and if such deviation is considered acceptable to the Procuring agency, the bid will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the bid as compared with those stipulated in this invitation, at the rate per annum specified in the Bid Data Sheet.

(d) *Cost of spare parts.*

- (i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the Bid Data Sheet, is annexed to the Technical Specifications. The total cost of these items, at the unit prices quoted in each bid, will be added to the bid price.

or

- (ii) The Procuring agency will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation specified in the Bid Data Sheet. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the bid price.

or

- (iii) The Procuring agency will estimate the cost of spare parts usage in the initial period of operation specified in the Bid Data Sheet, based on information furnished by each Bidder, as well as on past experience of the Procuring agency or other procuring agencies in similar situations. Such costs shall be added to the bid price for evaluation.

(e) *Spare parts and after sales service facilities in the Procuring agency's country.*

The cost to the Procuring agency of establishing the minimum service facilities and parts inventories, as outlined in the Bid Data Sheet or elsewhere in the bidding documents, if quoted separately, shall be added to the bid price.

(f) *Operating and maintenance costs.*

Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the Bid Data Sheet or in the Technical Specifications.

(g) *Performance and productivity of the equipment.*

(i) Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in the performance or efficiency below the norm of 100, an adjustment for an amount specified in the Bid Data Sheet will be added to the bid price, representing the capitalized cost of additional operating costs over the life of the plant, using the methodology specified in the Bid Data Sheet or in the Technical Specifications.

or

(ii) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the bid, and adjustment will be added to the bid price using the methodology specified in the Bid Data Sheet or in the Technical Specifications.

(h) *Specific additional criteria indicated in the Bid Data Sheet and/or in the Technical Specifications.*

The relevant evaluation method shall be detailed in the Bid Data Sheet and/or in the Technical Specifications.

Alternative

25.4 Merit Point System:

The following merit point system for weighing evaluation factors can be applied if none of the evaluation methods listed in 25.4 above has been retained in the Bid Data Sheet. The number of points allocated to each factor shall be specified in the Bid Data Sheet.

[In the Bid Data Sheet, choose from the range of]

Evaluated price of the goods	60 to 90
Cost of common list spare parts	0 to 20
Technical features, and maintenance and operating costs	0 to 20
Availability of service and spare parts	0 to 20
Standardization	0 to 20
Total	100

The bid scoring the highest number of points will be deemed to be the lowest evaluated bid.

26 Contacting the Procuring agency

26.1 Subject to ITB Clause 23, no Bidder shall contact the Procuring agency on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Procuring agency, it should do so in writing.

26.2 Any effort by a Bidder to influence the Procuring agency in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of the Bidder's bid.

F. Award of Contract

27 Post-qualification

- 27.1 In the absence of prequalification, the Procuring agency will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.3.
- 27.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13.3, as well as such other information as the Procuring agency deems necessary and appropriate.
- 27.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Procuring agency will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

28 Award Criteria

- 28.1 Subject to ITB Clause 30, the Procuring agency will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

29 Procuring agency's Right to Vary Quantities at Time of Award

- 29.1 The Procuring agency reserves the right at the time of contract award to increase or decrease, the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

30 Procuring agency's Right to Accept any Bid and to Reject any or All Bids

- 30.1 The Procuring agency 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 the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Procuring agency's action.

31 Notification of Award

- 31.1 Prior to the expiration of the period of bid validity, the Procuring agency will notify the successful Bidder in writing by registered letter or by cable, to be confirmed in writing by registered letter, that its bid has been accepted.
- 31.2 The notification of award will constitute the formation of the Contract.
- 31.3 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 33, the Procuring agency will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 15.

32 Signing of Contract

- 32.1 At the same time as the Procuring agency notifies the successful Bidder that its bid has been accepted, the Procuring agency will send the Bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.

- 32.2 Within thirty (30) days of receipt of the Contract Form, the successful Bidder shall sign and date the contract and return it to the Procuring agency.

33 Performance Security

- 33.1 Within twenty (20) days of the receipt of notification of award from the Procuring agency, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents, or in another form acceptable to the Procuring agency.
- 33.2 Failure of the successful Bidder to comply with the requirement of ITB Clause 32 or ITB Clause 33.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Procuring agency may make the award to the next lowest evaluated Bidder or call for new bids.

34 Corrupt or Fraudulent Practices

- 34.1 The Government of Sindh requires that Procuring agency's (including beneficiaries of donor agencies' loans), as well as Bidders/Suppliers/Contractors under Government-financed or Procuring Agency-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the SPPRA, in accordance with the SPP Act, 2009 and Rules made thereunder:
- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring agency, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the Procuring agency of the benefits of free and open competition;
 - (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government-financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government-financed contract.
- 34.2 Furthermore, Bidders shall be aware of the provision stated in sub-clause 5.4 and sub-clause 24.1 of the General Conditions of Contract.

Part One - Section II
General Conditions of Contract

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General Conditions of Contract

1. Definitions

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

- (a) “The Contract” means the agreement entered into between the Procuring agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- (b) “The Contract Price” means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
- (c) “The Goods” means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Procuring agency under the Contract.
- (d) “The Services” means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
- (e) “GCC” means the General Conditions of Contract contained in this section.
- (f) “SCC” means the Special Conditions of Contract.
- (g) “The Procuring agency” means the organization purchasing the Goods, as named in SCC.
- (h) “The Procuring agency’s country” is the country named in SCC.
- (i) “The Supplier” means the individual or firm supplying the Goods and Services under this Contract.
- (j) “The Project Site,” where applicable, means the place or places named in SCC.
- (k) “Day” means calendar day.

2. Application

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

3. Country of Origin

3.1 All Goods and Services supplied under the Contract shall have their origin in the countries and territories eligible under the rules and further elaborated in the SCC or Technical Specifications.

3.2 For purposes of this Clause, “origin” means the place where the Goods were mined, grown, or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

3.3 The origin of Goods and Services is distinct from the nationality of the Manufacturer / Supplier.

4. Technical Specifications

4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the concerned institution.

5. Use of Contract Documents and Information; Inspection and Audit by the Government

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

5.2 The Supplier shall not, without the Procuring agency's prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.

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

5.4 The Supplier shall permit the Procuring agency to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the procuring agency, if so required.

6. Patent Rights

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

7. Performance Security

7.1 Within twenty (20) days of receipt of the notification of Contract award, the successful Bidder shall furnish to the Procuring agency the performance security in the amount specified in SCC.

7.2 The proceeds of the performance security shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

7.3 The performance security shall be denominated in the currency of the Contract acceptable to the Procuring agency and shall be in one of the following forms:

- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring agency's country, in the form provided in the bidding documents or another form acceptable to the Procuring agency; or

(b) a cashier's or certified check.

7.4 The performance security will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in SCC.

8. Inspections and Tests

8.1 The Procuring agency or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring agency. SCC and the Technical Specifications shall specify what inspections and tests the Procuring agency requires and where they are to be conducted. The Procuring agency shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring agency

8.3 Should any inspected or tested Goods fail to conform to the Specifications, the Procuring agency may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Procuring agency.

8.4 The Procuring agency's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Procuring agency's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Procuring agency or its representative prior to the Goods' shipment from the country of origin.

8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

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

9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Procuring agency.

10. Delivery and Documents

- 10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are specified in SCC.
- 10.2 Documents to be submitted by the Supplier are specified in SCC.

11. Insurance

- 11.1 The Goods supplied under the Contract shall be delivered duty paid (DDP) / CFR / CNF / C&F / CPT – Karachi under which risk is transferred to the buyer after having been delivered at consignees end or Karachi Port, hence insurance coverage is sellers responsibility.

12. Transportation

- 12.1 The Supplier is required under the Contract to transport the Goods to a specified place of destination outside and within the Procuring agency's country, transport to such place of destination in the Procuring agency's country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.

13. Incidental Services

- 13.1 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 Procuring agency's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- 13.2 Prices charged by the Supplier for incidental 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 for other parties by the Supplier for similar services.

14. Spare Parts

- 14.1 As specified in SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
- (a) such spare parts as the Procuring agency may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any

warranty obligations under the Contract; and

- (b) in the event of termination of production of the spare parts:
 - (i) advance notification to the Procuring agency of the pending termination, in sufficient time to permit the Procuring agency to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the Procuring agency, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Procuring agency's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- 15.2 This warranty shall remain valid for twelve (12) months or according to the requirement of extended warranty period 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 Contract. In any case this period shall not exceed six (06) months beyond the warranty expiration period from the date of taking over of goods by the procuring agency, unless specified otherwise in SCC.
- 15.3 The Procuring agency shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Procuring agency.
- 15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, the Procuring agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring agency may have against the Supplier under the Contract.
- 15.6 The provisions of this Clause include all the expenses that the bidder may have to incur for delivery and installation of such replacement parts, material and equipment as are needed for satisfactory operation of the goods at the consignees end.
- 15.7 During the period of warranty, the bidder shall remedy, at his / her expense all defects in design, material and workmanship that may develop or are revealed under normal use of the goods upon receiving writing notice from the procuring agency; the notice shall indicate in what respect the goods are faulty.

- 15.8 The bidder shall provide warranty / guarantee for supply of reagents, kits and chemicals, consumables, films and ancillaries for at least 10 years (where applicable).
- 15.9 The bidder shall remain responsible for providing after sale services even after expiry of warranty / guarantee period and sign a Service Contract including parts or without parts with Procuring Agency for 05 years (minimum). Bidder shall separately quote the price of service contract (in terms of percentage) inclusive of parts and without parts, separately.
- 15.10 In case of consumable items, reagents, kits, chemicals, films etc. the contractor shall remain responsible for specificity, efficacy & sensitivity with maximum period of expiry as much allowed by manufacturer.
- 15.11 The Procuring Agency shall promptly notify the Bidder in writing of any claims arising out of this warranty.
- 15.12 The bidder shall be responsible to ensure the 90% uptime of the machinery / equipment during the warranty period.

16. Payment

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC.
- 16.2 The Supplier's request(s) for payment shall be made to the Procuring agency in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Procuring agency, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier.
- 16.4 The currency of payment shall be in Pak. Rupees for Goods supplied from within the Procuring Agency's country on DDP basis and payment shall be made in Foreign Currency. trough irrevocable letter of credit for Goods supplied from outside the Procuring Agency's country on CFR / CNF/ C&F / CPT Karachi Basis.

17. Prices

- 17.1 Prices charged by the Supplier for Goods delivered and 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 SCC or in the Procuring agency's request for bid validity extension, as the case may be.

18. Change Orders

- 18.1 The Procuring agency may at any time, by a written order given to the Supplier pursuant to GCC Clause 31, make changes within the general scope of the Contract in any one or more of the following:
- (a) drawings, designs, or specifications, where Goods to be furnished under the

Contract are to be specifically manufactured for the Procuring agency;

- (b) the method of shipment or packing;
- (c) the place of delivery; and/or
- (d) the Services to be provided by the Supplier.

18.2 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 delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring agency's change order.

19. Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring agency's prior written consent.

21. Subcontracts

21.1 The Supplier shall notify the Procuring agency in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

21.2 Subcontracts must comply with the provisions of GCC Clause 3.

22. Delay in the Supplier's Performance

22.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring agency in the Schedule of Requirements / Contract Award.

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

22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages

- 23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in 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 SCC. Once the maximum is reached, the Procuring agency may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default

- 24.1 The Procuring agency, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:
- (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring agency pursuant to GCC Clause 22; or
 - (b) if the Supplier fails to perform any other obligation(s) under the Contract.
 - (c) if the Supplier, in the judgment of the Procuring agency has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

“corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.

“fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.

- 24.2 In the event the Procuring agency terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Procuring agency may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring agency for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22, 23, and 24, 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.
- 25.2 For purposes of this clause, “Force Majeure” means an event beyond the control of the Supplier and not involving the Supplier’s fault or negligence and not

foreseeable. Such events may include, but are not restricted to, acts of the Procuring agency in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring agency in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring agency in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency

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

27. Termination for Convenience

- 27.1 The Procuring agency, by written 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 Procuring agency's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- 27.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring agency at the Contract terms and prices. For the remaining Goods, the Procuring agency may elect:
- (a) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.

28. Resolution of disputes

- 28.1 The Procuring agency and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 28.2 If, after thirty (30) days from the commencement of such informal negotiations, the Procuring agency and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in SCC. These mechanisms may include, but are not restricted to, conciliation mediated by a third party, adjudication in an agreed manner and/or arbitration.

29. Governing Language

29.1 The Contract shall be written in the language specified in SCC. Subject to GCC Clause 30, the version of the Contract written in the specified language shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

30. Applicable Law

30.1 The Contract shall be interpreted in accordance with the laws of the Procuring agency's country (Islamic Republic of Pakistan), unless otherwise specified in SCC.

31. Notices

31.1 Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by cable, telex, or facsimile and confirmed in writing to the other party's address specified in SCC.

31.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

32. Taxes and Duties

32.1 Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Procuring agency in case of Delivered Duty Paid (DDP) basis.

Dow University of Health Sciences



Bidding Documents

Single Stage – Two Envelope Procedure
As per Rule 46 (2) of SPPR, 2010 (Amended 2019)

IFB / NIT No. DUHS/DP/2022/182 Dated 04 April 2022

**Procurement of Laboratory Equipment /
Instruments for IBBPS, Microbiology DDRRL
and Histopathology DDRRL at Dow University
of Health Sciences**

PART TWO (PROCUREMENT SPECIFIC PROVISIONS)

- Invitation for Bids (IFB)
- Bid Data Sheet (BDS)
- Special Conditions of Contract (SCC)
- Schedule of Requirements
- Technical Specifications
- Sample Form
- Eligibility

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Part Two - Section I.

Invitation for Bids

Invitation for Bids (IFB) / Notice Inviting Tender (NIT)

IFB No. DUHS/DP/2022/182 Dated 04 April 2022

Dow University of Health Sciences (DUHS), Karachi invites sealed bids for the “**Procurement of Laboratory Equipment / Instruments for IBBPS, Microbiology DDRRL and Histopathology DDRRL at Dow University of Health Sciences**” from the Manufacturers / authorized Sole Agents of Manufacturers, having registration with Federal Board of Revenue (FBR) for Income Tax and Sales Tax.

Tender fee	Rs. 2,000/- (<i>Rupees Two Thousand Only</i>) Non-Refundable
Bidding procedure	Single Stage – Two Envelope Procedure as per rule 46 sub rule 2 of SPP Rules 2010 (Amended 2019)
Bid security	Two (2%) percent of the total bid value.
Tender purchasing date	From the date of publishing to 11 May 2022
Deadline for submission of bids	12 May 2022 up to 11:00 Hrs.
Bid Opening Date & Time	12 May 2022 at 11:30 Hrs.

Bidding Document containing detailed terms & conditions can be obtained against non-refundable pay Order / Demand Draft of Rs. 2,000/- being tender fee in favour of Dow University of Health Sciences during office hours. No tender shall be sold on the date of opening of bid. Tender Notice and bidding documents are also available on the websites of Dow University of Health Sciences (www.duhs.edu.pk) and Sindh Public Procurement Regulatory Authority (<http://ppms.pprasindh.gov.pk>), in this situation, bidder is required to enclose Pay Order / Demand Draft of tender fee (Rs. 2000/-) with their bid, which must be issued by a scheduled bank within the tender purchasing dates, otherwise bid will not be entertained. DUHS may issue the clarifications or amendments in respect of the bidding documents which will be uploaded on the both websites, DUHS will not be responsible of any confusion or misunderstanding in this regard.

The Dow University of Health Sciences, Karachi (DUHS) reserves the right to reject any or all the bids subject to the relevant provisions of SPP Rules 2010 (Amended 2019).

Address for Purchasing of bidding documents, submission and opening of bids:

Dow University of Health Sciences (Ojha Campus), Procurement Directorate at Library Block, SUPARCO Road, off Main University Road, Gulzar-e-Hijri, Scheme No. 33, Karachi.
Phone No: + 92-21-99261497, Email: director.procurement@duhs.edu.pk

Director Procurement
Dow University of Health Sciences, Karachi

Section II.
Bid Data Sheet

Bid Data Sheet

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

Introduction	
ITB 1.1	Name of Procuring Agency: Dow University of Health Sciences, Karachi (DUHS)
ITB 1.1	Name of Project/Scheme/Department/Institute: <ul style="list-style-type: none"> • Institute of Biological, Biochemical and Pharmaceuticals Sciences (IBBPS). • Microbiology DDRRL. • Histopathology DDRRL
ITB 1.1	Name of IFB / NIT No. : DUHS/DP/2022/182 Dated 04 April 2022.
ITB 1.1	Name of Contract: Procurement of Laboratory Equipment / Instruments for IBBPS, Microbiology DDRRL and Histopathology DDRRL at Dow University of Health Sciences.
ITB 6.1	Postal Address: Dow University of Health Sciences (Ojha Campus), Procurement Directorate at Library Block, SUPARCO Road, off Main University Road, Gulzar-e-Hijri, Scheme No. 33, Karachi. Phone No. + 92-21-99261497, Email: director.procurement@duhs.edu.pk
ITB 8.1	Language of the bid shall be ENGLISH.

Bid Price and Currency	
ITB 11.2	<ul style="list-style-type: none"> • The price quoted shall be in Pakistani Rupee for the Goods offered within the Procuring Agency's Country on delivered duty paid (DDP) Price. • The price quoted shall be in foreign Currency for the Goods offered from Outside the Procuring Agency's Country on CFR / CNF/ C&F / CPT Karachi Basis. • Price of incidental services, if any, must be included in price of goods
ITB 11.4	The price shall be fixed during the contract period.
ITB 12.1	<ul style="list-style-type: none"> • For the Goods offered within the Procuring Agency's Country: the price quoted shall be in Pak Rupees on delivered duty paid (DDP) basis. • For the Goods offered from Outside the Procuring Agency's Country: the price quoted shall be in Foreign Currency on CFR / CNF/ C&F / CPT- Karachi Basis.

Preparation and Submission of Bids		
ITB 13.3 (d)	Qualification requirements	

S#	Qualification Criteria (Mandatory Requirements)	Yes	No
1.	Compliance to the Technical Specifications.		
2.	Technical Proposal on Bidder's Letterhead		
3.	Catalogue / Brochures / technical data sheet (having complete technical specifications of the offered good)		
4.	Item-wise / Feature-wise product compliance / deviation sheet / statement on Bidder's Letterhead duly signed and stamped.		
5.	Valid Manufacturer Authorization OR Sub-Distributor duly authorized by the agent of the manufacturer.		
6.	Copy of CNIC of signatory of the Bid Forms		
7.	Complete Bidding Document, duly signed and stamped on its each/ every page as acceptance of all terms & conditions		
8.	Compliance to bid validity period		
9.	Compliance to payment terms and conditions		
10.	Compliance to the delivery schedule		
11.	Valid General Sales Tax (GST-FBR) Registration with Active Tax Payer Status on FBR website.		
12.	Valid Income Tax (FBR) Registration with Active Tax Payer Status on FBR website		
13.	Professional Tax Certificate		
14.	Original Tender Purchase Receipt / Pay Order of Tender Fee		
15.	Affidavit on stamp paper of Rs. 100/- duly notarized to the effect that: i. The bidder is neither blacklisted nor suspended by any National/International, including Provincial and Federal Govt. ii. Any director or owner of the bidding company is not awarded any punishment from any Court of Law. iii. Bidder has submitted the correct and complete information along with the bid/offer. If any document / information is found forged / engineered / fake / bogus at any stage, the bidder may be declared as Blacklisted in accordance with law and the performance guarantee and payment, if any may be forfeited.		
16.	The Bid Form on Bidder's Letterhead duly signed and stamped shall be inserted in the Financial Proposal. However, a copy of the same shall be attached in the Technical Proposal after hiding the amount.		
17.	The Price Schedule(s) on Bidder's Letterhead duly signed and stamped shall be inserted in the Financial Proposal. However, a copy of the same shall be attached in the Technical Proposal after hiding the amount.		
18.	Bid Security shall be inserted in the Financial Proposal. However, a copy of the same shall be inserted in the Technical Proposal after hiding the amount.		
19.	Company Profile		

ITB 14.3 (b)	Spare parts required for <u>ten (10) years</u> of operation.
ITB 15.1	Amount of bid security shall not be less than 2% of the total bid price of the bidder in the form of a Call Deposit, Bank Draft or a Bank Guarantee issued by a scheduled bank of Pakistan, in favour of the Dow University of Health Sciences, Karachi.
ITB 16.1	Bid validity period shall be <u>90 days</u>
ITB 17.1	Original “Financial and Technical Proposals”
ITB 18.2 (a)	Dow University of Health Sciences (Ojha Campus), SUPARCO Road, off Main University Road, Gulzar-e-Hijri, Scheme No. 33, Karachi.
ITB 18.2 (b)	<p>Name of Project/Scheme: Procurement of Laboratory Equipment / Instruments for IBBPS, Microbiology DDRRL and Histopathology DDRRL at Dow University of Health Sciences.</p> <p>IFB/NIT Title: DUHS/DP/2022/182 Dated 04 April 2022.</p> <p>“Must bear the name of the bidder” and a warning “Do Not Opened Before the time and date of bid opening”</p>
ITB 19.1	<p>Deadline for bid submission: Date: 12 May 2022 Time: upto 11:00 Hrs.</p>
ITB 22.1	<p>Date, Time and Place of Bid opening Date: 12 May 2022 Time: 11:30 Hrs. Place: Dow University of Health Sciences (Ojha Campus), Procurement Directorate at Library Block, SUPARCO Road, off Main University Road, Gulzar-e-Hijri, Scheme No. 33, Karachi.</p>

Bid Evaluation	
ITB 25.4	Criteria for bid evaluation.

i. Technical Bids / Proposals Evaluation:

- a. The bids not responsive to the MANDATORY QUALIFICATION CRITERIA provided at ITB Clause 13.3(d) shall not be eligible for further Technical Evaluation.
- b. Joint Venture’s / Consortium’s Bids, Conditional Bids, Telegraphic Bids, Bids not accompanied by Bid Security of required amount and form, bids received after specific date and time and bids of Black Listed firms shall be treated as rejected / non-responsive.
- c. The bids shall be evaluated and compared on **ITEMIZED BASIS** exclusively. Bids for partial / limited item(s) shall not be considered and rejected.

- d. If a bidder elects to submit alternative bid without enclosing a separate Bid Security of requisite amount and shape, Bid Form and valid Manufacturer Authorization, all such alternative bids will be rejected as nonresponsive.
- e. The bids shall be evaluated and compared on complete itemized basis.
- f. **Bids are invited as per Single Stage – Two Envelope Procedure** in accordance with sub rule 2 of rule 46 of the Sindh Public Procurement Rules, 2010 (Amended 2019). In case, any bidder encloses the financial bid within the technical bid, the same shall be rejected summarily.
- g. The following merit point system for weighing evaluation factors / criteria will be applied for technical proposals.
- h. Bidders achieving **minimum 70% points / marks** will be considered only for further process besides compliance of all mandatory clauses. Documentary evidence must be attached in support of your claim.

S#	CRITERIA / PARAMETERS / SUB-PARAMETERS	Total Marks
1	Conformity to the Purchaser's Specifications (Mandatory) (Valid Documentary Evidence shall be attached)	30
1.1	Fully compliant with the required specifications	30
1.2	Compliant with minor deviation (up to 5% subject to main function is not effected)	25
1.3	Non-compliant to required specifications	Disqualify
2	Product International Certification (Valid Documentary Evidence shall be attached)	10
2.1	USA Food & Drug Administration (USA-FDA 510k)	04
2.2	European Community (CE) MDD for specific model or series	03
2.3	Japan Quality Assurance Organization (JQAO) / Japan Industrial Standard (JIS) Ministry of Health, Labour and Welfare (MHLW) Govt. of Japan for specific model or series	03
3.	Manufacturer's Authorization (Valid Documentary Evidence shall be attached)	10
3.1	Bidder is OEM direct representative or the Sole Distributor / Agent	10
3.2	Bidder is Sub-Distributor duly authorized by the Sole Distributor / Agent of the OEM	05
4.	Technical Staff (Valid Documentary Evidence shall be attached)	10
4.1	Diploma of Associate Engineer (DAE) in relevant field (electrical / electronic / biomedical / mechatronics / mechanical / industrial). Copy of DAE certificate must be submitted (1 mark for each)	02
4.2	Graduate Engineer in relevant field (electrical / electronic / biomedical / mechatronics / mechanical / industrial). Copy of Degree must be submitted (2 marks for each)	04
4.3	OEM Certified Resource for quoted equipment / product (02 Marks for each Resource)	04
5.	Past Experience / Performance for supplying the Laboratory Equipment / instruments to the Public / Private Sector Universities / Government / Semi-Government Organization (Provincial / Federal / Local) in Pakistan during the last 5 years. Documentary evidence in shape of Purchase Order and Installation Report / Satisfactory performance certificate must be attached.	25

S#	CRITERIA / PARAMETERS / SUB-PARAMETERS	Total Marks
5.1	Completing a single PO / contract / project for supplying the Laboratory equipment / instruments valuing Rs. 3 million or above. (5 marks for each contract / project)	25
5.2	Completing a single PO / contract / project for supplying the Laboratory equipment / instruments valuing Rs. 2 million or above. (4 marks for each contract / project)	20
5.3	Completing a single PO / contract / project for supplying the Laboratory equipment / instruments valuing Rs. 1 million or above. (3 marks for each contract / project)	15
5.4	Completing a single PO / contract / project for supplying the Laboratory equipment / instruments valuing Rs. 0.5 million or above. (2 marks for each contract / project)	10
6.	Average Annual Turnover during last three (03) financial years (Audited Statements of Accounts and Income Tax Return Forms must be attached as supporting documents)	10
6.1	Above PKR 30 million	10
6.2	Above PKR 20 million	06
6.3	Above PKR 10 million	03
6.4	Below PKR 10 million	00
7	Networking	05
7.1	Networking setup across Pakistan (1 mark for each setup) (Proof of Registered office, with list of staff must be provided)	05
	TOTAL MARKS	100
8.	Bonus points	06
8.1	Free of Cost Comprehensive Extended Warranty including Parts, Services, Labor etc. (in addition to the standard or warranty period required in these bidding documents) (2 marks for each additional year)	06

ii. Financial Bids / Proposal Evaluation:

- a) Technically qualified/successful bidder(s) shall be eligible for Financial Proposal(s). The Financial bids shall be opened in the presence of the Bidders at the scheduled date, time and venue communicated in advance.
- b) Only those Financial Proposals will be announced / considered which were technically qualified by the Committee. Therefore, bidders are advised to give separate sealed envelope (s) of every quoted item and should mention the name of the item and tender serial number on the front of the sealed envelope in **BOLD and legible letters** to avoid confusion, otherwise, the Financial Proposal Envelope will be opened on qualified item basis and it will not be challenged by the bidder that procuring agency has opened the Financial Proposal of the disqualified items besides qualified items.
- c) Financial Bids / Proposals of Technically disqualified / rejected bidders will not be opened and sealed envelope shall be returned to the bidder.
- d) Bids not accompanied by the Bid Security of required amount and form shall be rejected.
- e) Procuring Agency shall not be responsible for any erroneous calculation of taxes and all differences arising out shall be fully borne by the Successful Bidder.
- f) For the purpose of comparison of bids quoted in different currencies, price shall be

converted into Pakistani Rupees. The rate of exchange shall be the selling rate prevailing seven working days before the date of opening of the bids, as notified by the National Bank of Pakistan (NBP) / State Bank of Pakistan (SBP).

Contract Award	
ITB 29.1	Procuring Agency reserves the right to drop any item and increase or decrease the quantity of goods originally specified in Schedule of Requirements / Technical Specifications without any change in unit price and other terms & conditions
ITM 32.1	Successful Bidder and the Procuring Agency will sign the Contract Agreement on the stamp paper with stamp duties as per the article 22-A (Contract) of the schedule of Stamp Act 1899. The expenditure involved on the said contract agreement will be borne by the bidder.

Section III.
Special Conditions of Contract

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Special Conditions of Contract

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

1. Definitions (GCC Clause 1)

GCC 1.1 (g)—The Procuring agency is: Dow University of Health Sciences, Karachi.

GCC 1.1 (h)—The Procuring agency's country is: Islamic Republic of Pakistan

GCC 1.1 (i)—The Supplier is: _____

[Name and Address of the Bidder]

2. Country of Origin (GCC Clause 3)

All countries and territories as indicated in Part Two Section VI of the bidding documents, "Eligibility for the Provisions of Goods, Works, and Services in Government-Financed Procurement".

3. Technical Specifications (GCC Clause 4)

The technical specifications of the goods provided in these bidding document are only for widest possible competition and not for favor any single contractor or supplier nor put others at a disadvantage. However, the brand name, catalogue No. / Name etc., if any, has only been used for the reference purpose. Equipment offered **"ATLEAST EQUIVALENT OR HAVING BETTER TECHNICAL SPECIFICATIONS"** shall also be considered.

4. Performance Security (GCC Clause 7)

GCC 7.1—The amount of performance security, as a percentage of the Contract Price, shall be **Five (5%) percent** of the Contract Price in favor of Dow University of Health Sciences, Karachi.

5. Packing (GCC Clause 9)

GCC 9.2—The following SCC shall supplement GCC Clause 9.2:

The packing, marking and documentation within and outside the packages shall be as per manufacturer standards meeting the safety requirements of the goods.

6. Delivery and Documents (GCC Clause 10)

GCC 10.2—*For Goods supplied from within the Procuring Agency's country:* The Bidder shall provide the following documents at the time of delivery of goods to the Store / Warehouse of the Dow University of Health Sciences, Karachi for verification duly completed in all respects:

- i. Original copies of Delivery Note (Delivery Challan) (in duplicate) showing item's description, make, model, quantity as well as Lot Number, Batch Number, Registration Number, manufacturing and expiry dates (if applicable).
- ii. Original copies of the Bidder's invoices (in duplicate) showing warranty, item's description, make, model as well as Lot Number, Batch Number, Registration Number, manufacturing and expiry dates (if applicable) per unit cost, and total amount.
- iii. Original copies of the Sales Tax Invoices (where applicable) in duplicate showing item's description, quantity, per unit cost without Sales Tax, amount of Sales Tax and total amount with Sales Tax.

- iv. Manufacturer's or Bidder's warranty certificate.
- v. Inspection certificate issued by the nominated inspection committee / Bidder's factory inspection report.
- vi. Certificate of origin.

GCC 10.2—For Goods supplied from abroad as per INCOTERM CFR / CNF/ C&F / CPT Karachi: Upon shipment, the Supplier shall notify the Procuring agency the full details of the shipment, including Contract number, description of Goods, quantity and usual transport document. The Supplier shall mail / submit the following documents to the Procuring agency at least one week prior to arrival of the Goods at the port or place of arrival and, if not received, the Bidder will be responsible for any consequent expenses.:

- (i) copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;
- (ii) original and two copies of the usual transport document (for example, a negotiable bill of lading, a non-negotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;
- (iii) copies of the packing list identifying contents of each package;
- (iv) insurance certificate;
- (v) Manufacturer's or Supplier's warranty certificate;
- (vi) inspection certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report; and
- (vii) certificate of origin.

7. Insurance (GCC Clause 11)

GCC 11.1— For Goods supplied from within the Procuring Agency's country: The Goods supplied under the Contract shall be delivered duty paid (DDP) under which risk is transferred to the buyer after having been delivered, hence insurance coverage is sellers responsibility. Since the Insurance is seller's responsibility they may arrange appropriate coverage.

GCC 11.1— For Goods supplied from abroad as per INCOTERM CFR / CNF/ C&F / CPT Karachi: The Goods supplied under the Contract shall be *INCOTERM CFR / CNF/ C&F / CPT Karachi* under which risk is transferred to the buyer after the goods reached at Karachi port, hence insurance coverage / marine cover note is sellers responsibility. Since the Insurance / marine cover is seller's responsibility they may arrange appropriate coverage.

8. Spare Parts (GCC Clause 14)

GCC 14.1—Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods. Other spare parts and components shall be supplied as promptly as possible, but in any case, within one (1) months of placing the order on DDP basis and in case of import of part within two (2) months after opening the letter of credit.

9. Warranty (GCC Clause 15)

GCC 15.2—In partial modification of the provisions, the warranty period shall be twelve (12) months or as per the extended warranty period from the 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, at its discretion, either:

- (a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the

Contract at its own cost and expense and to carry out further performance tests in accordance with GCC 8,

or

- (b) pay liquidated damages to the Procuring agency with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be 0.5% per week or part thereof the total amount of contract.

GCC 15.4 & 15.5—The period for correction of defects in the warranty period is 20 days or earlier.

GCC 15.9— The bidder shall separately quote the price of service contract inclusive of parts and without parts for the period defined in the bid data sheet at clause ITB 14.3(b) in term of %age for total contract value.

10. Payment (GCC Clause 16)

GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

- (a) Payment shall be made in Pak Rupees.
- (b) 100% of the Contract Price on complete delivery of store within thirty (30) days on submission of claim supported by acceptance certificate from procuring agency declaring Goods have been delivered and that all contracted services have been performed.

11. Prices (GCC Clause 17)

GCC 17.1—No prices adjustment shall be allowed.

12. Liquidated Damages (GCC Clause 23)

GCC 23.1—In case deliveries are not completed within the time frame specified in the schedule of requirements / contract award, a Show Cause Notice will be served on the Bidder which will be following by cancellation of the Contract to the extent of non-delivered portion of installments. No supplies will be accepted and the amount of Performance Guarantee / Security to the extent of non-delivered portion of supplies of relevant installments will be forfeited. If the firm fails to supply the whole installments, the entire amount of Performance Guarantee/Security will be forfeited to the Government Account and the firm will be blacklisted at least for two years for future participation in bids:

The liquidated damage shall be 0.5 % per week or part thereof. The maximum amount of liquidated damages shall be 10% of the amount of contract. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, the Procuring Agency shall rescind the contract, without prejudice to other courses of action and remedies open to it.

13. Resolution of Disputes (GCC Clause 28)

GCC 28.1—The dispute resolution mechanism to be applied pursuant to GCC Clause 28.2 shall be as follows:

In the case of a dispute between the Procuring agency and the Supplier, the dispute shall be referred to the dispute resolution mechanism as defined in rule 31, 32 and 34 of the SPP Rules, 2010 (Amended 2019).

14. Governing Language (GCC Clause 29)

GCC 29.1—The Governing Language shall be ENGLISH

15. Applicable Law (GCC Clause 30)

GCC 30.1-The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan which includes the following legislation:

**The Employment of Children (ECA) Act 1991
The Bonded Labour System (Abolition) Act of
1992 The Factories Act 1934**

16. Notices (GCC Clause 31)

GCC 31.1—*Procuring agency's address for notice purposes:*

Director Procurement
Dow University of Health Sciences (Ojha Campus)
Procurement Directorate at Library Block,
SUPARCO Road, off Main University Road,
Gulzar-e-Hijri, Scheme No. 33, Karachi.
Phone No. + 92-21-99261497
Email: director.procurement@duhs.edu.pk

Supplier's address for notice purposes:

Name of Bidder: _

Name of Contact Person & Designation: _

Phone No. _

Fax No. _

Mobile Phone No. _

Email Address _

Section IV.
Schedule of Requirements

Schedule of Requirements

S#	Description of Goods	Qty.	Required Delivery Schedule	Location
01.	As per the details of items attached in Section V – Technical Specifications		Delivery & Installation within 12 weeks or earlier from the date of Contact Award	Ojha Campus of Dow University of Health Sciences, Karachi (DUHS)

Section V.
Technical Specifications

Technical Specifications

S. NO.	NAME OF GOODS, TECHNICAL DESCRIPTION, SPECIFICATIONS, AND STANDARDS	QUANTITY
01	<p>Digital Weighing Analytical Balance: Precision weighing balance with minimum weighing capacity 0.1 mg, Internal automatic calibration, high-stability mode and other filter settings, air draft protection, short stabilization time, shock proof construction, LCD display.</p> <p>Or Equivalent All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	01 No
02	<p>Culture Plate Rotator (Turn plate rotator)</p> <p>Flexible start-stop controls or a timer function with adjustable rotation times of 1-25 seconds. For longer applications, the time can be extended to up to 125 seconds or switched to continuous operation, Petri dishes up to a size of 100 mm, An exceptionally low construction enables comfortable work; the stainless steel housing ensures maximum sterility and stability. Stainless steel case, Step less speed control 14-210 rpm, Short-term timer 1-125 seconds or continuous operation, Turntable with silicone insert & centering ring (autoclavable), Switching on and off with a hand movement or optional foot pedal, UV-resistant and flame-retardant, Minimal space requirement</p> <p>Or Equivalent All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	05 No

03	<p>Vertical Freezers</p> <p>-20°C, 5-6 compartments 200-300L. CFC Free, shelf must be included, datalogging option, temperature sensor alarm, installed in at least three reputed pharmaceutical and/or research organizations</p> <p>Or Equivalent</p> <p>All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	02 No
04	<p>Pharmaceutical Refrigerator</p> <p>A Lab Refrigerator, Double Door Unit should have Ergonomic design & Forced – Air Circulation, Volume or capacity should be more than 900-950L Temperature range should be 2 ~ 8°C (Ambient 10°C ~ 32°C) Microprocessor Controlled Audible & Visual alarm should be present Cabinet type: Upright Auto defrost 10 or more adjustable shelves Clear & large LED display Unit should have double glass door. CFC free</p> <p>Or Equivalent</p> <p>All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	03 No
05	<p>High Speed Centrifuge:</p> <p>Intelligent Microprocessor Control, • Inverter Controlled Brushless Motor, • Full Lid Interlock, • Imbalance Detection System, • Self Diagnostics, • Status Indicator, • Multiple Acceleration / Deceleration Rates, • Speed Range 15000 rpm, • 200ml Bowl Volume centrifugation, • Continuous centrifugation of 2-15L Volume with adapters and complete accessories.</p> <p>Or Equivalent</p> <p>All the options available for this system should be quoted separately.</p>	01 No

	<p>Demonstration may be requested for Technical Evaluation</p> <p>Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.</p> <p>Must have installed and successfully maintain units in 50+ different institutions across Pakistan (list of installation as per sample form must be provided)</p> <p>Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer.</p> <p>Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer.</p> <p>Complete list of spare parts and prices must be provided.</p> <p>Must have all tool, instruments, and calibration equipment in Karachi</p> <p>PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation</p> <p>Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model.</p> <p>Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested)</p> <p>USA/EU/Japan (Other country will be accepted if 300+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	
06	<p>Media Pouring Machine</p> <p>Media Preparation Capacity 2.5L to 30L</p> <p>Temperature Range (T°) 95-125°C Distribution Temperature Range (T°) 25-80°C, stirring technique 2 magnets Stirrer, Traceability USB ports 5 Ticket printer with WIFI Ethernet, with safety valve, with anti-shock body, different dispensing port 17mm, 12mm, and 6.4mm dispensing tubing, Integrated Master Flex Pump, Carrousel Capacity 440 dishes, built in Peltier, built in UV light, pouring accuracy±1%, Pouring Range 00.1 - 99.9ml plate and tube pouring control Panel with touch screen .Print out of documentation of work and print date and batch on each plate.</p> <p>Or Equivalent</p> <p>All the options available for this system should be quoted separately.</p> <p>Demonstration may be requested for Technical Evaluation</p> <p>Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.</p> <p>Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)</p> <p>Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer.</p> <p>Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer.</p> <p>Complete list of spare parts and prices must be provided.</p> <p>Must have all tool, instruments, and calibration equipment in Karachi</p> <p>PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation</p> <p>Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model.</p> <p>Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested)</p> <p>USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	01 No
07	<p>Carbon Dioxide Incubator</p> <p>Internal volume of 25-35 cu. ft. • Fanless design, Heated triple-pane glass door minimizes condensation and permits a clear view of your product. • Sealed inner/outer doors and advanced PI control to maintain temperature accuracy and uniformity • minimizing costly gas consumption Horizontal airflow provides tighter temperature uniformity for the optimum culturing environment. • Adjustable rH system – three convenient settings: low, medium and high. Microprocessor Message Center allows you to control all parameters without complicated programming</p> <p>Temperature: • Range 4 °C above ambient to 50 °C, • Control ± 0.1°C, Stability ± 0.1°C at 37 °C, • Uniformity ± 0.25 °C at 37 °C (ambient temperature between 18 and 25 °C)• CO2 0.2 to 20%</p> <p>Or Equivalent</p> <p>All the options available for this system should be quoted separately.</p> <p>Demonstration may be requested for Technical Evaluation</p> <p>Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures</p>	01 No

	<p>letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	
08	<p>Incubator</p> <p>Capacity 750 L • Flexible shelf system for optimal use of chamber volume, • Automatic over temperature alarm system •Door alarm •ambient +5 °C to 75 °C, •decontamination cycle • Sealed inner/outer doors and advanced PI control to maintain temperature accuracy and uniformity</p> <p>Or Equivalent All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	02 No
09	<p>Double Head Microscope</p> <p>Optical System Infinity optical system Built in Koehler illumination with LED illumination Illumination -High luminescent white LED illuminator 60,000 to 100,000 hours lifetime -Built in fly-eye lens -Light intensity management features. -Light intensity is automatically adjusted. Focusing Coaxial coarse & fine focusing (located on both sides) Focusing stroke Up 5 mm/Down 13 mm, coarse: 37.7-40 mm per rotation, fine: Focusing Fine 0.2 mm per rotation, minimum reading: 1-2 µm With coarse focus knob torque adjustment ring and stage vertical movement stopper</p>	07 No

	<p>Eye Pieces 10x (F.O.V. 22mm) Eye Pieces Diopter adjustment in both eyepieces and interpupillary distance adjustment</p> <p>Tube Trinocular Tube with 30 degrees inclination F.O.V 20-25 mm</p> <p>Nosepiece Quintuple Nose piece</p> <p>Stage Rectangular mechanical stage within main body, specimen holder up to 2L and Vernier calibrations, cross travel: 74 (X) x 50 (Y) -76 (X) x 52 (Y) mm or equivalent</p> <p>Objectives Plan Achromat 2X N.A. 0.10, W.D. 25-30.0 mm Plan Achromat 4X N.A. 0.10, W.D. 25-30.0 mm Plan Achromat 10X N.A. 0.25, W.D. 10.5-15.0 mm Plan Achromat 40X N.A. 0.65, W.D. 0.56 mm, Spring-loaded Plan Achromat 100X Oil N.A. 1.25, W.D. 0.20 mm spring loaded oil immersion</p> <p>Condenser Abbe Condenser, N.A. 1.25 vertical adjustment focusing stroke: 27mm</p> <p>Polarizer P-SA Analyzer & E2-DP Simple Polarizer / CN</p> <p>Fungus Proof Treatment Fungus Proof coating</p> <p>Accessories -Teaching unit for face to face observation. -Pointer unit. -AC/DC Adaptor for Pointer Unit. -Binocular tube. -10 xs with diopter adjustment.</p> <p>Or Equivalent All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufacturer's letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	
10	<p>Ice Lined Freezer Cabinet Type Chest Maximum Volume 250-300 Liter Maximum Storage Capacity 211 Noise Level <40 Freeze Protection Level A CFC-Free Refrigerant Super Performance: Work under ambient temperature 10-47°C, Holdover time more</p>	02 No

	<p>than 24 hours Microprocessor Control: More accuracy, more reliable. Microprocessor control and digital display, power on/off indicator. Lockable Design: Keep the vaccine more safe. Door lock to prevent unauthorized access.</p> <p>Or Equivalent All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>	
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11	<p>Biosafety Cabinet Class II A2 (Quantity:02)</p>	
	<p>4 ft.(1.2m) Cabinet Width Type Class II, Type A2 Main body Material Stainless Steel 304, 18 gauge Electrogalvanized sheet with white epoxy polyester antimicrobial powder coated finish. Work Zone 1.5 mm (0.06") 16 gauges Stainless steel 304with no.4 Finish. Antimicrobial coating on all painted surfaces inside and outside to minimizes contamination. Single-piece work tray, spill retaining and easy to clean Description 4 ft.(1.2m) Cabinet Width Type Class II, Type A2 Main body Material Stainless Steel 304, 18 gauge Electrogalvanized sheet with white epoxy polyester antimicrobial powder coated finish. Work Zone 1.5 mm (0.06") 16 gauges Stainless steel 304with no.4 Finish. Antimicrobial coating on all painted surfaces inside and outside to minimizes contamination. Single-piece work tray, spill retaining and easy to clean. Or Equivalent All the options available for this system should be quoted separately. Demonstration may be requested for Technical Evaluation Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including. Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided) Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer. Complete list of spare parts and prices must be provided. Must have all tool, instruments, and calibration equipment in Karachi PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model. Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested) USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p> <p>12. Water Bath (Quantity:01) Chamber Material 304 Stainless Steel</p>	

Capacity. 20-30 L
 Working temperature 5 to 95C
 Setting accuracy 0,1°C up to +99,9°C
 Temperature Stability ±0.1°C
 Stirring Range 50 to 1500 rpm
 Display LED for indications of programme status
 Temperature controller Microprocessor PID temperature controller
 Electrical requirement. 220 V 50/60 Hz
 Heating Capacity 1200 w
 Includes Gable Cover

Or Equivalent
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 Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.
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13. Autoclave (Quantity:01)
 Capacity 90-100 L
 Function Fully automatic
 Temperature 5°C-135°C
 Pressure range 0-6Kg/cm2
 Operating system Microcomputer control system
 Warming Time
 Display Digital Display of operation/ Parameter setting
 Single Door
 Top Loading
 Operating service Electrical Steam
 Sterilization cycles Vacuum, sterilization, cooling with error records
 Internal/External body Stainless Steel (316 L with mirror finish)
 Power Supply 220 V, 50/ 60 Hz
 Drain mechanism Safely

Or Equivalent
 All the options available for this system should be quoted separately.
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14.Colony Counter (Quantity:01)

Camera Color high definition CCD
CCD resolution (Pixels) 5M or better
Counting software English
Colony size resolution >0.1mm
Colony color recognition 8 colors
Applicable method Spread plate, pour plate, membrane filter, spiral plate
Counting speed less than 3 seconds
Long life dual LCD light source
Petri dish 90mm and 55mm standard
Power supply AC220V±10%, 50Hz
Or Equivalent
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15.Double Door Autoclave (Quantity:01)

High pressure steam sterilizer each with built-in Electrical Steam Generator in standard configuration and option for external steam supply.
Double Door and gasket channel should be formed from a single piece stainless steel
Chamber Capacity: 100 to 150 Liter
5 inch Color TFT LCD Screen on both loading and unloading sides.
Temperature and pressure recorder.
Chamber pressure indicator.
Preset programs for the most common sterilization processes for general-purpose hospital use.
Standby, Auto sleep and auto warm up functions to save electricity and time, and low water consumption.
Mechanical air removal with a series of vacuum/pressure pulses to effectively remove air for assuring sterilization.
The chamber dimensions are adapted to sterilization, using wire baskets according to SPRI & ISO, or containers according to DIN.
Human friendly mobility during Transport with heavy duty casters and firm fixing mechanism after installation.
Chamber, jacket, doors, generator and Pipes AISI 316 L/Ti stainless steel with proper insulation.
Device should operate with Stainless Steel AISI 316 Grade pneumatic valves only
Side panels should be free of screws and attached with firm fasteners for instantaneous access into the service area.
Application:
A sterilizer for general-purpose steam sterilization of surgical instruments, textiles, liquids, fluids and hospital utensils in central sterilization departments, operation departments, laboratories and laundries. The temperature range is from 105°C–135°C.
Standard Sterilization Cycles:
134oC High Cycle for Surgical Instruments
134oC High Special for Linen/Gowns
121oC Low Cycle for Silicone Implants
121oC for Rubber Goods
134oC High Cycle for Prion

134oC High Flash Cycle
 121oC Low Cycle for Liquids
 Waste Bag
 Liquid Waste
 Test/Diagnostic programs:
 Bowie & Dick Test.
 Vacuum Leak Test.
 Accessories: -
 · Complete with all standard accessories and removable shelves, capable of taking both, packets and containers of all standard sizes.
 · One loading and unloading trolleys and loading Shelve compatible with the system.
 UPS for controller with backup of 30 min
 FDA 21 CFR Part 11 Compliant
 Must include compatible RO system and Air compressor (as per manufacturer recommendation), make and model must be quoted.
 Or Equivalent
 All the options available for this system should be quoted separately.
 Demonstration may be requested for Technical Evaluation
 Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.
 Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)
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16. Compound Microscope (Quantity:01)

Stand Single mold sturdy stand with anti-rust materials. Extended base for better stability.
 Trinocular Viewing Head at 30°Inclined,360 rotatable, Interpupillary distance (48-75mm)
 Eyepiece Focusable wide field eyepiece 10/20mm with foldable eye guard with ocular meter for the measurement of particle/crystals along with calibrated stage micrometer for the calibration purpose.
 Nosepiece Revers angle Quadruple Nosepiece(Ball bearing Type) with click stops and rubber grip.
 Objective Achromatic Objective 4X,10X,40X,100X
 Mechanical Stage Reckless X axis, double plate stage size 200 x 160mm, X/Y travel range 78mm x 54mm.
 Condense Abbe NA1.25 with aspheric lens.Iris Diaphragm with blue day light filter. & Filter Focusing System Coaxial Coarse and Fine Adjustment, Fine Division 0.002mm, Coarse Stroke 37.7mm per Rotation, Fine Stroke 0.2mm per Rotation, Moving Range 28mm
 Illumination S-LED Illumination, Brightness Adjustable
 Halogen Lamp 100V-240V/ 6V20W, upto 2000 hours of Halogenated Lamp life.
 Plan-concave Mirror
 Camera Specifications.
 CCD Sensor 1/2.5" 5.0 Megapixal Color CMOS Active area: 5.70mm x 4.28mm
 Sensor Resolution 2592 x 1944 pixel
 Digitization 12 Bit RGB
 Pixel Clock 48 MHz
 Dynamic range 68 Db
 Integrated slot SD card Slot for SD and SDHC cards
 Recording Button for image capture
 Analogue Interface NTSC/PAL toggle switch on board
 External Power Optional power adapter available for when USB power not available
 PC should be supplied with microscope for transferring the image
 Utility requirement Electrical Supply 100V - 240V AC, 50/60 Hz

Or Equivalent

All the options available for this system should be quoted separately.

Demonstration may be requested for Technical Evaluation

Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.

Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)

Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer.

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17. Drying & Sterilization Oven (Quantity:01)

Working temperature range; above ambient temperature to +300 °C

Setting accuracy temperature up to 99.9 °C: 0.1 / from 100 °C: 0.5

Setting temperature range +20 to +300°C

Temperature sensor 1 Pt100 sensor

Single DISPLAY. Adaptive multifunctional digital PID-microprocessor controller with high-definition TFT-colour display

Digital backwards counter with target time setting, adjustable from 1 minute to 99 days

the process time does not start until the set temperature is reached

natural convection

Fresh air Admixture of pre-heated fresh air by electronically adjustable air flap

Vent connection with restrictor flap

Temperature control adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperatur

Auto diagnostic system for fault analysis

fully insulated stainless steel door with 2-point locking (compression door lock)

calibration certificate

Interior easy-to-clean interior, made of stainless steel

Volume 50-60 L

Max. number of internals 4

Voltage 220 V, 50/60 Hz

Or Equivalent

All the options available for this system should be quoted separately.

Demonstration may be requested for Technical Evaluation

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18. Cool Incubator (20° to 25°C) Qty:01

Temperature Uniformity ±1.2°C
Temperature sensor 2 Pt100 sensors
Volume 90-120 L\
digital PID-microprocessor controller with high-definition TFT-color displays.
Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
+10 °C, +25 °C and +40 °C
Type 304 stainless steel, electropolished
Forced ventilation by Peltier fan
Door Outside stainless steel, fully insulated, inside .2-point locking (compression door lock)
Window Glass window
Alarm visual and acoustic
Accessories 3 Shelves
Or Equivalent
All the options available for this system should be quoted separately.
Demonstration may be requested for Technical Evaluation
Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.
Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)
Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Training of Biomedical Engineer Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer.
Complete list of spare parts and prices must be provided.
Must have all tool, instruments, and calibration equipment in Karachi
PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation
Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model.
Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested)
USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))

19. Hot Incubator with digital logger (20°C to 80°C) Qty 2Nos

Temperature Range 20C° to 80°C
Temperature Accuracy ±0.1°C
Volume 120-160L
Temperature sensor 2 Pt100 sensors
Chamber; stainless steel, electropolished
Forced ventilation by Peltier fan
Double Door Outside stainless steel, fully insulated, inside glass
Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
Glass window
PID microprocessor temperature controller,
temperature set 0.1°C steps
3 Shelves
Vendor should provide all the accessories required to operate the machine as FOC.
Or Equivalent
All the options available for this system should be quoted separately.
Demonstration may be requested for Technical Evaluation
Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.
Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)
Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Training of Biomedical Engineer Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer.
Complete list of spare parts and prices must be provided.
Must have all tool, instruments, and calibration equipment in Karachi
PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation
Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model.
Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested)

USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))

20. Freezer -40°C (Quantity 4)

Data Logger: 24/7 automatic temperature recorder in the form of data logger should be provided with the fridge and that can download the data via micro SD card / USB

Alarm Controller and alarm battery back up

Door open alarm

Power failure alarm

High temperature alarm

Low temperature alarm

Working temperature range Minus 10 to minus 40 C

Defrost Off cycle auto defrost

Cooling Fan assisted cooling

Access port

CFC Free

Door lock with keys

Self closing door

Real time temperature display for two temperature probes

Internal light

Remote alarm contacts

Or Equivalent

All the options available for this system should be quoted separately.

Demonstration may be requested for Technical Evaluation

Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.

Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)

Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Training of Biomedical Engineer

Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer.

Complete list of spare parts and prices must be provided.

Must have all tool, instruments, and calibration equipment in Karachi

PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation

Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model.

Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested)

USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))

21. Pharmacy Fridge (Quantity:04)

24/7 automatic temperature recorder in the form of data logger should be provided with the fridge and that can download the data via micro SD card/USB

Alarm Controller and alarm battery back up

Door open alarm

Power failure alarm

High temperature alarm

Low temperature alarm

Temperature recording Minimum/maximum temperature recording and display

Working Temp 0-8C

Defrost Off cycle auto defrost

assisted cooling

CFC Free

Door lock with keys

Self-closing door

Real time temperature display for two temperature probes

Internal light

Or Equivalent

All the options available for this system should be quoted separately.

<p>Demonstration may be requested for Technical Evaluation</p> <p>Should have 2 years comprehensive warranty with 95% uptime including service, spare parts on manufactures letter head including.</p> <p>Must have installed and successfully maintain units in 15+ different institutions across Pakistan (list of installation as per sample form must be provided)</p> <p>Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software, and system backup in soft copy to be supplied the end-user/Engineer. Training of Biomedical Engineer</p> <p>Firm is also required to maintain a stock of spare parts in stock as recommended by the manufacturer. The list of which may be provided, and physical inspection may be done by the customer.</p> <p>Complete list of spare parts and prices must be provided.</p> <p>Must have all tool, instruments, and calibration equipment in Karachi</p> <p>PPM/calibration, IQ, OQ & PQ to be performed by the vendor with complete documentation as per manufacturer recommendation</p> <p>Must comply with 510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare) for specific quoted model.</p> <p>Original Equipment Manufacturer and Certificate of Origin Certificate (Embassy Attested)</p> <p>USA/EU/Japan (Other country will be accepted if 30+ number of functional units are installed in Pakistan and meets all specification, list of installation must be provided with contact details, with any 2 certifications (510(k) FDA (Food & Drug Administration)/ European MDD 93/42/EEC (Medical Device Directive) / Japanese MHLW (Ministry of Health, Labor & Welfare))</p>
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22. FTNIR

Qty: 01

Item	Specifications
Optical system	Must be Single-beam optics
Interferometer	Must be Michelson type with 30° incidence angle.
	Must be sealed and airtight with a built-in automatic dryer which electrolytically removes the moisture inside the interferometer. FTIR Spectrophotometers which utilize desiccants that requires regular replacement is not preferred.
	Must include built-in advanced auto-dynamic alignment function and aligned during scanning. & Should be capable of acquiring data in both scanning directions to ensure the maximum signal-to-noise ratio in the shortest possible time.
	Must be aligned automatically when the beam splitter is being replaced and it must be kept optimized and stable constantly.
	Interferometer window plate must be KBr with a moisture-resistant protective coating and user can be exchange it. It can be changed to optional KRS-5 window which is free from deterioration can even if it is wet. . The interferometer must utilize retro-reflecting cube corners for instantaneous correction of instability due to mirror tilt.
Maximum resolution	Must be 0.25cm ⁻¹ or higher (Middle IR).
S/N ratio	Must be 60,000:1 and more in Middle IR (peak-to-peak, 4cm ⁻¹ resolution, in a neighborhood of 2,100cm ⁻¹ , 1-minute accumulation)
Wavenumber Range	Fully covers practical wavenumber range from 7,800 to 350cm ⁻¹ .
	Optional upgrade to 12500 - 240cm ⁻¹ .
	User can change Beam splitter, Light source and Detectors to expand wavenumber range. The option to purge the spectrometer optics and the sample compartment should be available.
Light source	· Must be a high energy air-cooled ceramic light source for Middle/Far IR
	· Must come with 3 years guarantee.
Detector	· Must be a high sensitivity temperature-controlled DLATGS detector with a built-in temperature regulator to ensure excellent stability.
	· Can be switched to optional Liquid Nitrogen cooled MCT detector or InGaAs detector.
Mirror Speed	· Must be 4 step selections of 2.0, 2.8, 5 or 9 mm/sec. All mirrors should be gold-coated to maximize optical throughput in the Mid-IR spectral range.
	· Optionally can be selected one of 10, 20, 30, 40mm/sec, and maximum 20 spectra /sec can be obtained.
Laser	· Must be He-Ne laser for Data Sampling.
Atmosphere correction	· Must be incorporated to reduce influences of water vapor and CO2.
	· Can be automatically executed after scanning.
	· Can be applied to already obtain spectra as post analysis.

Sample compartment and Accessories	· The main sample compartment should have a center focus to accommodate the complete range of commercially available accessories and large customized accessories.
	· Automatic Accessory Recognition capability must be available to enable the FTIR to automatically recognizes the accessory type and ID number and optimum scan parameters for the accessory are automatically set.
Utility	· While FTIR is not used, power can be OFF or only a few standby power is used.
	· While FTIR is not used, Light source and Laser must be off to expand its lifetime.
Warranty	3years with maintenance parts and services free of cost 3years warranty for consumables free of Cost.
	CFR 21 Part 11 Compliant Software for FTIR Data Handling
	Standard comprehensive warranty and support should be three years. • Details of Annual Maintenance Contract after standard warranty.
	Installation: the price should be inclusive of full installation on site with full functionality demonstration.
	IQ, OQ/PQ interval programmable including alarm indicator
Installation:	• Training & Installation at our site should be done free of cost
Calibration	Calibration Built-in calibration procedures for speed, temperature control,
	Validation and qualification of equipment included IQ, OQ & PQ with documents are included in equipment price
	All Certification must be provided by the vendor
	Certification All components certified to USP / EP requirements
	3year annually calibration free of costs.
Standard	USP Standards (for In-process Calibration) should be supplied as FOC.
Training	Operational and troubleshooting training must be given by the Factory trained engineer for end-users
Software Specification	The software must offer optional packages for dedicated applications:
	Creation of customized spectral libraries and search in spectral libraries. Next to single component search this package should allow multicomponent search and mixture analysis to be useful for analyzing spectra showing contributions of several components.
	Structure editor and search of structures in libraries
	Identification of substances and substance classes. The identification software package must include cluster analysis and an unlimited number of hierarchical structured libraries
	Signal Sampling Over-sampling delta-sigma converter. Communication USB, wireless and TCP/IP interface allows direct connection with LAN. Instruments can be configured with wireless router communication. Calibration Transfer Absolute Virtual Instrument (AVI) – actively standardizes instrument response to further improve repeatability and protect data integrity. Atmospheric Compensation Minimizes effect of atmospheric water on the sample spectra without the need for reference or calibration spectra. Operates at various instrument settings without having to recalibrate the correction. Accessory Recognition Spectrum Two N sampling modules are automatically detected as soon as they are locked into the sampling area. Instrument parameters are optimized for the installed accessory. Accessories information stored with spectral data. Error Trapping All sample spectra is checked for common spectroscopic and sampling problems. Key instrument components are continuously monitored. Component Checks Individual component checks under software control can be executed on-demand or automatically scheduled at preset times/intervals. Power save Mode Instrument standby and power-up can be automatically schedule
Validation:	Instrument should has Internal Validation system with Serialized, traceable standards wheel including 1.5 MIL, (38 micron) NIST traceable polystyrene
Diamond-ATR accessory:	The ATR module should include a very robust diamond crystal. The diamond crystal should be mounted in the plate by soldering.
	The fixation of the crystal by glue does not assure the required stability and will therefore not be accepted.
	The life time of the diamond ATR module should be extremely long. The warranty period is expected to be 10 years.
	The diamond-ATR crystal should be monolithic to allow the measurement over the full Mid-IR

spectral range according to
The optical configuration of the spectrometer. No optical components should be used which limit the spectral range.
Vendor must perform IQ/OQ of software and hardware through manufacturer certified engineer.
IQ/OQ protocols must be automated and locked as per manufacturer protocols.
Complete training of end user for operations of machines provide locally at site.
Vendor must present at least 5 References of successful installations with end user satisfactory statement with in last 2 years for above mentioned specification.
Data Management
I7 Intel, 3GHz or better
8GB RAM Memory (256 SSD)
DVD-RW ROM
HDMI
101 keys keyboard
Mouse & mousepad
Laser Printer
Manufacturer origin must be USA, Europe & Japan.
UPS required according to KVA used by the equipment & computer system.
Manufacturer origin must be USA, Europe & Japan.
21 CFR compliance, Auditrial Installed. Computer System Validation must be Provided by vendor.

23. Atomic Absorption

Qty:01

General Specifications:	The equipment must come from a reputable brand in the market with direct manufacturer support - engineer, application and logistics locally.
	Flame atomizer and furnace atomizer units should be provided within single compartment with front-back switchover for space-saving compact design.
	Changeover between flame and furnace atomizer units should be completely automatic using software
Spectrometer:	The spectrophotometer must have measurable wavelength range from 185.0 to 900.0 nm. Or better
	Spectrometer must work in emission mode as well as absorption mode.
	Spectrometer must have minimum 6-lamp turret supplied with capability to lit 2 lamps simultaneously (to avoid delay between two methods).
	The monochromator must be aberration-corrected Czerny-Turner mounting with at least 300 mm focal length. Diffraction grating area must be at least 40x 40mm with ≥ 1800 lines/mm grooves.
	The monochromator must use non-spherical toroidal mirrors to optimize the focusing characteristics at the inlet of the monochromator to reduce optical aberrations.
	Spectral bandwidth selection must be automated with choice of at least 4 slit sizes within 0.2- 2.0 nm range.
Detector must be of wide-range photomultiplier with auto-gain function to reduce the effects of atomic emission interference.	

	Optical system must consist of 3 dimensional layout double-beam optics with optical double-beam for excellent stability in flame measurement and high-throughput single-beam in furnace measurement for higher sensitivity. The photometric system must be set automatically.
Flame Atomizer:	Flame atomizer must be able to operate Air-C ₂ H ₂ , N ₂ O-C ₂ H ₂ flames with automatic changing between the two flame types.
	Burner head must be made from highly resistant titanium with 10 cm slot size (5 cm titanium slot burner for N ₂ O-C ₂ H ₂ flame must be available).
	The burner angle should be adjustable from 0 to 90° to extend working concentration range (not possible in case of dual atomizer system with furnace).
	Nebulizer must be Pt-Ir capillary type with PTFE orifice and ceramic impact bead; capable of handling hydrofluoric acid containing samples.
	The burner chamber must be made from inert engineered plastic with angled design to minimise drain accumulation.
	Burner atomizer must have ability to align burner head at optimal lateral and vertical position automatically using software
	Also system must be able to do automatic search for optimum fuel flow rate to achieve maximum sensitivity.
	Two types of background (BG) correction methods must be provided for flame technique with at least one background correction method applicable over entire wavelength range 185-900 nm.
	System must be provided with the safety measures such as : a) Gas pressure monitor b) Ability to automatically detect fuel gas leak, when the power is turned on, c) Flashback detection, d) Flame monitor, e) Prevent use of incorrect burner head, f) Drain tank level monitor, g) Automatic flame extinction upon power outage or sudden power interruption, h) Internal fan stop sensor, and i) Use of flame-retardant materials for the instrument external covers and atomizer unit.
	System must include earthquake/ vibration sensor to perform automatic flame extinguishing in case of emergency. The nebulizer also has an adjustable sample uptake rate, essential for optimum performance with refractory element or organic solvent. The whole flame automation system is easily removed for cleaning or for change over to graphite furnace.
Autosampler:	Autosampler for flame mode analysis must have the following features:
	Auto sampler should be directly triggered from AAS unit via RS-232 communication having completely software controlled operation.
	Autosampler should have minimum 50 vial positions of ≥15 mL vial capacity.
	Rinse port with overflow wash mechanism should be provided to avoid any carryover or contamination from Autosampler probe between two sample runs.
	Autosampler should permit random access to any vial location of samples and standards.
	Autosampler should have minimum 60 vial positions (2ml capacity) for samples and 8 vial positions (20 ml capacity) for reagents. Or better
	Probe rinse using solvent discharge method should be provided to avoid any carryover or contamination from autosampler probe between two sample runs.
	Autosampler should permit random access to any vial location of samples, reagents and diluents with capability to mix sample with at least 4 types of reagents.
	Autosampler should be provided with integrated cover (lid) to avoid any contamination from environmental dust.
Sample injection syringe should permit for injection volume of 2-90 µL.	

	Autosampler should be capable of automatic standard preparation (from stock) and automatic dilution of over-range samples up to 300-fold.
	Minimum 60 sample vials and 8 reagent vials should be provided along with autosampler.
Furnace Atomizer:	System should have high-sensitivity mode setting and capability to increase sensitivity up to 20 times using boosting function.
	Automatic optimum temperature search function for furnace program should be provided.
	Furnace atomizer unit must have ability to align furnace at optimal lateral and vertical position for best sensitivity automatically using software
	Two types of background (BG) correction methods must be provided for furnace technique with at least one background correction method applicable over entire wavelength range 185-900 nm.
	System must be provided with the safety measures such as : a) Cooling water flow rate monitor, b) Gas pressure monitor, c) Overcurrent protection unit (double check by circuit protector and optical sensor), and d) Furnace block cooling check.
Hydride generator:	AAS system should be provided with hydride generator system employing use of sodium borohydride (NaBH ₄) for high sensitivity analysis of elements like As, Se, Sb and Hg.
	Hydride accessory must have completely automated software controlled operation.
	Signal measurement should be done by using continuous flow method.
	System must enable easy operation with online mixing of Sample, reductant (NaBH ₄) and acid (HCl); so as to avoid any need of pre-acidification of sample.
	Two reagent bottles and two quartz absorption cells should be provided along with the hydride system.
	Hydride system should be able to perform automatic sample analysis using autosampler provided with AAS system.
Utility requirements:	Main AAS unit and all accessories should be capable to operate with single phase power supply of 200-240V.
	Cooling water circulator (chiller) should be provided for furnace operation as standard with instrument and not from local supplier.
	Single hose exhaust should be sufficient for total AAS system.
Software:	
	Operation of the system should be easy and intuitive via Windows 7 Operating System.
	Software measurement mode must comprise of flame method and furnace method with display of signal analog output for two channels (atomic absorption and background signal).
	Software must have automatic baseline correction of baseline drift and automatic calibration curve correction function using sensitivity monitoring.
	Software should calculate and display sample concentration using either calibration curve method or standard addition method; based on sample volume, dilution rate, fixed volume and factor inputs.
	Software must have capability to analyze up to 20 replicates and must display average value, standard deviation (SD) and RSD values directly.
	The furnace technique signal processing should be possible with both peak height and peak area.
	Software should automatically check for proper functioning of lamp, detector and background corrector before starting analysis.
	Software must be able to record the used lamp time (hours) and monitor lamp warming-up time.
	Sample results must be displayed in table or worksheet format which is easy to print, copy and report.

	Software should have security management using login ID and password to have controlled user access based on user privileges. Software should have log record, audit trail and electronic signatures.
Others requirements:	Compliance: All modules must be GLP/GMP compliant/ a declaration of Conformity certificate must be provided.
	Instruction Manual: Hardcopy of the instruction/ user's manual for main instrument and all other accessories must be included in the quote.
	Training: The supplier must provide training for the users and biomedical engineer of the instruments at site as well as at the supplier's application laboratory, after installation and commissioning. Details of the training program must be attached with the tender.
	System Warranty and Technical Support
	On installation, commissioning and training by factory-trained Engineer is required.
	All necessary Accessories required to run the system by vendor.
.	UPS required according to KVA used by the equipment
	Calibration standards for all Metals.
	Zinc, Lithium, Arsenic , Nickel , chromium, nitrite , sodium , Potassium, magnesium, Calcium, sulphate , chlorine ,chloride, Nitrite, cadmium, Iron ,Mercury , Selenium
	5 years Warranty for Lamps of all metals free of cost. 3 year warranty for other consumables free of cost
	Manufacturer origin must be USA, Europe & Japan.
UPS	UPS required according to KVA used by the equipment & Computer
	21 CFR compliance, Audit trial Installed. Computer System Validation must be Provided by vendor.
Additional Requirements:	Vendor must perform IQ/OQ of software and hardware through manufacturer certified engineer.
	IQ/OQ protocols must be automated and locked as per manufacturer protocols.
	Complete training of end user for operations of machines provide locally at site.
	Vendor must present at least 5 References of successful installations with end user satisfactory statement with in last 2 years for above mentioned specification.
	Data Management
	I7 Intel 3GHz or better
	8GB RAM Memory (256 SSD)
	250GB Hard disk Storage
	DVD-RW ROM
	HDMI
	101 keys keyboard
	Mouse & mousepad
	Laser Printer

24. Karl Fischer titrator

Karl Fischer TITRATOR Required Specification		Qty:01
Automated System	Touch Screen option available in a system that provides clear information to the end-user.	
	Determinations from 100 ppm to 100% water – fast and precisely.	
	Determinations from 1ppm to 5 % for low Water content Samples.	
Solvent Manager	Titrator must come with solvent manager with liquid handling device.	
	For Gas-Phase Extraction autosampler is required, to place the sample into vials.	
	Automated In Motion Karl Fischer Oven to determine the water content of up to 10 samples or better.	
	Auto recognition of burette and filler	
	Minimum no of methods 05 or better.	
	No of samples per series allow minimum 120 or better.	
	Safety stop function must be available in Titrator	
	Polarization current range: 0 to 20µA or better	
Measurement Range	Repeatability 0.3% at > 10 mg H ₂ O or better	
	Measurement range should be -2000 + 2000mv or better	
	Resolution 0.1 mv or better	
	Burette resolution 0.25ul for 5ml or better	
	Drift measurement < 6µg/min or better	
	Limit of error : 0.3 %	
Accessories	Silicone Grease , Burettes (Burettes 5ml, 10ml, 15ml qty 05 each.), Metal Sensors, Titration Stand, Titrant 5 litre , Glass beaker 100-150 ml with stirrer (5 pieces), Titrators 10 Litres	
	Security Access: Systems that Security access shall require a Login Name and Password. Access to different areas of the system shall be defined in terms of Roles i.e. user, Supervisor or power user and administrator control etc Roles shall be defined in terms of View, Edit and Function Privileges.	
Consumables	The system should be an easy-to-use next generation 32-bit software that incorporates the latest Windows technology. Data can be exportable on PDF for reporting purpose.	
Security	Equipped with multiple functions like Graphical User Interface, Assistant Bar, Data Explorer, Wizard software and long-filename compatible.	
	Flexible Graphical User Interface to display instrument status, show real time plot and change all instrument set points.	
Software System	Computer System Validation (CSV) Required with Proper Documentation. The vendor must provide a CSV report with a performance at least for 3 years as FOC.	
	System must come up with own built-in software platform also compliant with 21 CFR Part 11 with audit trail.	
	Should have full GLP/GMP support in terms of security, audit-trail and validation support.	
	QA/QC (statistical) functions, batch auto-stop function, run user program function, supports pre-run programs, OLE automation compatibility (Batch analysis, etc).	
	Emergency stop mechanism shall be located at easily accessible position near the operating Person	
	In case of Power Failure Equipment should stop in save condition, Equipment should not restart of its own without user permission.	
Data Transport	Via USB into PDF Format / Ethernet .	
Warranty and Calibration service	3years calibration with maintenance services as FOC by Factory trained engineer. 3-year comprehensive warranty with parts replacement (consumables and fixed parts) free of cost. A quoted model should be the latest version and spare parts should be available for the period of the next 10 years (Required certification from manufacturer/vendor).	
Printer	A compatible Printer is required with the system.	
Installation	Installation: the price should be inclusive of full installation, on-site with full functionality demonstration and IQ, OQ & PQ documents.	

Training	Operational and troubleshooting training at site should be done free of cost by the factory-trained engineer
Certification	Certification All components certified to USP / EP requirements
UPS	UPS required according to KVA used by the equipment & Computer
Country origin	Manufacturer origin must be USA, Europe & Japan.

25- Micro Analytical Balance		Qty:01
Specifications		
Software Compliance	21 CFR Part 11	
User Management	Name , ID , Password & User option available	
Maximum Capacity	120 g or better	
minimum readability	0.001 mg	
Adjustment	Internal / FACT	
Weighing Pan Diameter	80 mm or better	
Display	High contrast display (HCD)	
Settling Time	10 seconds or better	
Voltage Electrical load	220 Volt	
Linearity, typical	0.03 mg or better	
Linearity ±	0.1 mg	
Battery Option	yes	
Antistatic Kit	Required	
Evaporation Trap	Required	
Guaranteed Repeatability	0.04 mg	
Housing	Die-cast aluminum, plastic PA-12	
Vendor must provide one year standard warranty service for equipment and 2 years extended warranty services with parts replace (including all Major parts and Consumable parts)		
3years performance calibration and maintenance services as free of charge service. Warranty of Consumables .		
IQ, OQ & PQ to be performed by the vendor with complete qualification documents and manual.		
All other necessary accessories should be supplied by vendor for equipment running.		
vendors should submit the Certificate for availability of Spare parts of quoted model upto 10 years		
Quoted model should be latest version		
Latest model should be quoted with printer.		
Training: Comprehensive (operational & trouble shooting) training to end-user		
complete USP weigh Box with certificate		
Printer Compatible with constant un removable ink 20 Printer rolls, 5 printer cartridges.		
weigh boat 100 pcs (for Small Weights)		
Stainless steel spatulas set (For Minimum to Maximum weigh) small grooved spatula 6		
Brushes for instrument cleaning (At least 6 Brushes), Fibre Free tissue boxes 5.		

S. NO.	NAME OF GOODS, TECHNICAL DESCRIPTION, SPECIFICATIONS, AND STANDARDS	QUANTITY
26	GC Mainframe	01 No.
	Must be able to support at least 1 inlet, 3 detectors and 3 signal acquisition. Must be able to support at least 2 inlets, 3 detectors and 3 signals acquisition.	

	<p>Must be possible to have at least 2 detectors mounted, with more is preferred and monitored simultaneously on the GC and software.</p> <p>Must be able to install up to 6 electronic flow control units, providing control of up to 18 channels.</p> <p>Must have advanced intelligent self-diagnosis feature. Electrical system, flow control systems and sensors must be fully supported by the operating software.</p> <p>Must provide software that monitors GC counters and provides graphic display. Also must provide a real-time notification via indicator/advisor when a counter limit has been reached.</p> <p>GC must have an independent display on the instrument.</p> <p>Must provide a run time deviation log created for each analysis.</p> <p>Context-sensitive online help must be available.</p> <p>Should have 10 files for analytical conditions storage.</p> <p>Built-in column bleed compensation for the use of packed column.</p> <p>Standard atmospheric pressure and temperature compensation must be available.</p> <p>Retention time repeatability : <0.008% (or equivalent to 0.0008min)</p> <p>Area repeatability : < 1% RSD</p> <p>An extensive self-diagnosis function with safety features helps prevent unexpected instrument malfunctions. It enables a detailed diagnosis of the septum and inserts usage status, whether there is a temperature sensor error, gas supply pressures, control status of each gas, ignition function, DC voltage, AD converter, and other factors.</p>	
27	<p>Column Oven</p> <p>Operating temperature range: ambient + 10°C to 450°C</p> <p>Oven temperature set point resolution must be 0.1°C.</p> <p>Oven must support 10 ramps and negative ramps must be allowed.</p> <p>Maximum achievable temperature ramp rate must be 100°C/min.</p> <p>Oven temperature program set point resolution for the temperature ramp rate must be 0.1°C.</p> <p>Maximum run time of at least 998 minutes</p> <p>Oven cools down from 450°C to 50°C must be less than 4 mins (under non-specific conditions), with faster cooling speed is preferred</p>	01 No.
	<p>Split / Split less Injector</p> <p>Must be able to install at least one independent temperature controlled injector unit.</p> <p>Must be suitable for all capillary columns of 50um to 530um internal diameter.</p> <p>The pressure controller must come with compensation for barometric pressure and ambient temperature changes as standard.</p> <p>Must be able to select pressure units as psi or kPa.</p> <p>Must be able to select carrier and makeup gas types: Helium, Hydrogen, Nitrogen or Argon.</p> <p>Split ratio range: 0 to 7500 must be available to avoid column overload.</p> <p>Maximum operating temperature up to 400°C.</p> <p>Must consist of at least 2 pressure programming methods, including the constant pressure mode. Ramped mode is not considered as an independent programming method, for instance the ramped pressure and constant pressure modes are not different as both employ the same pressure calculation for programming.</p> <p>The flow has to be stable against temperature coefficient within 0.2%/°C change.</p> <p>Must be able to set total flow range: 0 to 1,200mL/min for He, 0 to 1,200mL/min for H₂, and 0 to 200 mL/min for N₂. The flow of H₂ is capped for safety purposes.</p> <p>Built-in automatic carrier shutoff if the inlet pressure drops significantly, i.e. in the case of leakage.</p> <p>Efficient gas saver mode built-in to reduce gas consumption during standby without affecting performance.</p> <p>Must have electronic septum purge flow control to eliminate carry-over.</p>	01 No.

<p>28</p>	<p>Quadrupole MS</p> <p>The quadrupoles should be made up of metal rods and should be cleanable.</p> <p>The quadrupoles must have the pre-rods as filter to minimize the influence of contamination and thus increase the sensitivity.</p> <p>The mass spectrometer must have Electron Ionization (EI) modes supplied as standard. Positive Chemical Ionization (PCI) and Negative Chemical Ionization (NCI) available as options.</p> <p>The mass spectrometer must have EI/CI source as option that allow switching between EI / CI mode without changing ion source.</p> <p>The mass spectrometer must be equipped with an ultra-high sensitivity ion source that has an ion optical system with high transport efficiency and excellent temperature homogenization of the ion source box to prevent the formation of adsorption sites inside the ion source due to cold spots.</p> <p>It should have a mass range of 1.5 to 1090 amu with unit mass resolution over the entire mass range.</p> <p>The system must provide one click auto-tune for BFB, DFTPP.</p> <p>It must be able to perform calibration manually as well as auto-tune at m/z 1066 [Tris (perfluorononyl)-S-triazine], molecular weight of 1485] to obtain accurate mass spectrum for high molecular weight compounds such as halogenated and derivatized compounds.</p> <p>The mass spectrometer should be able to scan at faster scan rate in order to achieve more information and more data points for accurate quantitation. The scanning speed capability should be 20,000 amu/sec (single scan). Higher scan rates are preferred</p> <p>It should have faster scan cycles in order to obtain highly precise data for fast GCMS and should be able to support advance applications such as comprehensive GC x GC.</p> <p>The mass spectrometer should have a stability of +0.1u / 48 hours.</p> <p>The ion source and transfer line must be independently heated over a user- selectable temperature range: Ion Source: 100 to 350°C Transfer Line: 50 to 350°C</p> <p>The ion source must be accessible from the front for ease of maintenance without the need to remove the top cover.</p> <p>The mass spectrometer should have Twin-Line capability to eliminate the need to swap columns when switching applications.</p> <p>The mass spectrometer must have a dynamic range of 8×10^6.</p> <p>It should have high performance synchronous SIM/Scan with automated SIM set up that can convert a full scan method to a SIM or SIM/Scan method. The software must automatically configure the number of SIM group, SIM cycles across the peak and the ions added to each group.</p> <p>Software must have automatic SIM table creation function included to create SIM window base on elution time.</p> <p>The system should be able to automatically set up a SIM/Scan method from an injected standard.</p> <p>EI scan sensitivity: Signal-to-noise (S/N) > 2000 at m/z 272 for 1 pg octafluoronaphthalene (OFN) in EI scan</p> <p>PCI scan sensitivity: Signal-to-noise (S/N) > 1200 at m/z 183 for 100pg benzophenone in PCI scan</p> <p>NCI scan sensitivity: Signal-to-noise (S/N) > 1200 at m/z 272 for 100fg octafluoronaphthalene (OFN) in NCI scan</p> <p>The NCI ion source should have the flexibility to perform EI analysis without changing ion source.</p> <p>The vacuum system should consist of high capacity turbo molecular pump with differential vacuum exhaust system. Minimum 300 L/Sec capacity is required higher capacity is preferred to allow higher flow rates up to 8 ml/min or more.</p> <p>The vacuum system must be able to accommodate flow rates up to 10.0ml/min of helium enabling highly effective evacuation speeds and increases allowable column flow rates.</p>	<p>01 No.</p>
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	<p>The mass spectrometer should have capability to install two narrow-bore capillary columns into the MS simultaneously in order to eliminate the need to swap columns. There should be an automatic interrupt system which provides protection against damage such as filament failure. In case of power failure, vacuum integrity and cleanliness should be maintained by not venting to atmospheric pressure automatically.</p> <p>There should be 2 filaments available for both EI and CI ionization mode allowing automatic switching to another when one fails.</p> <p>Fully automatic start-up and shut-down of the GCMS by simply one-click of a button on the computer screen must be available when replacing columns or repairing ion sources. Should have eco-friendly feature which reduces the power consumption in analysis standby mode.</p> <p>Auto tune should be available in both CI and NCI for all 3 types of reagent gases (Methane, Isobutene and Ammonia).</p>	
29	<p>Auto sampler</p> <p>Sample injection system with a 6-sampler rack as standard, and can easily configure to accommodate 12 samples.</p> <p>Multifunctional, high throughput sampler which can accommodate up to 150 samples must be available as an optional accessory.</p> <p>Must be able to install the Autosampler easily without the need for alignment.</p> <p>Must allow random access in sample sequencing.</p> <p>Must have priority sampling mode to allow priority sample and method to be inserted into the sequence at any time</p> <p>Number of sample injections: 1 ~ 99 injections per sample.</p> <p>Sample volume injection should be in the range of 0.1 ~ 8.0 µl. Optionally, should be capable of 0.5 ~ 40 µl & 2.5 ~ 200 µl injection.</p> <p>Syringe speed: Selectable in two stages.</p> <p>Plunger movement speed: Selectable in three stages.</p> <p>Cross contamination of $<10^{-4}$.</p> <p>Stand-by time: 0 ~ 99.9 after sample suction; 0 ~ 99.9 sec after sample injection.</p> <p>Number of syringe pumping: 0 ~ 20 with pre-wash and post-wash after injection of samples.</p> <p>Depth of syringe insertion into the vial: Changeable in up-down directions to access different layer of sample solution.</p> <p>Solvent flush method and Standard Addition Mode should be available.</p> <p>Multi-injection up to 18mL should be possible for large volume injection.</p> <p>Area repeatability of injection amount must be less than 2%.</p> <p>Able to prepare ahead, for example washing the syringe with solvent prior to the next analysis.</p>	01 No.
30	<p>Data Management and Acquisition System</p> <p>I7 Intel, 3GHz or better</p> <p>8GB RAM Memory</p> <p>250GB SSD</p> <p>DVD-RW ROM</p> <p>HDMI</p> <p>101 keys keyboard</p> <p>Mouse & mouse pad</p> <p>Laser Printer</p>	01 No.
31	<p>Software System</p> <p>The system should be an easy-to-use next generation 32-bit software that incorporates the latest Windows technology.</p> <p>Equipped with multiple functions like Graphical User Interface, Assistant Bar, Data Explorer, Wizard software and long-filename compatible.</p>	01 No.

	<p>Flexible Graphical User Interface to display instrument status, show real time plot and change all instrument set points.</p> <p>Able to identify target analyte correctly in the event where retention time has shifted from the originally supposed retention time.</p> <p>or Automatic Adjustment of Retention Time (AART) software must come as standard to identify target analyte correctly in the event where retention time has shifted from the originally supposed retention time.</p> <p>The software package should allow for the complete control of the GC. Furthermore, the software must include the capability to control up to 4 GCs at any one time (9 detectors simultaneously), method development and automation, data acquisition, data analysis, generation of custom reports, etc.</p> <p>Should have full GLP/GMP support in terms of security, audit-trail and validation support.</p> <p>Must have the following data acquisition capabilities:</p> <p>Snapshot function, supports single analysis and batch analysis, Batch Table Wizard, add or insert analyses,</p> <p>Supports extended analysis time, automatic time, automatic data file creation</p> <p>QA/QC (statistical) functions, batch auto-stop function, run user program function, supports pre-run programs, OLE automation compatibility (Batch analysis, etc).</p> <p>Must have the following data processing and data analyses functions:</p> <p>Peak integration manipulation, identification (supports multiple relative retention times and grouping)</p> <p>Quantitation (percentage area method, corrected percentage area method, internal standard method, external standard method, standard addition method, index calculation, manual coefficient input)</p> <p>Calibration points and levels (16 levels x 10 points), manual calibration curve creation, column performance calibration, data comparison functions.</p> <p>Must have more than 10 types of report items – sample information, environment settings, methods, chromatograms, peak tables, calibration curves, grouping results, diagrams, text, etc.), OLE object compatibility, layout customization and preview functions, summary report.</p> <p>Must allow clock-time programming with the ability to automatically start/stop a GC at the user-specified scheduled time.</p> <p>Must be capable of performing detector auto-ranging.</p> <p>21 CFR compliance, Audit trail Installed Computer System Validation must be Provided by vendor</p> <p>System check (GC self-diagnosis), status log must be available to allow continuous monitoring of GC in real-time to alert user maintenance needs and instrument problems.</p> <p>System Control must be Via Touch screen, Via Software and Via WIFI.</p>	
32	<p>Database/Library</p> <p>Flavor and fragrance library must be available as optional product.</p> <p>Optimized method for toxicology analysis must be available as optional product.</p> <p>Optimized method for pesticide analysis and library must be available as optional product.</p> <p>Optimized method for metabolite analysis and library must be available as optional product.</p>	01 No.
	<p>Accessories that must be included into the system</p> <p>GC startup kit</p> <p>Two unit of moisture trap, oxygen trap and hydrocarbon trap</p> <p>All gas regulators required for normal functioning must be included</p> <p>Two gas tight syringe for gas samples</p> <p>5 boxes of 100 samples vials with caps suitable for GC injection</p>	
	<p>Warranty</p> <p>3years with maintenance services free of cost by vendor.</p> <p>Consumables warranty for 3 years free of cost.</p>	

	<p>Details of Annual Maintenance Contract 5% after standard warranty from 4th year to 10th year. Installation: the price should be inclusive of full installation on site with full functionality demonstration. IQ, OQ/PQ interval programmable including alarm indicator.</p>	
	<p>Installation: Training & Installation at our site should be done free of cost. Training must be given by the vendor Internationally for two end user and one Biomedical Engineer</p>	
	<p>Calibration: Calibration Built-in calibration procedures for speed, temperature control, Validation All IQ & OQ documents included Computer System Validation with Documentation required by the vendor All Certification must be provided by the vendor Certification All components certified to USP / EP requirements 3 year annually calibration free of costs.</p>	
	<p>Standard USP Standards. (for In-process Calibration)</p>	
	<p>Other Accessorize 8 GC columns, 20 Guard Cartilages with their guard shell from manufacturer.</p>	
	<p>UPS UPS required according to KVA used by the equipment & Computer system. (Local)</p>	
	<p>Manufacturer origin must be USA, Europe & Japan. And must have at least 5 installation in Pakistan</p>	

SPECIAL NOTE:

- i. Confirm delivery / completion period must be specified.
- ii. Equipment must be quoted with all the standard accessories and operational and repair manuals, required for the operation of the equipment.
- iii. **Bidder will be responsible to provide the local training in the use of equipment to the relevant university staff on free of cost (FOC) basis. However, cost will be quoted separately, for ANY SPECIALIZED TRAINING (Foreign or Local) required for the smooth operation of the equipment.**
- iv. UPS/Power protection for the equipment shall be incorporated in the systems, otherwise prices must be quoted separately.
- v. 95% up time of the machinery / equipment to be ensured by the bidder during the warranty period and maintenance contract period.
- vi. Manufacturer shall be responsible for providing the complete support in case of agency transfer.
- vii. **The service contract inclusive of parts will be 7% after warranty and excluding parts will be 1.5% up to the 10 years (post warranty / guarantee period) in term of percentage (%) for total contract value.**

Section VI.
Sample Forms

Sample Forms

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1. Bid Form and Price Schedules

NIT / IFB N°: _

Date: _

To: *[name and address of Procuring Agency]*

Gentlemen and/or Ladies:

Having examined the bidding documents including Addenda Nos. *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver *[description of goods and services]* in conformity with the said bidding documents for the sum of *[total bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods *[insert offered delivery schedule]*.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to _____ percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring agency.

We agree to abide by this Bid for a period of *[number]* days from the date fixed for Bid opening under Clause 22 of the Instructions to Bidders, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

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

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount and Currency	Purpose of Commission or gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none")

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

Dated this day of 20 .

[signature] [in the capacity of]

Duly authorized to sign Bid for and on behalf of _

2. (A) PRICE SCHEDULE IN PAK RUPEES
Delivered Duty Paid (DDP BASIS)

FOR GOODS OFFERED WITHIN THE PROCURING AGENCY'S COUNTRY

Name of Bidder ____. IFB / NIT Number __.

S#	Detailed Specification of Goods	Model / Cat No.	Name of Manufacturer	Country of Origin	Port of Shipment	Quantity of Stores	Unit	Rate Per Unit	Total Price
1	2	2	4	5	6	7	8	9	10
Total Amount in Pak Rs. on DDP Basis									

Name _

In the capacity of _

Signed _

Duly authorized to sign the Bid for and on behalf of _

Date _

NOTE:

Port of Shipment and Country of origin of "MAJOR PART(S) OF THE EQUIPMENT" must be clearly reflected separately in the Technical and Financial bids. The "Origin" means the place where the "goods" are mined, grown, or produced.

**2. (B) PRICE SCHEDULE IN FOREIGN CURRENCY
(CFR / CNF/ C&F / CPT - KARACHI BASIS)**

FOR GOODS OFFERED FROM OUTSIDE THE PROCURING AGENCY'S COUNTRY

Name of Bidder ____. IFB / NIT Number__.

S#	Detailed Specification of Goods	Model / Cat No.	Name of Manufacturer	Country of Origin	Port of Shipment	Quantity of Stores	Unit	Currency	Rate Per Unit	Total Price
1	2	2	4	5	6	7	8	9	10	11
Total Amount in Foreign Currency										

Name _

In the capacity of _

Signed _

Duly authorized to sign the Bid for and on behalf of _

Date _

NOTE:

Port of Shipment and Country of origin of "MAJOR PART(S) OF THE EQUIPMENT" must be clearly reflected separately in the Technical and Financial bids. The "Origin" means the place where the "goods" are mined, grown, or produced.

2. Bid Security Form

Whereas *[name of the Bidder]* (hereinafter called “the Bidder”) has submitted its bid dated *[date of submission of bid]* for the supply of *[name and/or description of the goods]* (hereinafter called “the Bid”).

KNOW ALL PEOPLE by these presents that WE *[name of bank]* of *[name of country]*, having our registered office at *[address of bank]* (hereinafter called “the Bank”), are bound unto *[name of Procuring agency]* (hereinafter called “the Procuring agency”) in the sum of for which payment well and truly to be made to the said Procuring agency, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ___ day of _20_.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Procuring agency during the period of bid validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders;

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

This guarantee will remain in force up to and including twenty eight (28) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

[signature & Seal of the bank]

3. Contract Form

THIS AGREEMENT made the _____ day of _____ 20 _____ between [name of Procuring Agency] (hereinafter called “the Procuring Agency”) of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called “the Supplier” of the other part:

WHEREAS the Procuring agency invited bids for certain goods and ancillary services, viz., *[brief description of goods and services]* having *[Contract NIT No.]*, *[Contract Ref. No.]* and has accepted a bid by the Supplier for the supply of those goods and services in the sum of *[contract price in words and figures]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Bid Form and the Price Schedule submitted by the Bidder;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications;
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract; and
 - (f) the Procuring agency’s Notification of Award.
3. In consideration of the payments to be made by the Procuring agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring agency to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Procuring agency hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of 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 their respective laws the day and year first above written.

Signed, sealed, delivered by _the_ (for the Procuring agency)

Signed, sealed, delivered by _the_ (for the Supplier)

4. Performance Security Form

To: *[name of Procuring agency]*

WHEREAS *[name of Supplier]* (hereinafter called “the Supplier”) has undertaken, in pursuance of Contract No.*[reference number of the contract]* dated _____ 20.____ to supply *[description of goods and services]* (hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

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

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

This guarantee is valid until the _____ day of 20.____.

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

5. Bank Guarantee for Advance Payment

To: *[name of Procuring*

agency] [name of Contract]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends Clause 16 of the General Conditions of Contract to provide for advance payment, *[name and address of Supplier] having [Contract NIT No.], [Contract Ref. No.]* (hereinafter called "the Supplier") shall deposit with the Procuring agency a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of *[amount of guarantee in figures and words]*.

We, the *[bank or financial institution]*, as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Procuring agency on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding *[amount of guarantee in figures and words]*.

We further agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between the Procuring agency and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until *[date]*.

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

6. Manufacturer's Authorization Form

[See Clause 13.3 (a) of the Instructions to Bidders.]

Dated: _____

To: *[name of the Procuring agency]*

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

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

We hereby undertake that we will provide the complete after sale services support in case of agency transfer.

[signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.

7. Integrity Pact (AFFIDAVIT)

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS/CONTRACTORS/CONSULTANTS.

Contract Number: _____ Dated: _____

Contract Value: _____

Contract Title: _____

[Name of Supplier/Contractor/Consultant] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoS) through any corrupt business practice.

Without limiting the generality of the foregoing, **[Name of Supplier/ Contractor/ Consultant]** represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from Procuring Agency (PA), except that which has been expressly declared pursuant hereto.

[Name of Supplier/Contractor/Consultant] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with PA and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[Name of Supplier/Contractor/Consultant] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to PA under any law, contract or other instrument, be voidable at the option of PA.

Notwithstanding any rights and remedies exercised by PA in this regard, **[Name of Supplier/Contractor/Consultant]** agrees to indemnify PA for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to PA in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by **[Name of Supplier/Contractor/Consultant]** as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from PA.

[Procuring Agency] [Supplier /Contractor/Consultant]